

### Town of Arlington, MA Redevelopment Board

### Agenda & Meeting Notice September 23, 2019

# The Arlington Redevelopment Board will meet <u>Monday, September 23, 2019</u> at 7:30 PM in the **Town Hall Annex, 2nd Floor Conference Room, 730 Massachusetts Avenue, Arlington, MA** 02476

### 1. 19R Park Ave and 117 Broadway – review of final plans and specifications

7:30 p.m	19R Park Ave and 117 Broadway – review of final plans and
8:30 p.m.	specifications
	Board will review drawings provided by the Housing Corporation of
	Arlington via Davis Square Architects per Special Permit 3519 (19R
	Park Ave, known as Downing Square) General Condition 1 and Special
	Permit 3520 (117 Broadway) General Condition 1.
	Applicant will be provided 15 minutes for an introductory presentation.
	<ul> <li>Board members will review, discuss, and may vote.</li> </ul>

The updated 19R Park Ave. drawings are available <u>here</u> and online on the Redevelopment Board project page.

### 2. Meeting Minutes (8/12)

8:30 p.m	• Board will review draft minutes and may vote to approve them.
8:40 p.m	

### 3. Open Forum

8:40 p.m	<ul> <li>Except in unusual circumstances, any matter presented for</li> </ul>
9:00 p.m.	consideration of the Board shall neither be acted upon, nor a decision
	made the night of the presentation. There is a three minute time limit to
	present a concern or request.

### 4. Adjourn

9:00 – Adjourn

### 5. Correspondence received

Correspondence received: Email and Attachments from Don Seltzer 091619 Correspondence received from Chris Loreti 092319 regarding 117 Broadway Special Permit Absence of Open Space



### Town of Arlington, Massachusetts

### 19R Park Ave and 117 Broadway – review of final plans and specifications

#### Summary:

7:30 p.m. -19R Park Ave and 117 Broadway – review of final plans and specifications8:30 p.m.Board will review drawings provided by the Housing Corporation of Arlington via Davis<br/>Square Architects per Special Permit 3519 (19R Park Ave, known as Downing Square)<br/>General Condition 1 and Special Permit 3520 (117 Broadway) General Condition 1.

- Applicant will be provided 15 minutes for an introductory presentation.
- Board members will review, discuss, and may vote.

The updated 19R Park Ave. drawings are available <u>here</u> and online on the Redevelopment Board project page.

### ATTACHMENTS:

	Туре	File Name	Description
D	Reference Material	117_BroadwayARB_set.pdf	117 Broadway - ARB set
۵	Reference Material	117_color_elevations.pdf	117 color elevations
۵	Reference Material	ARB_Cover_Letter.pdf	ARB Cover Letter
۵	Reference Material	Bicycle_Rack_infoDero.pdf	Bicycle Rack info - Dero
۵	Reference Material	Building_A_color_elevations.pdf	Building A color elevations
۵	Reference Material	Building_B_color_elevations.pdf	Building B color elevations

# 117 BROADWAY

# 117 BROADWAY, ARLINGTON, MA 02474

S001

### DRAWING LIST

STRUCTURAL GENERAL NOTES AND TYPICAL DETAILS

G000	COVER
C-1	GRADING & UTILITY PLAN
C-3	PLANTING PLAN
EX-1	ALTA/ACSM LAND TITLE SURVEY
A001	GENERAL NOTES AND MOUNTING HEIGHTS
A002	DOOR AND FINISH SCHEDULE
A003	WINDOW SCHEDULE
A004	WALL TYPES
A005	FLOOR & ROOF TYPES
A101	FIRST FLOOR PLAN
A102	SECOND FLOOR PLAN
A103	THIRD FLOOR PLAN
A104	FOURTH FLOOR PLAN
A105	ROOF PLAN
A201	SOUTH ELEVATION
A202	WEST ELEVATION
A203	EAST ELEVATION
A204	NORTH ELEVATION
A205	BUILDING SECTION
A206	BUILDING SECTION
A300	VERTICAL CIRCULATION
A301	
A302	VERTICAL CIRCULATION
A303 A304	STAIR DETAILS ELEVATOR DETAILS
A304 A401	LEVEL 1 REFLECTED CEILING PLAN
A401 A402	LEVEL 2 REFLECTED CEILING PLAN
A402 A403	LEVEL 3 REFLECTED CEILING PLAN
A403	LEVEL 4 REFLECTED CEILING PLAN
A501	WALL SECTIONS
A502	WALL SECTIONS
A503	BUILDING DETAILS
A504	BUILDING DETAILS
A505	BUILDING DETAILS
A506	BUILDING DETAILS
A507	BUILDING DETAILS
A510	ROOF DETAILS
A511	WINDOW DETAILS
A512	WINDOW DETAILS
A513	CURVED EXTERIOR WALL - DETAILS
A601	ENLARGED TYPICAL UNIT PLANS
A602	ENLARGED TYPICAL UNIT PLANS
A610	BATHROOM ELEVATIONS
A611	BATHROOM ELEVATIONS
A620	KITCHEN ELEVATIONS
A621	KITCHEN ELEVATIONS
A622	KITCHEN ELEVATIONS
A630	INTERIOR DETAILS
A631	INTERIOR DETAILS

5001	STRUCTURAL GENERAL NOTES AND THICKE DETAIL
S002	STRUCTURAL TYPICAL DETAILS
S003	STRUCTURAL TYPICAL DETAILS
S004	STRUCTURAL TYPICAL DETAILS
S005	STRUCTURAL TYPICAL DETAILS
S101	GROUND FLOOR AND FOUNDATION PLAN
S102	SECOND FLOOR FRAMING PLAN
S103	THIRD FLOOR FRAMING PLAN
S104	FOURTH FLOOR FRAMING PLAN
S105	ROOF FRAMING PLAN
S201	SECTIONS
S202	SECTIONS
S203	SECTIONS
M001	MECHANICAL LEGEND AND NOTES
M002	MECHANICAL SCHEDULES
M003	MECHANICAL SCHEDULES
M101	MECHANICAL PLAN - FIRST FLOOR
M102	MECHANICAL PLAN - SECOND FLOOR
M103	MECHANICAL PLAN - THIRD FLOOR
M104	MECHANICAL PLAN - FOURTH FLOOR
M105	MECHANICAL PLAN - ROOF
M201	MECHANICAL DETAILS
M202	MECHANICAL DETAILS
M203	MECHANICAL DETAILS
M204	MECHANICAL DETAILS
E001	ELECTRICAL LEGEND & NOTES
E002	ELECTRICAL PANEL SCHEDULES
E100	ELECTRICAL SITE PLAN
E101	ELECTRICAL PLAN - FIRST FLOOR
E102	ELECTRICAL PLAN - SECOND FLOOR
E103	ELECTRICAL PLAN - THIRD FLOOR
E104	ELECTRICAL PLAN - FOURTH FLOOR
E105	ELECTRICAL PLAN - ROOF
E201	LIGHTING PLAN - FIRST FLOOR
E202	LIGHTING PLAN - SECOND FLOOR
E203	LIGHTING PLAN - THIRD FLOOR
E204	LIGHTING PLAN - FOURTH FLOOR
E301	ELECTRICAL ONE-LINE DIAGRAM & DETAILS



### DRAWING LIST

P001 P101 P102 P103 P104 P105 P201 P202	PLUMBING LEGEND, NOTES & SCHEDULES PLUMBING PLAN - FIRST FLOOR PLUMBING PLAN - SECOND FLOOR PLUMBING PLAN - THIRD FLOOR PLUMBING PLAN - FOURTH FLOOR PLUMBING PLAN - ROOF PLUMBING DETAILS PLUMBING DETAILS
P203	PLUMBING DETAILS
FP001 FP101	FIRE PROTECTION LEGEND AND NOTES FIRE PROTECTION PLAN - FIRST FLOOR FIRE PROTECTION PLAN - SECOND FLOOR
FP102	
FP103 FP104 FP105	FIRE PROTECTION PLAN - THIRD FLOOR FIRE PROTECTION PLAN - FOURTH FLOOR FIRE PROTECTION PLAN - ROOF
FP201	FIRE PROTECTION DETAILS
FP201	FIRE PROTECTION DETAILS
FP202	FIRE PROTECTION DETAILS
FA001 FA101	FIRE ALARM LEGEND, NOTES & DETAILS FIRE ALARM PLAN - FIRST FLOOR
FA102	FIRE ALARM PLAN - SECOND FLOOR
FA103	FIRE ALARM PLAN - THIRD FLOOR

- FA104 FIRE ALARM PLAN FOURTH FLOOR
- FA105 FIRE ALARM PLAN ROOF

GROSS SQUARE	FOOTAGE (GSF)
Level 1	4,299 SF
Level 2	5,355 SF
LEVEL 3	5,360 SF
LEVEL 4	4,364 SF
Grand total	19,378 SF

UNIT M	IX
NUMBER	Count
Level 2	
1 BED	1
2 BED	3
3 BED	1
LEVEL 3	
1 BED	1
2 BED	3
3 BED	1
LEVEL 4	
2 BED	3
2 BED - HC	1
Total Units	14



- Pam Hallett, Housing Corporation of Arlington 252 Massachusetts Ave, 02474 781.859.5211 (T)
- ARCHITECT:
   DAVIS SQUARE ARCHITECTS
   240A ELM STREET, SOMERVILLE, MA 02144
   617.628.5700 (T) 617.628.1717 (F)
- CIVIL ENGINEER:
   DEVELLIS ZREIN, INC.
   PO BOX 37, FOXBOROUGH, MA 02035 508.473.4114 (T) 774.215.0631 (F)
- STRUCTURAL ENGINEER:
   SOUZA, TRUE AND PARTNERS, INC.
   265 WINTER STREET, THIRD FLOOR, WALTHAM, MA 02451 617.926.6100 (T)
- MEP ENGINEER:
   NORIAN/SIANI ENGINEERING, INC.
   43 BRADFORD ST, 3RD FLOOR, CONCORD, MA 01742-2972 781.398.2250 (T) 781.398.2280 (F)

LOCATION MAP

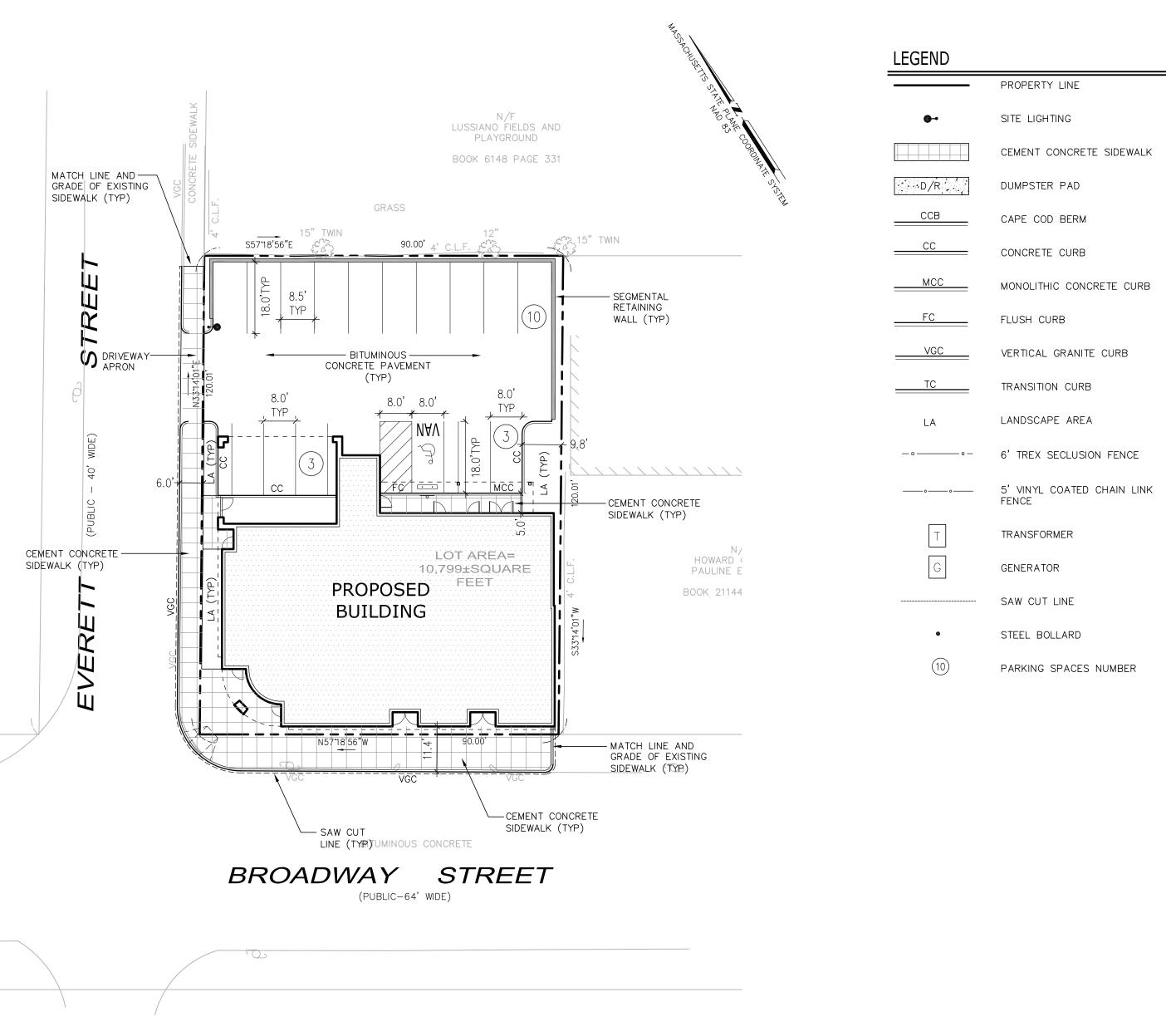


95% PRICING SUBMISSION 08.23.2019



PROJECT NO. 16045.00

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# NOTES

DO NOT SCALE DRAWINGS.

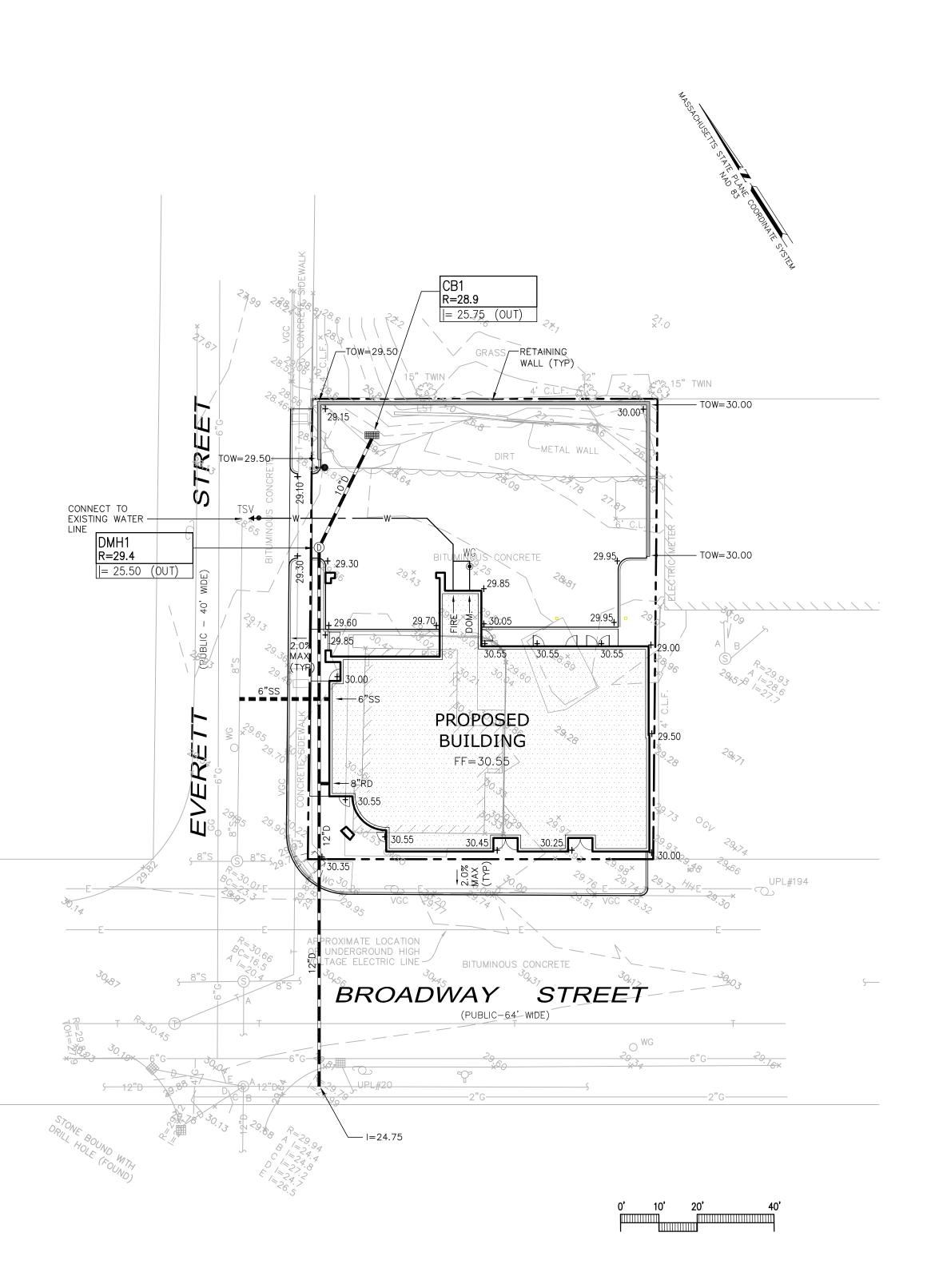
# No. REVISIONS/SUBMISSIONS Date DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant Site Planning, Civil Engineering, Landscape Architecture Po Box 307 Foxborough, MA 508.473.4114 phone develliszrein.com D DeVellis Zrein Inc. Project 117 BROADWAY 117 Broadway Street, Arlington, MA Title LAYOUT AND MATERIALS PLAN Designed Drawing No. IAZ Checked C-1 Project No. 16045 Scale 1" = 20' Date 08.28.19

### 12

	(-R/	ADING AND UTILITY NOTES
	1.	EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY NITSCH ENGINEERING OF BOSTON, MA AND IS DATED 02/19/2014.
	2.	PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT, BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
	3.	CONTRACTOR TO ADJUST UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN-OUTS, UTILITY MANHOLES, CATCH BASINS, INLETS, ETC.) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.
	4.	ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH TOWN OF ARLINGTON DEPARTMENT OF PUBLIC WORKS STANDARDS.
	5.	ALL WORK TO BE DONE WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF ARLINGTON.
	6.	THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
	7.	WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
	8.	THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES, AND BOXES TO THE PROPOSED FINISH SURFACE GRADE.
	9.	THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
1	10.	CONTRACTOR SHALL MAINTAIN, OR ADJUST TO NEW FINISH GRADE, AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS: LIGHT POLES, SIGN POLES, MANHOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS, UNLESS OTHERWISE NOTED OR DIRECTED BY OWNER'S REPRESENTATIVE.
3	11.	ALL CEMENT LINED DUCTILE IRON JOINTS AT FITTINGS (CLASS 53,) VALVES, AND HYDRANT LATERALS SHALL BE MECHANICAL JOINT WITH NEOPRENE GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH-ON TYPE WITH NEOPRENE OR SYNTHETIC RUBBER GASKETS. ALL WATER GATES SHALL OPEN AS PER CITY REQUIREMENTS. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.0 FEET OF GROUND COVER AND A MINIMUM OF 10 FOOT SEPARATION FROM THE SEWER SYSTEM. AT WATER AND SEWER CROSSINGS, THE WATER LINE SHALL BE ENCASED IN SIX INCHES OF CONCRETE FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
	12.	ALL SEWER PIPES SHALL BE PVC PER ASTM D3034, SDR-35 AND ASTM D1784 WITH RUBBER GASKET JOINTS.
	13.	SITE LIGHTING IS SHOWN ON THIS PLAN FOR COORDINATION PURPOSES ONLY. REFER TO ELECTRICAL PLANS FOR EXACT TYPE AND LOCATION.
_	14.	REFER TO ELECTRICAL PLANS FOR SECTIONS AND DETAILS OF THE UTILITY DUCT BANK.
	15.	AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION, AT THE CONTRACTOR'S EXPENSE.
	16.	REFER TO ARCHITECTURAL PLANS FOR PROPOSED LOCATION OF UTILITY SERVICE STUBS AT BUILDING.
Ξ	17.	THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRICAL.) FINAL DESIGN AND LOCATIONS AT THE BUILDING WILL BE PROVIDED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION.
	18.	WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
)	19.	CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS.
	20.	MAXIMUM SLOPE IN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
	21.	ENSURE ALL EXISTING (TO REMAIN), AND PROPOSED MANHOLE COVERS PROPERLY IDENTIFY UTILITY SERVICED.
	22.	CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
	23.	BITUMINOUS CONCRETE ELEVATIONS AT CATCH BASINS TO BE 1/4 INCH ABOVE RIM ELEVATION SHOWN FOR CATCH.
	24.	SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.
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### NOTES

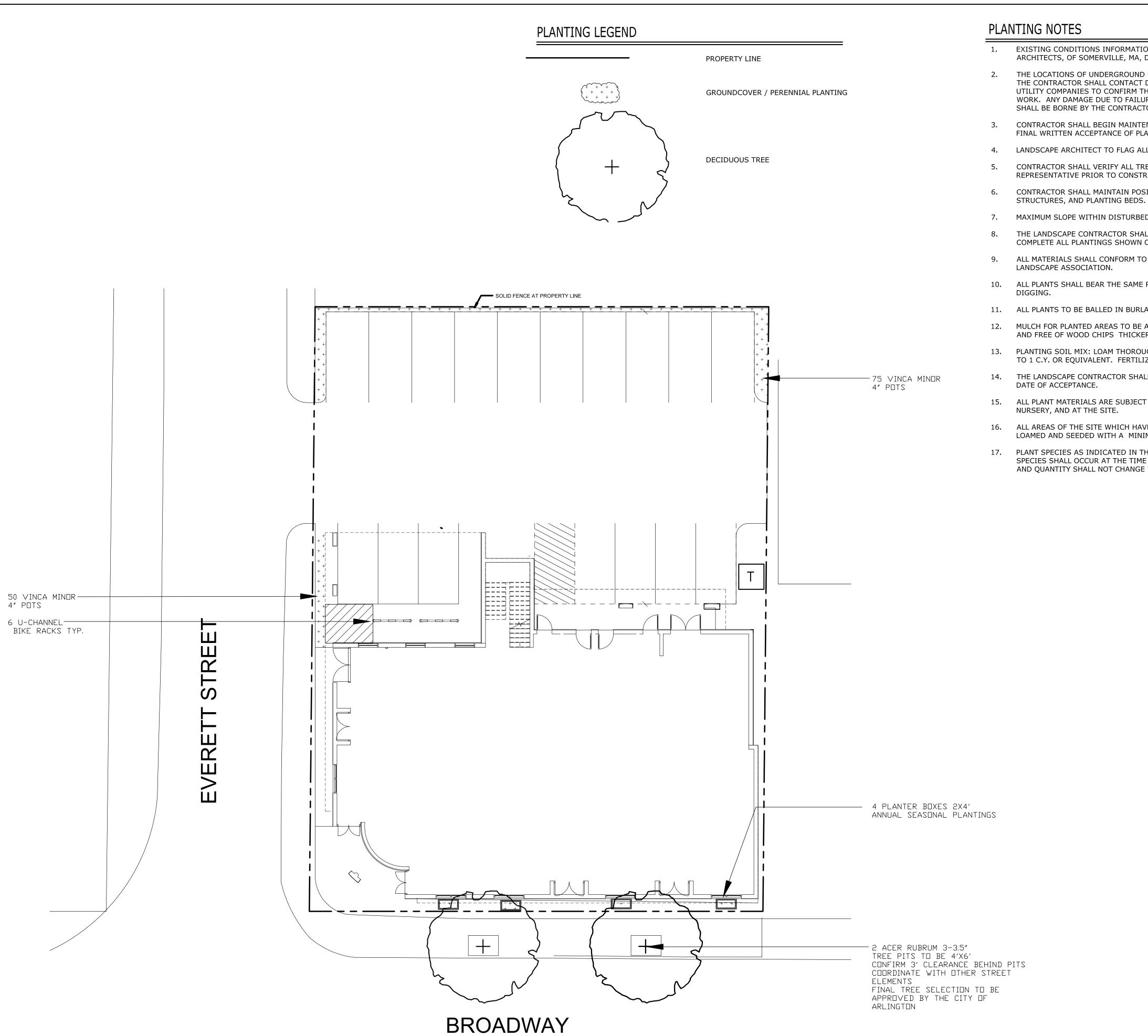
DO NOT SCALE DRAWINGS.

# GRADING AND UTILITY LEGEND

	PROPERTY LINE
45	PROPOSED CONTOUR LINE
+ 45.20	SPOTGRADE
	SEWER LINE
	DRAIN LINE
—W—-—	WATER LINE
G	GAS LINE
UG-E/T/FA	UNDERGROUND ELECTRIC, TELEPHONE, FIRE ALARM
<b>#</b>	CATCHBASIN
٢	DRAIN MANHOLE
S	SEWER MANHOLE
WG 👁	WATER GATE
HYD∳	HYDRANT
HYD <b>∲</b> TSV ◀●	HYDRANT TAPPING SLEEVE AND VALVE
TSV <•	TAPPING SLEEVE AND VALVE

TOW=30.50 TOP OF WALL ELEVATION





# PLANTING NOTES

1. EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM A SITE PLAN PREPARED BY DAVIS SQUARE ARCHITECTS, OF SOMERVILLE, MA, DATED NOVEMBER 2016.

2. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL CONTACT DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.

3. CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL WRITTEN ACCEPTANCE OF PLANT MATERIAL.

4. LANDSCAPE ARCHITECT TO FLAG ALL TREES TO BE TRANSPLANTED PRIOR TO CONSTRUCTION START.

5. CONTRACTOR SHALL VERIFY ALL TREE REMOVALS AND/OR TRANSPLANTS WITH OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION START.

6. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS,

7. MAXIMUM SLOPE WITHIN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.

THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE ALL PLANTINGS SHOWN ON THIS DRAWING.

9. ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN NURSERY AND

10. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE

11. ALL PLANTS TO BE BALLED IN BURLAP OR CONTAINERIZED.

12. MULCH FOR PLANTED AREAS TO BE AGED PINE BARK: PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.

13. PLANTING SOIL MIX: LOAM THOROUGHLY INCORPORATED WITH ROTTED MANURE PROPORTIONED 5 C.Y. TO 1 C.Y. OR EQUIVALENT. FERTILIZER ADDED PER RECOMMENDED RATES OF SOILS ANALYSIS.

14. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM

15. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE

16. ALL AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOAMED AND SEEDED WITH A MINIMUM DEPTH OF 6" DEPTH TOPSOIL.

17. PLANT SPECIES AS INDICATED IN THE PLANT LIST ARE SUGGESTIONS ONLY. FINAL SELECTION OF SPECIES SHALL OCCUR AT THE TIME OF PLANT PURCHASE, DEPENDING ON AVAILABILITY. PLANT SIZE AND QUANTITY SHALL NOT CHANGE WITHOUT APPROVAL OF OWNER'S REPRESENTATIVE.

# 117 BROADWAY

### ARLINGTON, MA



## PLANTING PLAN

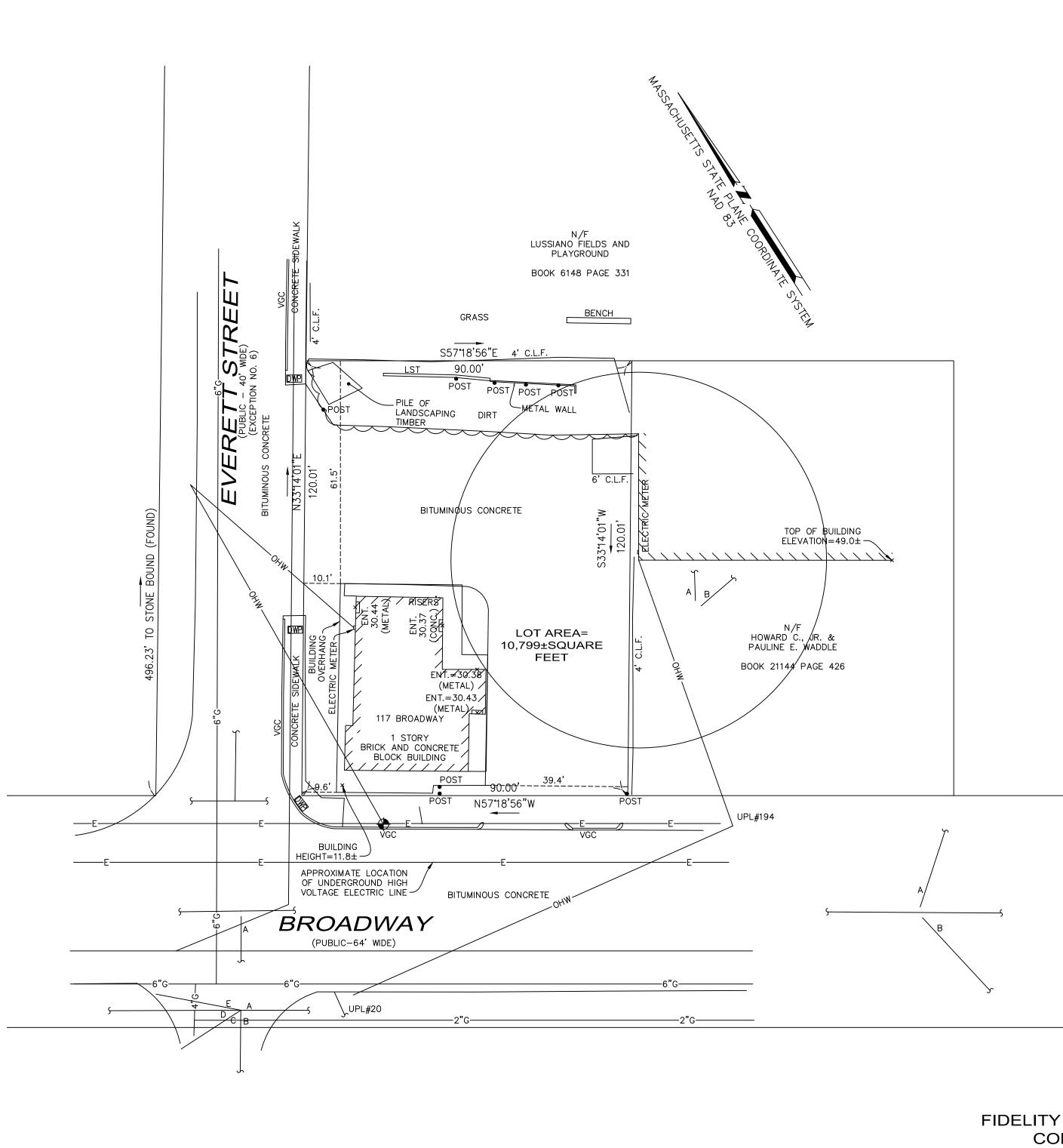
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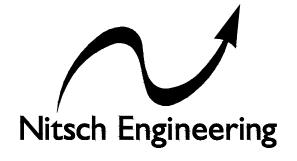
### ZONING INFORMATION

DISTRICT: VEHICULAR ORIENTED BUSINESS (B4)

PERMITTED USES: RESTAURANT UNDER 2,000 SF IS NOT PERMITTED; RESTAURANT OVER 2,000 SF REQUIRES A SPECIAL PERMIT; SEE TABLE IN SECTION 5.04 OF ARLINGTON ZONING CODE FOR ADDITIONAL PERMITTED USES.

\*\*ZONING INFORMATION OBTAINED FROM "ZONING CERTIFICATE", PREPARED BY ZONING SOLUTIONS, INC., AND DATED JUNE 16, 2014.





### www.nitscheng.com

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- Land Surveying
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- ► Planning
- ► GIS

### LEGEND

■ ● ● ■ © © © © © © © © © © © © ©	CATCH BASIN CABLE TELEVISION MANHOLE DRAIN MANHOLE ELECTRIC MANHOLE MISCELLANEOUS MANHOLE SEWER MANHOLE TELEPHONE MANHOLE GAS SHUT-OFF WATER SHUT-OFF GAS GATE WATER GATE FIRE HYDRANT DOWN SPOUT UTILITY POLE UTILITY POLE WITH CONDUIT LINE TO GRO LIGHT BOLLARD LANDSCAPE LIGHT LANDSCAPE TIMBER HAND HOLE TRASH CAN METAL POST CONCRETE POST PARKING METER SIGN POST DECIDUOUS TREE WITH TRUNK DIAMETER
الک ی ن ک ک ک ک ک ک ک ک ک ک ک ک ک ک ک ک ک	CONIFEROUS TREE WITH TRUNK DIAMETER HANDICAP PARKING SPOT ELEVATION CHAIN LINK FENCE BITUMINOUS CONCRETE BERM SLOPED GRANITE CURB VERTICAL GRANITE CURB VERTICAL CONCRETE CURB
R= I= TH= NPV TOW= BC= TW CATV D- E- G G S T W OHW	RIM ELEVATION EQUALS INVERT ELEVATION EQUALS TOP OF HOOD ELEVATION EQUALS NO PIPES VISIBLE TOP OF WATER BOTTOM CENTER OF CHANNEL TOP OF WALL ELEVATION UNDERGROUND CABLE TELEVISION LINE UNDERGROUND CABLE TELEVISION LINE UNDERGROUND DRAIN LINE UNDERGROUND ELECTRIC LINE UNDERGROUND GAS LINE UNDERGROUND SEWER LINE UNDERGROUND SEWER LINE UNDERGROUND TELEPHONE LINE UNDERGROUND WATER LINE OVERHEAD WIRES BENCH MARK
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### UTILITY INFORMATION STATEMENT

1. THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.

2. THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.

3. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.

4. THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILATION OF THIS INFORMATION.

5. IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILING UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED AND ACTUAL LOCATIONS.

6. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.

7. THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.

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### **GRAPHIC SCALE**

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SCALE: 1"=20'

### FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT FILE NO. 14-0011 TN-FN EFFECTIVE DATE: FEBRUARY 13, 2014

PROJECT # 10127			
FILE: 10127_TOP0_Broadway_020415.c	lwg		
SCALE: 1"=20'			
DATE: 2/19/2014			
PROJECT MANAGER: PRL			
FIELD BOOK:			
DRAFTED BY: TAL	REV.	COMMENTS	DATE
CHECKED BY: PRL		REVISIONS	

### TABLE A ITEMS:

- 3. THE PARCEL SHOWN HEREON LIES WITHIN A ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% CHANCE ANNUAL FLOODPLAIN) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR MIDDLESEX COUNTY, MASSACHUSETTS. COMMUNITY PANEL NO. 25017C0417E, EFFECTIVE DATE: JUNE 4, 2010.
- 16. THERE WAS NO SURFACE EVIDENCE OF BUILDING CONSTRUCTION AT THE TIME OF THE SURVEY.
- 17. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO PROPOSED CHANGES TO THE ABUTTING RIGHT-OF-WAY LINES.
- 18. THERE WAS NOT SURFACE EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP AT THE TIME OF THE SURVEY.
- 19. WETLANDS DO NOT APPEAR TO BE PRESENT ON SITE BASED ON INFORMATION AVAILABLE AT THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE PRESENCE OF WETLANDS HAS NOT BEEN CONFIRMED BY AN ENVIRONMENTAL SCIENTIST TRAINED IN THE IDENTIFICATION OF WETLANDS.

ROUND

### EXHIBIT A

A CERTAIN PARCEL OF LAND SITUATED IN ARLINGTON, MIDDLESEX COUNTY, MASSACHUSETTS, WITH THE BUILDINGS THEREON, BEING SHOWN AS LOT 1 ON A PLAN ENTITLED "SUB-DIVISION OF LAND IN ARLINGTON, MASSACHUSETTS", DATED FEBRUARY, 1952 JOS. J. SULLIVAN, C.E., RECORDED WITH MIDDLESEX SOUTH DISTRICT DEEDS, BOOK 7865 PAGE 553, AND BEING BOUNDED AND DESCRIBED AS FOLLOWS:

NORTHEASTERLY BY LAND OF THE TOWN OF ARLINGTON, NINETY (90) FEET;

SOUTHEASTERLY BY LOT 2 AS SHOWN ON SAID PLAN, ONE HUNDRED TWENTY AND 01/100 (120.01) FEET;

SOUTHWESTERLY BY BROADWAY AS SHOWN ON SAID PLAN, NINETY (90) FEET; AND NORTHWESTERLY BY EVERETT STREET AS SHOWN ON SAID PLAN, ONE HUNDRED

CONTAINING 10,800 SQUARE FEET OF LAND ACCORDING TO SAID PLAN.

SCHEDULE BII-EXCEPTIONS

TWENTY AND 01/100 (120.01) FEET.

SCHEDULE B OF THE POLICY OR POLICIES TO BE ISSUED WILL CONTAIN EXCEPTIONS TO THE FOLLOWING MATTERS UNLESS THE SAME ARE DISPOSED OF TO THE SATISFACTION OF THE COMPANY:

NOTE: THIS POLICY OMITS ANY COVENANTS, CONDITIONS OR RESTRICTIONS REFERRED TO BELOW, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAW, EXCEPT TO THE EXTENT THAT SAID COVENANTS, CONDITIONS OR RESTRICTIONS ARE PERMITTED BY APPLICABLE STATE OR FEDERAL

1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF, BUT PRIOR TO THE DATE OF THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT. 2. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION.

3. THE FOLLOWING MATTERS SHOWN ON PLAN OF SURVEY ENTITLED "TOPOGRAPHIC PLAN OF LAND 117 BROADWAY ARLINGTON, MASSACHUSETTS" PREPARED FOR: HOUSING CORPORATION OF ARLINGTON DATED FEBRUARY 19, 2014 SCALE 1" = 20' PROJECT 1027 BY NITSCH ENGINEERING:

A. OVERHEAD WIRE ON EVERETT STREET CROSSES CORNER OF LAND TO UTILITY POLE ON BROADWAY;

B. POSSIBLE ENCROACHMENT OF 6' CHAIN LINK FENCE AND OTHER FENCE OVER BOUNDARY WITH LAND N/F HOWARD C. JR. & PAULINE E. WADDLE;

C. ENCROACHMENT OF 4' CHAIN LINK FENCE OVER BOUNDARY LINE WITH N/F LUSSIANO FIELDS AND PLAYGROUND

4. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR OR MATERIALS HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS. (NOT A SURVEY MATTER)

5. SUCH MATTERS AS WOULD BE DISCLOSED BY A CURRENT CERTIFICATE OF MUNICIPAL LIENS. NOTE(I): ITEMS 2 AND 4 WILL BE REVISED OR DELETED UPON RECEIPT OF A SATISFACTORY AFFIDAVIT AS TO PARTIES IN POSSESSION AND MECHANICS' LIENS. ITEM 3 WILL BE DELETED OR REVISED UPON RECEIPT OF A SATISFACTORY SURVEY AND SURVEYOR'S REPORT. ITEM 5 WILL BE REVISED UPON RECEIPT OF CERTIFICATE OF MUNICIPAL LIENS. (NOT A SURVEY MATTER) 6. TAKING BY THE TOWN OF ARLINGTON FOR THE LAYOUT OF EVERETT STREET, RECORDED AT

BOOK 10509 PAGE 483. (EVERETT STREET AS SHOWN ON THE SURVEY). 7. ORDER FOR SIDEWALK CONSTRUCTION BY THE TOWN OF ARLINGTON, RECORDED AT BOOK

13305 PAGE 17. (NOT PLOTTABLE)

TO: HOUSING CORPORATION OF ARLINGTON, A MASSACHUSETTS NONPROFIT CORPORATION, FIDELITY NATIONAL TITLE INSURANCE COMPANY AND TOGETHER WITH THEIR SUCCESSORS AND/OR ASSIGNS; AND LEADER BANK, N.A.:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 6, 7(b)(1), 8, 9, 11(a), 13, 14, AND 16-19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 2/19/2014.

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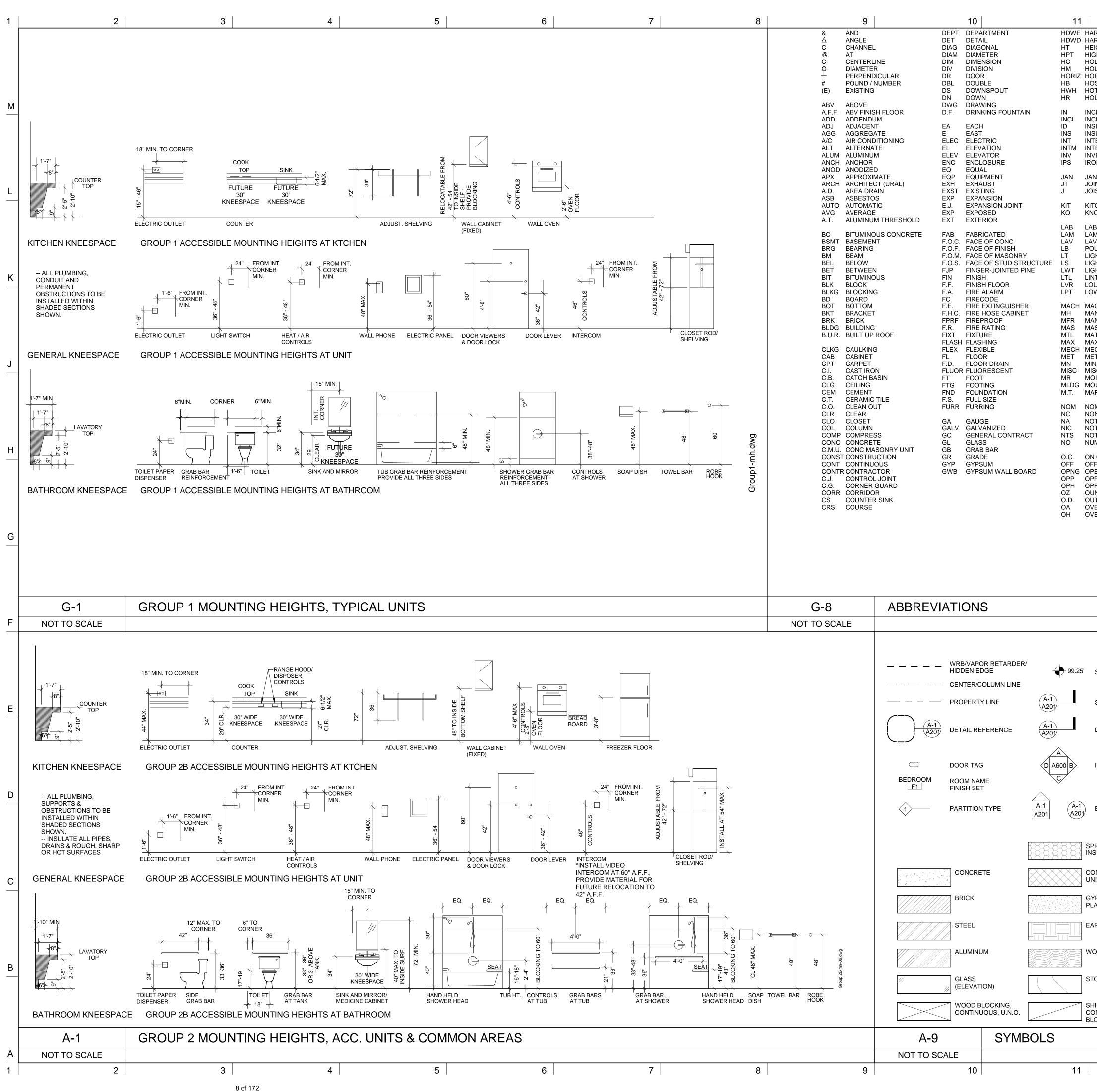
PAUL R. LEBARON, P.L.S.

DATE

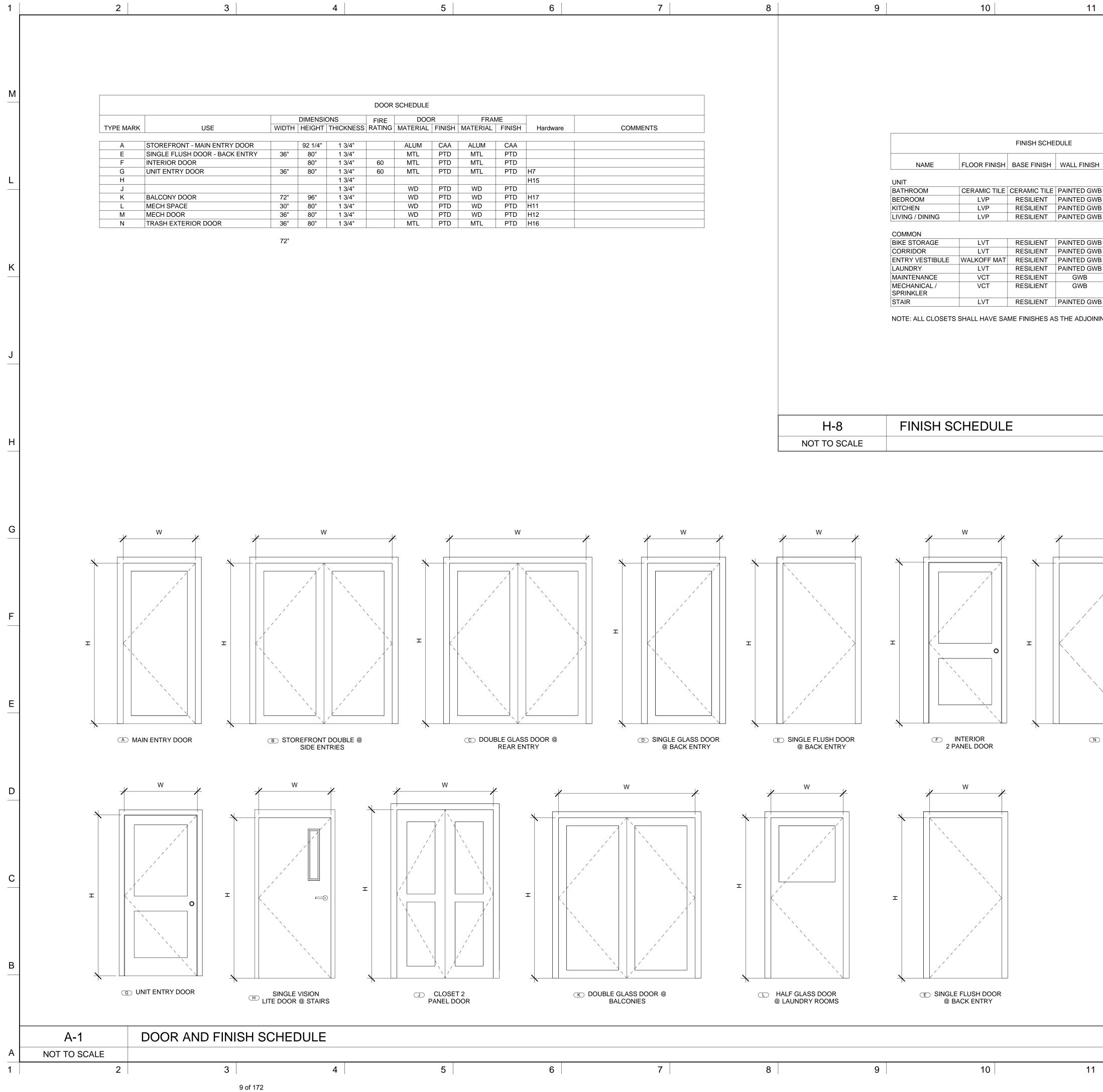
ALTA/ACSM LAND TITLE SURVEY 117 BROADWAY ARLINGTON, MASSACHUSETTS

PREPARED FOR: HOUSING CORPORATION OF ARLINGTON 20 ACADEMY STREET, ARLINGTON, MASSACHUSETTS 02476 OF REV.

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CORRIDOR	LVT	RESILIENT	PAINTED GWB	PA
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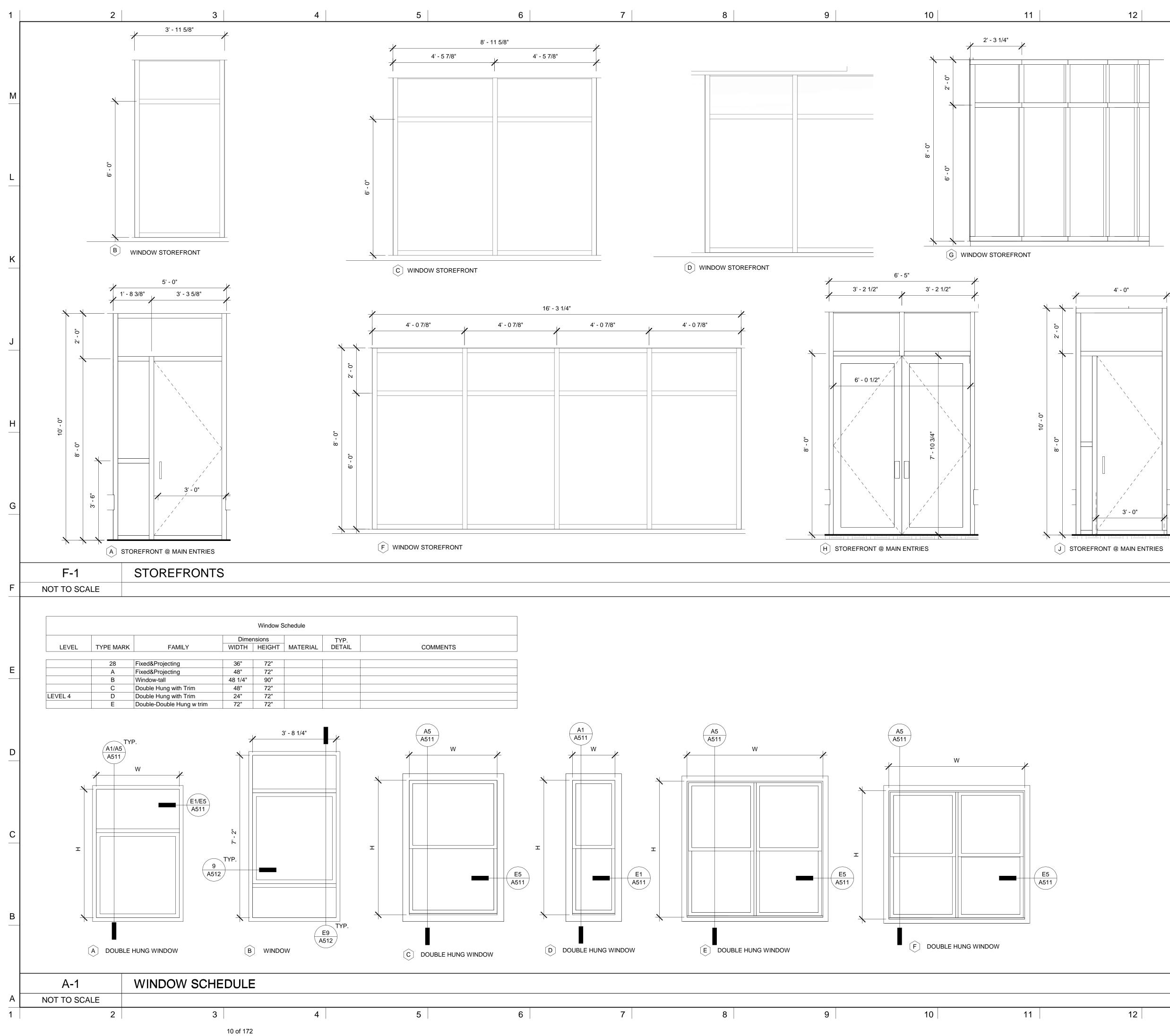
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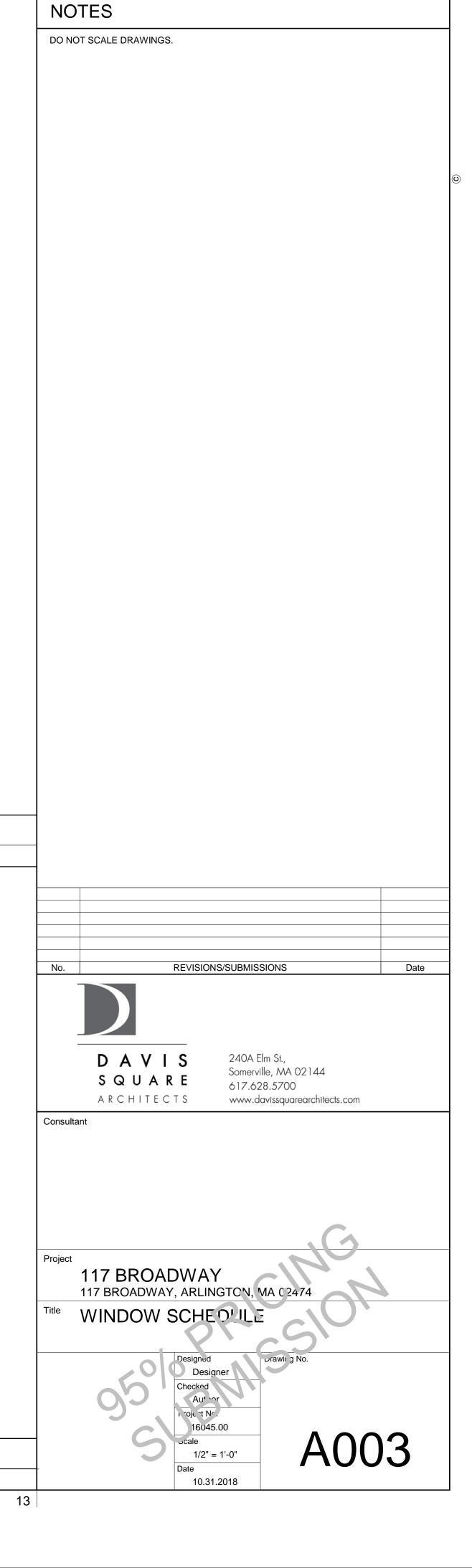
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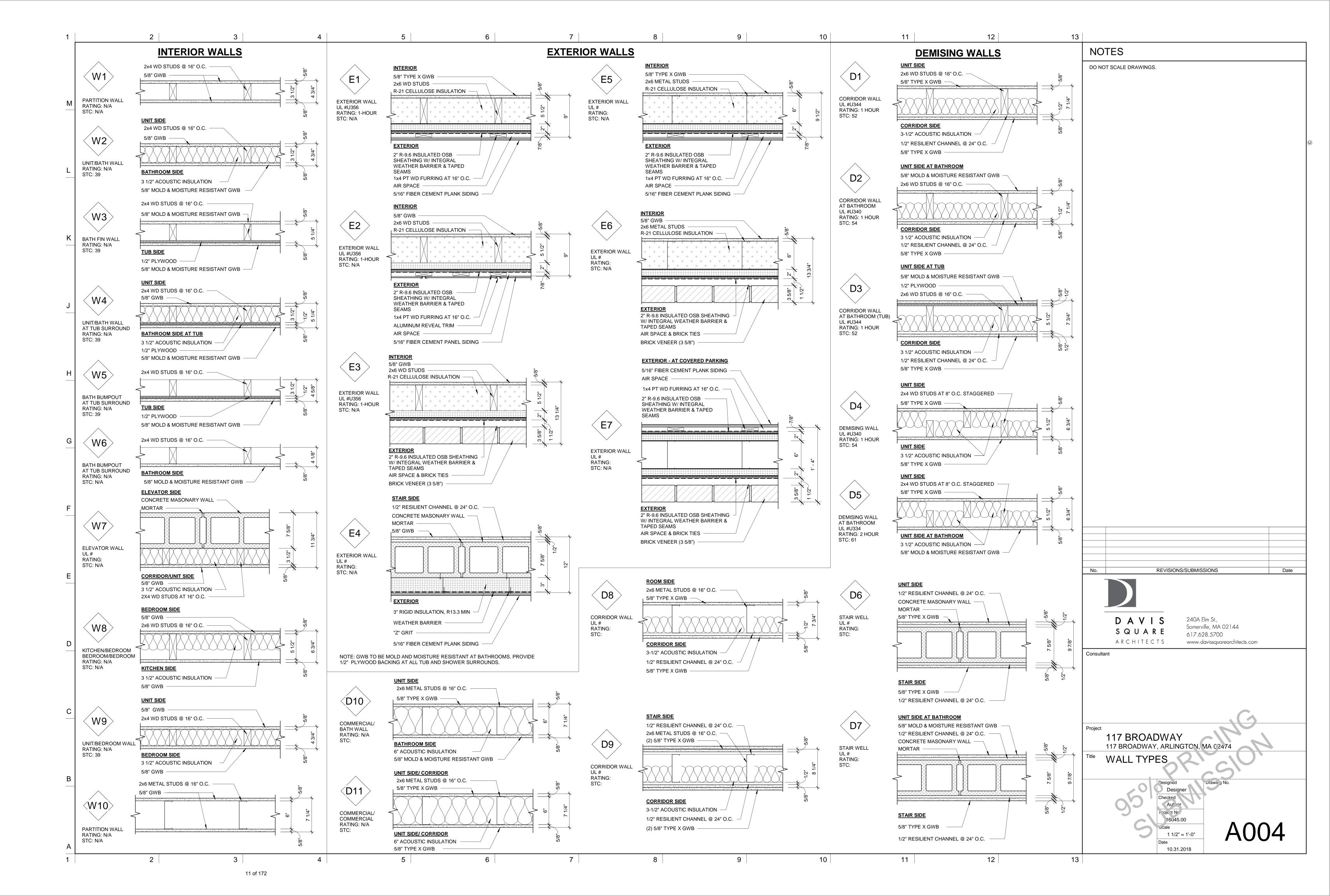
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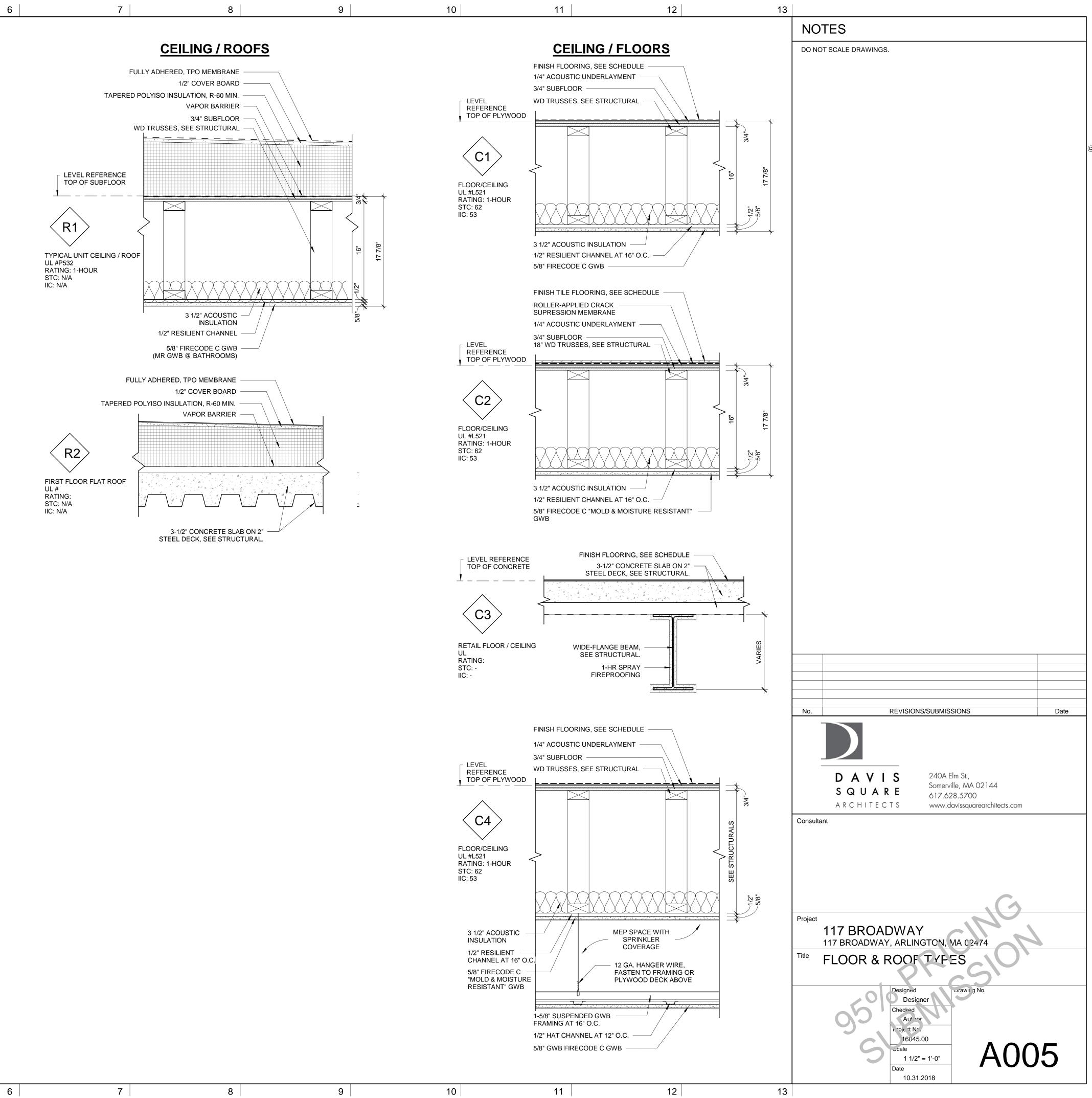


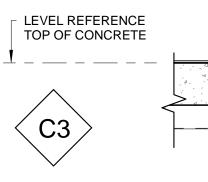


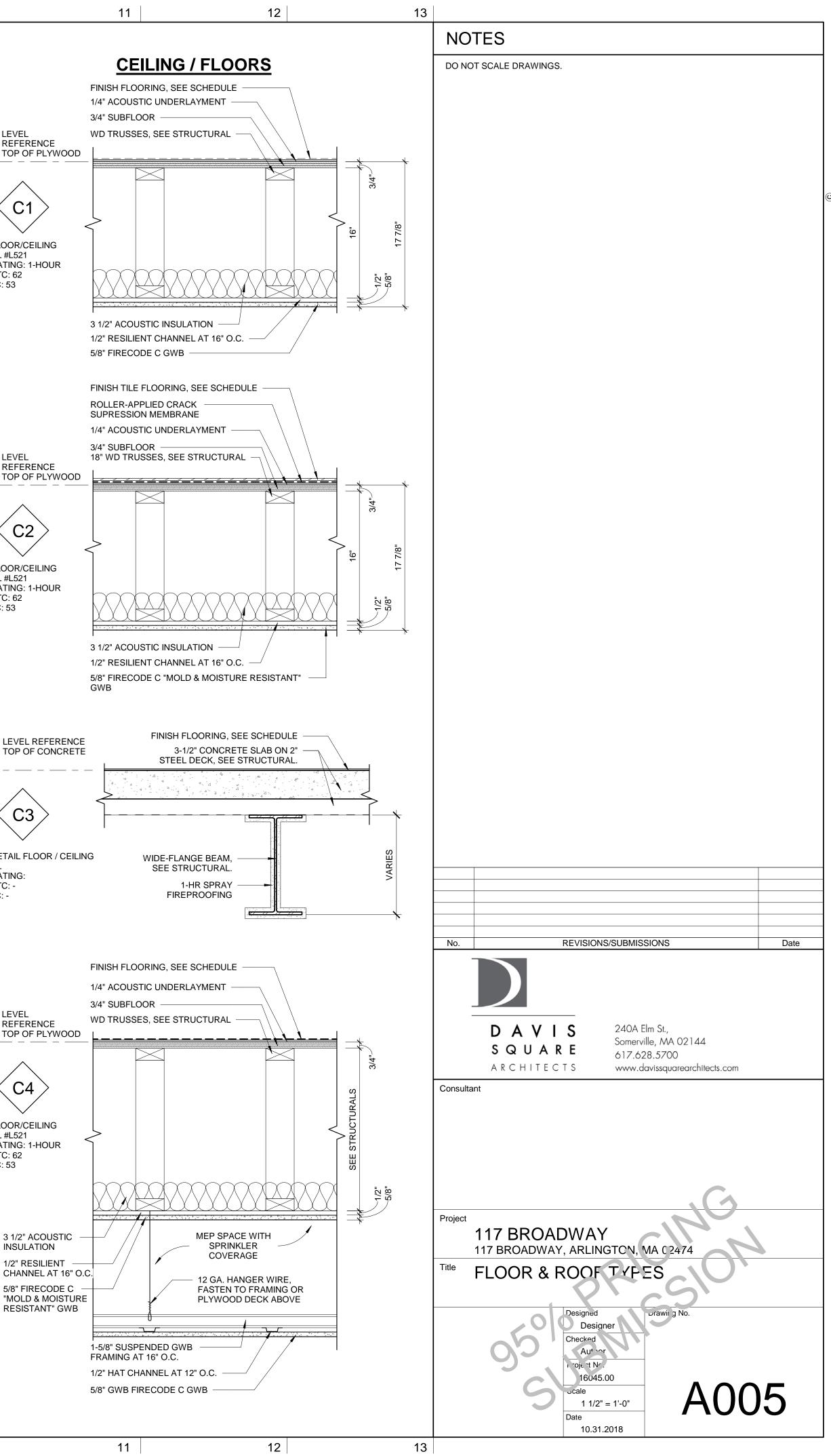


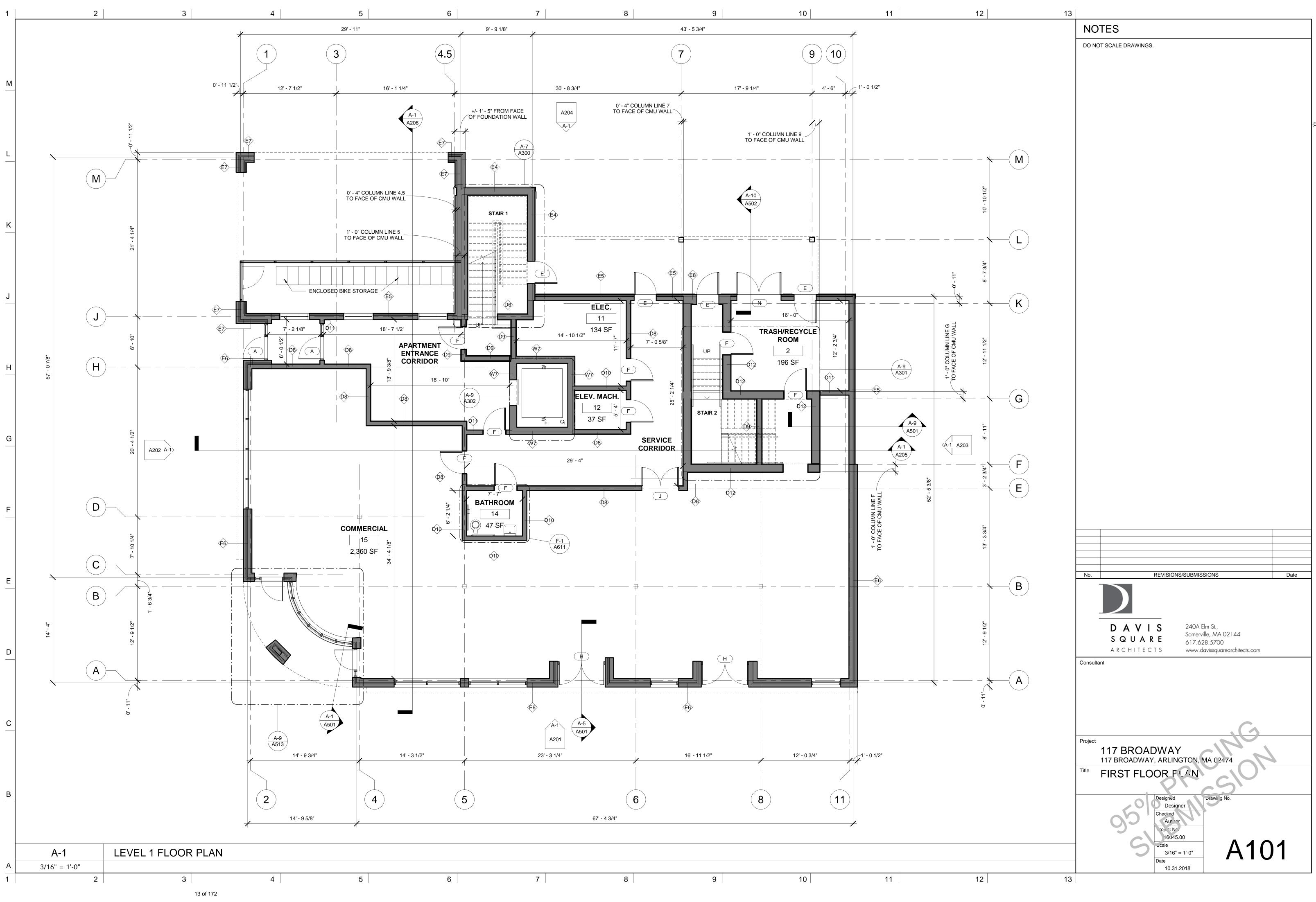


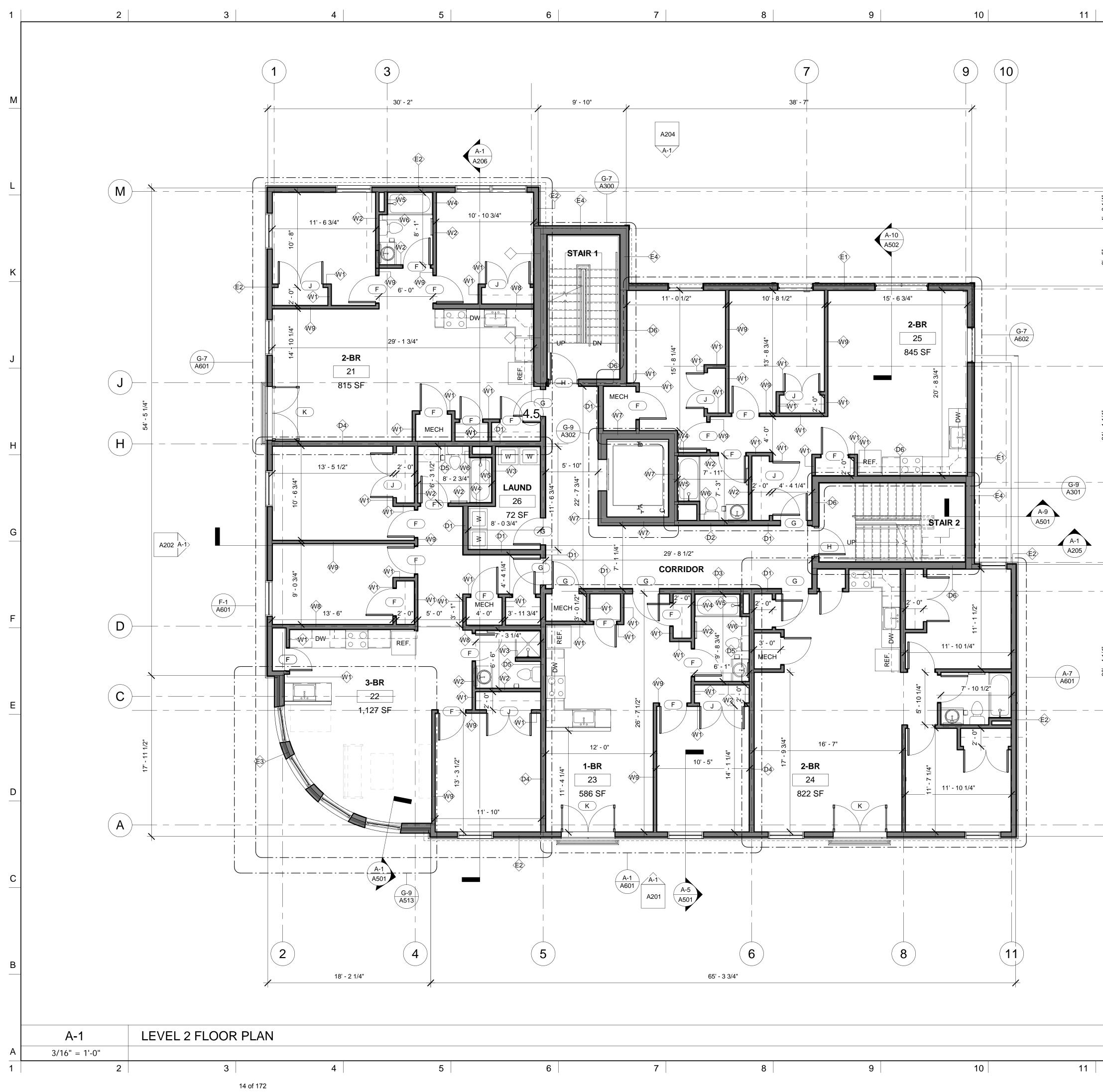
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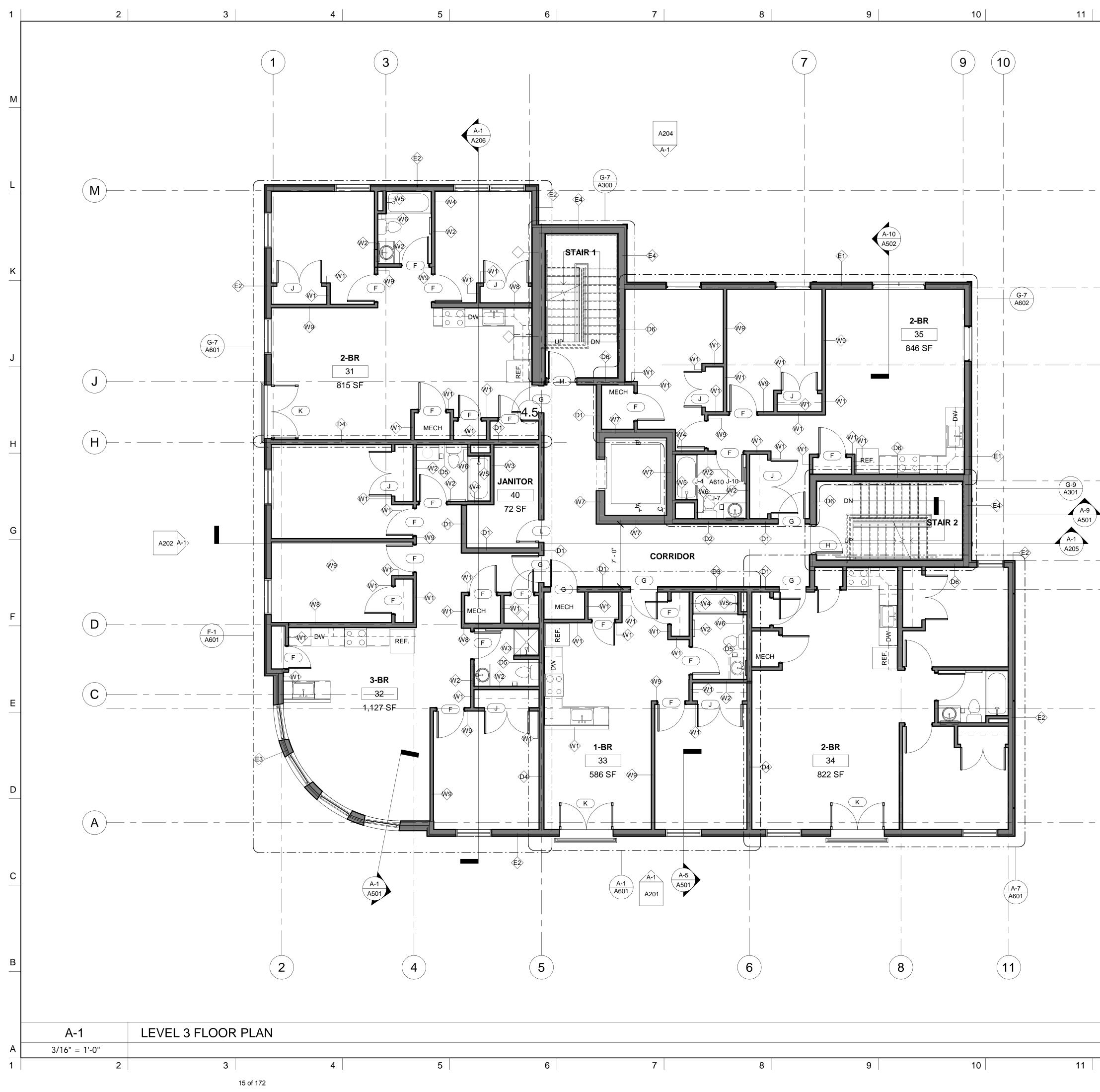






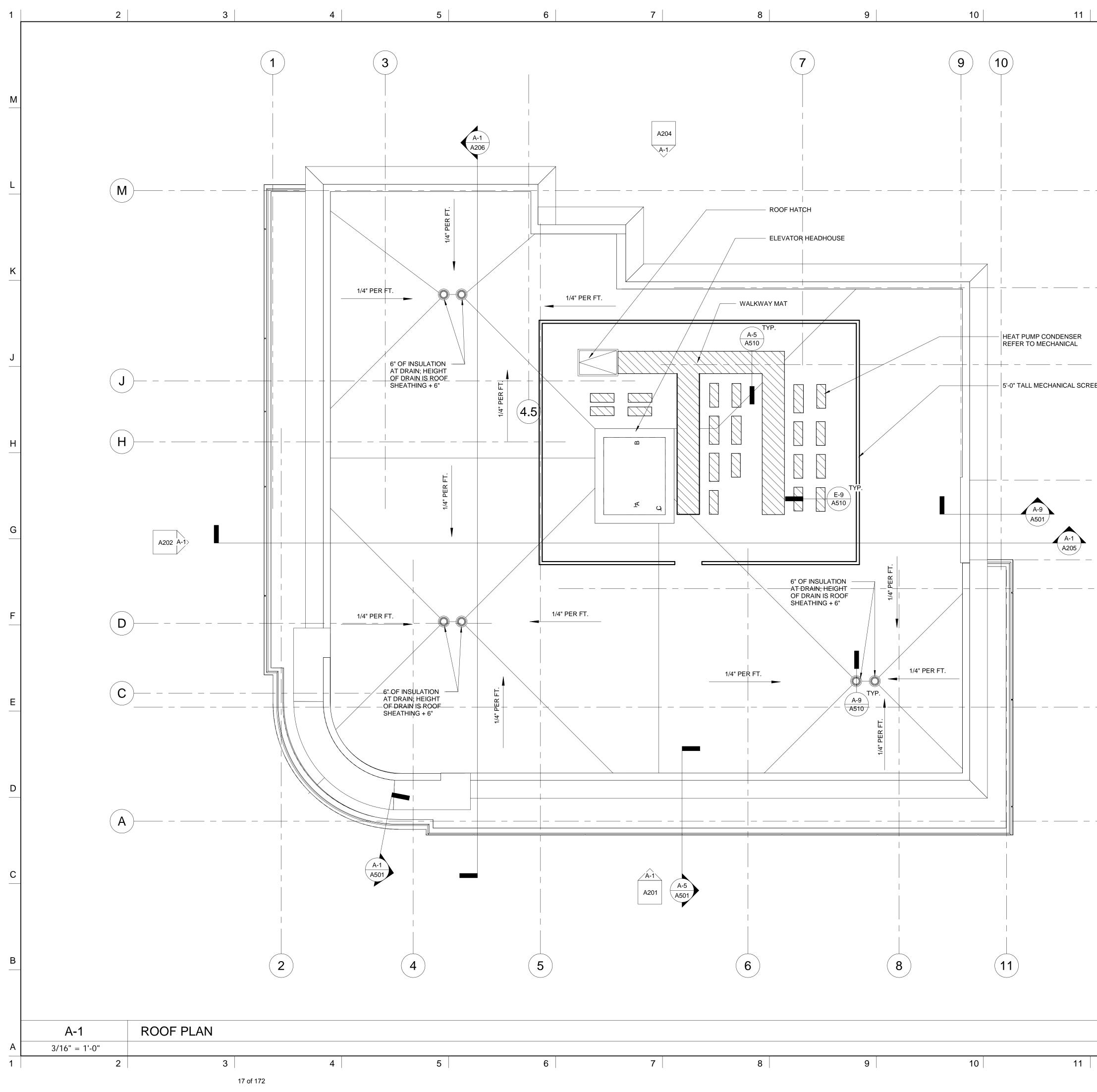


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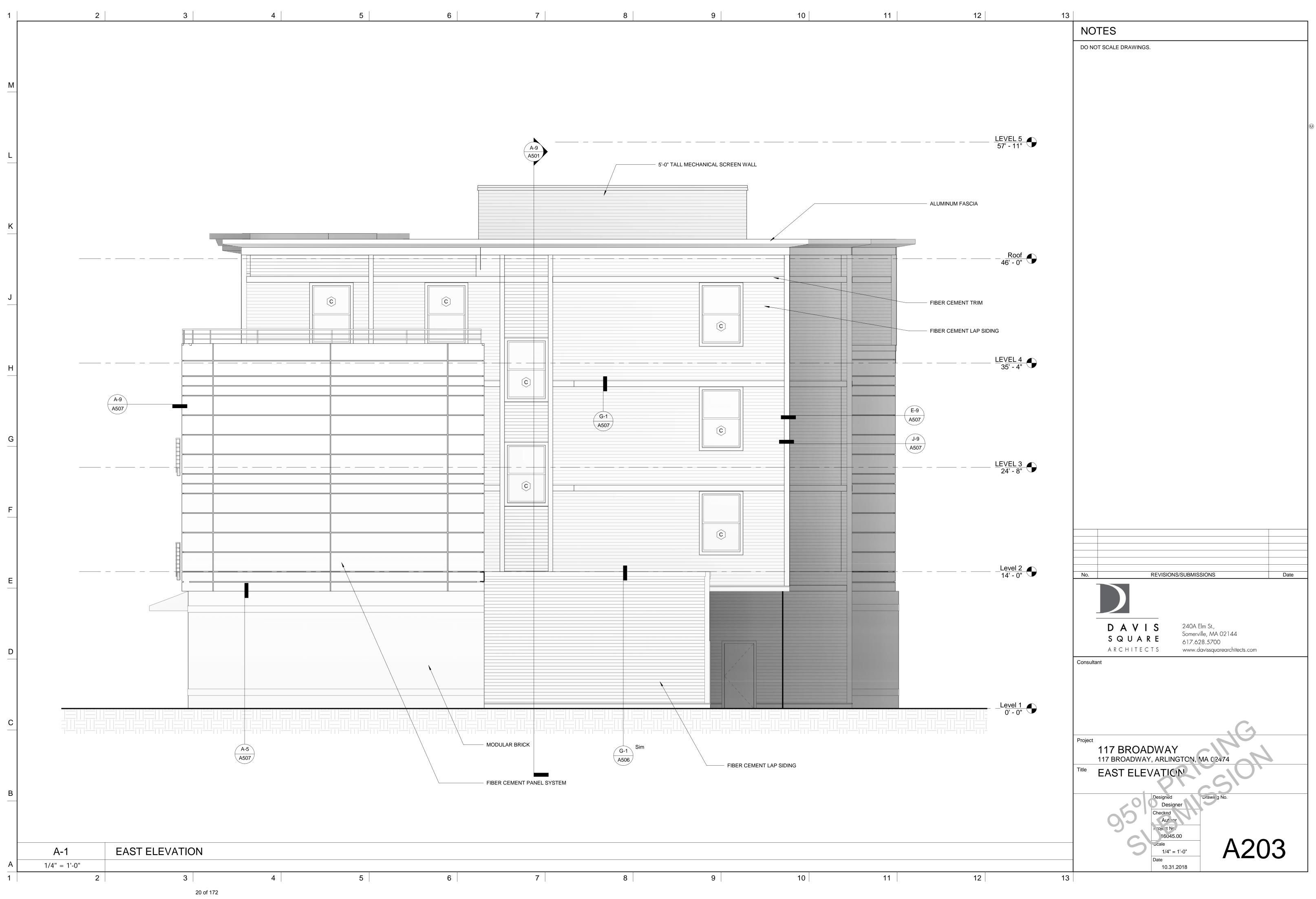




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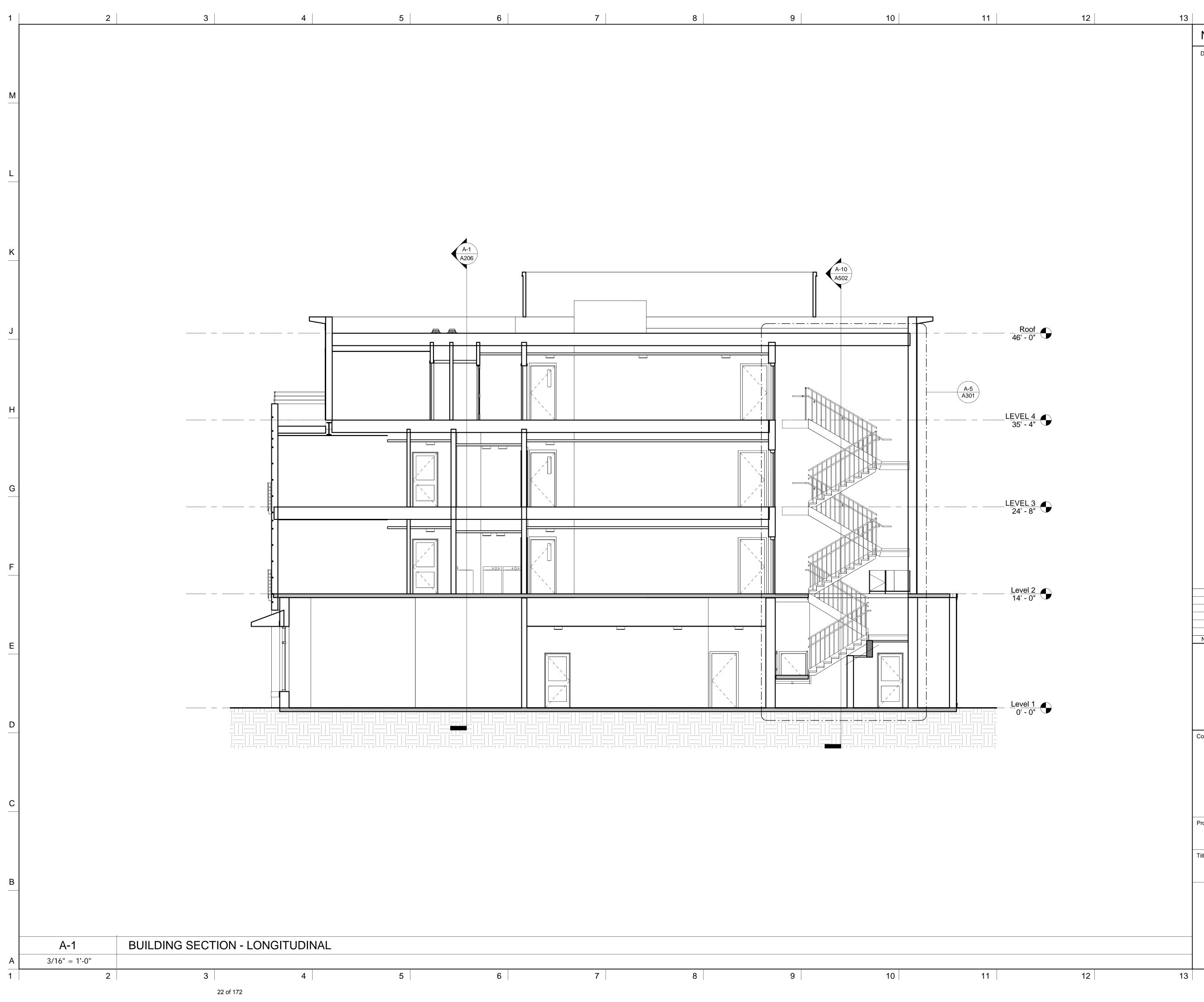












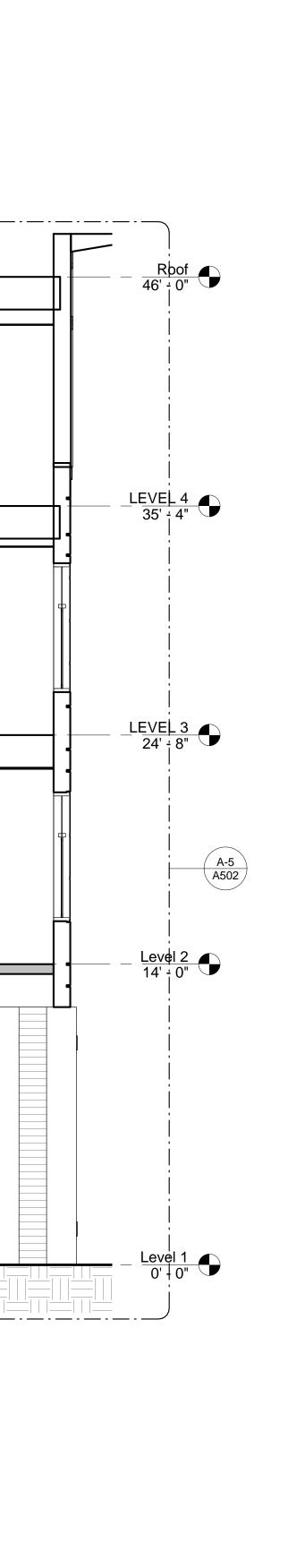
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SQUARE       Somervile, MA D2144         ARCHITECTS       617.628,5700         ARCHITECTS       www.davissquarearchitects.com         Consultant       Consultant         Project       117 BROADWAY         117 BROADWAY, ARLINGTON, MA C2474         Title       BUILDING SEC.TICN         Viseling       Designer         Checkage       Designer         Viseling       Articr         Viseling       A2055			
SQUARE       Somervile, MA D2144         ARCHITECTS       617.628,5700         ARCHITECTS       www.davissquarearchitects.com         Consultant       Consultant         Project       117 BROADWAY         117 BROADWAY, ARLINGTON, MA C2474         Title       BUILDING SEC.TICN         Viseling       Designer         Checkage       Designer         Viseling       Articr         Viseling       A2055			DAVIS 240A Elm St.
ARCHITECTS       www.davissquarearchitects.com         Consultant       Project         117 BROADWAY       117 BROADWAY         117 BROADWAY, ARLINGTON, MA C2474         Title       BUILDING SECTION         Designed       Orraviti g No.         Designed       Orraviti g No.         Occeled       3/16" = 1'-0"         Date       10.31.2018	Level 1 0' - 0"		Somerville, MA 02144
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16045.00       scale       3/16" = 1'-0"       Date       10.31.2018			Author
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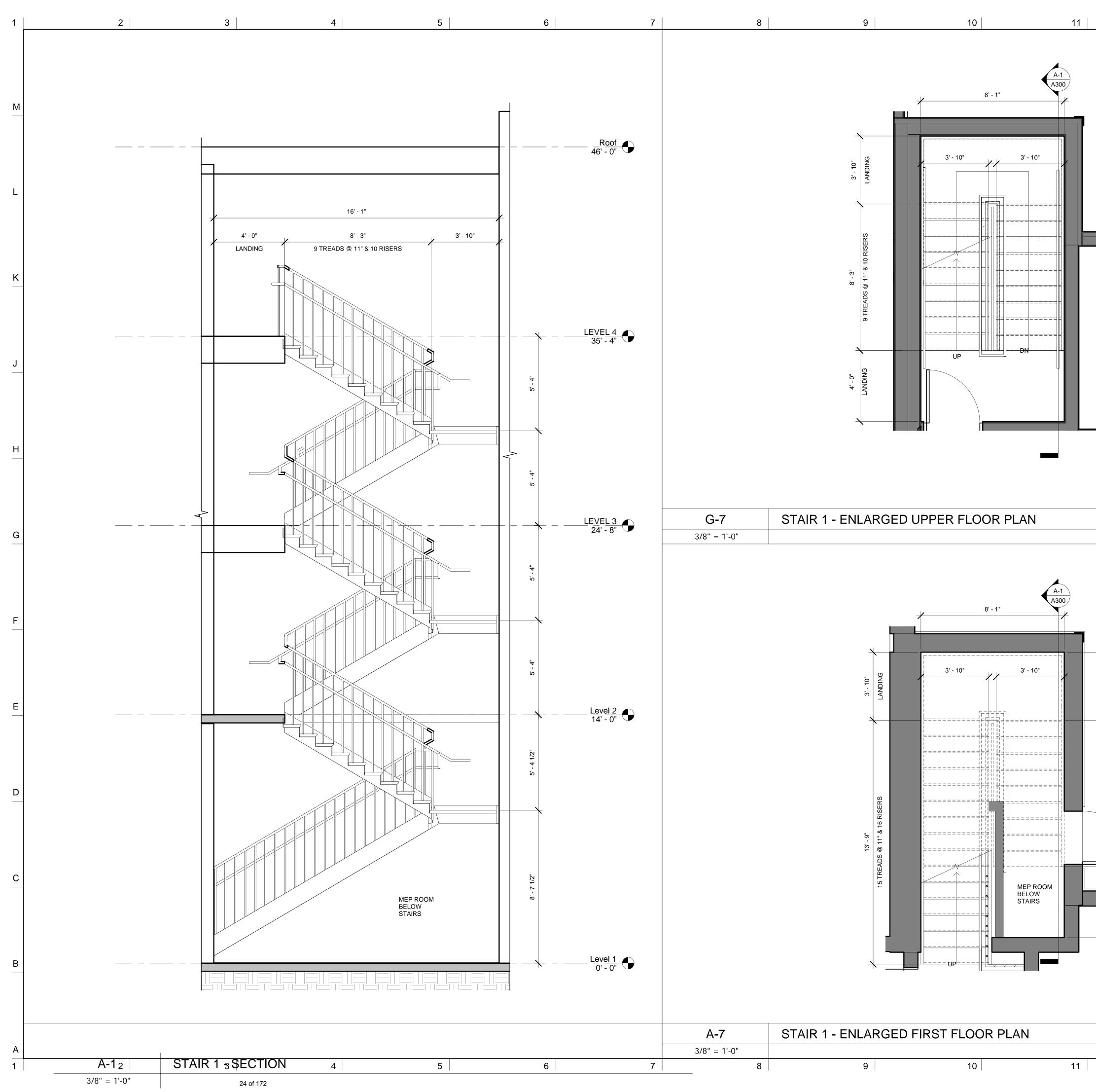
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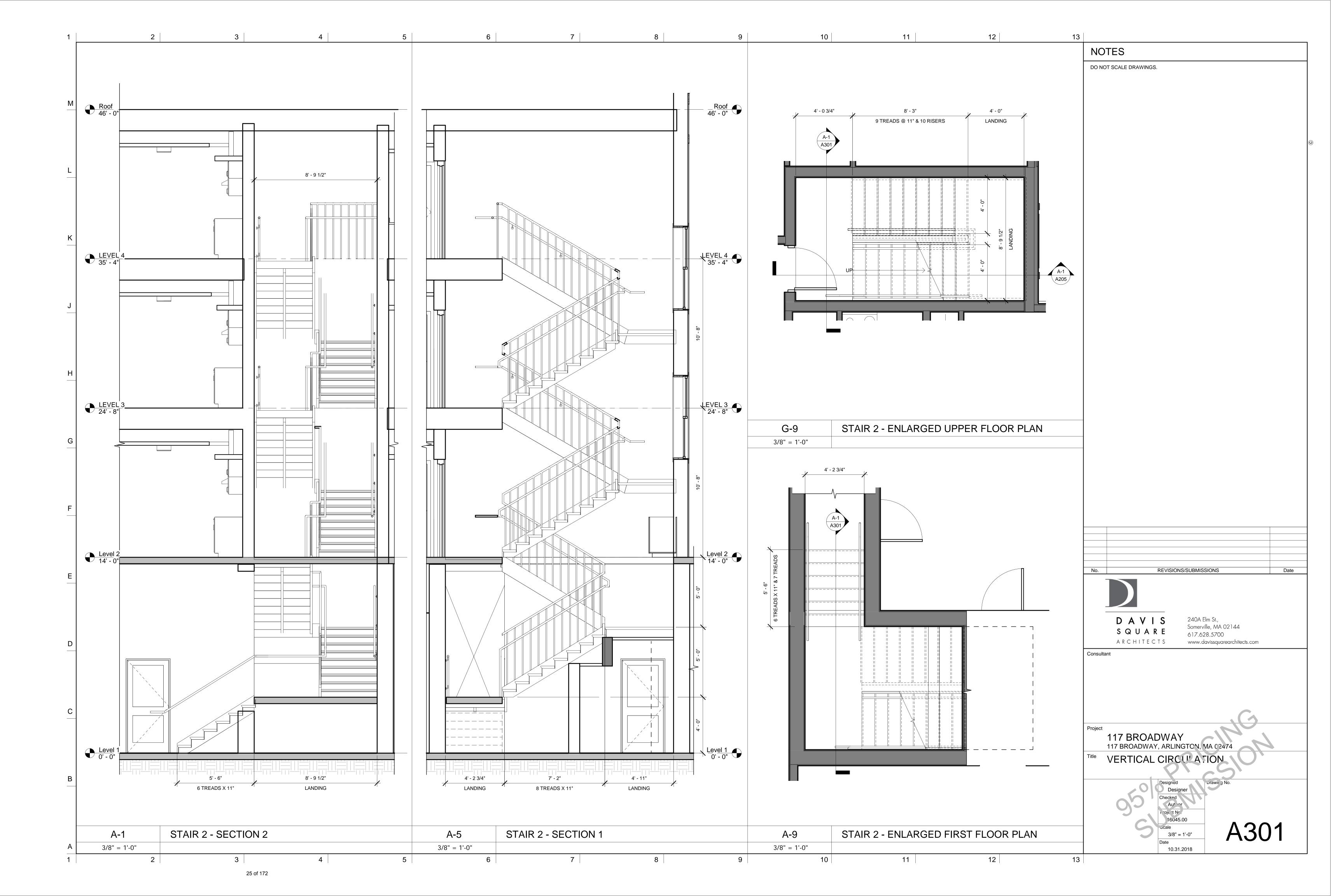
No.	REVISIONS/SUBMISSIONS	Date
	DAVIS SQUARE240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	
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Desire of		
Project	117 BROADWAY 117 BROADWAY, ARLINGTCN, MA C 2474	
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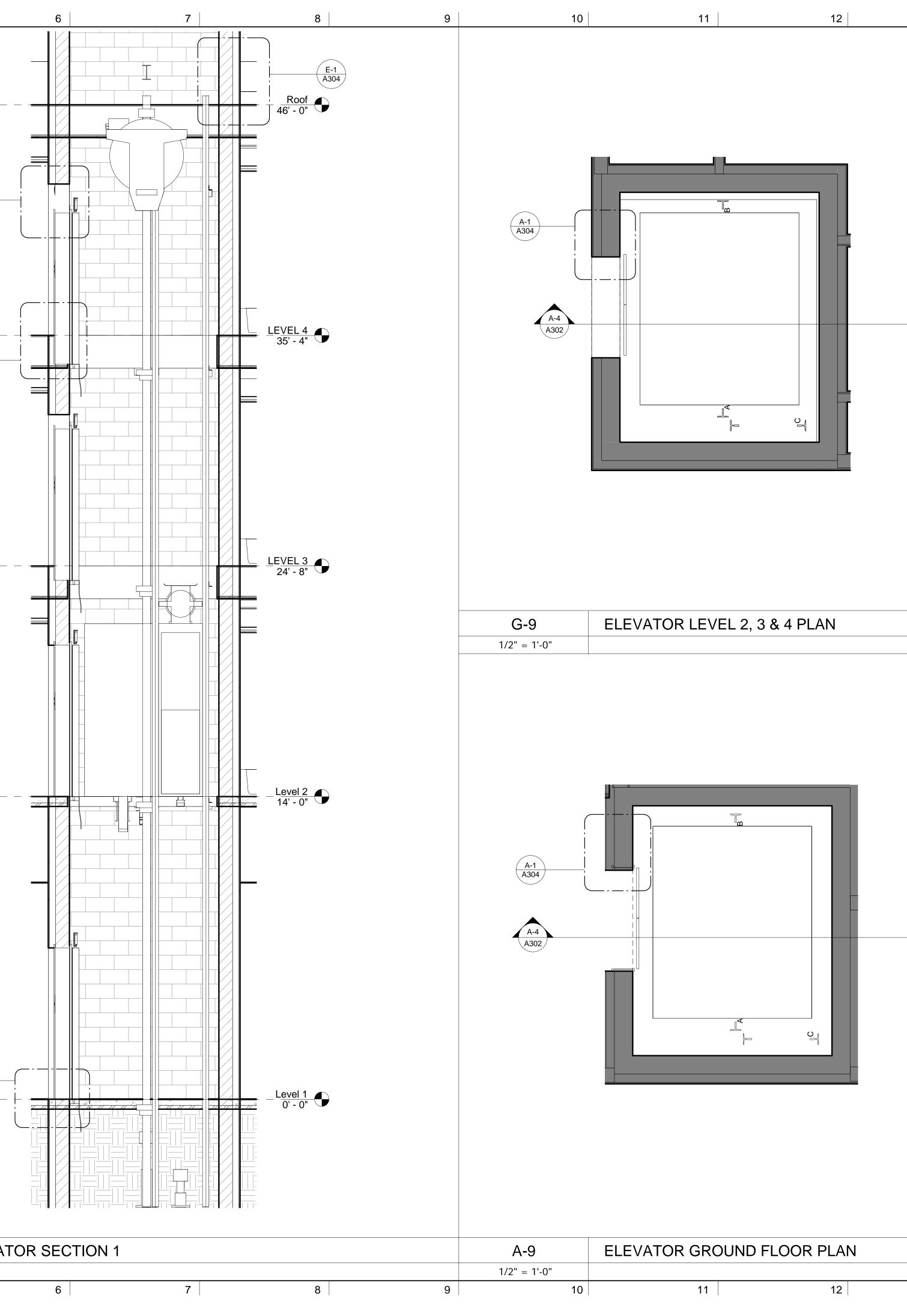
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No.	REVISIONS	S/SUBMISSIONS		Date
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117 BRO	ROADWAY ADWAY, ARLING	GTCN, MA C 24		
<u>of</u>	Designed Design Checked Author Inrojent Nr. 16045.0 Scale 3/8" = 7 Date 10.31.2	00 1'-0"	No.	0

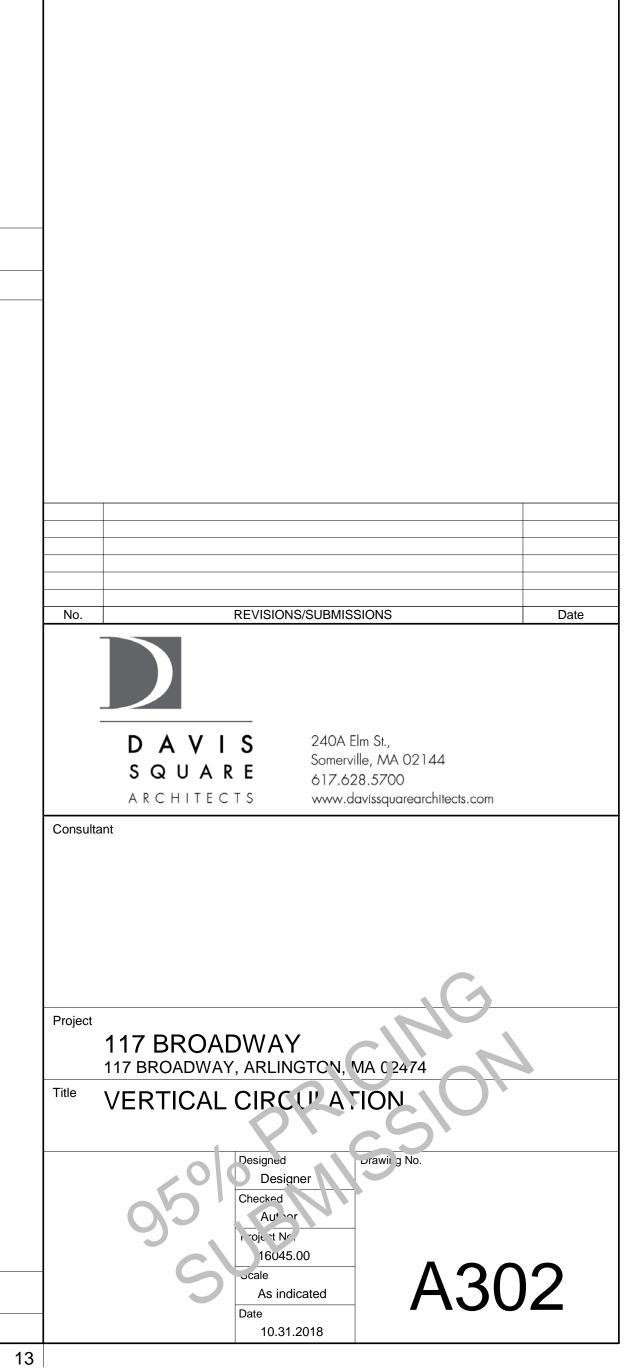


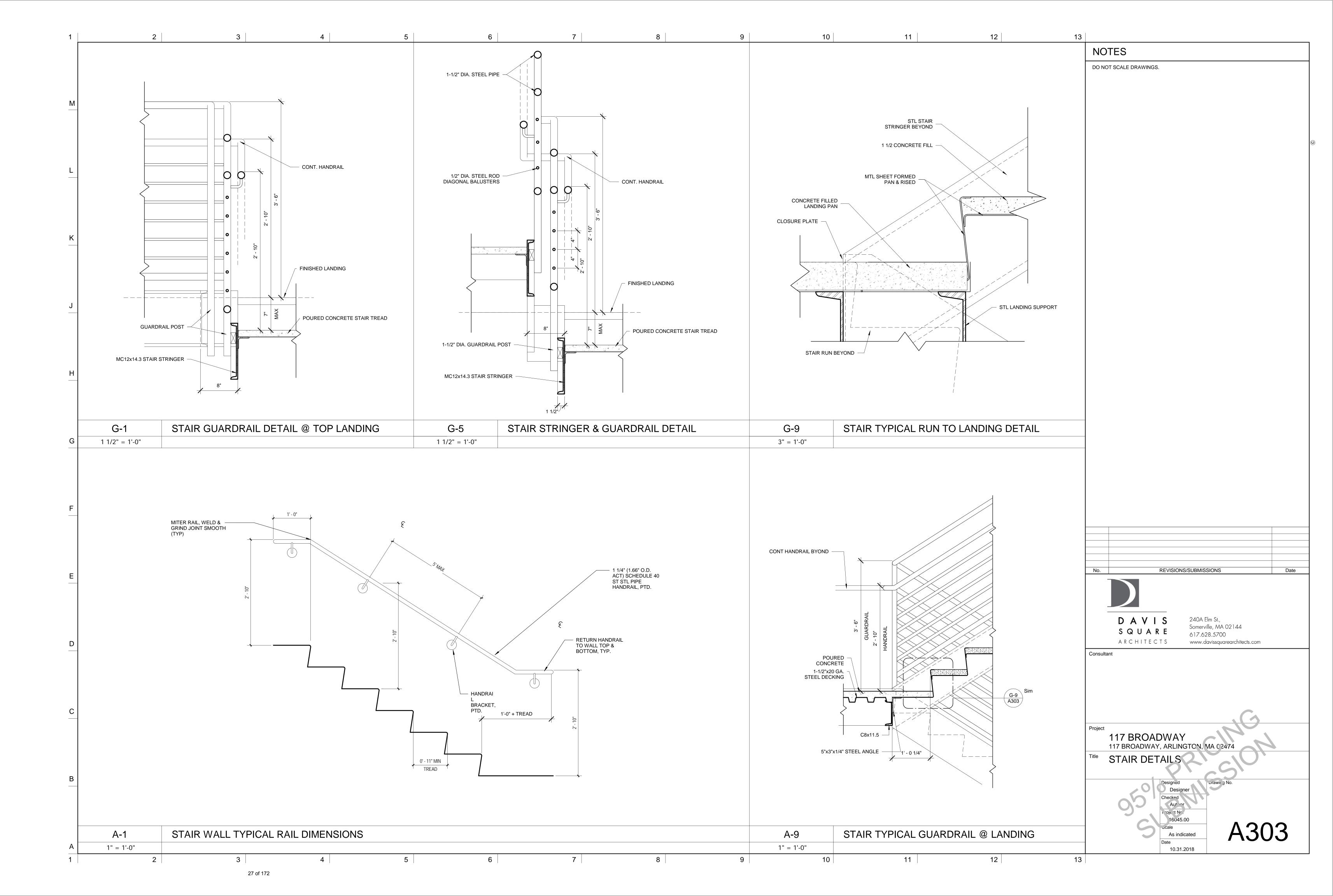
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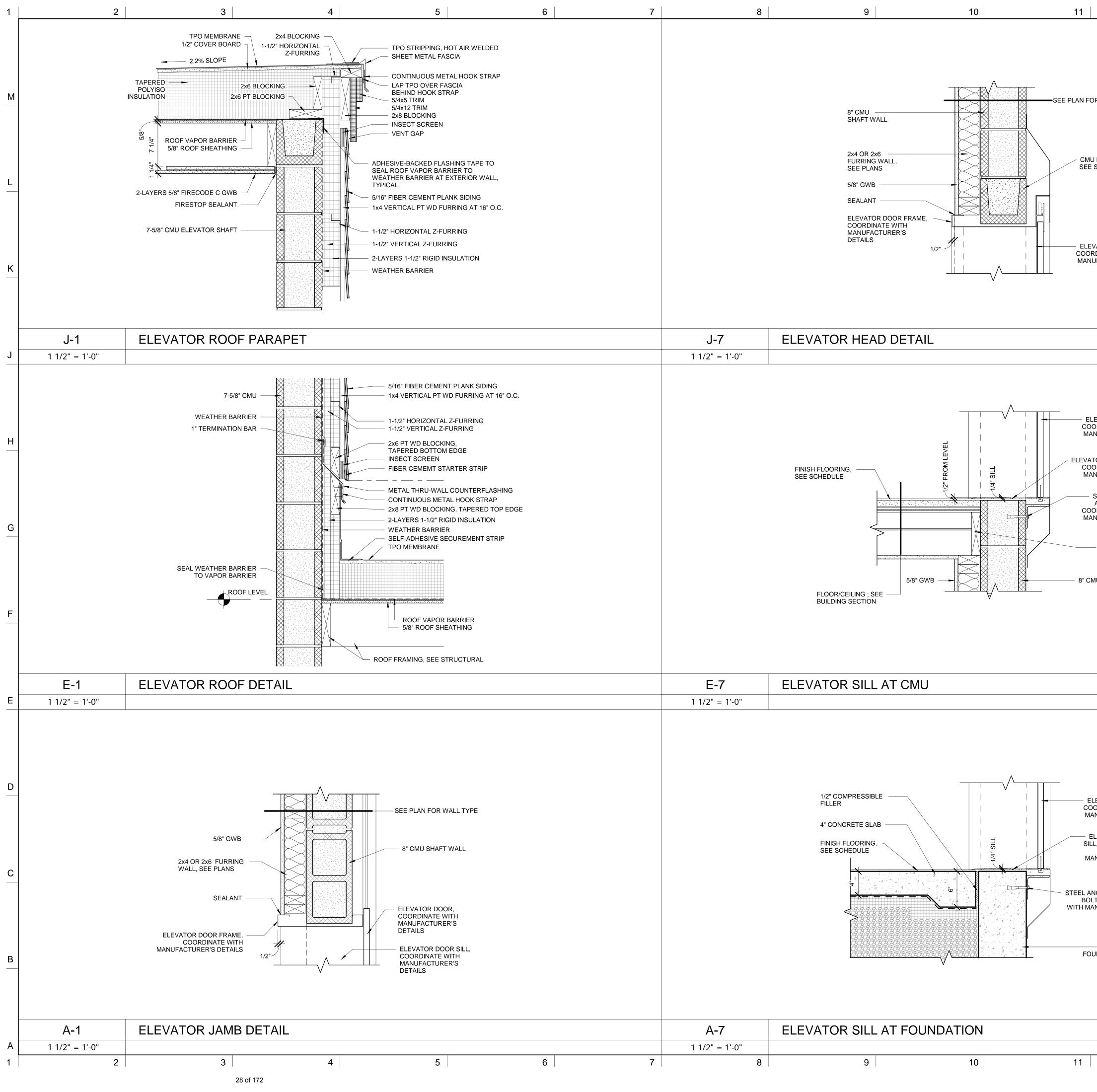


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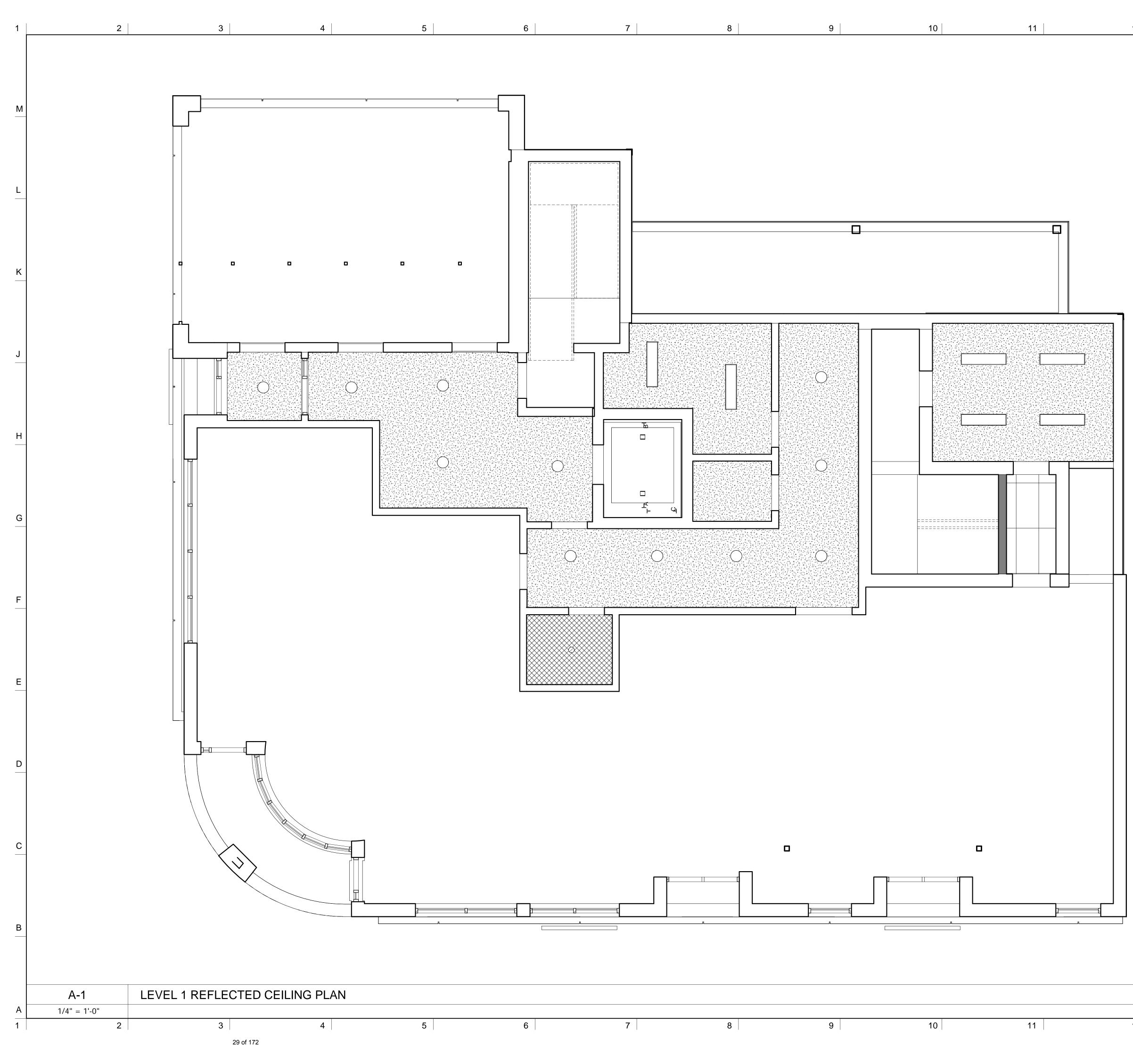
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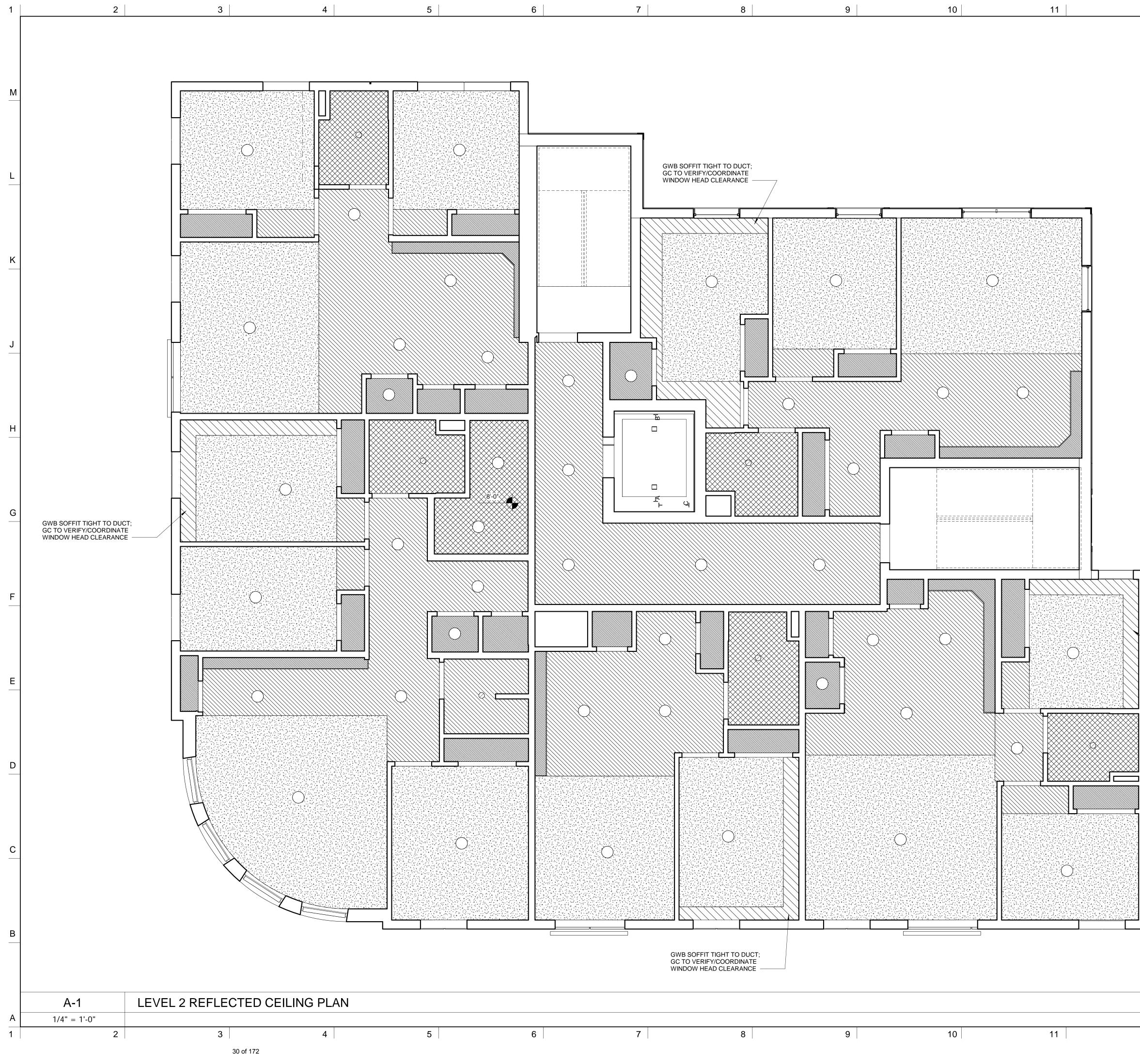




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JFACTURER'S DETAILS		
EVATOR DOOR,		
ORDINATE WITH NUFACTURER'S		
FOR DOOR SILL, DRDINATE WITH NUFACTURER'S		
DETAILS STEEL ANGLE &		
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DETAILS		
- LEDGER, SEE STRUCTURAL		
IU SHAFT WALL		
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	No. REVISIONS/SUBMISSIONS Date	
	DAVIS 240A Elm St.,	
	<b>SQUARE</b> Somerville, MA 02144 617.628.5700	
EVATOR DOOR,	A R C H I T E C T S       www.davissquarearchitects.com         Consultant	┥
ORDINATE WITH NUFACTURER'S DETAILS		
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WITH NUFACTURER'S		
DETAILS		
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NUFACTURER'S DETAILS	117 BROADWAY 117 BROADWAY, ARLINGTCN, MA C 2474	
	Title ELEVATOR DETAY S	
– 8" CONCRETE JNDATION WALL	Designed rawit g No.	
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	1 1/2" = 1'-0" A304	
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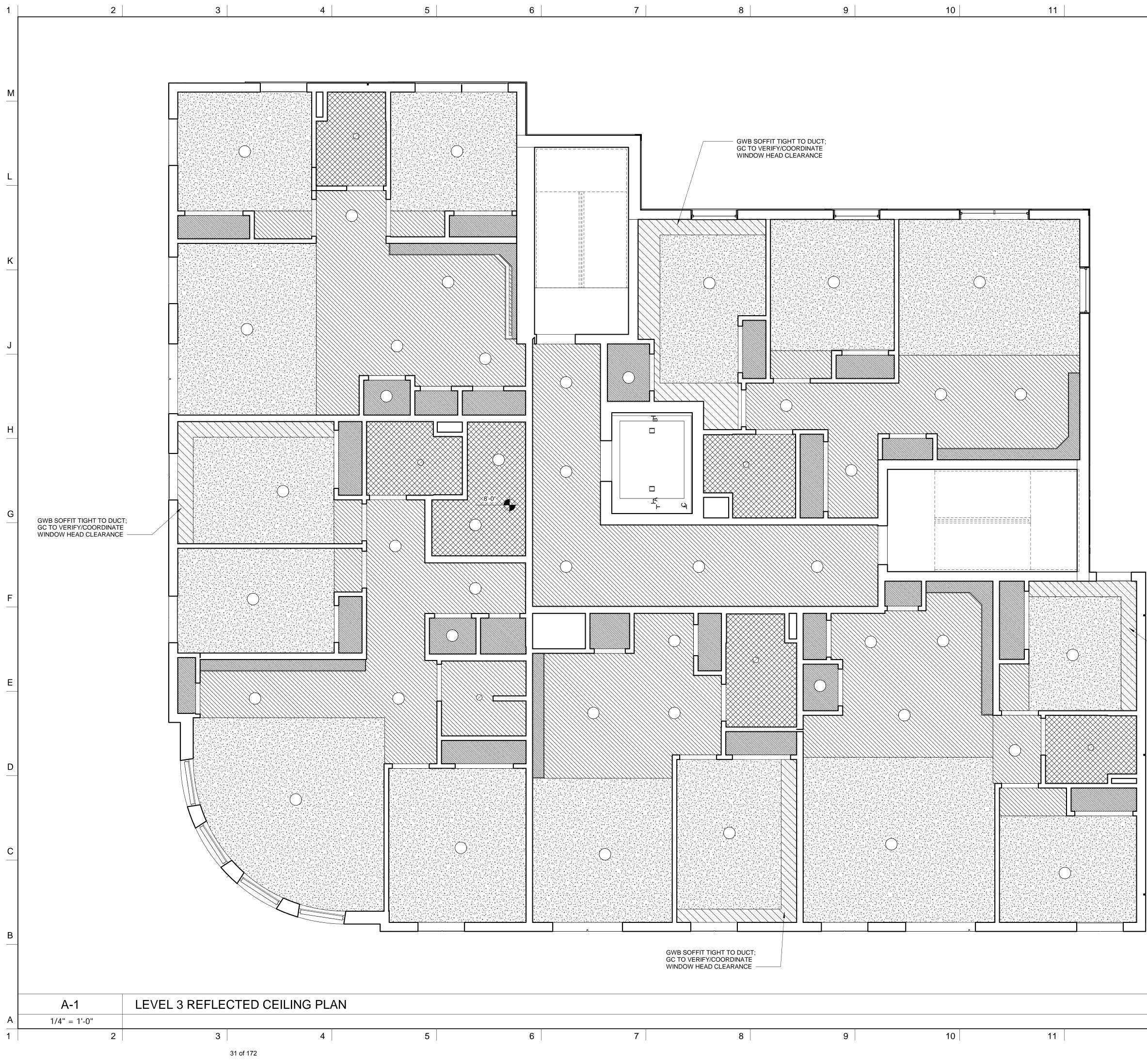
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	SURFACE MOUNTED CEILING FIXTURE, SEE EI LIGHTING PLANS.	LECTRICAL		
Q	WALL SCONCE, SEE ELECTRICAL DRAWINGS.			
	FAN LIGHT COMBO, COORDINATE BETWEEN N AND ELECTRICAL.	<b>MECHANICAL</b>		
	CEILING FAN, SEE MECHANICAL PLANS.			
0	RECESSED CAN LIGHT, SEE ELECTRICAL LIGH	ITING PLANS.		
	CLOSET & ABOVE KITCHEN CABINETS SOFFIT SEE FLOOR/CEILING ASSEMBLY C4	GWB AT 7'-0"		
	MOISTURE RESISTANT GWB AT 7'-6", UNLESS SEE FLOOR/CEILING ASSEMBLY C4	NOTED OTHERWISE		
	UNIT ENTRY & DROPPED GWB SOFFITS AT 8'-( SEE FLOOR/CEILING ASSEMBLY C4	D"		
$ \begin{array}{c} & & \\ & & $	1) ON FIRST FLOOR GWB SOFFIT AT 10'-0" 2) ON UPPER FLOORS GWB AT UNDERSIDE OI SHOWN IN FLOOR/CEILING ASSEMBLY 1. (AT I ROOM PROVIDE ASSEMBLY 2.)			
No.	REVISIONS/SUBMISSIONS	Date		
	<b>VIS</b> 240A Elm St.,			
S Q	UARE         Somerville, MA 02144           617.628.5700			
A R C	HITECTS www.davissquarearchitects	.com		
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Project 117 R	ROADWAY	2		
117 BRC	DADWAY, ARLINGTCN, MA C 2474			
LEVE	L 1 REFLECTED CEILING			
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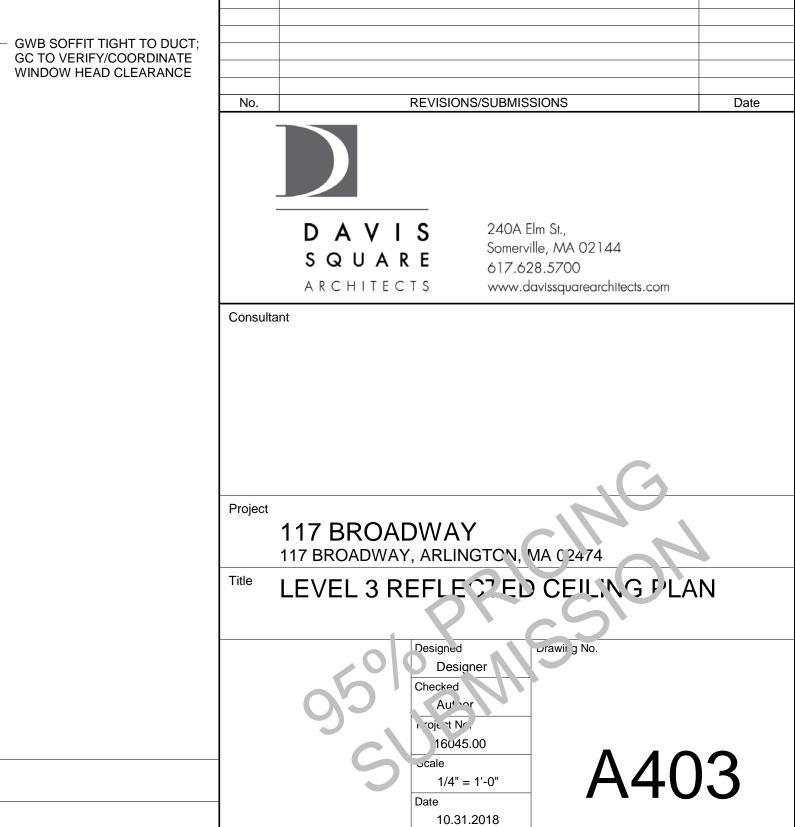
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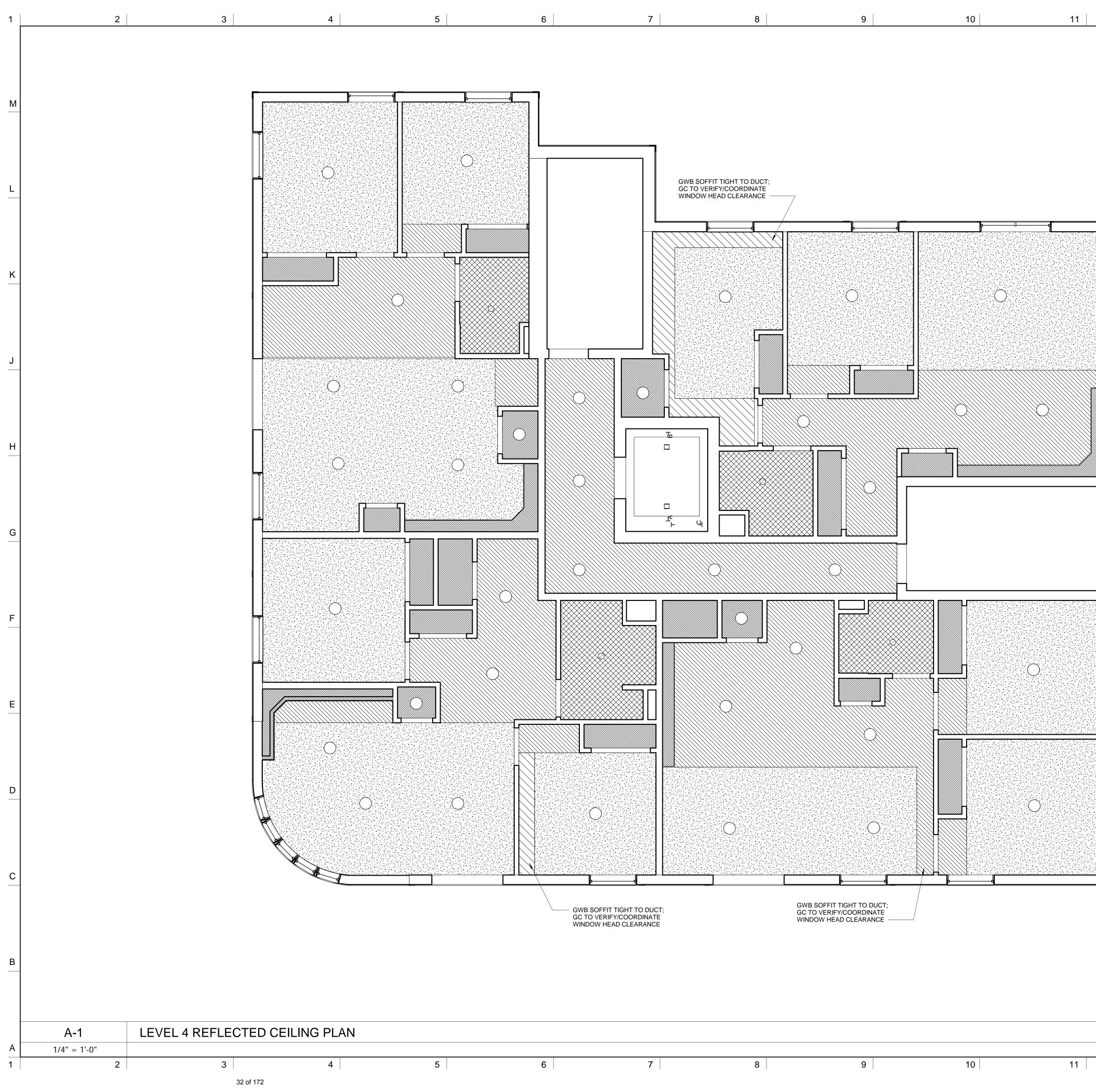
	DO NOT SCALE DRAWINGS. <u>GENERAL NOTES</u> • THESE NOTES APPLY TO EVERYTHING IN THE DRAWINGS TO THE LEFT. • SEE ELECTRICAL DWG'S FOR LIGHTING FIXTURES AND LOCATIONS			
	NUMBERED NOTES         1.       THESE NOTES APPLY TO SPECIFIC ELEMENTS IN THE DRAWINGS TO THE LE	FT.		
	LEGEND         SURFACE MOUNTED CEILING FIXTURE, SEE ELECTRICAL LIGHTING PLANS.			
	$\bigcirc$ WALL SCONCE, SEE ELECTRICAL DRAWINGS.			
	FAN LIGHT COMBO, COORDINATE BETWEEN MECHANICAL AND ELECTRICAL.			
	CEILING FAN, SEE MECHANICAL PLANS.			
	RECESSED CAN LIGHT, SEE ELECTRICAL LIGHTING PLANS.			
	CLOSET & ABOVE KITCHEN CABINETS SOFFIT GWB AT 7'-0" SEE FLOOR/CEILING ASSEMBLY C4			
	MOISTURE RESISTANT GWB AT 7'-6", UNLESS NOTED OTHERWISI SEE FLOOR/CEILING ASSEMBLY C4	E		
	UNIT ENTRY & DROPPED GWB SOFFITS AT 8'-0" SEE FLOOR/CEILING ASSEMBLY C4			
	1) ON FIRST FLOOR GWB SOFFIT AT 10'-0" 2) ON UPPER FLOORS GWB AT UNDERSIDE OF STRUCTURE, AS SHOWN IN FLOOR/CEILING ASSEMBLY 1. (AT ELEVATOR MACHIN ROOM PROVIDE ASSEMBLY 2.)	E		
WB SOFFIT TIGHT TO DUCT; C TO VERIFY/COORDINATE INDOW HEAD CLEARANCE	Image:			
	No.     REVISIONS/SUBMISSIONS     Date       DAVIS     240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com     240A Elm St., Somerville, MA 02144       Consultant     240A Elm St., Somerville, MA 02144			
	Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA C2474 Title LEVEL 2 REFLECTED CEILING FLAN Designed Designer Checked Author roje t Nr. 16045.00 ocale 1/4" = 1'-0" Date			
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DO NOT SCALE DRAWINGS. <u>GENERAL NOTES</u> • THESE NOTES APPLY TO EVERYTHING IN THE DRAWINGS TO THE LEFT. • SEE ELECTRICAL DWG'S FOR LIGHTING FIXTURES AND LOCATIONS	
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LEGEN	I <u>D</u>		
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	Q	WALL SCONCE, SEE ELECTRICAL DRAWINGS.	
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(		CEILING FAN, SEE MECHANICAL PLANS.	
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		CLOSET & ABOVE KITCHEN CABINETS SOFFIT GWB AT 7 SEE FLOOR/CEILING ASSEMBLY C4	7'-0"
		MOISTURE RESISTANT GWB AT 7'-6", UNLESS NOTED O SEE FLOOR/CEILING ASSEMBLY C4	THERWISE
		UNIT ENTRY & DROPPED GWB SOFFITS AT 8'-0" SEE FLOOR/CEILING ASSEMBLY C4	
		1) ON FIRST FLOOR GWB SOFFIT AT 10'-0" 2) ON UPPER FLOORS GWB AT UNDERSIDE OF STRUCTURE, AS SHOWN IN FLOOR/CEILING ASSEMBLY 1. (AT ELEVATOR MACHINE ROOM PROVIDE ASSEMBLY 2.)	





13 NOTES DO NOT SCALE DRAWINGS. <u>GENERAL NOTES</u>
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SEE ELECTRICAL DWG'S FOR LIGHTING FIXTURES AND LOCATIONS NUMBERED NOTES1.THESE NOTES APPLY TO SPECIFIC ELEMENTS IN THE DRAWINGS TO THE LEFT. LEGEND SURFACE MOUNTED CEILING FIXTURE, SEE ELECTRICAL LIGHTING PLANS.  $\bigcirc$  WALL SCONCE, SEE ELECTRICAL DRAWINGS. FAN LIGHT COMBO, COORDINATE BETWEEN MECHANICAL AND ELECTRICAL. CEILING FAN, SEE MECHANICAL PLANS.  $\bigcirc$  RECESSED CAN LIGHT, SEE ELECTRICAL LIGHTING PLANS. CLOSET & ABOVE KITCHEN CABINETS SOFFIT GWB AT 7'-0" SEE FLOOR/CEILING ASSEMBLY C4 MOISTURE RESISTANT GWB AT 7'-6", UNLESS NOTED OTHERWISE SEE FLOOR/CEILING ASSEMBLY C4 UNIT ENTRY & DROPPED GWB SOFFITS AT 8'-0" SEE FLOOR/CEILING ASSEMBLY C4 1) ON FIRST FLOOR GWB SOFFIT AT 10'-0" 2) ON UPPER FLOORS GWB SCITH AT 10-5 2) ON UPPER FLOORS GWB AT UNDERSIDE OF STRUCTURE, AS SHOWN IN FLOOR/CEILING ASSEMBLY 1. (AT ELEVATOR MACHINE ROOM PROVIDE ASSEMBLY 2.) No. **REVISIONS/SUBMISSIONS** Date DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA ( 2474 Title LEVEL 4 REFLECTED CEILING PLAN

16045.00

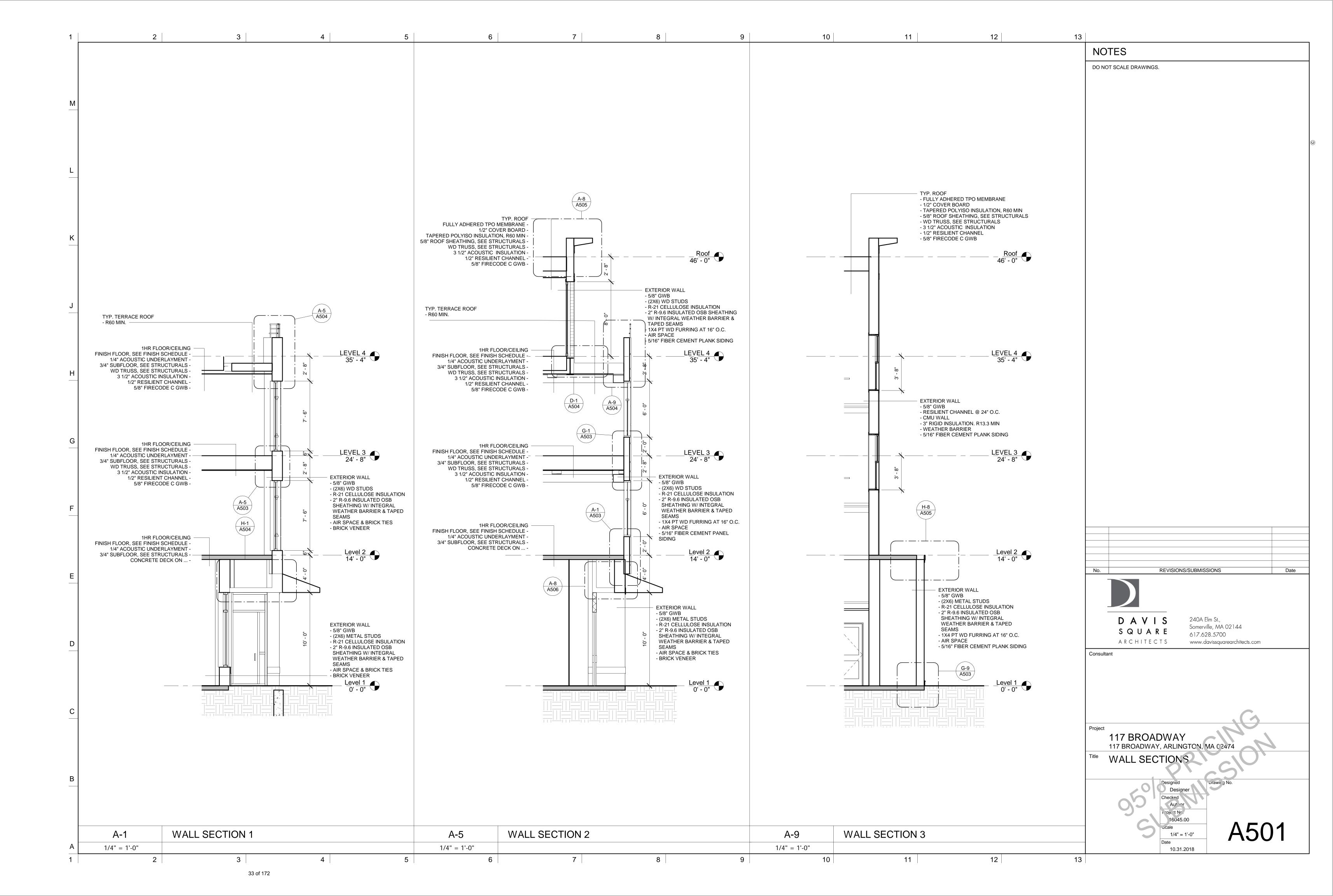
1/4" = 1'-0"

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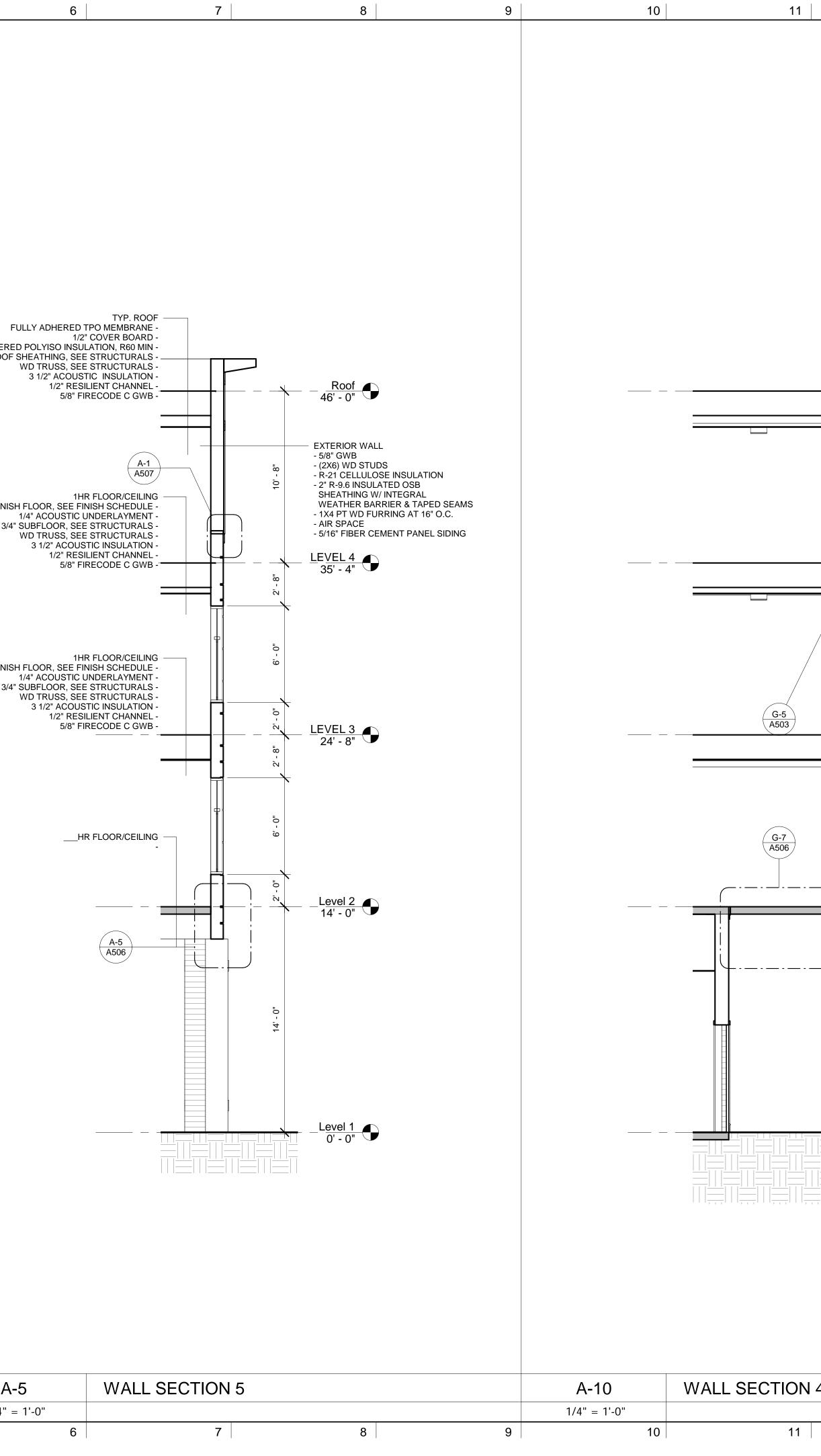
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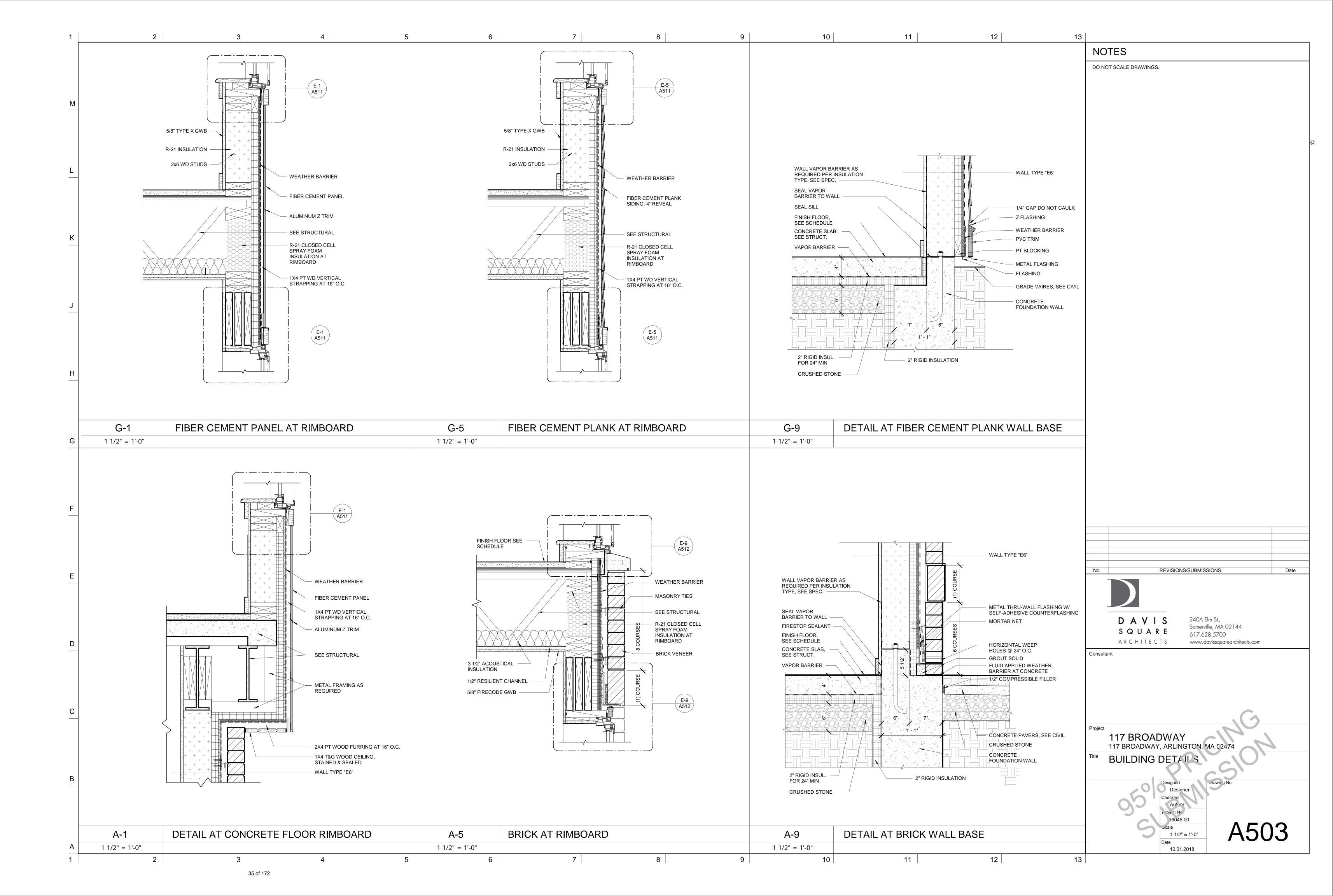
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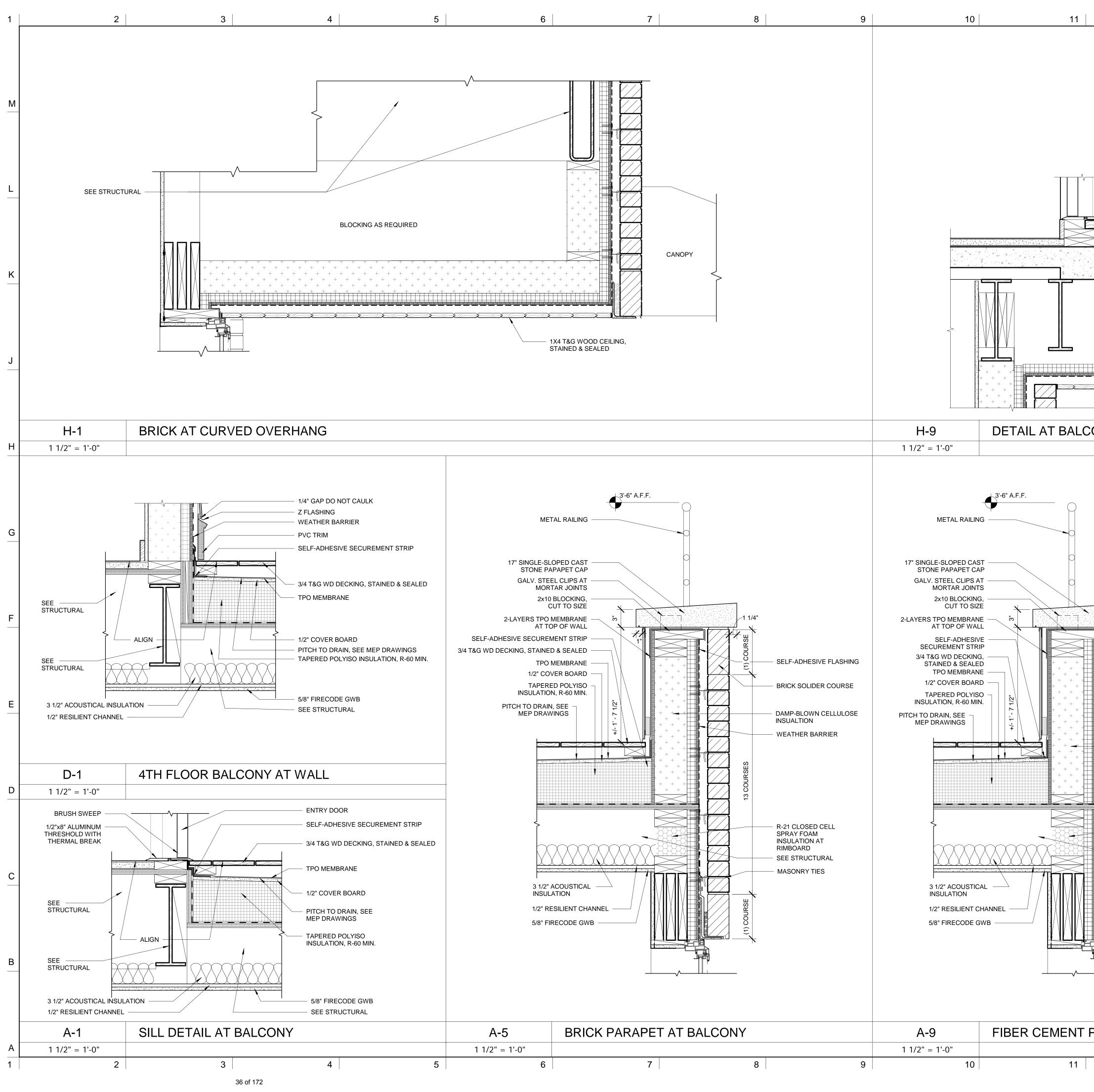


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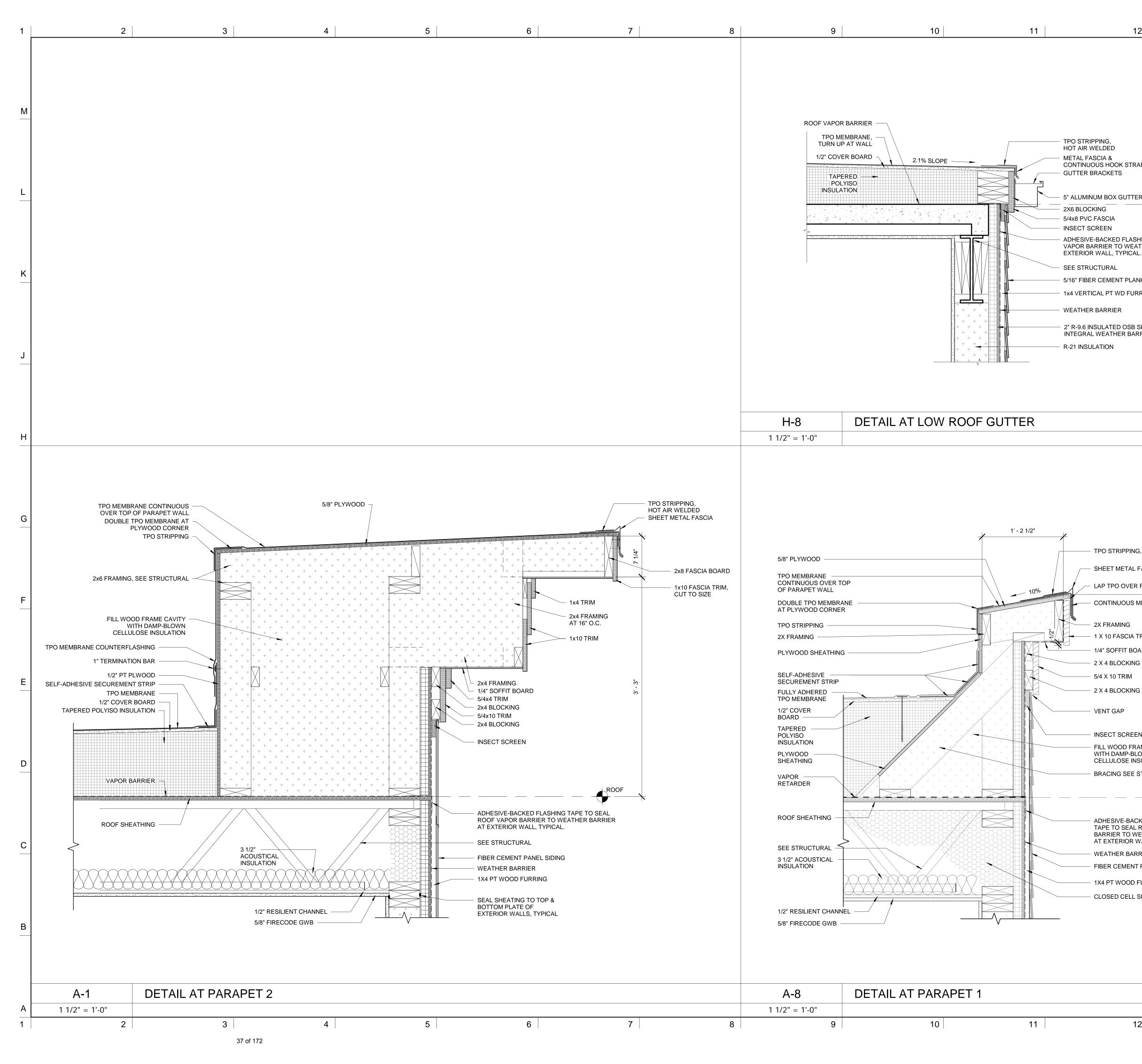


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	<u>Level 2</u> 14' - 0"	
L I I		No. REVISIONS/SUBMISSIONS Date
		DAVIS 240A Elm St., Somerville, MA 02144
		SQUARE ARCHITECTS somerville, IVA 02144 617.628.5700 www.davissquarearchitects.com
		Consultant
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		Project
		117 BROADWAY 117 BROADWAY, ARLINGTON, MA C 2474
		Title WALL SECTIONS
		Designed Designer Designer
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4		scale 1/4" = 1'-0" Date A502
T		Date 10.31.2018
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	NOTES		
	DO NOT SCALE DRAWINGS.		
		(	0
W/ ROPE CAULK			
METAL RAILING ANCHORED TO EXTERIOR WALL OF BUILDING			
ALUMINUM FLASHING			
BLOCKING AS REQUIRED			
5/16" FIBER CEMENT PANEL 1x4 PT WD FURRING AT 16" O.C			
5/16" FIBER CEMENT PANEL			
1x4 PT WD FURRING AT 16" O.C			
SIM. BALCONIES ON UPPER LEVELS			
ONY			
	_		
SELF-ADHESIVE FLASHING			
	No. REVISIONS/SUBMISSIONS	Date	
FIBER CEMENT PANEL			
WEATHER BARRIER			
DAMP-BLOWN CELLULOSE			
	DAVIS SQUARE 240A Elm St., Somerville, MA 02144 617 628 5700		
ALUMINUM Z TRIM	SQUAKE     617.628.5700       ARCHITECTS     www.davissquarearchitects.com		
1x4 PT WD FURRING AT 16" O.C.	Consultant		
R-21 CLOSED CELL SPRAY FOAM			
INSULATION AT RIMBOARD			
SEE STRUCTURAL			
	Project 117 BROADWAY		
	117 BROADWAY, ARLINGTCN, MA C 2474		
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PANEL PARAPET AT BALCONY	Scale 1 1/2" = 1'-0" A50 Date	4	
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	_	

# NOTES

### DO NOT SCALE DRAWINGS.

TPO STRIPPING, HOT AIR WELDED METAL FASCIA & CONTINUOUS HOOK STRAP - GUTTER BRACKETS

- 5" ALUMINUM BOX GUTTER

- 2X6 BLOCKING - 5/4x8 PVC FASCIA

INSECT SCREEN ADHESIVE-BACKED FLASHING TAPE TO SEAL ROOF VAPOR BARRIER TO WEATHER BARRIER AT

LEVEL 2

- SEE STRUCTURAL

- 5/16" FIBER CEMENT PLANK SIDING

- 1x4 VERTICAL PT WD FURRING AT 16" O.C.

- WEATHER BARRIER

2" R-9.6 INSULATED OSB SHEATHING W/ **INTEGRAL WEATHER BARRIER & TAPED SEAMS** - R-21 INSULATION

SHEET METAL FASCIA - LAP TPO OVER FASCIA BEHIND HOOK STRAP - CONTINUOUS METAL HOOK STRAP 2X FRAMING - 1 X 10 FASCIA TRIM, CUT TO SIZE 1/4" SOFFIT BOARD 2 X 4 BLOCKING - 5/4 X 10 TRIM 2 X 4 BLOCKING

- TPO STRIPPING, HOT AIR WELDED

- INSECT SCREEN FILL WOOD FRAME CAVITY WITH DAMP-BLOWN CELLULOSE INSULATION BRACING SEE STRUCTURAL

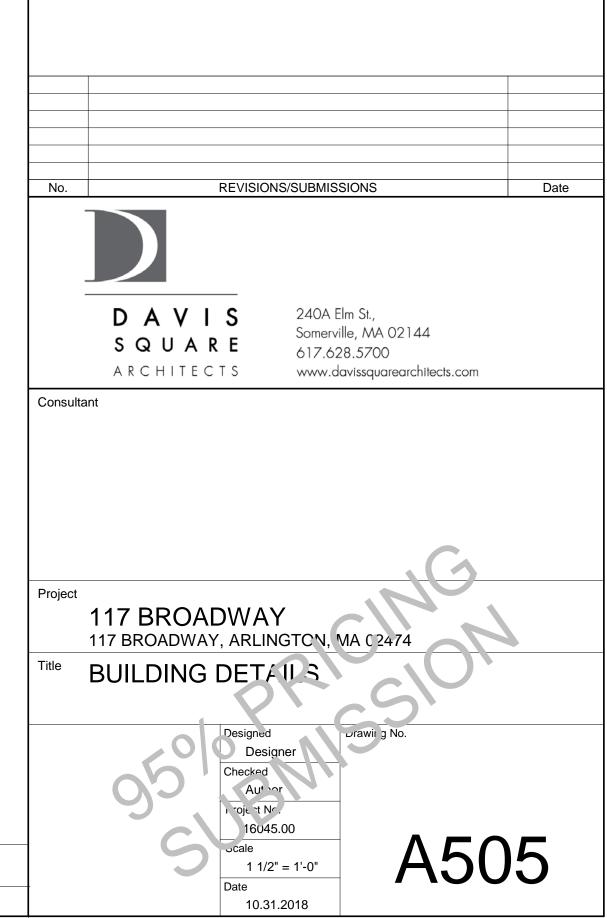
VENT GAP

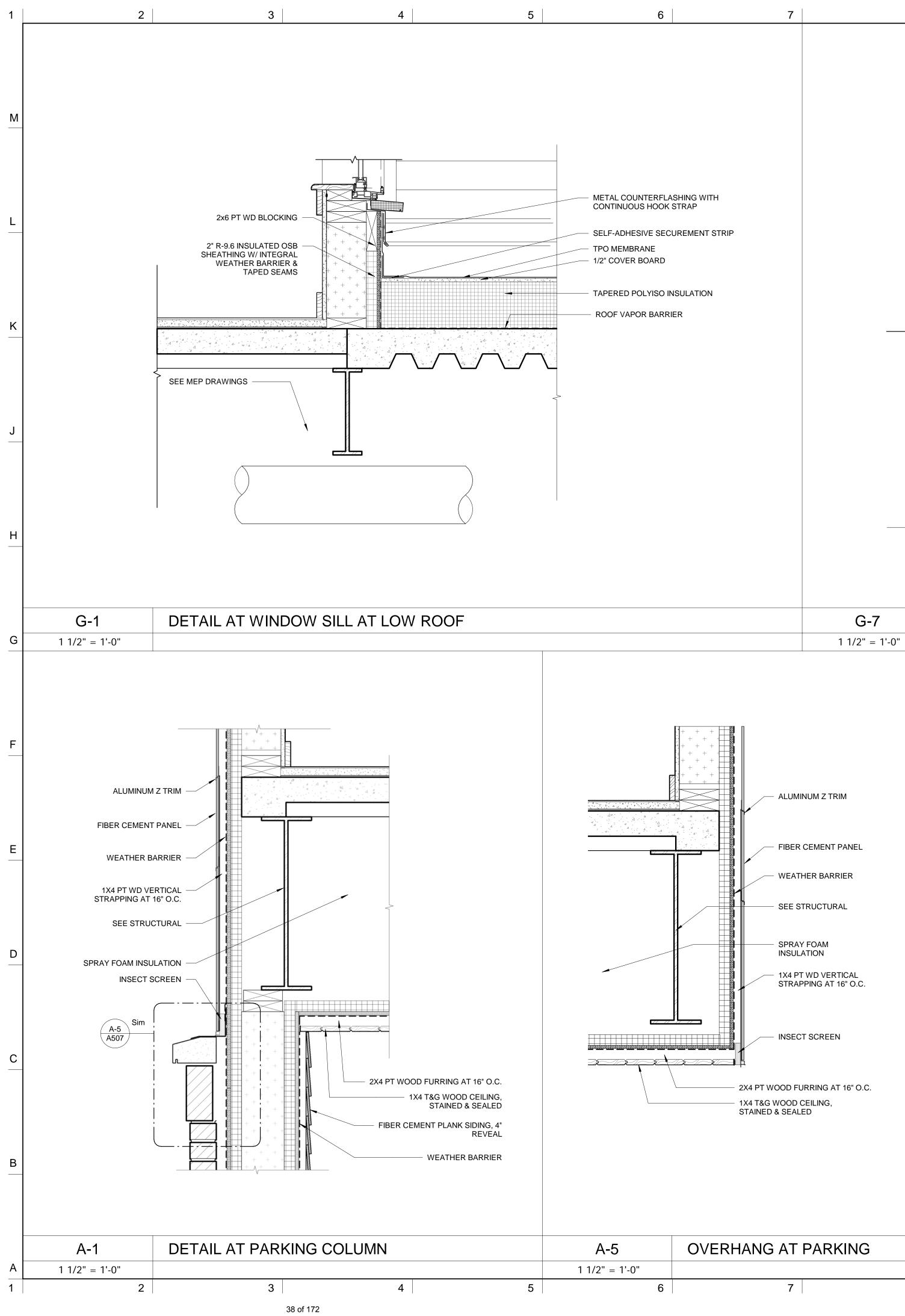
ROOF

## ADHESIVE-BACKED FLASHING TAPE TO SEAL ROOF VAPOR BARRIER TO WEATHER BARRIER AT EXTERIOR WALL, TYPICAL WEATHER BARRIER FIBER CEMENT PLANK SIDING

1X4 PT WOOD FURRING

CLOSED CELL SPRAY FOAM INSULATION





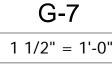


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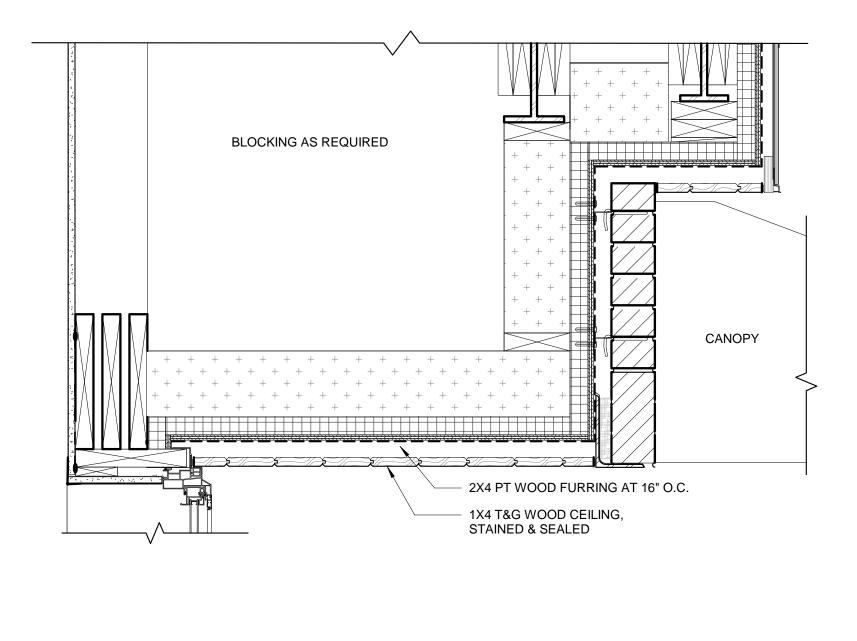
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1X4 PT WD VERTICAL STRAPPING AT 16" O.C. - FIBER CEMENT PLANK SIDING, 4" REVEAL - WEATHER BARRIER



## DETAIL AT OVERHANG 2



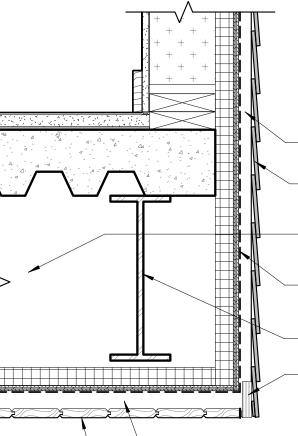
# OVERHAND DETAIL AT ENTRY DOORS

= 1'-0"			1 1/2" = 1'-0"		
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A-8

## 13 NOTES

# DO NOT SCALE DRAWINGS.



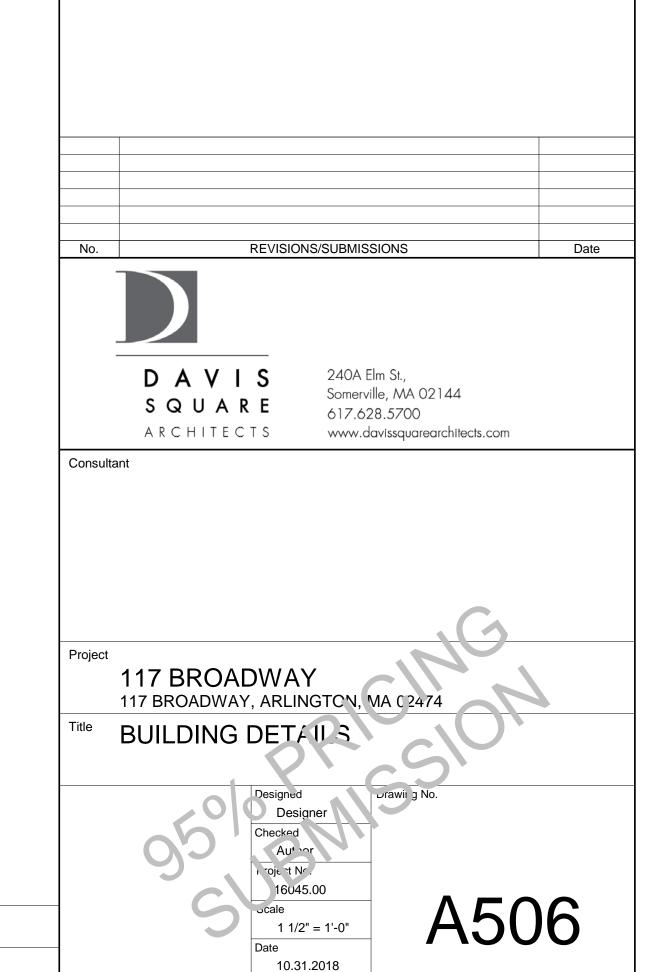
 1X4 PT WD VERTICAL STRAPPING AT 16" O.C. FIBER CEMENT PLANK SIDING, 4" REVEAL

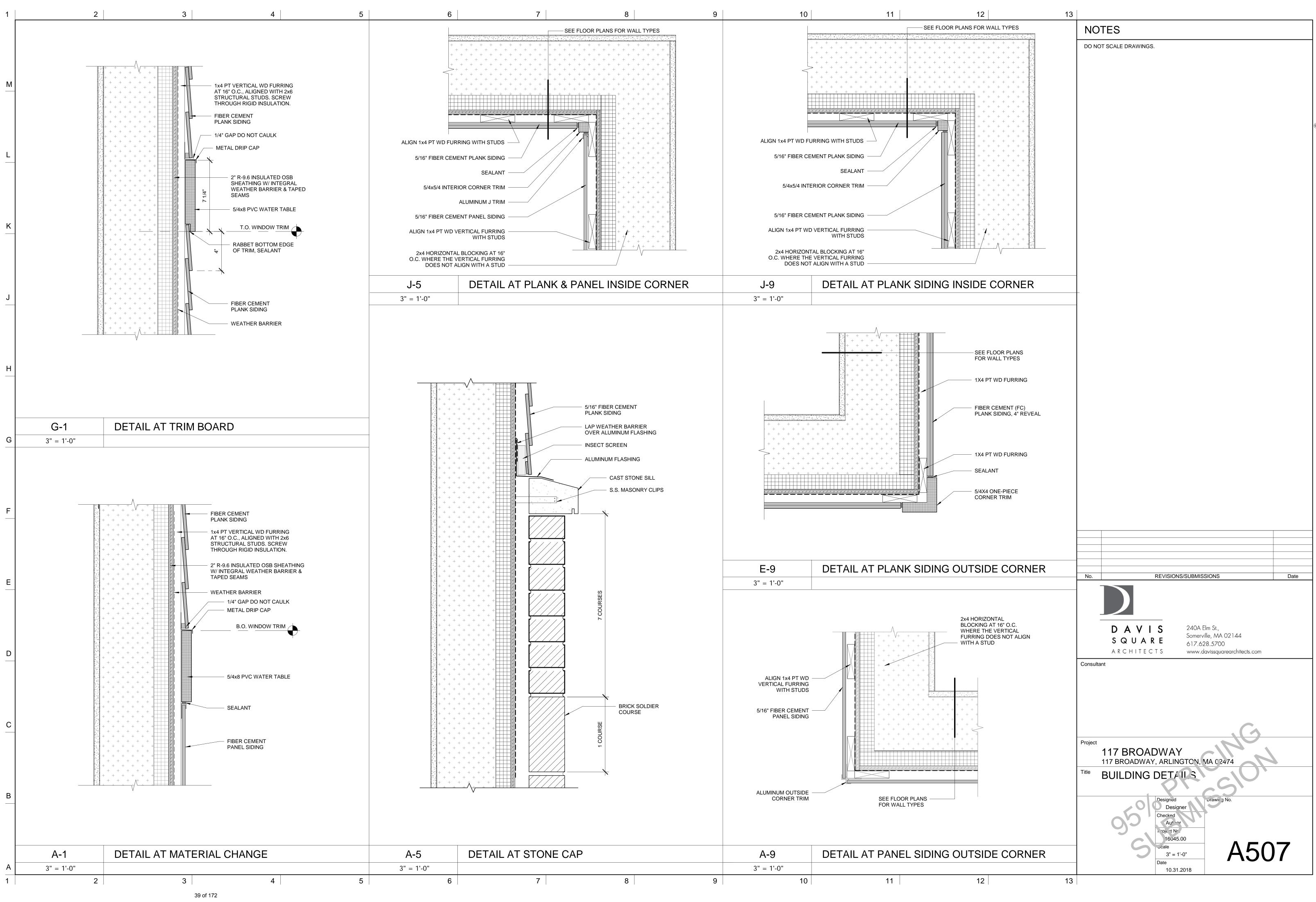
SPRAY FOAM INSULATION

- WEATHER BARRIER
- SEE STRUCTURAL

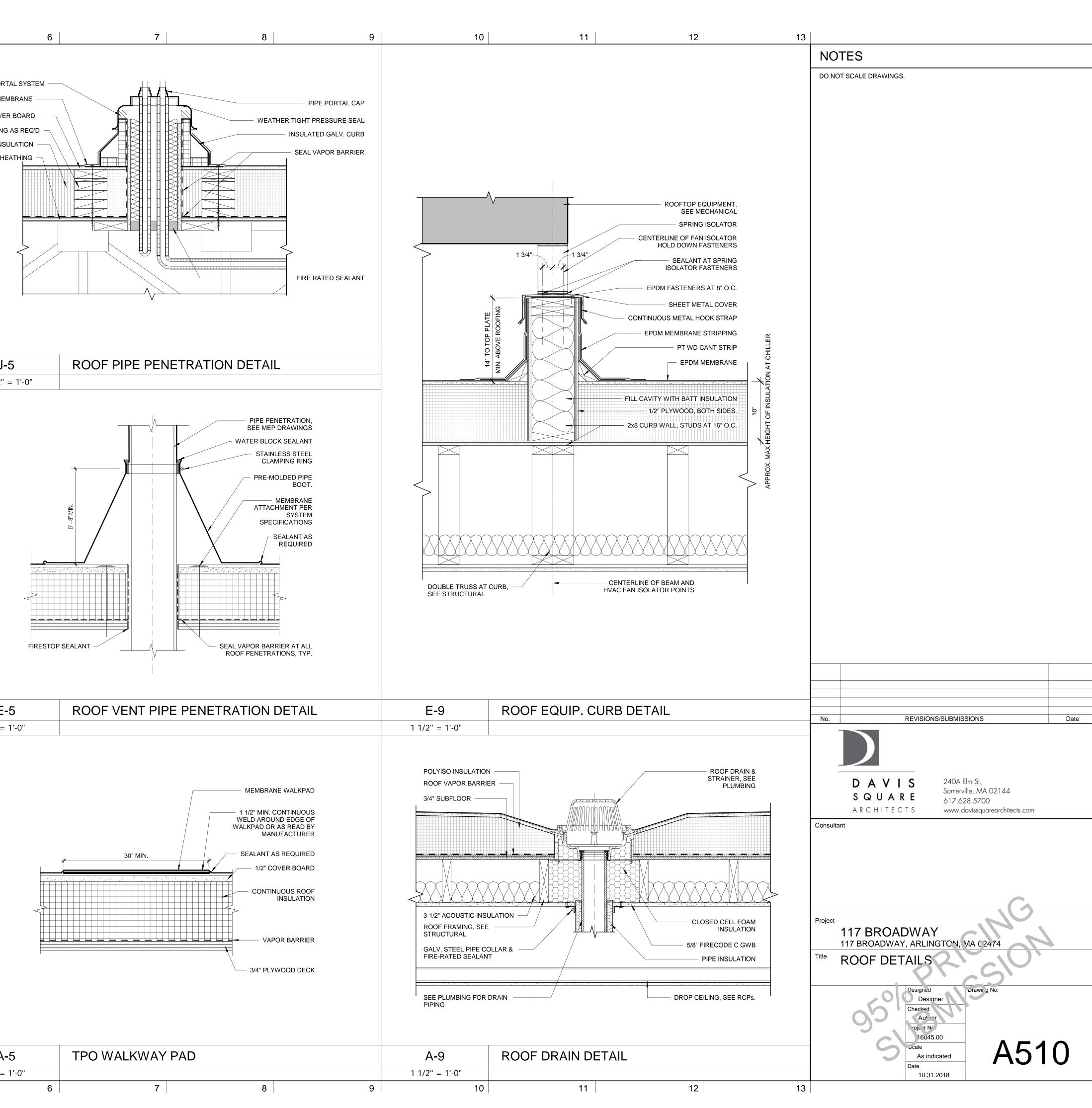
INSECT SCREEN

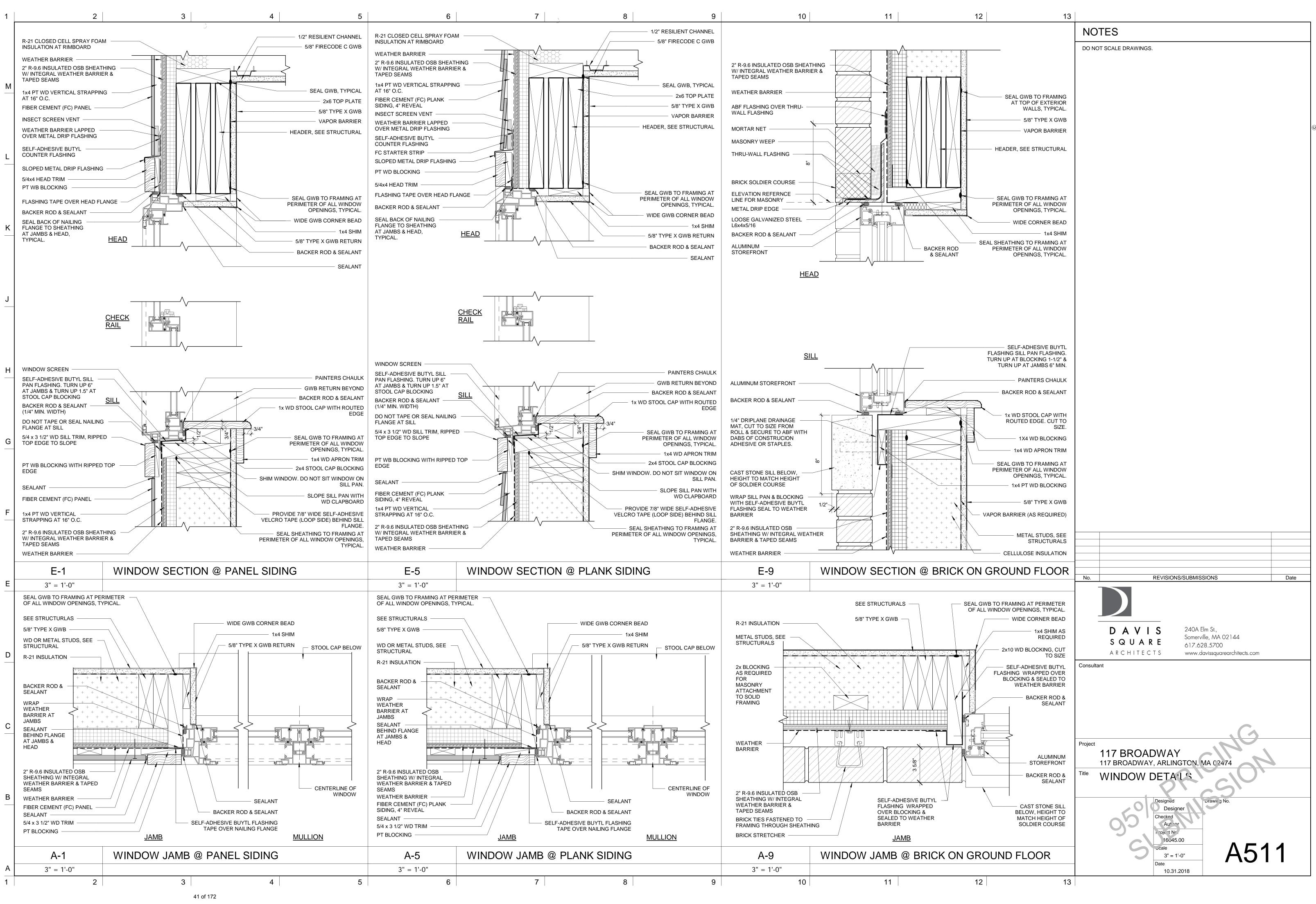
2X4 PT WOOD FURRING AT 16" O.C. 1X4 T&G WOOD CEILING, STAINED & SEALED



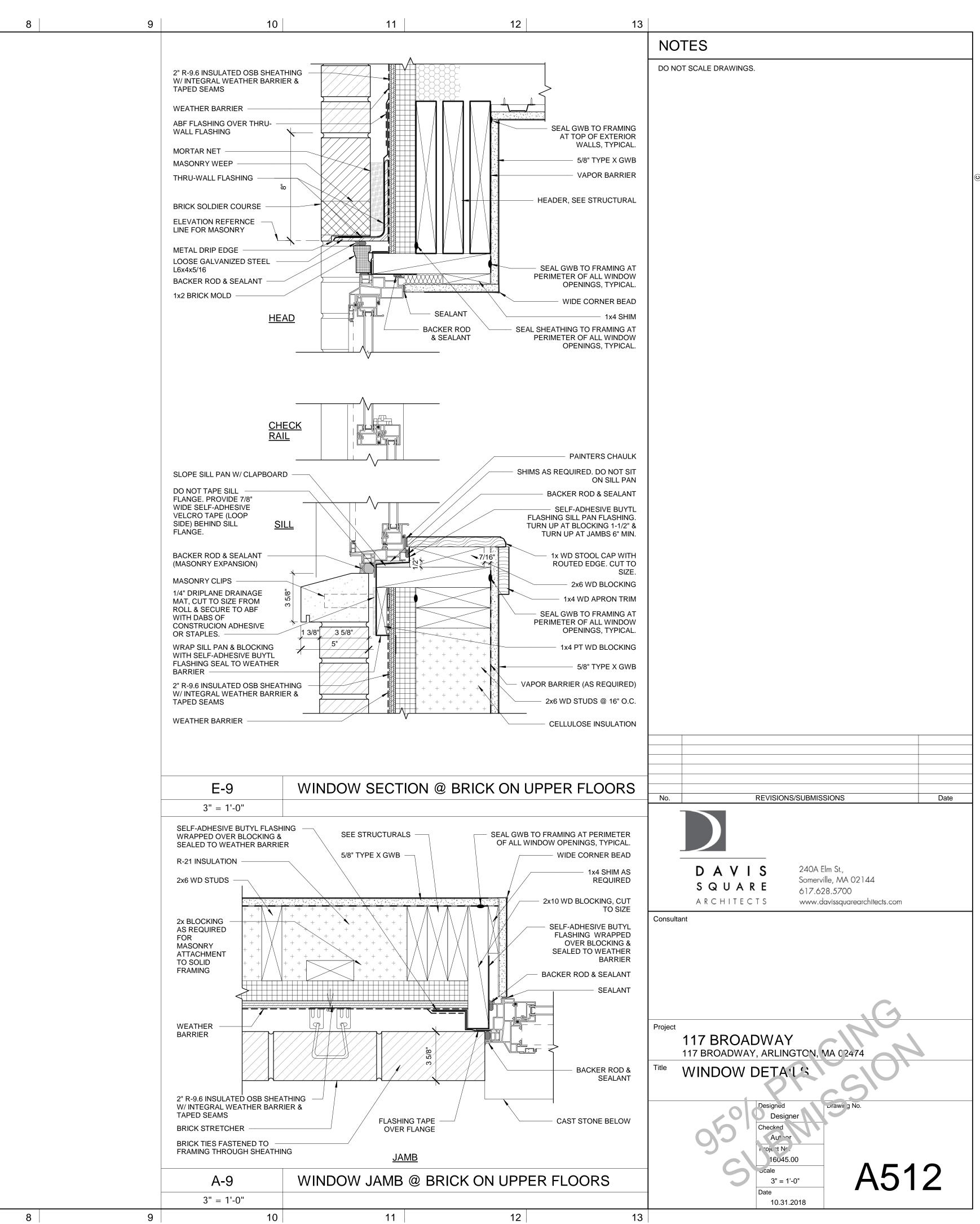


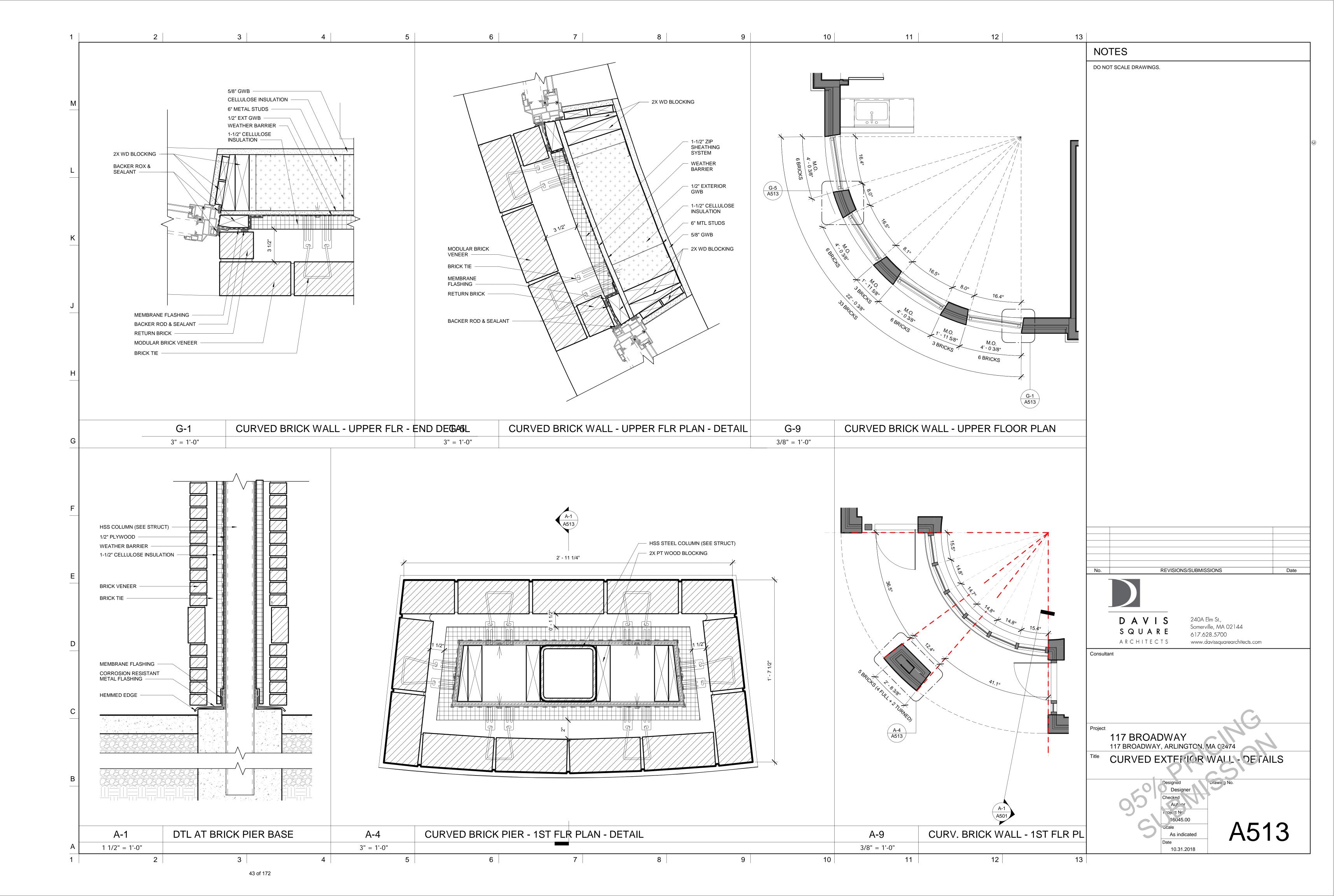
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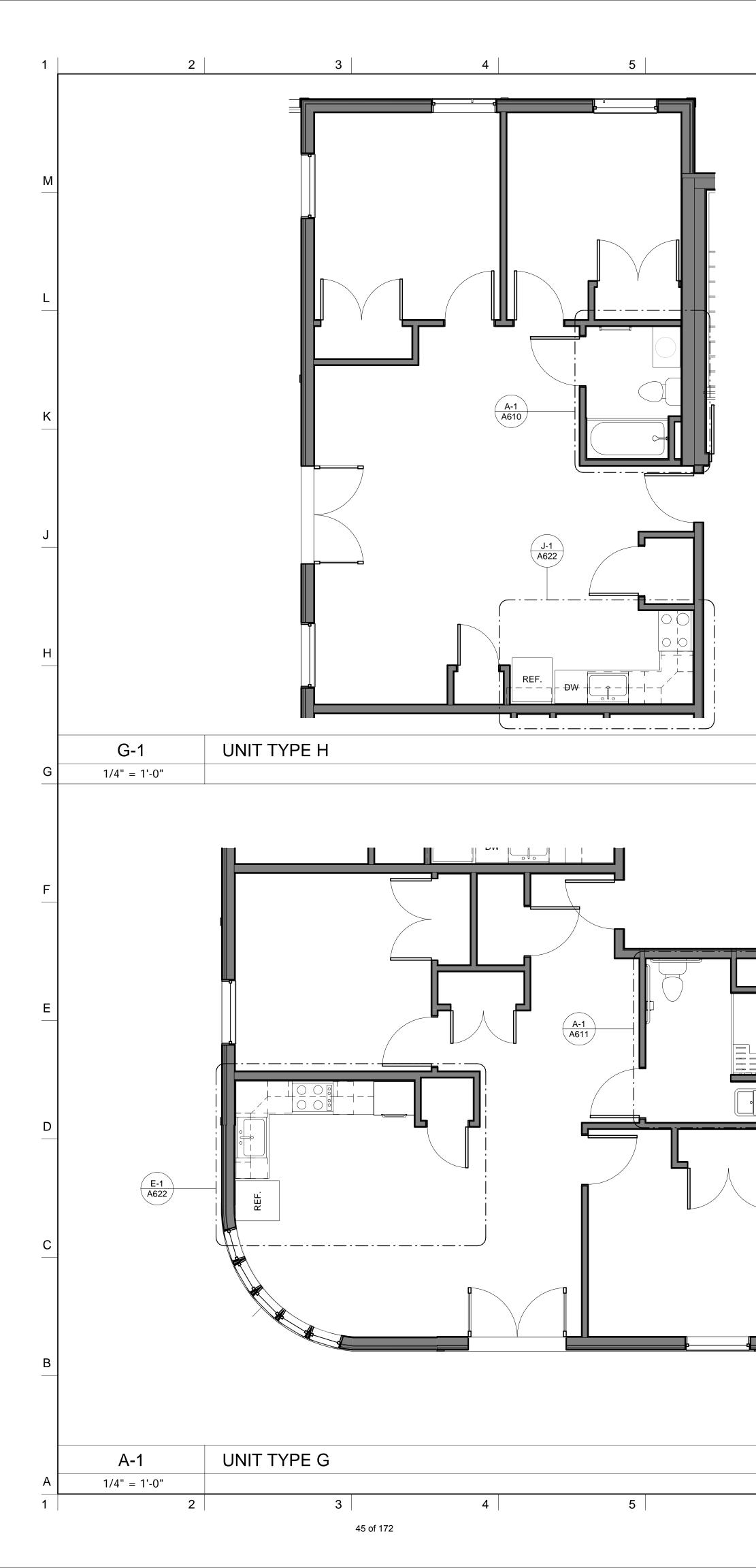


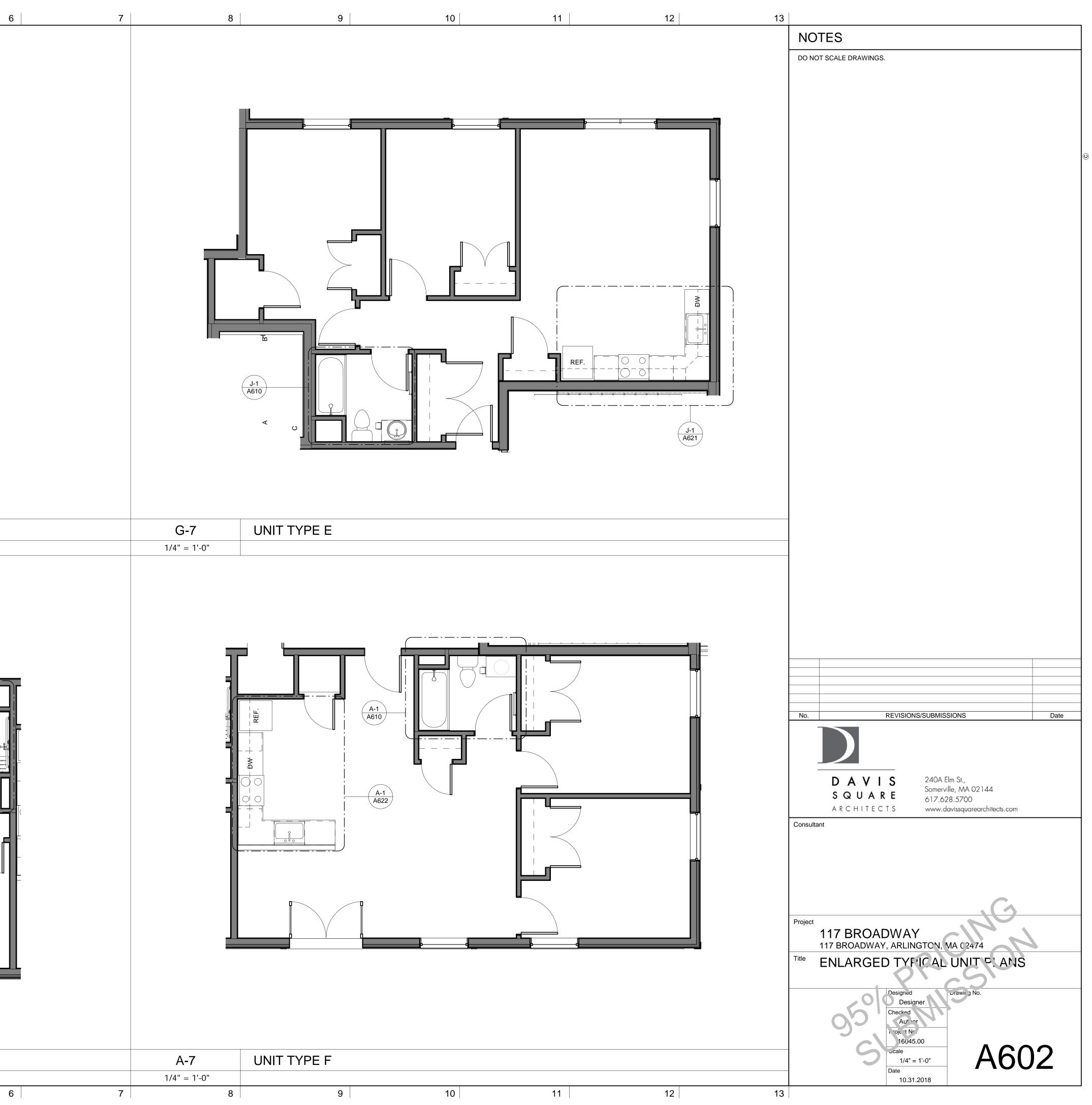
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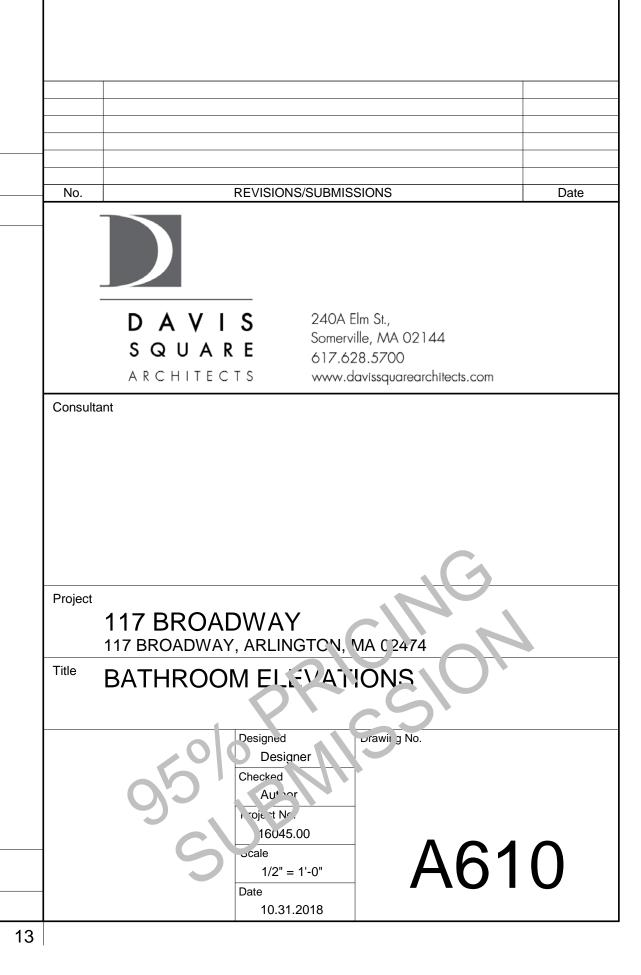




13 NOTES

DO NOT SCALE DRAWINGS.

	KEYNOTES
Key	Keynote Text
B1	SHOWER CURTAIN ROD, MOUNTED AT 6'6" A.F.F.
B6	24" TOWEL BAR
B7	ROBE HOOK
B8	TOILET PAPER DISPENSER
B9	RECESSED MEDICINE CABINET WITH MIRROR
B11	VANITY
B12	LIGHT FIXTURE
B14	SHOWER HEAD
B17	SOLID SURFACE TUB SURROUND; PROVIDE BLOCKING (TO 60" A.F.F.) AT ALL SHOWER WALLS
B18	MIXING VALVE
B20	4" PORCELAIN TILE COVE BASE
B21	TOILET





NOTES

DO NOT SCALE DRAWINGS.

## KEYNOTES Keynote Text

Key B1 SHOWER CURTAIN ROD, MOUNTED AT 6'6" A.F.F. B2HINGED, PADDED ACCESSIBLE SHOWER SEATB336" GRAB BAR B4 42" GRAB BAR B5 48" GRAB BAR

B8 TOILET PAPER DISPENSER B12 LIGHT FIXTURE

B13 ADA-COMPLIANT MIRROR

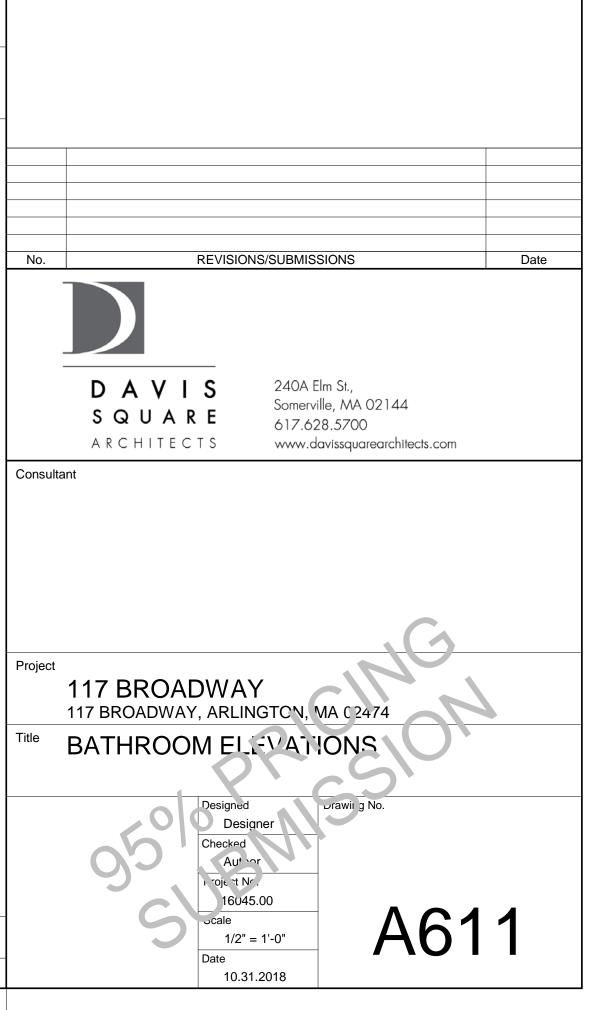
B14 SHOWER HEAD B15 HANDHELD SHOWER AND MIXING VALVE

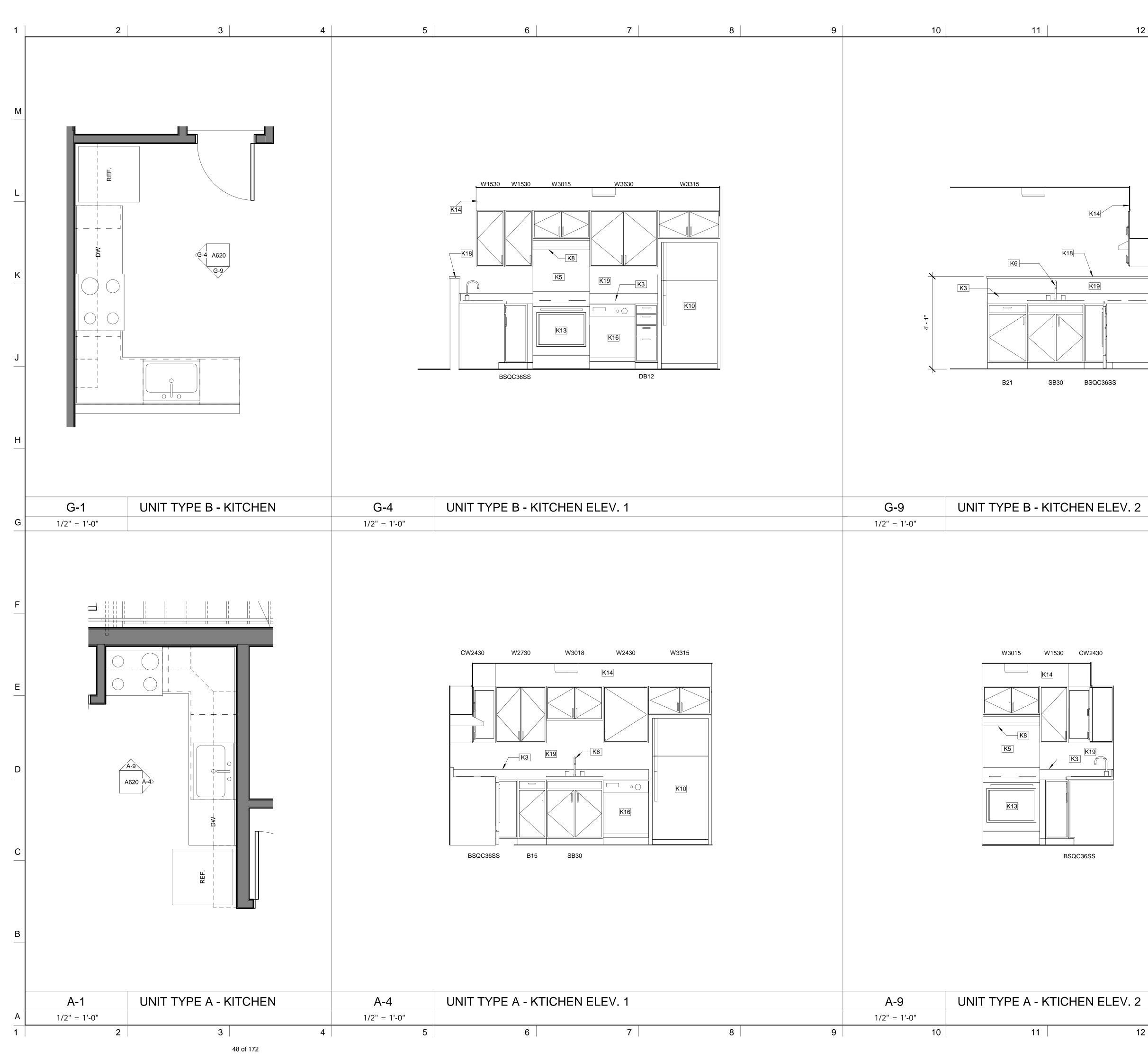
B16 WALL-HUNG SINK B10 WALE-HONG SINK B17 SOLID SURFACE TUB SURROUND; PROVIDE BLOCKING (TO 60" A.F.F.) AT ALL SHOWER WALLS B19 MARBLE THRESHOLD

B20 4" PORCELAIN TILE COVE BASE

B21 TOILET

TYPE	G BATH	ELEV.	1

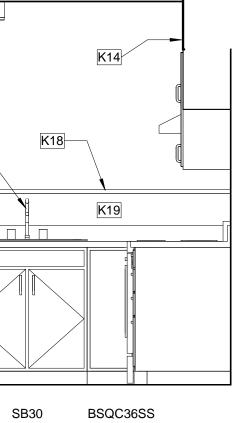




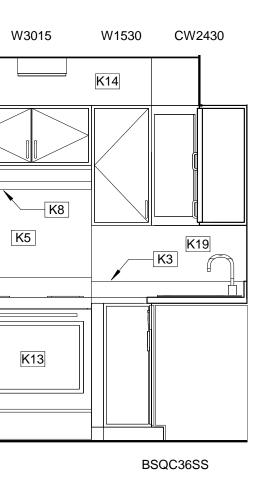
# 13 NOTES

DO NOT SCALE DRAWINGS.

KEYNOTES



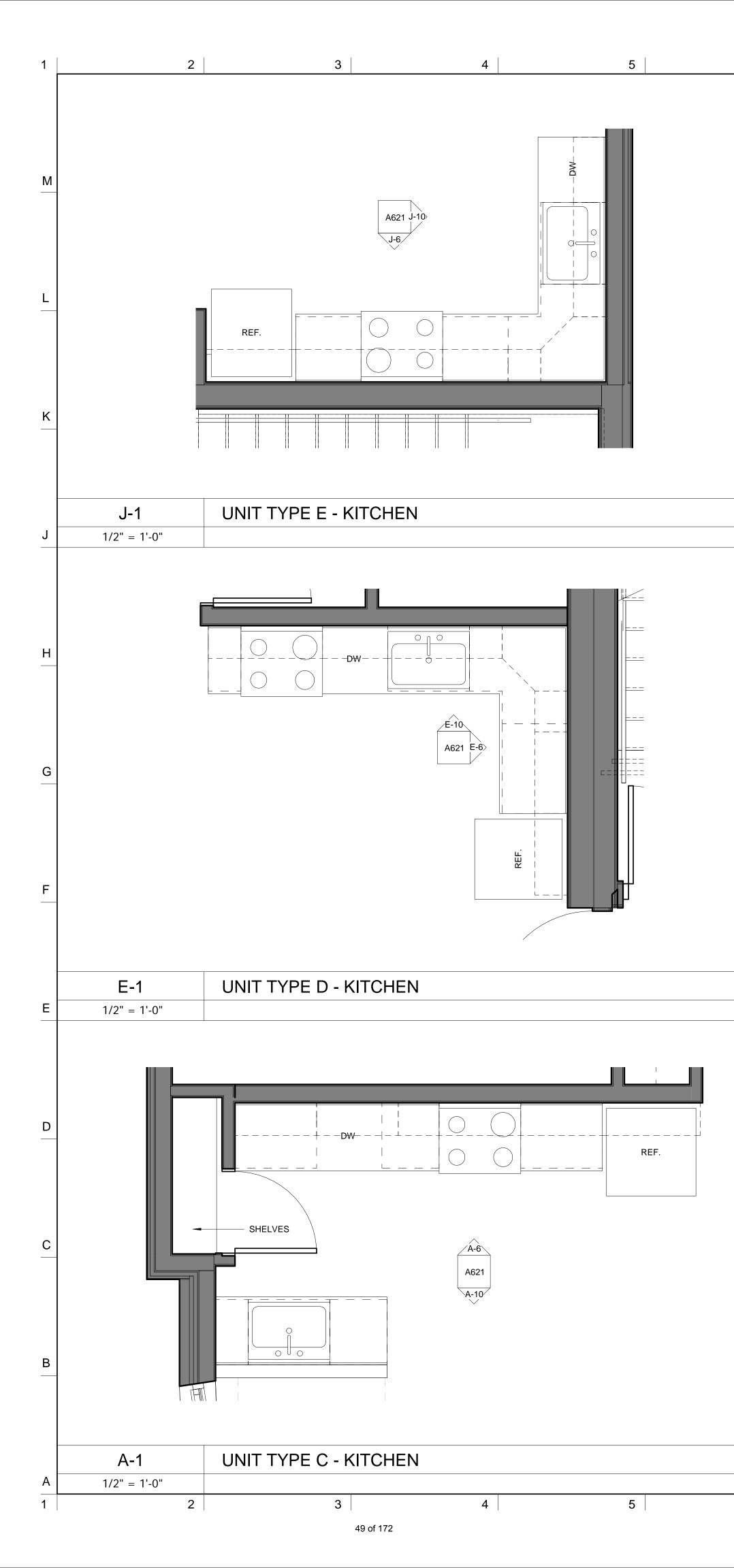


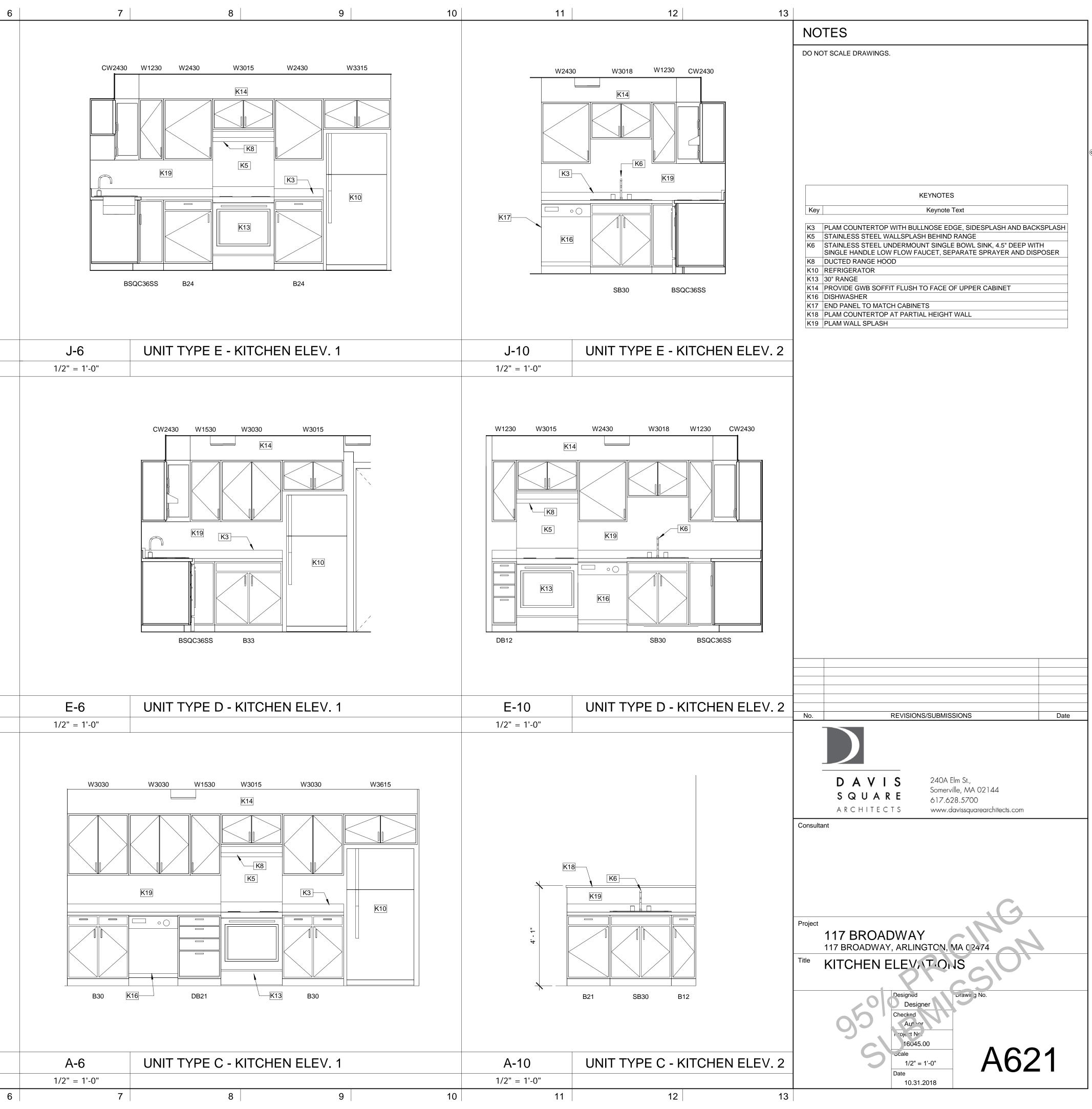




Key	/ Keynote Text	
K3	PLAM COUNTERTOP WITH BULLNOSE EDGE, SIDESPLASH AND BAC	KSPLASH
K5 K6	STAINLESS STEEL WALLSPLASH BEHIND RANGE STAINLESS STEEL UNDERMOUNT SINGLE BOWL SINK, 4.5" DEEP WI	тн
	SINGLE HANDLE LOW FLOW FAUCET, SEPARATE SPRAYER AND DIS	
K8 K10	DUCTED RANGE HOOD REFRIGERATOR	
K13	30" RANGE	
K14 K16		
K18 K19		
ITTO		
No.	REVISIONS/SUBMISSIONS	Date
	DAVIS 240A Elm St.,	
	<b>SQUARE</b> Somerville, MA 02144 617.628.5700	
	A R C H I T E C T S www.davissquarearchitects.com	
Consulta	ant	
Project		
	117 BROADWAY	
	117 BROADWAY, ARLINGTCN, MA C2474	
<b>Fitle</b>	KITCHEN ELEVATIONS	_
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10.31.2018







NOTES

DO NOT SCALE DRAWINGS.

	KEYNOTES	
Key K1	VINYL BASE	
K2 K3 K5 K6	SWITCH FOR REMOTE RANGE HOOD CONTROL PLAM COUNTERTOP WITH BULLNOSE EDGE, SIDESPLASH AND BACH STAINLESS STEEL WALLSPLASH BEHIND RANGE STAINLESS STEEL UNDERMOUNT SINGLE BOWL SINK, 4.5" DEEP WIT SINGLE HANDLE LOW FLOW FAUCET, SEPARATE SPRAYER AND DIS	Ъ
K7 K8 K9 K10 K11	30" COOKTOP DUCTED RANGE HOOD BREADBOARD INSERT REFRIGERATOR WALL-MOUNTED ELECTRIC OVEN	
K12 K13 K14 K16	SINK APRON 30" RANGE PROVIDE GWB SOFFIT FLUSH TO FACE OF UPPER CABINET DISHWASHER PLAM COUNTERTOP AT PARTIAL HEIGHT WALL	
K19		
 No.	REVISIONS/SUBMISSIONS	Date
	DAVIS SQUARE240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	
Consulta	Int	
Project	117 BROADWAY 117 BROADWAY, ARLINGTCN, MA C 2474	
Title	KITCHEN ELEVATIONS	

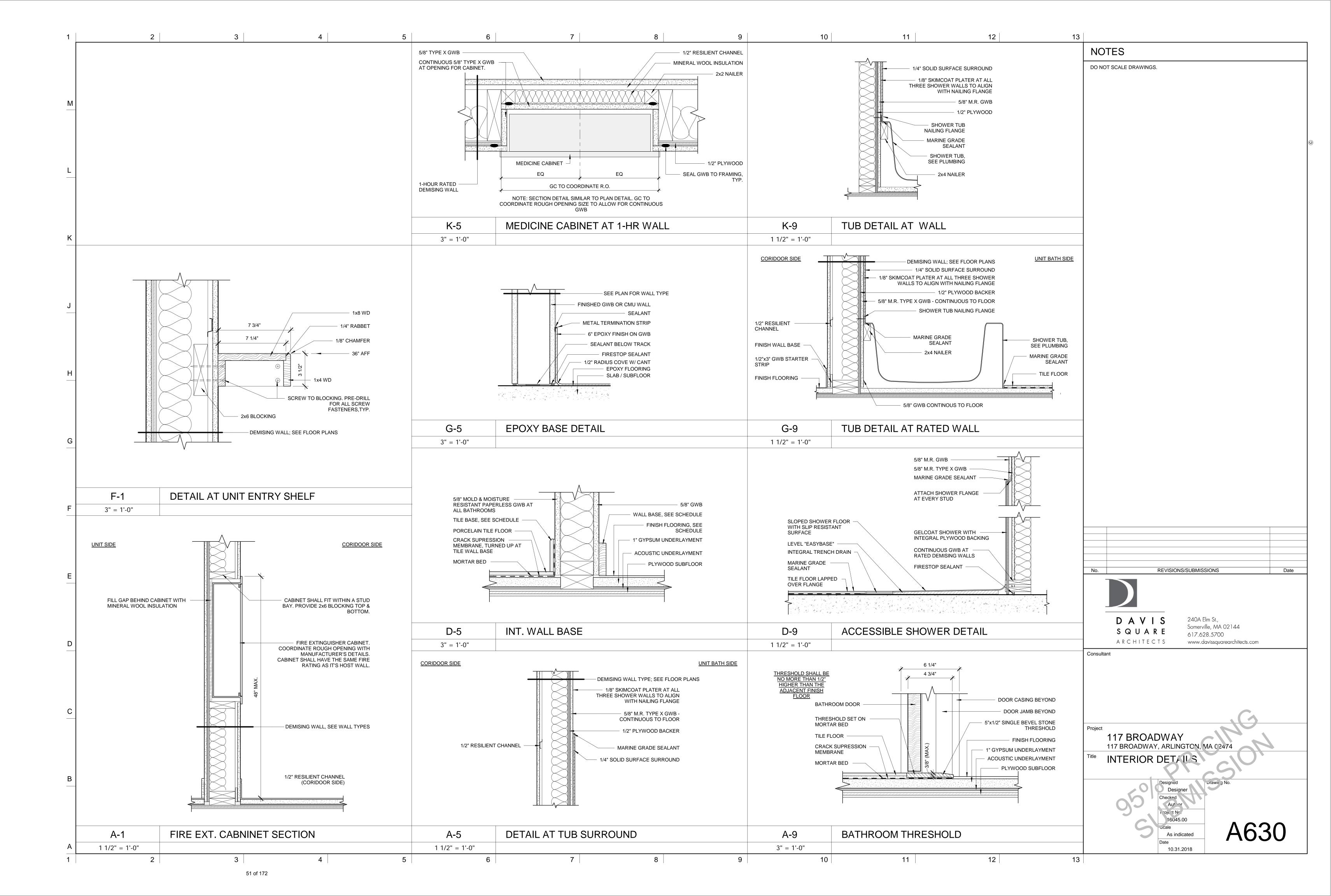
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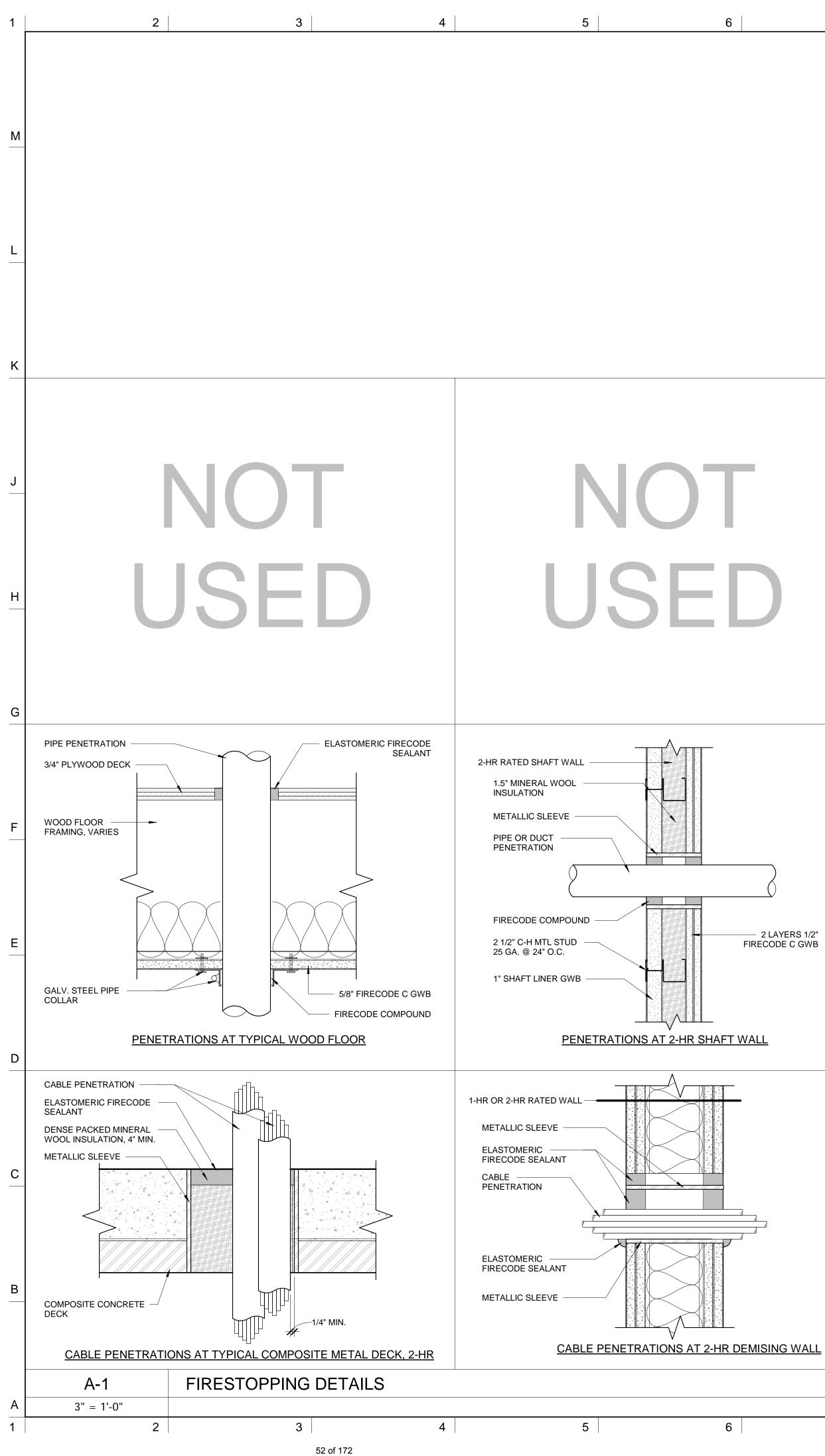
Jaie 1/2" = 1'-0" Date

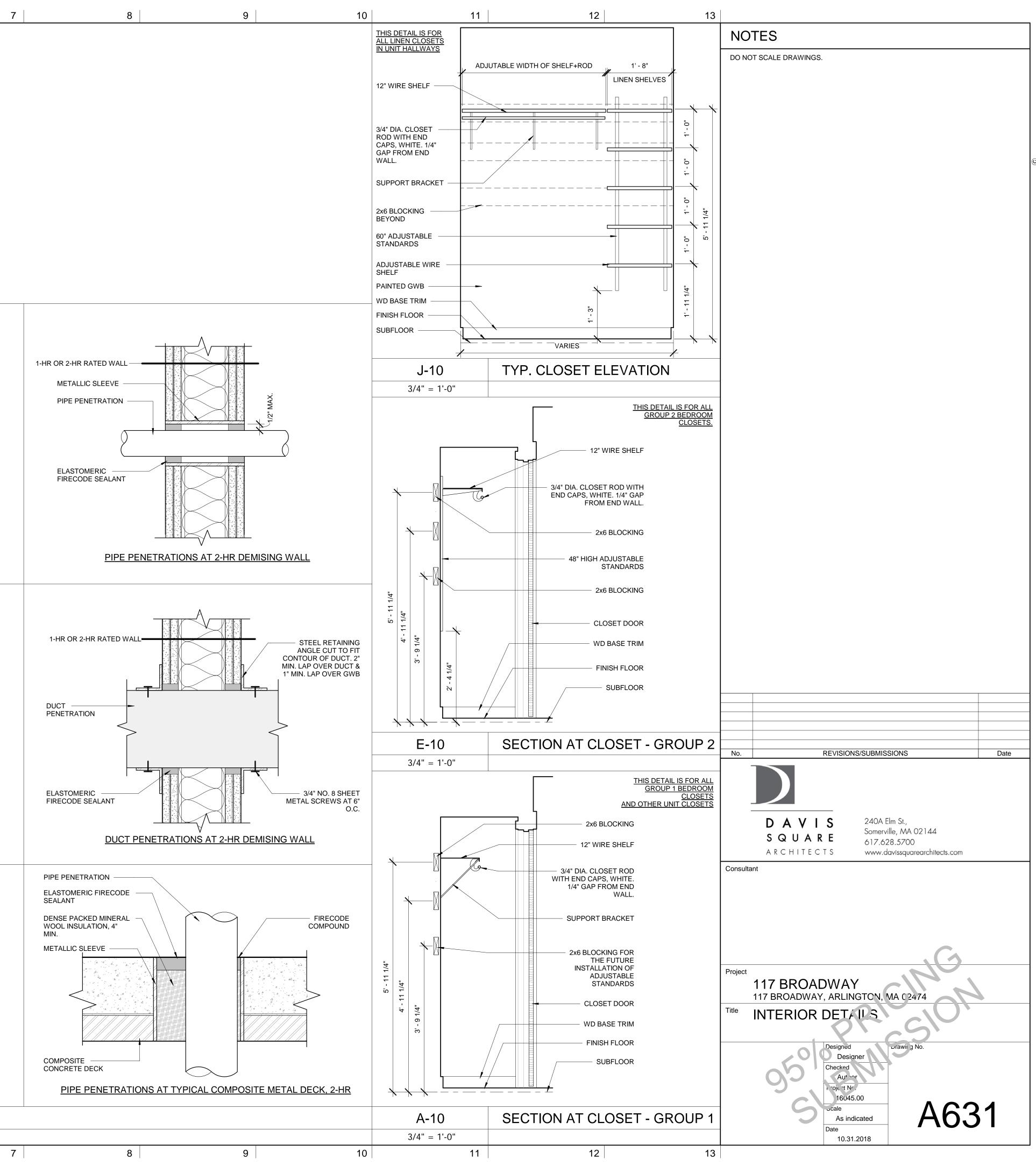
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	. <u>Ge</u> 1.	STRUCTURAL DR	AWING	S SHALL BE USED IN CON	IJUNCTION WITH AR	CHITECTURAL,	
	2.	ALL DIMENSIONS	AND C	CAL, AND SHOP DRAWING ONDITIONS MUST BE VEF BE BROUGHT TO THE AT	IFIED IN THE FIELD	AND ANY	
	3.	SHOP DRAWINGS STEEL, STEEL DE TRUSSES SHALL	S FOR F CK, EN BE SUI	AFFECTED PORTION OF REINFORCING STEEL (INCI IGINEERED WOOD PRODU BMITTED TO THE ARCHITE RICATION CAN PROCEED	LUDING ALL ACCESS ICTS AND PRE-FABF	RICATED WOOD D ACCEPTANCE	
L	4.	ACCEPTED SHOP	P DRAW		SHALL BE SUBMIT	TED TO THE ARCHITECT	Г
	5.	MADE.		DTED. DETAILS SHOWN O			
		TYPICAL FOR ALL	. SIMIL	AR CONDITIONS.			
	6. 7.		OR SHA	WISE NOTED. LL PROVIDE ALL NECESS/ STING BUILDINGS DURING		HORING AND BRACING	
к	8.	ALL WORK SHALL	. COMF	Y WITH THE MASSACHU	SETTS STATE BUILD	DING CODE, 8TH EDITIO	N.
	9.	NO OPENINGS SH APPROVAL OF TH		E MADE IN ANY STRUCTU HITECT.	RAL MEMBER WITHO	OUT THE WRITTEN	
	10.			DIMENSION OF STRUCTU APPROVAL OF THE ARCH		LL BE MADE	
	11.		AWING	SS ON A SIDE ARE GENER S. REFER TO ARCHITECT			
J	12.	LOAD IMPOSED L	JPON S	ESPONSIBLE FOR LIMITIN TRUCTURAL FRAMING. C( APACITY OF THE FRAMING	ONSTRUCTION LOAI	DS SHALL NOT	
	13.	CONTRACTOR IS SUPPORT THAT N	RESP( MAY BE	Signed to function as DNSIBLE for furnishing Required as the resu DDS and/or sequences	ALL TEMPORARY E	BRACING AND/OR	
	14.			DRAWINGS, USE DIMENSIO SIONS NOT OTHERWISE IN		CHITECTURAL	
H 	. 15.		THE EF	RUCTION AND/OR ERECT FECTS OF THERMAL MOV CTION PERIOD.			
	16.	ANY DEVIATION F BE RELIEVED OF	ROM T THE R	LL INFORM THE ARCHITE( THE CONTRACT DOCUMEN ESPONSIBILITY OF SUCH F SHOP DRAWINGS, PROE	ITS. THE CONTRAC	TOR SHALL NOT PROFESSIONAL	
G		SUCH DEVIATION	I AT TH	CIFICALLY INFORMED THI E TIME OF SUBMISSION A D THE SPECIFIC DEVIATION	ND THE ARCHITECT		
	. 17.	REPRESENTATIV	e of a Dr coc	AIL IS CUT ON THE PLAN, LL LIKE OR SIMILAR CONE )RDINATING SUCH REQUI	DITIONS. THE CONTR	RACTOR IS	
	<u>DE</u> 1.		MASS	ACHUSETTS STATE B	UILDING CODE: (9	TH EDITION)	
				D, Pg = 40 PSF Ce LOAD), Pf =30 PSF + D			
F		SUSPENDED SI CEILING: PV ARRAYS:	ERVIC		PSF PSF PSF		
	2.	STRUCTURE: FLOORS:		AC	tual weight (t.	AKEN AS 5 PSF)	
		CORRIDOR LOBBIES, S	S: TAIRS	.O.N.): AND FLEXIBLE OPEN REAS:	PLAN AREAS:1	80 PSF 00 PSF	TITIONS
E		CEILING:		ES:5 PSI 	:		
		STRUCTURE:		ACTUAL \			
	3.	GROUND LEVE					
				I.N.O.): ROOMS:			
D	4.	WIND LOAD: BASIC WIND SF	PEED,	V: 127 MPH	IW = 1.00	OCCUPANCY C	ATEGORY = <b>II</b>
			SSUR	RY = B E COEFFICIENT, GCPI: CLADDING PRESSURES		LOW:	-
		HEIGH	T (h): (/	WALL DESIGN WIND P ABOVE GRADE)	RESSURE TABLE h < 30'-0"	30'-0" < h ≤ 50'-0"	_
				10ft <sup>2</sup>	32 PSF	37 PSF	-
		AT FIELD	REA (A)	20ft <sup>2</sup>	31 PSF	35 PSF	_
<u>C</u>		OF WALLS (INTERIOR ZONES)	TRIBUTARY AREA (A)	50ft <sup>2</sup>	29 PSF	33 PSF	_
	-		TRIB	100ft <sup>2</sup>	27 PSF	31 PSF	_
	01.dwg			500ft <sup>2</sup>	24 PSF 39 PSF	28 PSF 45 PSF	-
	\18186_S001.dwg		AREA (A)	20ft <sup>2</sup>	39 PSF 36 PSF	43 PSF 42 PSF	_
	MA\181	AT END ZONES		50ft <sup>2</sup>	33 PSF	38 PSF	-
В	8\18186 117 BROADWAY - ARLINGTON MA		TRIBUTARY	100ft <sup>2</sup>	30 PSF	35 PSF	_
ں 	ARLIN	NOTES		500ft <sup>2</sup>	24 PSF	28 PSF	_
	WAY - ,	NOTES: 1. FOR EFFE	CTIVE	WIND AREAS BETWEEN T	HOSE GIVEN VALUE	E MAY BE	
	BROAD		D, OTH	ERWISE USE THE VALUE			
	117 F	2. PRESSUR FROM SURFAC		ED ABOVE SHALL BE CO	NSIDERED TO ACT T	OWARDS OR AWAY	
	18/1816						

[	SIGN LOADS (CO	in HNU		/IND PRESSURE TABLE			_	<u>OD:</u>
	HEIGH	IT (h): (A	ABOVE GRADE)	h < 30'-0"	30'-0" < h ≤ 50'-0"		1.	AL DE
			10ft <sup>2</sup>	29 PSF	34 PSF		2.	AL BE
	INTERIOR	AREA (A	20ft <sup>2</sup>	28 PSF	33 PSF		3.	AL
	ZONES	rributary area (a)	50ft <sup>2</sup>	27 PSF	32 PSF		4.	AL
		TR	100ft <sup>2</sup>	27 PSF	31 PSF			BE T(
		A (A)	10ft <sup>2</sup>	49 PSF	57 PSF		5.	PF Sl
	END ZONES	TRIBUTARY AREA (A)	20ft <sup>2</sup>	44 PSF	51 PSF		6.	AL
		TRIBUTA	50ft <sup>2</sup>	37 PSF	43 PSF		7.	TH
			1001	32 PSF 73 PSF	37 PSF 85 PSF		1.	0
		TRIBUTARY AREA (A)	20ft <sup>2</sup>	61 PSF	71 PSF		8.	Al W
	CORNER ZONES	UTARY /	50ft <sup>2</sup>	44 PSF	51 PSF		9.	
		TRIB	100ft <sup>2</sup>	32 PSF	37 PSF		10.	C( Al
				OSE GIVEN, VALUE MAY BE IN WER EFFECTIVE WIND AREA.			10.	ST FC
	ASSEMBL	IES, TH		L ELEMENTS ONLY. FOR ROO REA MAY NOT EXCEED 10 ft <sup>2</sup> . THER INFORMATION.			10	F F E
	SEISMIC LOAD: le = 1.00 Ss	$s = 0.2^{\circ}$	19 S1 = 0.070 S	SITE CLASS:D			12.	ALI ST/ DE
	So SEISMIC DESIGN	ds = 0.2 I CATE	234 Sd1 = 0.112 GORY = B	BEARING WALL SYST SHEATHED WITH WO	TEM UTILIZING LIGHT FRA		13.	Ali Thi Be Thi Pre
,	STRUCTURAI AN	IALYS		SHEAR RESISTANCE R = 6.5, Cd = 4.0 UIVALENT LATERAL FOR			14.	ALI CO
	SEISMIC BASE S		PEI V = Cs * W	R ASCE 7 CH. 12.8 W = TBD			15.	STI IN T
	SOIL LOADS:	F F1 · · ·					16.	ALI
	A. EQUIVALEN SOIL DENSI ACTIVE: AT-REST:		D PRESSURES:	130 PCF 40 PCF 65 PCF			17.	AP. DIA SU
	Passive: B. Friction Co C. Allowable			300 PCF 0.5 1H:1V			18.	PL` OT
;	SPECIAL LOADIN (a) GUARDRAIL		NDRAILS:				19.	ali Wa
			ENTRATED LOAD, <u>OR</u> :				20.	PR
	(b) GUARDRAIL 50 PLF HORI (c) ELEVATOR	ZONTA					21.	UN INS LES
	WEIGHT OF			OADS SHALL BE DOUBLE	ED FOR IMPACT		22.	ali Thi
וכ	NCRETE							ALI OV
	ALL CONCRET LEAN CONCRE OF 1500 PSI AT	TE UN F 28 DA	IDER THE ELEVATOR AYS (AS NEEDED).	MAT SLAB WHICH SHALL	TH OF 4000 PSI AT 28 DA . HAVE A MINIMUM COMP	RESSIVE STRENGTH	23.	TH BE TH
			E SHALL BE NORMAL V BE LIGHT-WEIGHT (11	· /	PT FOR THE SLAB ON ST	EEL DECK		•
	ALL REINFORC		ARS SHALL CONFORM	I TO ASTM A615, GRADE	60 (DEFORMED), EXCEP	T ASTM A706	<u>PC</u>	DST-I
	LAP ALL CONT	INUOL	JS BARS IN ACCORDA	NCE WITH THE "DEVELO	PMENT LENGTH AND SP	LICE TABLE".	1.	E A
			ABRIC (W.W.F.) SHALI @ 3"-0" ON CENTER.	CONFORM TO ASTM A1	185. LAP 2 SQUARES AT			
	CLEAR CONCF	RETE P	PROTECTION FOR REIN	NFORCING: (UNLESS OT	HERWISE NOTED).			
	C. SLA D. PIEF	INDAT BS-ON RS ANI	ion Walls: 2" I-grade: 1/4" the SL/ D Pilasters: 2" to t		IE TOP			
	F. INTE G. FRA	RIOR	ID COLUMNS: 2" EXTE AND ABOVE GRADE W SLABS: ¾" FROM TOP, I STEEL DECK: 1" FRO	2" FROM BOTTOM				
					SLEEVES, DUCT OPENIN HE APPROVAL OF THE AF			
					MISSION OF THE ARCHIT		2. 3.	
	INSIDE BEAM S	STIRRU JIT DIA	JPS AND WALL REINFO METERS ON CENTER.	DRCING. LINES OF CONI	TOP REINFORCING, AND DUIT SHALL BE SPACED NDUIT IN SLAB SHALL BE MITTED.	NOT CLOSER THAN		P S P S
	ALL KEYS SHA	LL BE	2" BY 4" WITH BEVELE	D SIDES (UNLESS OTHE	RWISE NOTED).			C A
	CONSTRUCTIO FORMED WITH	ON JOI A STA	NTS SHALL BE APPRO ANDARD KEY AND ALL	VED BY THE ARCHITECT REINFORCING EXTEND	N THE DRAWINGS. VERT F. ALL CONSTRUCTION ED IN ACCORDANCE WIT	JOINTS SHALL BE	4. 5.	
	THE CONTRAC	tor s	NTS, AND ISOLATION	NGS SHOWING THE CON JOINTS FOR SLABS-ON-	IPLETE LAYOUTS OF ALL GRADE. CONCRETE PLA		6.	T T R
		SHOW	N ON THE DRAWINGS	BEEN REVIEWED BY TH SHALL BE IN ACCORDAN	E ARCHITECT. NCE WITH THE LATEST E	DITION OF THE ACI	7.	Т
<u>)</u>								E
	SAMPLES FOR LESS THAN ON	ICE A	DAY, NOR LESS THAN		PLACED EACH DAY SHAI JBIC YARDS OF CONCRE BS AND WALLS.		8.	D

### NOTES

# STRUCTURAL LUMBER AND THEIR CONNECTIONS SHALL CONFORM TO THE LATEST EDITION OF THE NFPA "NATIONAL

(UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFICATIONS)

SIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND SUPPLEMENT "DESIGN VALUES FOR WOOD CONSTRUCTION." WOOD FRAMING EXPOSED TO WEATHER SHALL BE PRESERVATIVE PRESSURE TREATED SOUTHERN PINE NO. 2 OR FTER, OR WOLMANIZED PSL

SILLS IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE PRESSURE TREATED SOUTHERN PINE NO. 2 OR BETTER. STRUCTURAL WOOD FRAMING (JOISTS, RAFTERS, STUDS AND LINTELS) SHALL BE SPRUCE-PINE-FIR NO.1/NO. 2 OR

TER WITH Fb - 875 PSI; Fv - 135 PSI; E - 1,400,000 PSI P PLATES AND SILL PLATES OF ALL STRUCTURAL WALLS SHALL BE SOUTHERN PINE NO. 2 OR BETTER.

OVIDE DOUBLE TACK STUDS (MINIMUM) UNDER ALL HEADERS, OR BUILT UP BEAMS UNLESS OTHERWISE NOTED. CH STUDS SHALL CONTINUE FROM THE POINT OF LOAD APPLICATION TO THE FOUNDATION.

LFLUSH (SIDE-MOUNTED) CONNECTIONS SHALL HAVE BEAM, JOIST OR TRUSS HANGERS CAPABLE OF SUPPORTING E MAXIMUM REACTION OF THE MEMBER. POST TO BEAM CONNECTIONS SHALL HAVE A METAL POST CAP, BY "SIMPSON," OR ACCEPTED EQUAL, UNLESS

HERWISE NOTED CONNECTIONS SHALL CONFORM TO THE CURRENT EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR

OOD CONSTRUCTION, AND THE CONTRACT DOCUMENTS. STRUCTURAL LUMBER SHALL BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER NSTRUCTION'S "CONSTRUCTION MANUAL".

#### . STRUCTURAL LAMINATED STRAND LUMBER (LSL), LAMINATED VENEER LUMBER (LVL), AND PARALLEL RAND LUMBER (PSL) SHALL CONFORM TO THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION R WOOD" AND SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

LSL's	LVL's	PSL's (BEAMS)	PSL's (COLUMNS)
2,325 PSI	Fb = 2,600 PSI	Fb = 2,900 PSI	Fb = 2,400 PSI, Fc= 2,500 PSI
310 PSI	Fv = 285 PSI	Fv = 290 PSI	Fv = 180 PSI
,550,000 PSI	E = 2,000,000 PSI	E = 2,000,000 PSI	E = 1,800,000 PSI

PERFORMANCE RATED I-JOISTS (PRI'S) SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH APA/EWS NDARDS AND ESR-1405. JOISTS SHALL HAVE THE MINIMUM PROPERTIES DEFINED ON THE SCHEDULE (SEE TYPICAL TAILS). SEE SPECIFICATION FOR MORE INFORMATION.

#### STEEL HARDWARE SHALL BE HOT-DIPPED GALVANIZED. PROVIDE AND INSTALL STAMPED AND FABRICATED STEEL OF FYPE INDICATED AS REQUIRED IN THE CONSTRUCTION DOCUMENTS OR CONNECTION SHOP DRAWINGS. NAILS SHALL THOSE FURNISHED BY THE MANUFACTURER FOR THIS SPECIFIC USE. NAILS SHALL BE FULLY DRIVEN IN ALL HOLES IN HANGER OR ANCHOR. "TECO" OR "SIMPSON" HANGERS, CONFORMING TO THE REQUIREMENTS INDICATED, SHALL BE IVIDED. ALL TRUSS. TJI AND LVL/PSL HARDWARE SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER

. FASTENING SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE PER THE MASSACHUSETTS STATE BUILDING

RUCTURAL WOOD MEMBERS SHALL NOT BE CUT, NOTCHED OR PIERCED IN EXCESS OF THE LIMITATIONS SPECIFIED IE MASSACHUSETTS STATE BUILDING CODE

L TOP-MOUNTED JOISTS SHALL HAVE A MINIMUM BEARING OF 1-3/4" AT JOIST ENDS; 3-1/2" AT INTERMEDIATE SUPPORTS. RATED ROOF AND FLOOR SHEATHING SHALL BE T & G PLYWOOD ONLY AND NAILED WITH 10d NAILS @ 6" O.C. ALONG PHRAGM BOUNDARIES AND AT ALL SUPPORTED EDGES. PROVIDE 10d NAILS @ 12" O.C. AT ALL INTERMEDIATE PPORTS. SEE S-006 FOR DETAIL.

WOOD SHEATHING AT ROOF AND WALLS SHALL SPAN PERPENDICULAR TO ROOF TRUSSES OR WALL STUDS, UNLESS HERWISE NOTED.

L EXTERIOR WALL SHEATHING AND INTERIOR WALL SHEATHING SHALL BE APA RATED STRUCTURAL I PLYWOOD LL SHEATHING WITH A MINIMUM THICKNESS OF  $\frac{15}{2}$ ", SEEPLAN NOTES FOR NAILING PATTERN.

DVIDE 2X BLOCKING AT ALL UNSUPPORTED PLYWOOD EDGES AT SHEAR WALL SHEATHING.

ESS OTHERWISE NOTED ON THE DRAWINGS, ALL STUD WALLS SHALL BE CAPPED WITH DOUBLE TOP PLATES TALLED TO PROVIDE OVERLAPPING CORNERS AND WALL INTERSECTIONS. TOP PLATES SHALL BE OFESET NOT S THAN 48 INCHES.

#### WALLS REQUIRING PLYWOOD SHEATHING SHALL BE CONSTRUCTED WITH THE SHEATHING PROPERLY FASTENED TO WALL STUDS, SOLE PLATE AND TOP PLATES IN ACCORDANCE WITH THE MASSACHUSETTS STATE BUILDING CODE. VERTICAL JOINTS OF PANEL SHEATHING SHALL OCCUR OVER STUDS AND ALL HORIZONTAL JOINTS SHALL OCCUR ER BLOCKING AT LEAST EQUAL IN SIZE TO THE STUDS.

E FOLLOWING CONSTRUCTION COMPONENTS ARE DESIGNATED ON THE BASIS OF A PERFORMANCE SPECIFICATION TO DESIGNED BY THE CONTRACTOR'S OR SUBCONTRACTOR'S REGISTERED PROFESSIONAL ENGINEER. THE DESIGN OF ESE STRUCTURAL ELEMENTS OR SYSTEMS WILL BE REVIEWED BY THE SER: WOOD STAIRS, LANDINGS, HANDRAILS AND GUARDRAILS

STALLED ANCHORS

CEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ICHOR TYPES AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS.

WHERE PLANS, SECTIONS, OR DETAILS REQUIRE ANCHORAGE TO CONCRETE WITH ADHESIVE ANCHORS, USE THE HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) WITH HAS-E THREADED RODS (SEE NOTE #2 BELOW) PER ICC ESR-3187, OR APPROVED EQUAL.

WHERE PLANS, SECTIONS, OR DETAILS REQUIRE ANCHORAGE TO SOLID GROUTED MASONRY WITH ADHESIVE ANCHORS. USE THE HILTI HIT-HY 70 HYBRID ADHESIVE FOR MASONRY WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) WITH HAS-E THREADED RODS (SEE NOTE #2 BELOW) PER ICC ESR-2682, OR APPROVED EQUAL.

WHERE PLANS, SECTION, OR DETAILS REQUIRE ANCHORAGE TO CONCRETE OR SOLID GROUTED MASONRY WITH MECHANICAL OR EXPANSION ANCHORS, USE HILTI KWIK BOLT-3 EXPANSION ANCHORS PER ICC ESR-1385.

WHERE PLANS, SECTIONS, OR DETAILS REQUIRE NEW STEEL REINFORCING BARS TO BE ANCHORED TO CONCRETE, USE THE HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187.

ILESS OTHERWISE NOTED, THREADED ROD ANCHORS SHALL CONFORM TO HAS-E STANDARD IS 898 CLASS 5.8.

ICHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER THOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE ODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR HALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE ERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR IOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION TEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL LSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

NSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.

VERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE HILTI PROFI SYSTEM.

HE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION AINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE AINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

ICHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO DGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE AWINGS

XISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. NO XISTING BARS MAY BE CUT OR REMOVED TO INSTALL ANCHORS. CONTRACTOR MAY RELOCATE ANCHORS TO AVOID XISTING REINFORCEMENT PROVIDED MAXIMUM SPACING AND EDGE CLEARANCE DISTANCES ARE MAINTAINED.

7

### STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL MATERIALS, WORKMANSHIP, AND DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

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- STRUCTURAL STEEL W-SHAPES ... ...ASTM A992 (GRADE 50) ...ASTM A500, GRADE C (Fy=50 KSI) STRUCTURAL STEEL TUBES ..... STRUCTURAL STEEL PIPES .... ...ASTM A500, GRADE C (Fy=46 KSI) STRUCTURAL STEEL CHANNELS & ANGLES.....ASTM A36, U.N.O. STRUCTURAL STEEL PLATES..... ....ASTM A572, GRADE 50, U.N.O.
- 3. ALL SHOP CONNECTIONS SHALL BE WELDED TO CONFORM TO "STRUCTURAL WELDING CODE" AWS D1.1, LATEST EDITION, OF THE AMERICAN WELDING SOCIETY, E70 SERIES. SHOP CONNECTIONS MAY BE HIGH STRENGTH BOLTED TO CONFORM TO SPECIFICATION ASTM A325.
- 4. ALL FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTED TO CONFORM TO ASTM A325-N, UNLESS OTHERWISE NOTED. WHERE WELDING IS SPECIFIED, WELDING PER NOTE #2 ABOVE SHALL APPLY.
- 5. PROVIDE 3/8" THICK MINIMUM STIFFENER PLATES AT ALL BEAMS OVER COLUMNS AND AT ALL COLUMNS OVER BEAMS.
- 6. ALL STRUCTURAL STEEL BEAMS AND COLUMNS SHALL BE UNPRIMED, UNLESS OTHERWISE ON NOTED ON PLAN OR IN SPECIFICATIONS
- 7. PROVIDE 1/4 INCH THICK LEVELING PLATE AND 3/4"(±) OF NON-SHRINK GROUT UNDER ALL COLUMN BASE PLATES SUPPORTED ON CONCRETE OR CMU. LEVELING PLATES SHALL BE SET AND GROUTED SOLID BEFORE ERECTION OF COLUMN.
- 8. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36 OR 55, UNLESS OTHERWISE NOTED. EMBEDMENT INTO CONCRETE SHALL BE 12" TERMINATED WITH HEAVY HEX NUT, U.O.N.
- 9. ALL "SIMPLY SUPPORTED" CONNECTIONS SHALL CONFORM TO THE TYPICAL DETAILS GIVEN ON THE PROCEEDING TYPICAL DETAIL SHEETS AND SHALL BE DESIGNED BY THE STEEL FABRICATOR TO SUPPORT THE MINIMUM LOADS GIVEN ON THE "TYPICAL BEAM TO SINGLE PLATE CONNECTION" DETAIL UNLESS LARGER LOADS ARE INDICATED ON THE PLANS. PROVIDE CONNECTION DESIGN CALCULATIONS AT THESE CONDITIONS.
- 10. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS. ALL CERTIFICATIONS MUST BE CURRENT (i.e. WITHIN 12 MONTHS OF PERFORMANCE OF WELDING).
- 11. SHORT SLOTTED HORIZONTAL HOLES IN WEB OF BEAM FOR BOLTED CONNECTIONS ARE PERMISSIBLE.
- 12. PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND) AT WELDED CONNECTIONS, UNLESS OTHERWISE NOTED. 13. ALL EXPOSED STRUCTURAL STEEL AND THE ASSOCIATED CONNECTIONS, INCLUDING DUNNAGE, SCREEN SUPPORTS AND
- RELIEVING ANGLES SHALL BE HOT-DIPPED GALVANIZED. REFER TO ARCH. DWG'S. FOR COLOR GALVANIZING REQUIREMENTS. 14. REFER TO SPECIFICATION SECTION 051200 FOR ADDITIONAL INFORMATION.

FOUNDATIONS AND SUBGRADE PREPARATION:

- 1. WHERE SHOWN ON THE DRAWINGS, FOUNDATIONS SHALL BEAR ON AGGREGATE PIERS DESIGNED TO IMPROVE THE GROUND SOIL PER THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. ALTERNATELY, FILL OVER THE ENTIRE SITE MAY BE REMOVED DOWN TO THE NATURAL SAND LAYER AND REPLACED WITH COMPACTED STRUCTURAL FILL. THE EXCAVATION IS ESTIMATED TO BE UP TO 15'-0" DEEP AND EXTEND BELOW THE GROUND WATER LAYER. THE DESIGN BEARING PRESSURE VALUE FOR ALL FOOTINGS SHALL BE 2.0 TSF.
- THE ESTIMATED ELEVATION OF THE BOTTOM OF EACH FOOTING IS INDICATED THUS [0'-0"]. THE BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT FINISHED GRADE.
- 3. NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH UNLESS WALLS ARE SUFFICIENTLY BRACED TO PREVENT MOVEMENT OR STRUCTURAL DAMAGE AND THE SLAB-ON-GRADE IS IN PI ACE
- 4. FOR TYPICAL SLAB-ON-GRADE CONSTRUCTION A HEAVY DUTY VAPOR BARRIER PLACED BELOW THE FLOOR SLAB BASE COURSE CONSISTING OF GRIFFOLYN TYPE 65G HIGH PERFORMANCE, HIGH DENSITY POLYETHYLENE OR APPROVED EQUAL (WITH JOINTS LAPPED A MINIMUM OF 12 INCHES) OVER AT LEAST 2'-0" OF COMPACTED STRUCTURAL FILL.
- 5. SLAB-ON-GRADE SHALL NOT BEAR DIRECTLY ON BEDROCK, BOULDERS, OR COBBLES. PROTRUDING BEDROCK, BOULDERS, OR COBBLES SHALL BE EXCAVATED.
- 6. THE EXTERIOR FOUNDATION WALLS SHALL INCLUDE A PREFABRICATED DRAINAGE PRODUCT SUCH AS MIRIDRAIN 6000 INSTALLED DIRECTLY AGAINST THE EXTERIOR FACE OF THE WALL ALONG WITH A BITUMASTIC DAM PROOFING (SEE ARCH).
- 7. FOR CONSTRUCTION UNDER WINTER CONDITIONS, FOUNDATION AND FLOOR SLABS SHALL BE PROTECTED FROM FREEZING TEMPERATURES UNTIL THE BUILDING IS ENCLOSED AND HEATED.
- 8. THE DESIGN AND EXECUTION OF ALL TEMPORARY EARTH RETENTION SYSTEMS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 9. NO CONCRETE SHALL BE PLACED IN WATER, ICE, FROST, OR ON FROZEN SUBGRADE MATERIAL. PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT FROST FROM PENETRATING ANY FOOTING OR SUBGRADE MATERIAL (BEFORE AND AFTER CONCRETE PLACEMENT) UNTIL SUCH SUBGRADE MATERIAL IS FULLY PROTECTED BY THE PERMANENT STRUCTURAL SYSTEM.
- 10. FOUNDATIONS SHALL BE CENTERED ON GRID INTERSECTIONS, UNLESS OTHERWISE NOTED.
- 11. UNLESS OTHERWISE NOTED, STRIP FOOTINGS BELOW FOUNDATION WALLS (BETWEEN COLUMN SPREAD FOOTINGS) SHALL BE AT LEAST 2'-6" WIDE x 1'-0" DEEP REINFORCED WITH (3)-#5'S BOTTOM (CONT.). THE TOP ELEVATION OF THE STRIP FOOTING SHALL MATCH THE TOP ELEVATION OF THE ADJACENT COLUMN STRIP FOOTING, UNLESS OTHERWISE NOTED.
- 12. A LICENSED GEOTECHNICAL ENGINEER SHALL OBSERVE THE EXPOSED SUBGRADES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AFTER FINAL EXCAVATION TO CONFIRM THE ASSUMED FOUNDATION BEARING CONDITIONS. IT MAY BE NECESSARY TO OVER-EXCAVATE AND REPLACE LOCALLY WEAK, DISTURBED, OR OTHERWISE UNACCEPTABLE BEARING SOILS.
- 13. ALL FOUNDATION RECOMMENDATIONS ARE BASED ON THE "SUBSURFACE EXPLORATIONS AND GEOTECHNICAL RECOMMENDATIONS, 117 BROADWAY DEVELOPMENT, ARLINGTON, MASSACHUSETTS", REPORT BY GEI CONSULTANTS, DATED FEBRUARY 12, 2018. REFER TO THE ABOVE - REFERENCED GEOTECHNICAL ENGINEERING REPORT FOR ADDITIONAL INFORMATION

#### REINFORCED CONCRETE MASONRY

EXCEED 2000 PSI.

1. ALL REINFORCED CONCRETE MASONRY SHALL CONFORM TO THE LATEST EDITION OF THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

- 2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE I, NORMAL WEIGHT.
- 3. THE NET AREA COMPRESSIVE STRENGTH OF THE MASONRY ASSEMBLY (fm') SHALL BE EQUAL OR
- 4. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S.
- 5. GROUT SHALL CONFORM TO ASTM C476, FINE TYPE, AND SHALL HAVE A MINIMUM 28 DAY
- COMPRESSIVE STRENGTH OF 3000 PSI.
- 6. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED.
- 7. THE WORK IN PROGRESS WILL BE INSPECTED AND EVALUATED FOR ACCEPTANCE.

### STEEL DECKING:

- STEEL FLOOR DECK (COMPOSITE) SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO AISC SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS. BEFORE FORMING SHEETS SHALL BE COATED WITH A ZINC COATING CONFORMING TO ASTM-A653, G-60 COATING, UNITS SHALL BE SUPPLIED WITH INTEGRAL LOCKING LUGS TO PROVIDE FULLY COMPOSITE BEHAVIOR BETWEEN THE DECK AND THE CONCRETE SLAB.
- 2. STEEL FLOOR DECKING SHALL BE FASTENED TO STEEL FRAMING BY A 5/8" DIAMETER (MINIMUM) PUDDLE WELDS IN A 36/4 PATTERN. FLOOR DECK SHEETS SHALL BE FASTENED TO EACH OTHER AT SIDELAPS WITH #10 TEK SCREWS AT 36" ON CENTER (MAXIMUM SPACING).

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- PROVIDE END CLOSURES, CAPS, SUMP PANS AND ALL OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. SUMP PANS ARE REQUIRED FOR OPENINGS GREATER THAN 13".
- 4. MECHANICAL, ELECTRICAL, PLUMBING OR CEILING CONSTRUCTION SHALL NOT BE HUNG DIRECTLY FROM THE DECK.
- 5. REFER TO SPECIFICATION SECTION 053100 FOR ADDITIONAL INFORMATION.

QUALITY ASSURANCE:

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- 3. SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR QUALITY ASSURANCE TESTING AND
- INSPECTIONS.
- A PARTY TO SCHEDULING OF WORK.
- BY THE INDEPENDENT TESTING AGENCY.

### SCHEDULE. SEPARATE ALLOWANCES IN ADDITION TO MATERIALS S

SEPARATE ALLOWANCE IN THI

(INCLUDING INSTALLATION) W AT THE DISCRETION OF THE F THE OWNER SHALL NOT BE BIL STRUCTURAL STEEL: CAST-IN-PLACE CONCRETE: 4000 PSI NORMAL WEIGHT

> FORMWORK WOOD FRAMING

# C. ALL SIZES AND SHAPES

# SHOP DRAWINGS:

- REPRODUCED FOR USE AS SHOP DRAWINGS.
- THE CONTRACT DOCUMENTS.

REVIEW THEREOF.

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THOSE REQUESTED BT STP ON PREVIOUS SUBMITTALS.

## NOTES

DO NOT SCALE DRAWINGS.

#### THE OWNER WILL EMPLOY AND PAY FOR THE SERVICES OF AN INDEPENDENT TESTING AGENCY TO PROVIDE OUALITY ASSURANCE TESTING AND INSPECTIONS FOR WORK SPECIFIED IN CHAPTER 17 OF THE 9TH EDITION OF THE MASSACHUSETTS STATE BUILDING CODE. THE TESTING AGENCY SHALL BE LICENSED. IN THE STATE OF MASSACHUSETTS AND ALL TESTING AND INSPECTIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF AN ENGINEER REGISTERED IN THE STATE OF MASSACHUSETTS.

FAILURE OF OUALITY ASSURANCE TESTING AND INSPECTIONS TO DETECT ANY DEFECTIVE WORK OR MATERIAL SHALL NOT IN ANY WAY PREVENT LATER REJECTION WHEN SUCH DEFECT IS NOTED, NOR SHALL IT OBLIGATE THE OWNER'S REPRESENTATIVE FOR FINAL ACCEPTANCE.

### THE TESTING AGENCY AND ITS REPRESENTATIVES ARE NOT AUTHORIZED TO REVOKE, ALTER, RELAX, ENLARGE OR RELEASE ANY PORTION OF THE WORK, PERFORM ANY DUTIES OF THE CONTRACTOR OR BE

RECORDS OF INSPECTIONS SHALL BE KEPT AVAILABLE TO THE BUILDING OFFICIAL DURING PROGRESS OF THE WORK AND FOR TWO YEARS AFTER COMPLETION OF THE PROJECT. RECORDS SHALL BE PRESERVED

CONTRACTOR SHALL SUBMIT A SCHEDULE OF SHOP DRAWING SUBMITTAL DATES AT LEAST 30 DAYS PRIOR TO FIRST SUBMITTAL. FAILURE TO SUBMIT DRAWINGS ON DESIGNATED DATE MAY IMPACT REVIEW

HOWN BY THESE DOCUMENTS, CONTRACTORS SHALL PROVIDE A
EIR BID PRICES FOR THE FOLLOWING QUANTITIES OF MATERIALS
HICH, IF NEEDED, WILL BE SPECIFIED AT A LATER TIME AND
NGINEER OF RECORD. IF THIS MATERIAL IS NOT USED,
LLED:
5% OF TOTAL STEEL TONNAGE

REINFORCING STEEL (BARS & WELDED WIRE FABRIC): 5% OF TOTAL REINF TONNAGE 5% OF TOTAL VOLUME 5% OF TOTAL 5% OF TOTAL AMOUNT

### MISC. METALS SECTION (INCLUDING STAIRS AND RAILINGS):

ALL STEEL INDICATED ON THESE DRAWINGS NOT SPECIFICALLY SIZED BY LENGTH, WIDTH, THICKNESS, OR WEIGHT SHALL BE PROVIDED UNDER THE WORK OF SPECIFICATION SECTION 055000 (METAL FABRICATIONS) UNLESS SPECIFICALLY CALLED OUT TO BE BY MISCELLANEOUS METALS.

2. ALL STAIRS, STAIR LANDINGS, RAILINGS AND OTHER STAIR COMPONENTS SHALL BE DESIGNED AND DETAILEE UNDER THE SUPERVISION OF A STRUCTURAL ENGINEER LICENSED IN MASSACHUSETTS.

3. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED, SEALED, AND SUBMITTED TO THE ARCHITECT FOR REVIEW. SHOP DRAWINGS SHALL CLEARLY INDICATE, BUT NOT BE LIMITED TO, THE FOLLOWING:

#### A. LOADS IMPOSED ON THE STRUCTURE FROM THE STAIR B. ALL CONNECTIONS FROM THE STAIR TO THE STRUCTURE

D. ALL DIMENSIONS AND CONFIGURATIONS

4. ALL CONCRETE INFILL (WHERE INDICATED ON THE ARCHITECTURAL DRAWINGS) AND LANDINGS SHALL BE CA WITH NORMAL WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. 5. REFER TO SPECIFICATION SECTION 055000 FOR ADDITIONAL INFORMATION.

### 1. SHOP DRAWINGS ARE DRAWINGS, DIAGRAMS, SCHEDULES, MATERIAL LISTS AND OTHER DATA SPECIFICALLY PREPARED FOR THE WORK FOR THE GENERAL CONTRACTOR OR ANY SUBCONTRACTOR, MANUFACTURER, SUPPLIER OR DISTRIBUTOR TO ILLUSTRATE SOME PORTION OF THE WORK. CONTRACT DRAWINGS ARE NOT TO BE

2. WHEN APPLICABLE, SHOP DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO: ERECTION PLANS, NOTES AND BRACING DETAILS, ACCESSORIES, CONNECTION DETAILS, JOIST, BEAM AND COLUMN DETAILS, BENDING, DETAILS FOR REINFORCING RODS, AND ANY OTHER ITEMS WHICH ARE TYPICAL OF INDUSTRY STANDARD FOR SHOP DRAWING SUBMITTALS. SUBMIT STAMPED STRUCTURAL CALCULATIONS WHERE NOTED ABOVE. 3. NO PORTION OF THE WORK REQUIRING SUBMISSION OF A SHOP DRAWING SHALL BE STARTED UNTIL THE SUBMITTAL

HAS BEEN SATISFACTORILY REVIEWED BY SOUZA, TRUE AND PARTNERS, INC. (STP) AND ALL OTHER PARTIES INVOLVED. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH FINAL REVIEWED SUBMITTALS AND

### 4. ALL SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY, UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS. UNLESS OTHERWISE NOTED IN THE CONTRACT SPECIFICATIONS, THE FOLLOWING SEQUENCE SHALL BE FOLLOWED: MANUFACTURER/CONTRACTOR/ARCHITECT/ENGINEER/ARCHITECT/CONTRACTOR/MANUFACTURER.

5. THE CONTRACTOR SHALL REVIEW, APPROVE AND SUBMIT ALL SHOP DRAWINGS REQUIRED BY THE CONTRACT DOCUMENTS IN AN ORDER WHICH IS SEQUENTIAL WITH THE PROGRESS OF THE WORK AND CONSISTANT WITH THE LEAD TIMES RELATED TO THE PRODUCTS. THE SHOP DRAWING SUBMITTAL SCHEDULE SHALL INCLUDE ADEQUATE TIME FOR A COMPLETE AND PROFESSIONAL REVIEW BY ALL PARTIES INVOLVED. IT SHALL BE NOTED THAT THE REVIEW TIME WILL VARY DEPENDING ON THE SIZE AND CONTENT OF THE SUBMITTAL. BY APPROVING AND SUBMITTING SHOP DRAWINGS. THE CONTRACTOR REPRESENTS THAT HE OR SHE HAS VERIFIED ALL MATERIALS. FIELD MEASUREMENTS AND FIELD CONSTRUCTION CRITERIA RELATED THERETO, OR WILL DO SO. IN ADDITION, THIS SHALL REPRESENT THAT HE OR SHE HAS CHECKED AND COORDINATED THE INFORMATION CONTAINED WITHIN SUCH SUBMITTALS WITH THE REQUIREMENTS OF THE WORK AND OF THE CONTRACT DRAWINGS. SOUZA TRUE AND PARTNERS. INC. RESERVES THE RIGHT TO RETURN ANY SHOP DRAWINGS WHICH ARE JUDGED TO BE "RUBBER STAMP APPROVED" BY THE CONTRACTOR WITHOUT PROPER REVIEW AND EVALUATION.

#### 6. ALL SHOP DRAWINGS THAT ARE RECEIVED WITHOUT FIRST BEING REVIEWED AND STAMPED BY THE CONTRACTOR WILL BE RETURNED UNREVIEWED. 7. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AS A RESULT OF STP'S (SOUZA, TRUE AND PARTNERS, INC.) REVIEW OF THE SHOP DRAWINGS UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED STP, IN WRITING, OF SUCH DEVIATION AT THE TIME OF SUBMISSION AND STP HAS GIVEN WRITTEN ACCEPTANCE TO THE SPECIFIC DEVIATION. THE CONTRACTOR

8. THE CONTRACTOR SHALL DRAW ATTENTION TO ALL DEVIATIONS FROM THE CONTRACT DRAWINGS AND INCLUDE REASONS FOR SUCH DEVIATIONS WITH THE SUBMITTED SHOP DRAWINGS. IN ADDITION, THE CONTRACTOR SHALL DIRECT SPECIFIC ATTENTION, IN WRITING OR ON RESUBMITTED SHOP DRAWINGS, TO REVISIONS OTHER THAN

### 9. REFER TO SAMPLE SHOP DRAWING STAMP AND ACTION LEGEND (BELOW) FOR FURTHER CLARIFICATION: ACTION LEGEND

SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE SHOP DRAWINGS BY STP'S

MATERIALS, SIZES, GENERAL ARRANGEMENT AND DETAILS SHOWN ON THIS DRAWING APPEAR TO BE IN SUBSTANTIAL COMPLIANCE WITH THE INTENT OF THE CONTRACT DRAWINGS.

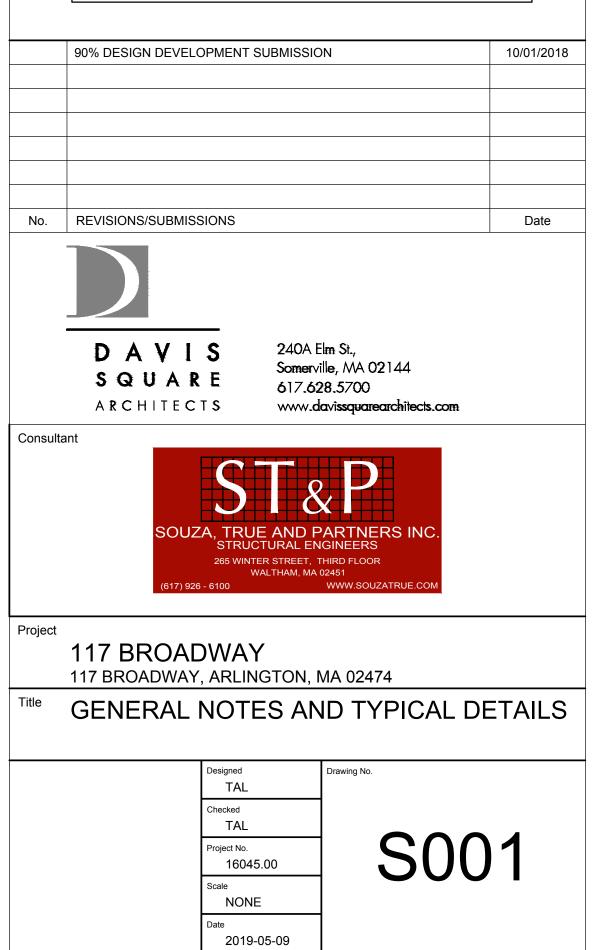
UBMITTAL ACCEPTED, SUBJECT TO NOTATIONS CORRECTIONS NOTED WILL BRING THIS SUBMITTAL INTO SUBSTANTIAL COMPLIANCE WITH THE MATERIALS, SIZES, GENERAL ARRANGEMENTS AND DETAILS NOTED IN THE CONTRACT DOCUMENTS. PROVIDED THAT NO OTHER MODIFICATIONS ARE NECESSARY, RESUBMITTAL IS NOT REQUIRED. REVIEW IS COMPLETE AND ALL CORRECTIONS ARE DEEMED OBVIOUS WITH NO AMBIGUITY

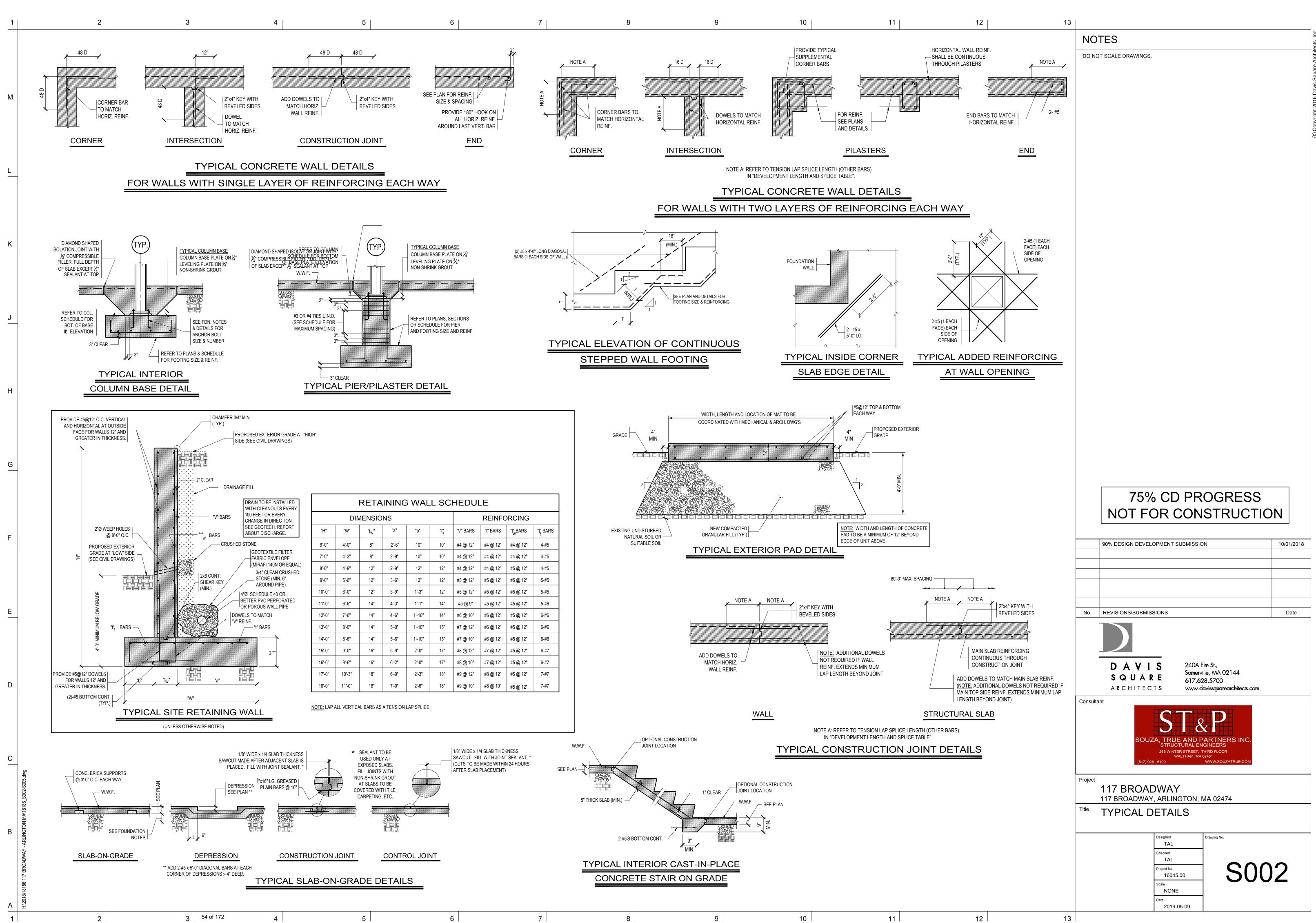
#### UBMITTAL ACCEPTED IN PART, RESUBMIT ITEMS NOTED CORRECTIONS NOTED WILL BRING THIS SUBMITTAL INTO SUBSTANTIAL COMPLIANCE WITH THE MATERIALS, SIZES, GENERAL ARRANGEMENTS AND DETAILS NOTED IN THE CONTRACT DOCUMENTS. PORTIONS OF THE DRAWING

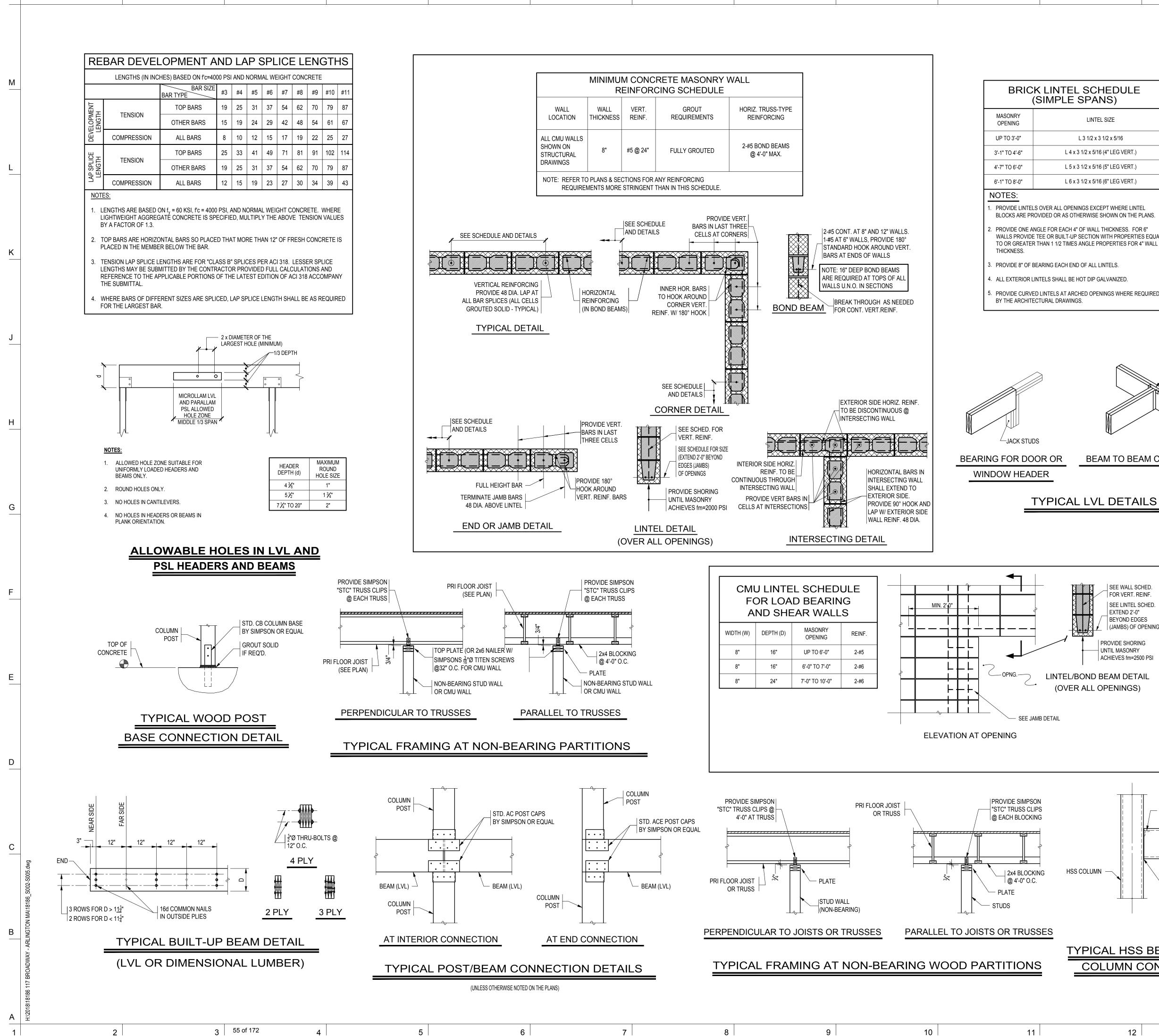
MUST BE REVISED AND REVIEWED PRIOR TO FABRICATION. UBMITTAL NOT ACCEPTED; REVISE, REVIEW AND RESUBMIT FABRICATION SHALL NOT TAKE PLACE PRIOR TO THIS DRAWING BEING REVISED, RESUBMITTED AND REVIEWED BY SOUZA, TRUE AND PARTNERS, INC., AND ALL OTHER PARTIES INVOLVED. DETAILS OR ITEMS NOTED BY THE

REVIEWER REQUIRE FURTHER CLARIFICATION. ESUBMITTED SHOP DRAWINGS THAT WERE PREVIOUSLY ACCEPTED WILL BE NOT REVIEWED UNLESS REVISIONS RE CLOUDED. ONLY CLOUDED ITEMS WILL BE RE-REVIEWED.

ONTRACTOR SHALL SUBMIT A SCHEDULE OF SHOP DRAWING SUBMITTAL DATES AT LEAST 30 DAYS PRIOR TO FIRST SUBMITTAL. FAILURE TO SUBMIT DRAWINGS ON DESIGNATED DATE MAY IMPACT REVIEW SCHEDULI







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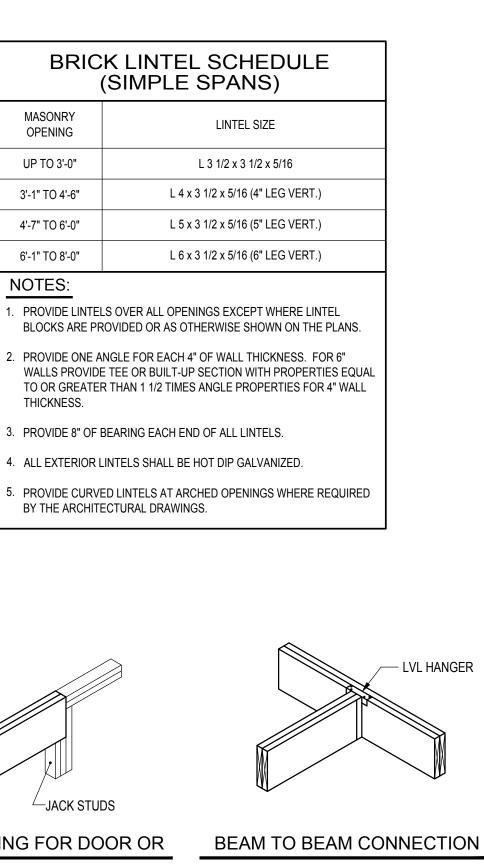
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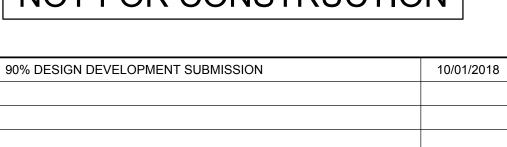
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# NOTES

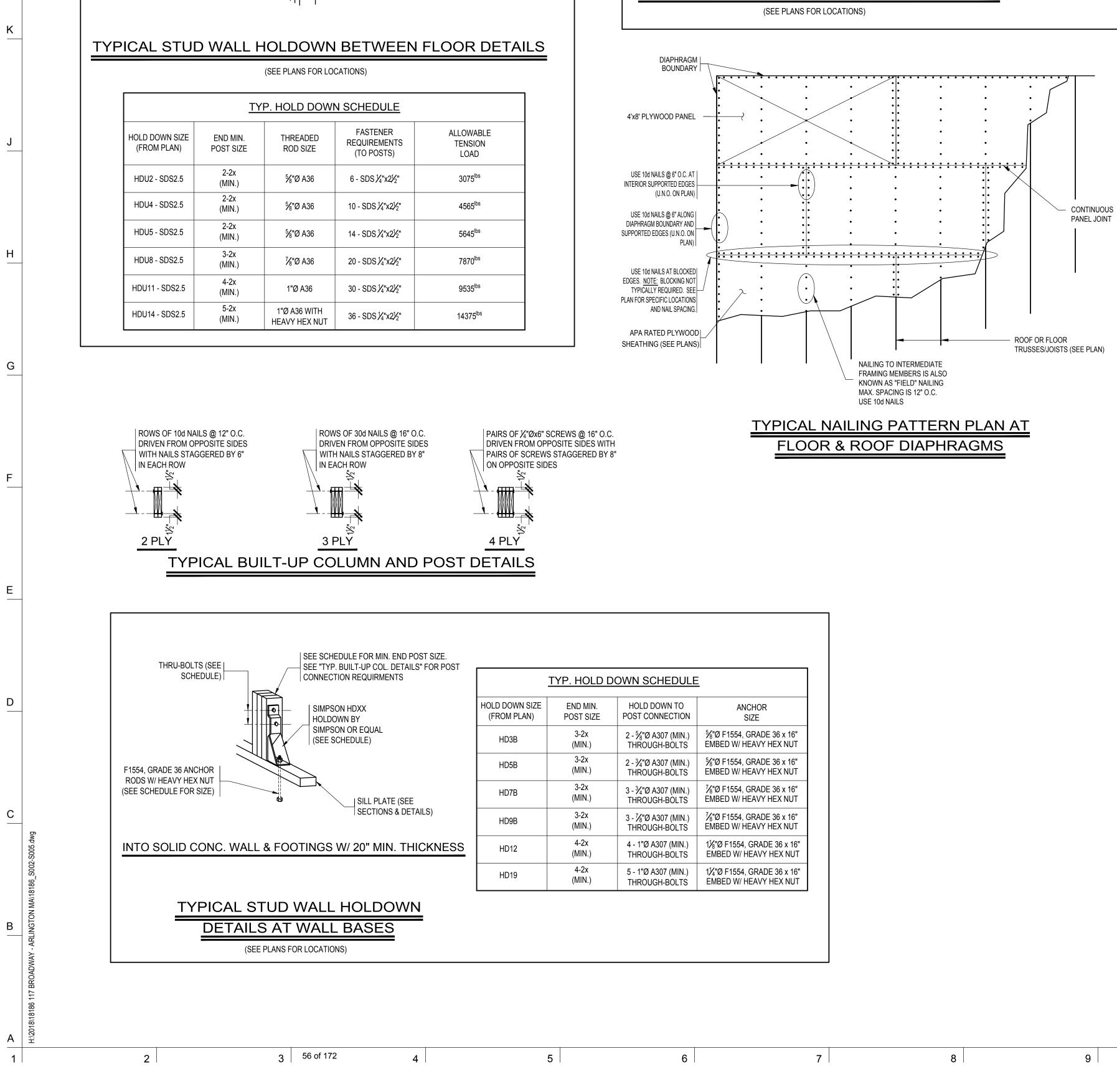
DO NOT SCALE DRAWINGS.

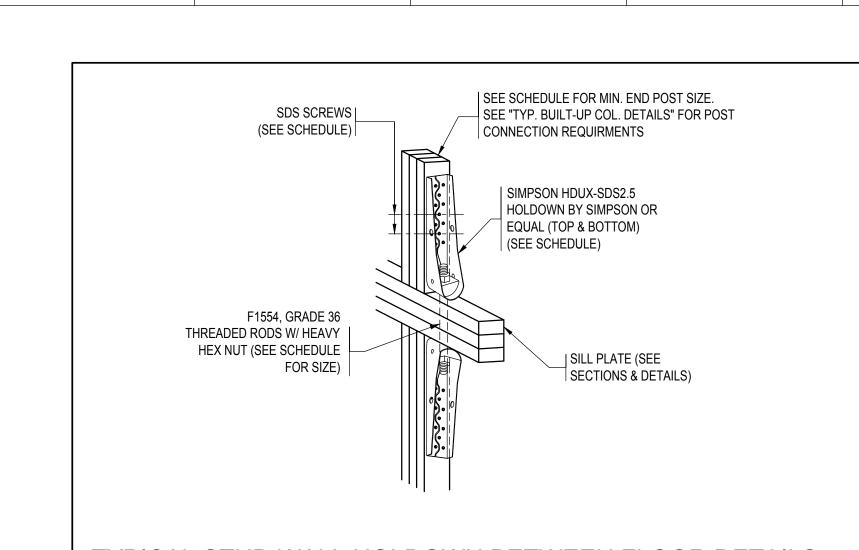




SEE WALL SCHED. FOR VERT. REINF. SEE LINTEL SCHED. EXTEND 2'-0" BEYOND EDGES (JAMBS) OF OPENINGS PROVIDE SHORING UNTIL MASONRY ACHIEVES fm=2500 PSI LINTEL/BOND BEAM DETAIL (OVER ALL OPENINGS) HIDDEN ERECTION CLIP HSS COLUMN - HSS BEAM TYPICAL HSS BEAM TO HSS COLUMN CONNECTION



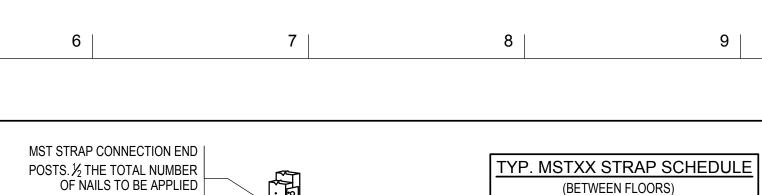




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ABOVE & BELOW THE FLOOR

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MSTXX SIMPSON STRAP

TIE DETAIL

TYPICAL STD. WALL TIE BETWEEN FLOORS

MST SIZE

MST 27

MST 37

MST 48

MST 60

MST 72

NOTE: MST STRAP TO BE

APPLIED ON PLYWOOD SIDE OF WALL (NOT SHOWN)

FASTENERS

30 - 16d NAILS

42 - 16d NAILS

50 - 16d NAILS

65 - 16d NAILS

68 - 16d NAILS

MIN	MINIMUM DESIGN PROPERTIES FOR PRI JOISTS						
DEPTH	JOIST SERIES	EI x 10 <sup>6</sup> (psi)	M (Ib-ft)	V (lb)	MAX. END REACTION (lb) (1¾" BEARING)		
9½"	PRI-20 PRI-30 PRI-40 PRI-50 PRI-60	132 159 184 186 219	2520 3225 2735 3800 3780	1120 1120 1120 1120 1120 1120	830 945 1080 1015 1080		
117⁄8"	PRI-20 PRI-30 PRI-40 PRI-50 PRI-60 PRI-70 PRI-80 PRI-90	225 271 313 316 371 416 518 571	3265 4170 3545 4915 4900 6595 6940 8770	1420 1420 1420 1420 1420 1420 1420 1420	830 945 1200 1015 1200 1160 1280 1400		
14"	PRI-40 PRI-50 PRI-60 PRI-70 PRI-80 PRI-90	459 463 544 609 756 832	4270 5860 5895 7865 8360 10,460	1710 1710 1710 1710 1710 2125	1200 1015 1200 1160 1280 1400		
16"	PRI-40 PRI-50 PRI-60 PRI-70 PRI-80 PRI-90	625 630 739 826 1024 1126	4950 6715 6835 9010 9690 11,985	1970 1970 1970 1970 1970 2330	1200 1015 1200 1160 1280 1400		

NOTE: MAXIMUM LIVE LOAD DEFLECTION SHALL NOT EXCEED L/480.

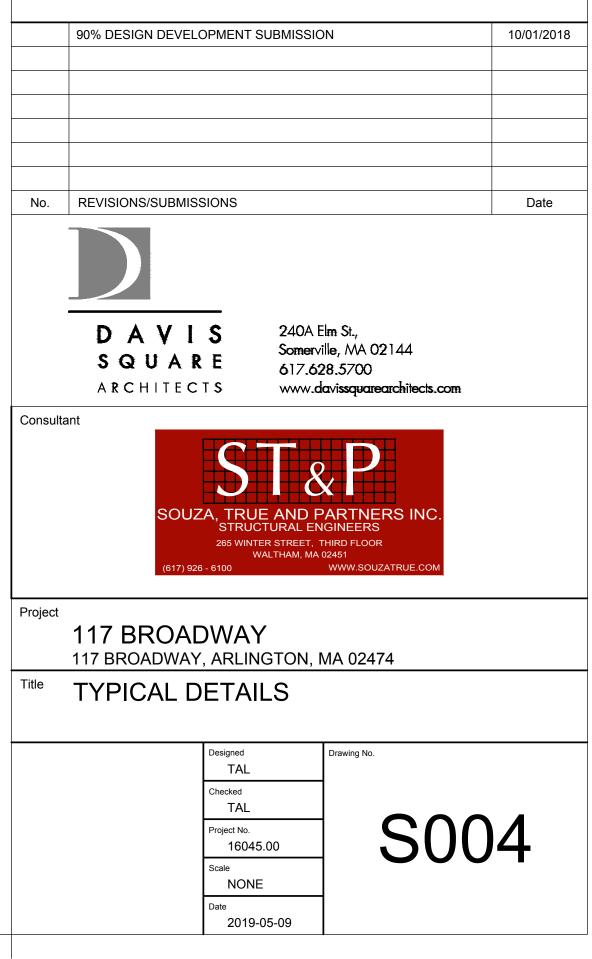
N SCHEDULE	
OLD DOWN TO	ANCHOR
ST CONNECTION	SIZE
5∕8"Ø A307 (MIN.)	5⁄8"Ø F1554, GRADE 36 x 16"
IROUGH-BOLTS	EMBED W/ HEAVY HEX NUT
¾"Ø A307 (MIN.)	5⁄8"Ø F1554, GRADE 36 x 16"
IROUGH-BOLTS	EMBED W/ HEAVY HEX NUT
¾"Ø A307 (MIN.)	%"Ø F1554, GRADE 36 x 16"
IROUGH-BOLTS	EMBED W/ HEAVY HEX NUT
%"Ø A307 (MIN.)	%"Ø F1554, GRADE 36 x 16"
IROUGH-BOLTS	EMBED W/ HEAVY HEX NUT
- 1"Ø A307 (MIN.)	1 <sup>1</sup> / <sub>8</sub> "Ø F1554, GRADE 36 x 16"
IROUGH-BOLTS	EMBED W/ HEAVY HEX NUT
- 1"Ø A307 (MIN.)	1¼"Ø F1554, GRADE 36 x 16"
IROUGH-BOLTS	EMBED W/ HEAVY HEX NUT

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# NOTES

DO NOT SCALE DRAWINGS.



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	WALLS	ON SCHEDULE INTO CMU		ED LUMBER	ENGINEER
	WALLS MAX. SHEAR REACTION	DN SCHEDULE INTO CML NUMBER OF ¾"Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s)	R CONNECTIO NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n)	ED LUMBER	<b>ENGINEER</b>
	MAX. SHEAR REACTION	NUMBER OF ¾"Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s)	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n)	CLIP ANGLE SIZE & LENGTH	LVL SIZE 2-1¾"x11¼" LVL OR
	MAX. SHEAR	NUMBER OF ¾"Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n)	CLIP ANGLE	LVL SIZE
	MAX. SHEAR REACTION	NUMBER OF ¾"Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s)	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x¾x1'-1" LG. (EA. SIDE OF	LVL SIZE 2-1¾"x11¼" LVL OR 2-1¾"x11½" LVL OR 3½"x11¼" PSL 2-1¾"x14" LVL OR
	MAX. SHEAR REACTION 4900 <sup>lbs</sup>	NUMBER OF ¾"Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s) 2@10" O.C.	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C. 3@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x¾x1'-1" LG. (EA. SIDE OF LVL)	LVL SIZE 2-1¾"x11¼" LVL OR 2-1¾"x11¼" LVL OR 3½"x11¼" PSL 2-1¾"x14" LVL
	MAX. SHEAR REACTION 4900 <sup>lbs</sup> 5400 <sup>lbs</sup>	NUMBER OF ¾ "Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s) 2@10" O.C. 2@1'-1" O.C.	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C. 3@3" O.C. 4@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x¾x1'-1" LG. (EA. SIDE OF LVL) L5x5x¾x1'-4" LG. (EA. SIDE) L5x5x¾x1'-7" LG.	LVL SIZE 2-1¾"x11¼" LVL OR 2-1¾"x11¼" LVL OR 3½"x11¼" PSL 2-1¾"x14" LVL OR 3½"x14" PSL 2-1¾"x16" LVL OR
	MAX. SHEAR REACTION 4900 <sup>lbs</sup> 5400 <sup>lbs</sup> 6800 <sup>lbs</sup>	NUMBER OF ¾ "Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s) 2@10" O.C. 2@1'-1" O.C. 3@8" O.C. 3@9" O.C.	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C. 3@3" O.C. 4@3" O.C. 5@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x <sup>3</sup> / <sub>8</sub> x1'-1" LG. (EA. SIDE OF LVL) L5x5x <sup>3</sup> / <sub>8</sub> x1'-4" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-7" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-9" LG. (EA. SIDE)	LVL SIZE 2-1¾"x11¼" LVL OR 2-1¾"x11¼" LVL OR 3½"x11¼" PSL 2-1¾"x14" LVL OR 3½"x14" PSL 2-1¾"x16" LVL OR 3½"x16" PSL 2-1¾"x16" PSL 2-1¾"x18" LVL OR 3½"x18" PSL 3-1¾"x11¼" LVL OR
	MAX. SHEAR REACTION 4900 <sup>lbs</sup> 5400 <sup>lbs</sup> 6800 <sup>lbs</sup>	NUMBER OF ¾ "Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s) 2@10" O.C. 2@1'-1" O.C. 3@8" O.C.	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C. 3@3" O.C. 4@3" O.C. 5@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x <sup>3</sup> / <sub>6</sub> x1'-1" LG. (EA. SIDE OF LVL) L5x5x <sup>3</sup> / <sub>8</sub> x1'-4" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-7" LG. (EA. SIDE)	LVL SIZE 2-1 <sup>3</sup> / <sub>4</sub> "x11 <sup>1</sup> / <sub>4</sub> " LVL OR 2-1 <sup>3</sup> / <sub>4</sub> "x11 <sup>1</sup> / <sub>8</sub> " LVL OR 3 <sup>1</sup> / <sub>2</sub> "x11 <sup>1</sup> / <sub>4</sub> " PSL 2-1 <sup>3</sup> / <sub>4</sub> "x14" LVL OR 3 <sup>1</sup> / <sub>2</sub> "x16" PSL 2-1 <sup>3</sup> / <sub>4</sub> "x16" PSL 2-1 <sup>3</sup> / <sub>4</sub> "x18" LVL OR 3 <sup>1</sup> / <sub>2</sub> "x18" PSL 3-1 <sup>3</sup> / <sub>4</sub> "x11 <sup>1</sup> / <sub>4</sub> " LVL
	MAX. SHEAR REACTION 4900 <sup>lbs</sup> 5400 <sup>lbs</sup> 6800 <sup>lbs</sup>	NUMBER OF ¾ "Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s) 2@10" O.C. 2@1'-1" O.C. 3@8" O.C. 3@9" O.C.	NUMBER OF ¾"Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C. 3@3" O.C. 4@3" O.C. 5@3" O.C. 3@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x <sup>3</sup> / <sub>8</sub> x1'-1" LG. (EA. SIDE OF LVL) L5x5x <sup>3</sup> / <sub>8</sub> x1'-4" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-7" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-9" LG. (EA. SIDE)	LVL SIZE 2-1¾"x11¼" LVL OR 2-1¾"x11¼" LVL OR 3½"x11¼" PSL 2-1¾"x14" LVL OR 3½"x14" PSL 2-1¾"x16" LVL OR 3½"x16" PSL 2-1¾"x16" PSL 2-1¾"x18" LVL OR 3½"x18" PSL 3-1¾"x11¼" LVL OR 3-1¾"x11½" LVL OR
8" (MIN.) CMU V (SEE SCHED	MAX. SHEAR REACTION 4900 <sup>lbs</sup> 5400 <sup>lbs</sup> 6800 <sup>lbs</sup> 7000 <sup>lbs</sup> 5250 <sup>lbs</sup>	NUMBER OF ¾ "Øx6¾" EMBED THREADED RODS INTO SOLID GROUTED 8" (MIN.) CMU WALL UTILIZING THE HILTI HY-20 HYBRED ADHESIVE SYSTEM (PER ANGLE) @ SPACING (s) 2@10" O.C. 3@8" O.C. 3@9" O.C. 2@10" O.C.	NUMBER OF ¾ Ø (A307 MIN.) THRU BOLTS @ SPACING (n) 3@3" O.C. 4@3" O.C. 5@3" O.C. 3@3" O.C. 3@3" O.C.	CLIP ANGLE SIZE & LENGTH L5x5x <sup>3</sup> / <sub>8</sub> x1'-1" LG. (EA. SIDE OF LVL) L5x5x <sup>3</sup> / <sub>8</sub> x1'-4" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-7" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-9" LG. (EA. SIDE) L5x5x <sup>3</sup> / <sub>8</sub> x1'-1" LG. (EA. SIDE)	LVL SIZE 2-1¾"x11¼" LVL OR 2-1¾"x11¼" LVL OR 3½"x11¼" PSL 2-1¾"x14" LVL OR 3½"x14" PSL 2-1¾"x16" LVL OR 3½"x16" PSL 2-1¾"x16" PSL 2-1¾"x11¼" LVL OR 3½"x18" PSL 3-1¾"x11¼" LVL OR 3-1¾"x11¼" PSL 1¾"x14" LVL OR

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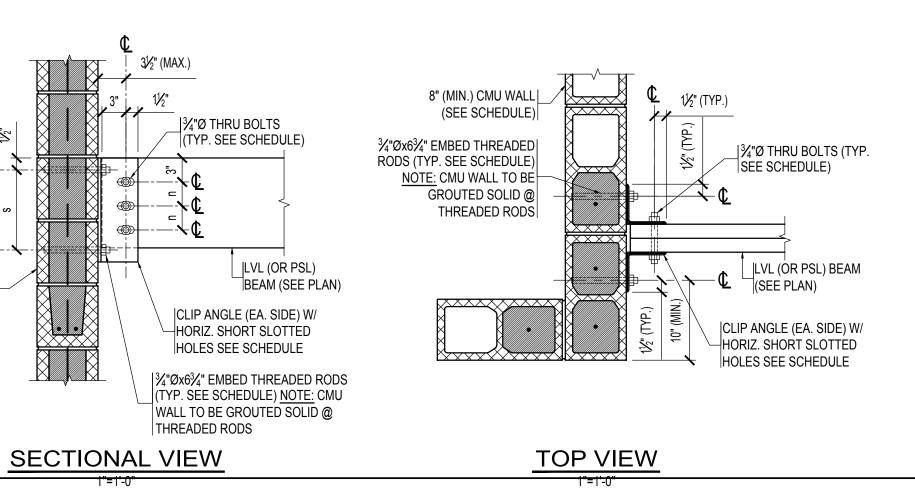
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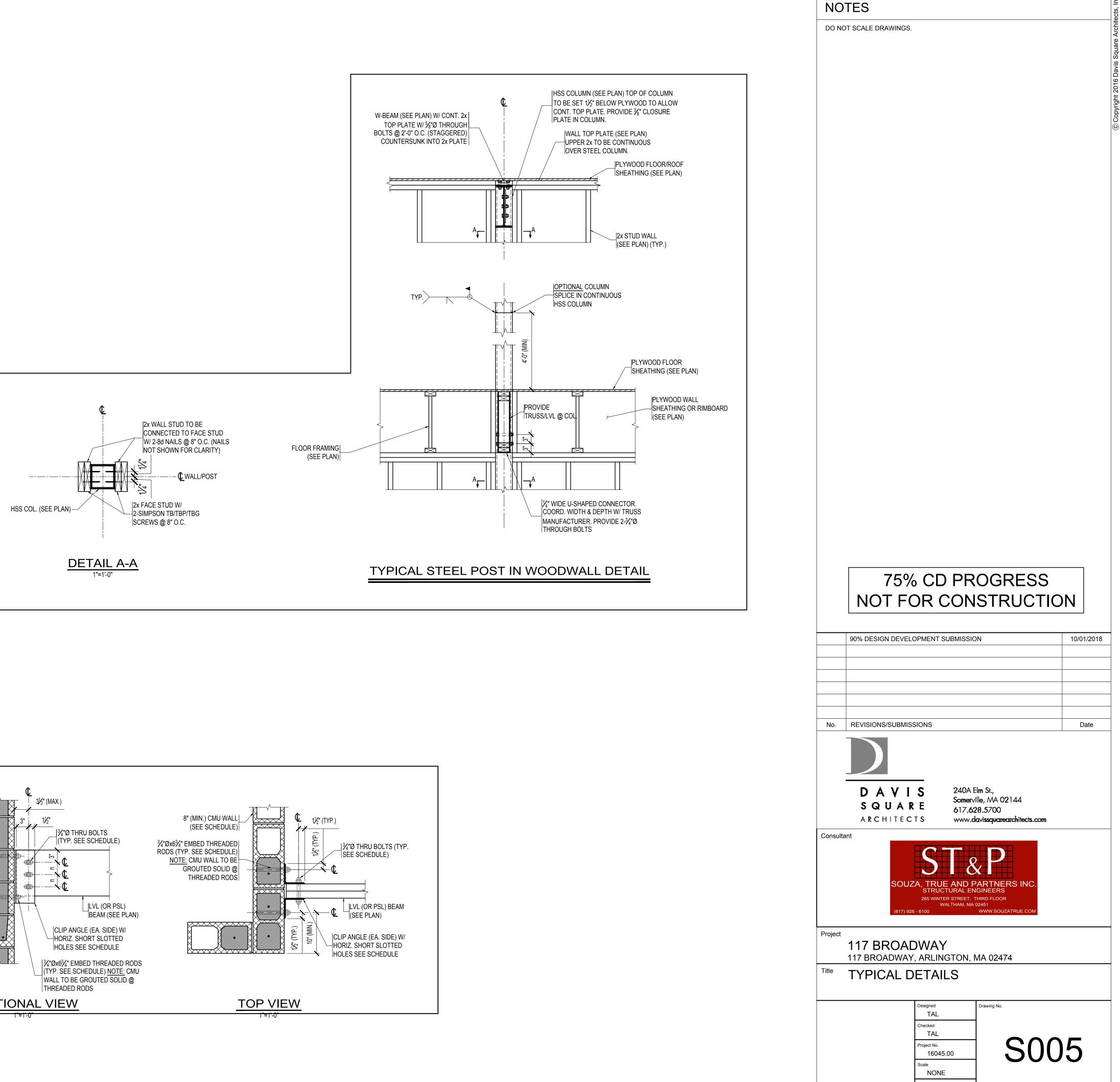
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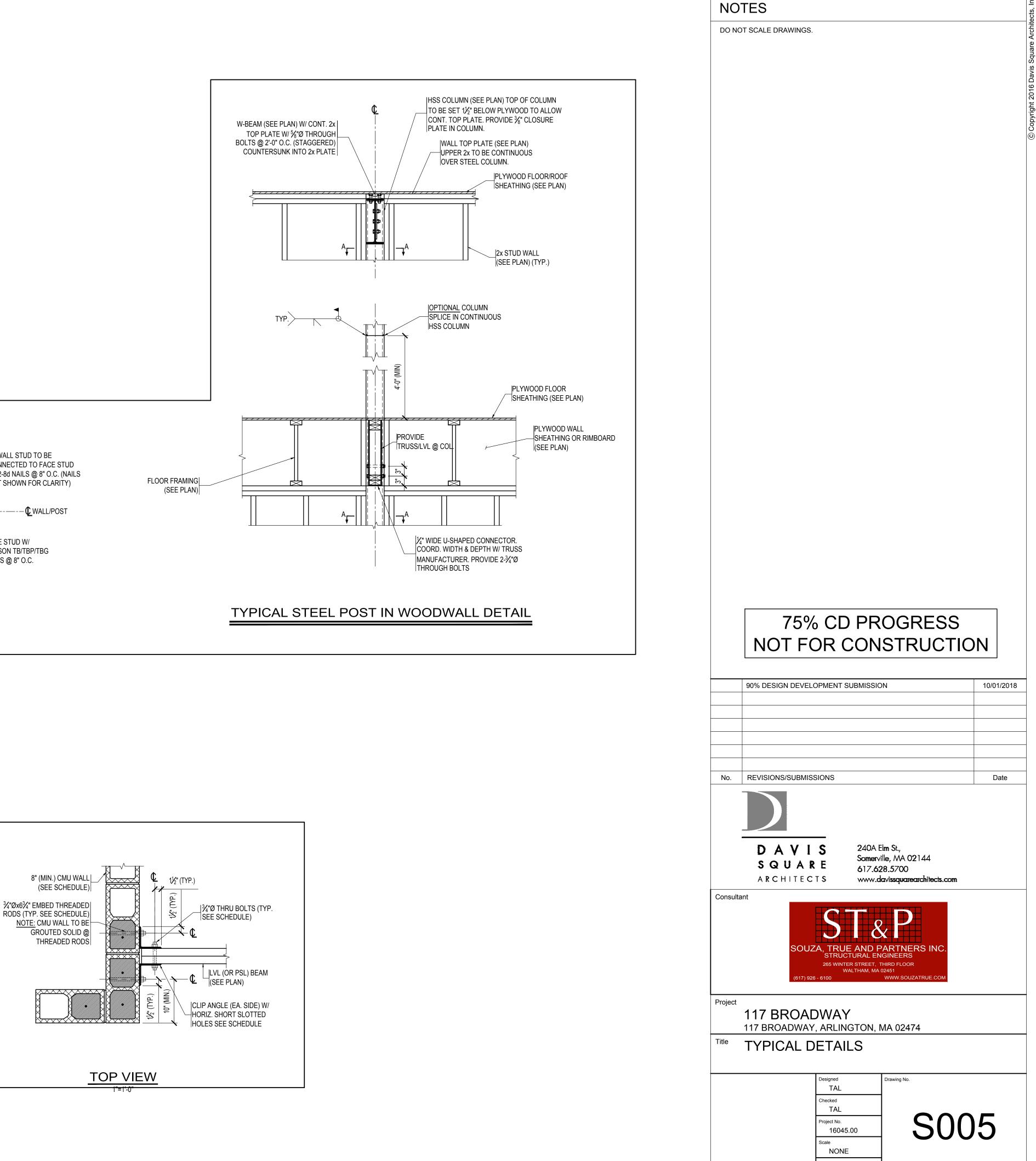




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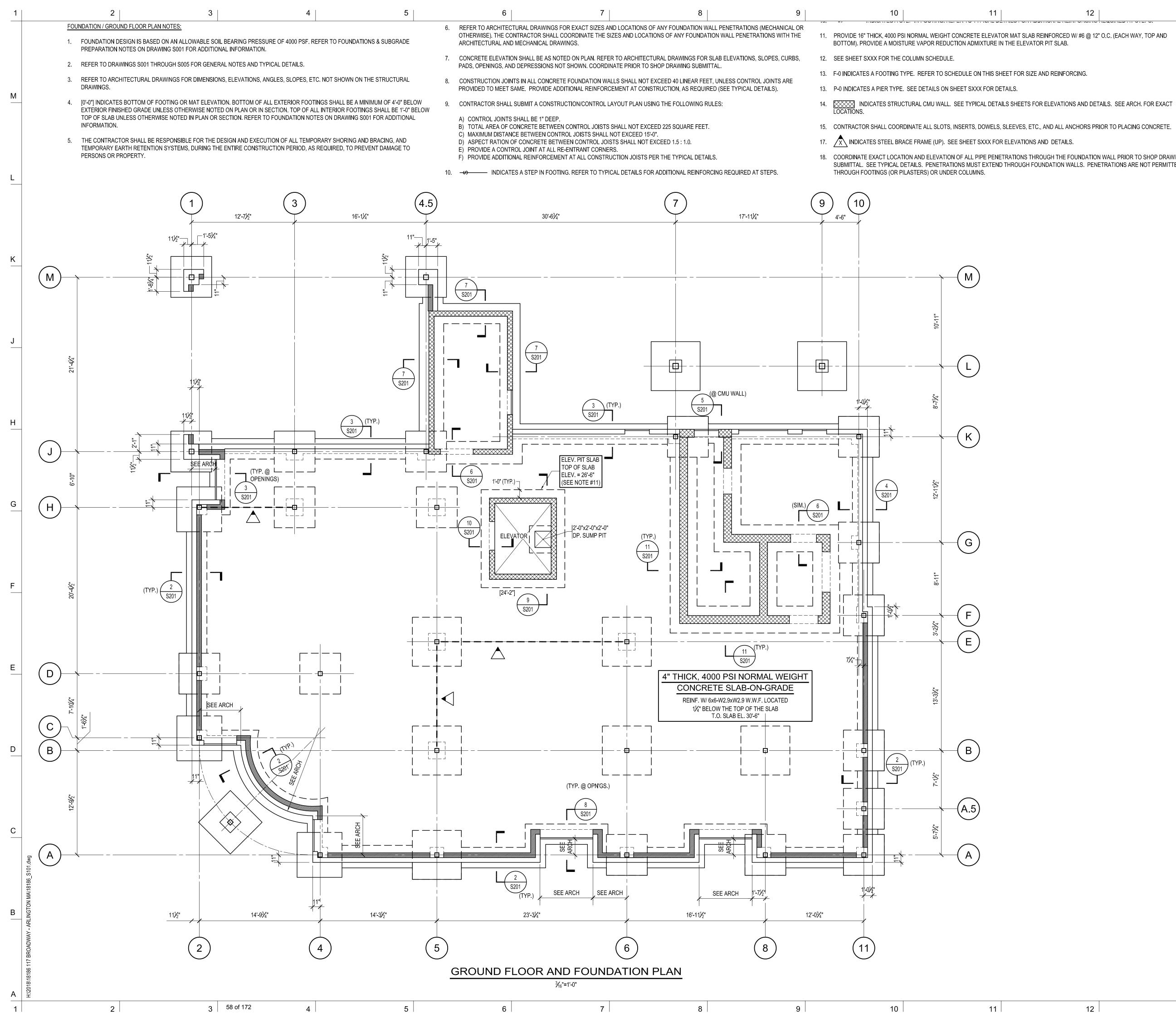
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WALL PENETRATIONS (MECHANICAL C	ND LOCATIONS OF ANY FOUNDATION W	CTURAL DRAWINGS FOR EXACT SIZES A	FER TO ARCHITEC
(	SIZES AND LOCATIONS OF ANY FOUNDA		
		D MECHANICAL DRAWINGS	CHITECTÚRAL ANI

- 11. PROVIDE 16" THICK, 4000 PSI NORMAL WEIGHT CONCRETE ELEVATOR MAT SLAB REINFORCED W/ #6 @ 12" O.C. (EACH WAY, TOP AND BOTTOM). PROVIDE A MOISTURE VAPOR REDUCTION ADMIXTURE IN THE ELEVATOR PIT SLAB.
- 13. F-0 INDICATES A FOOTING TYPE. REFER TO SCHEDULE ON THIS SHEET FOR SIZE AND REINFORCING.

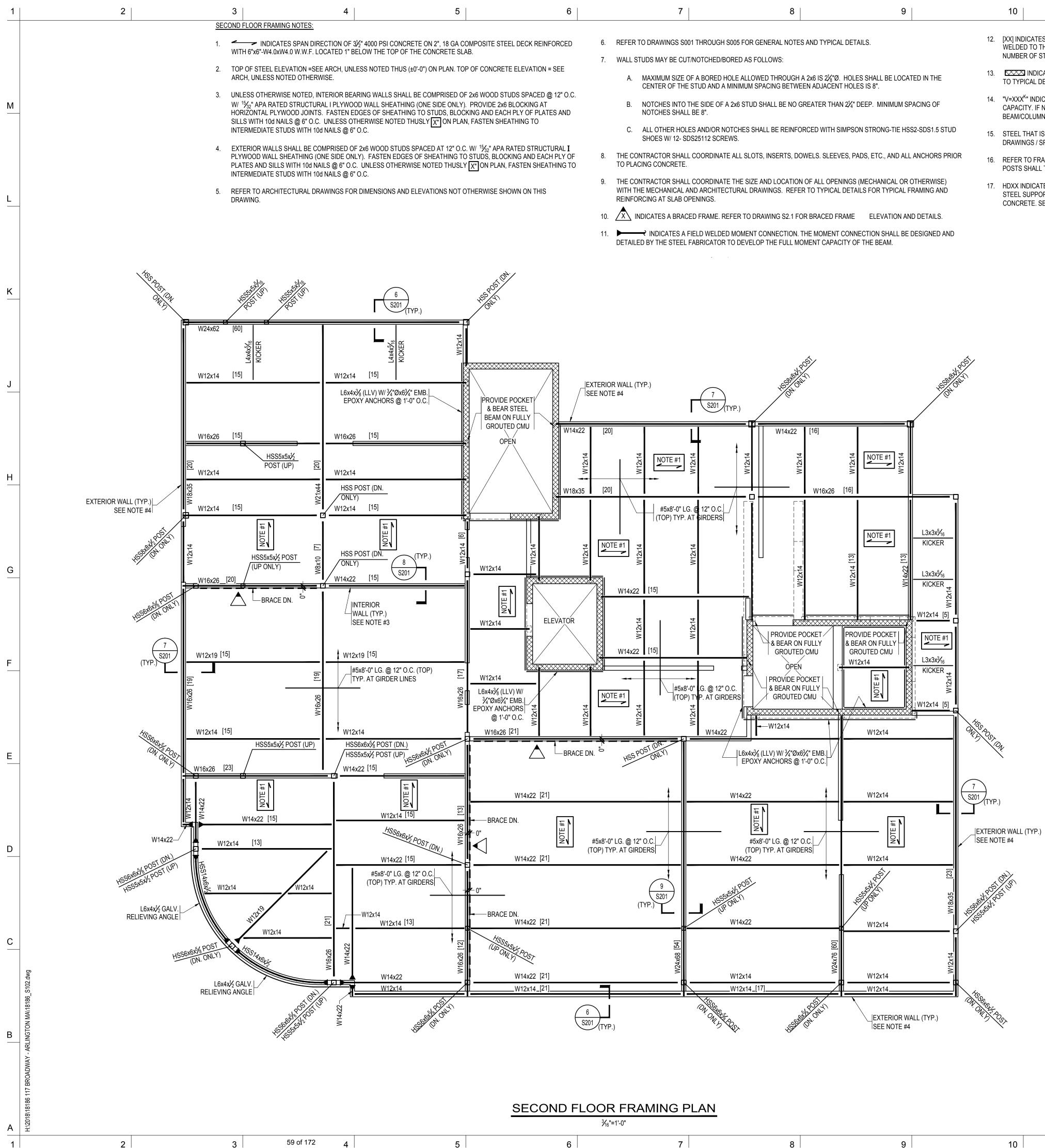
- 15. CONTRACTOR SHALL COORDINATE ALL SLOTS, INSERTS, DOWELS, SLEEVES, ETC., AND ALL ANCHORS PRIOR TO PLACING CONCRETE.
- 18. COORDINATE EXACT LOCATION AND ELEVATION OF ALL PIPE PENETRATIONS THROUGH THE FOUNDATION WALL PRIOR TO SHOP DRAWING SUBMITTAL. SEE TYPICAL DETAILS. PENETRATIONS MUST EXTEND THROUGH FOUNDATION WALLS. PENETRATIONS ARE NOT PERMITTED

# NOTES

DO NOT SCALE DRAWINGS.

# PROGRESS DRAWING FOR INFORMATION NOT FOR CONSTRUCTION

90% DESIGN DEVELOPMENT SUBMISSION 10/01/2018 No. REVISIONS/SUBMISSIONS Date DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant NTER STREET, THIRD FLOC Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 GROUND FLOOR AND FOUNDATION PLAN Drawing No. esigned TAL Checked TAL S101 oject No. 16045.00 AS NOTED 10.31.2018 13



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RCED	6.	REFER TO DRAWINGS SOC	11 THROUGH S005 FOR GENERAL NOTE	S AND TYPICAL DETAILS.	

- NUMBER OF STUDS IS NOT INDICATED AT STEEL BEAMS BELOW COMPOSITE SLABS, PROVIDE STUDS AT 12" ON CENTER.

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- TO TYPICAL DETAILS FOR REINFORCING AND ADDITIONAL INFORMATION.
- 14. "V=XXX<sup>K</sup>" INDICATES STEEL FABRICATOR IS TO DESIGN THE CONNECTION TO HAVE THE MINIMUM LISTED SHEAR CAPACITY. IF NO VALUE IS LISTED, THE CONNECTION CAPACITY SHALL CONFORM TO "TYPICAL W BEAM TO BEAM/COLUMN CONNECTION" DETAIL SHOWN ON DRAWING S0.3.
- 15. STEEL THAT IS TO RECEIVE SPRAY-ON FIRE RETARDANT SHALL REMAIN UNPRIMED. COORDINATE W/ ARCHITECTURAL DRAWINGS / SPECIFICATIONS.
- 16. REFER TO FRAMING PLANS ABOVE FOR POSTS FROM FLOORS AND ROOFS ABOVE. UNLESS OTHERWISE NOTED, ALL POSTS SHALL TERMINATE AT THE LEVEL 2 COMPOSITE SLAB.
- 17. HDXX INDICATES SIMPSON HD HOLDOWN INTO CONCRETE FLOOR. ALL ANCHORS MUST BE CONNECTED DIRECTLY TO STEEL SUPPORTS BELOW CONCRETE SLAB. CONTRACTOR TO COORDINATE EXACT LOCATIONS PRIOR TO CASTING CONCRETE. SEE TYPICAL DETAIL SHEET FOR SCHEDULE AND DETAILS.

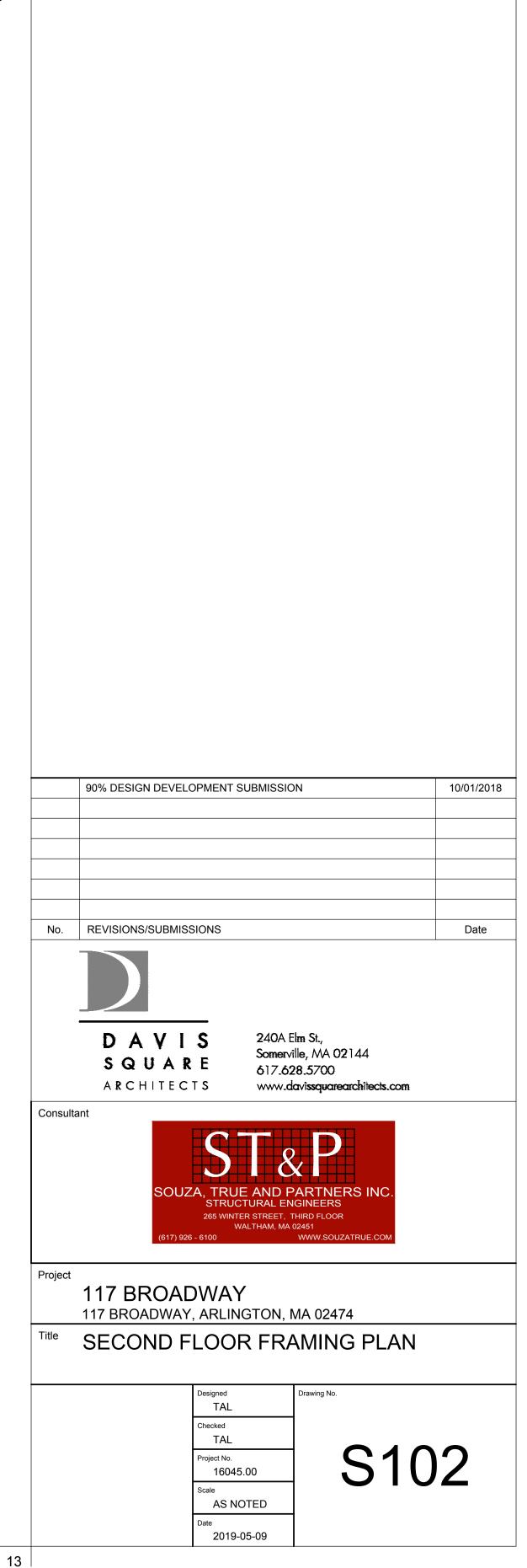
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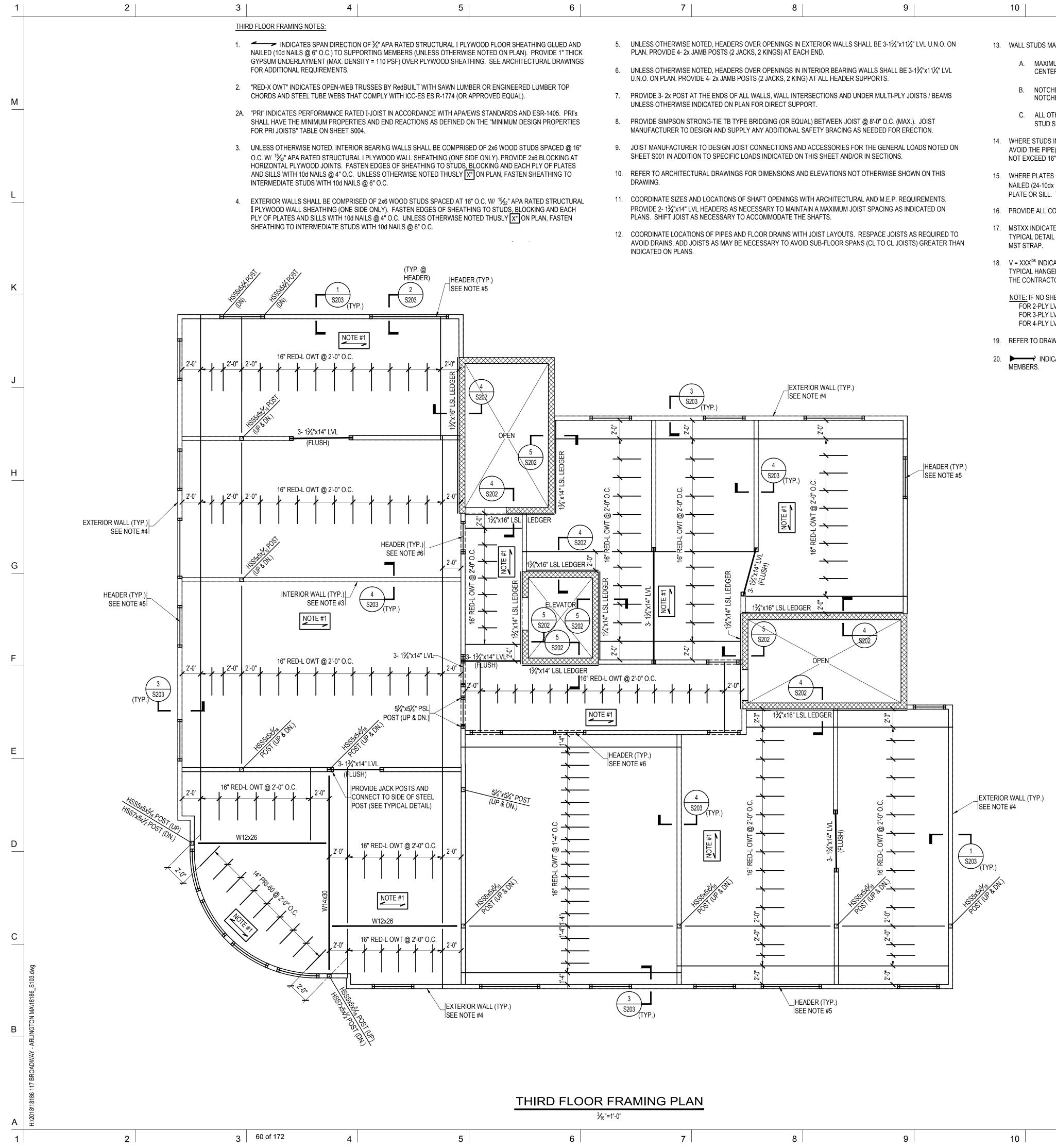
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## 12. [XX] INDICATES THE NUMBER OF $\frac{3}{4}$ " x $\frac{4}{2}$ " LONG HEADED STUD SHEAR CONNECTORS LOCATED ALONG THE BEAM AND WELDED TO THE TOP OF THE BEAM. STUDS SHALL BE SPACED UNIFORMLY ALONG THE BEAM SPAN. WHERE THE

13. INDICATES 8" NOMINAL FULLY GROUTED REINFORCED CMU WALLS AT STAIR AND ELEVATOR SHAFTS. REFER

## DO NOT SCALE DRAWINGS.





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	5.	UNLESS OTHERWISE NOTED, HEADER PLAN. PROVIDE 4- 2x JAMB POSTS (2 J		LLS SHALL BE 3-1¾"x11¼" LVL U.N.O. (	DN 13. WALL S	TUDS MAY BE CUT/NOTCHED/BORED AS FO
PROVIDE 1" THICK CTURAL DRAWINGS	6.	UNLESS OTHERWISE NOTED, HEADER U.N.O. ON PLAN. PROVIDE 4- 2x JAMB I	S OVER OPENINGS IN INTERIOR BEA		A.	MAXIMUM SIZE OF A BORED HOLE ALLOW CENTER OF THE STUD AND A MINIMUM S

- NOTCHES SHALL BE 8".
- STUD SHOES W/ 12- SDS25112 SCREWS.
- NOT EXCEED 16" O.C.
- PLATE OR SILL. THE GAP FOR THE PIPE SHALL NOT BE MORE THE  $4\frac{1}{2}$  INCHES.
- 16. PROVIDE ALL CONNECTION HARDWARE TO SUPPORT END OF JOISTS.
- THE CONTRACTOR. SUBMIT CALCULATIONS FOR REVIEW.
- NOTE: IF NO SHEAR VALUE IS PROVIDED, THE MINIMUM VALUE SHALL BE AS FOLLOWS: FOR 2-PLY LVL: 5,000<sup>lbs</sup> FOR 3-PLY LVL: 8,000<sup>lbs</sup> FOR 4-PLY LVL: 9,000<sup>lbs</sup>
- 19. REFER TO DRAWINGS S001 THROUGH S005 FOR GENERAL NOTES AND TYPICAL DETAILS.

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# NOTES

DO NOT SCALE DRAWINGS.

S FOLLOWS:

OWED THROUGH A 2x6 IS 21/8"Ø. HOLES SHALL BE LOCATED IN THE I SPACING BETWEEN ADJACENT HOLES IS 8".

B. NOTCHES INTO THE SIDE OF A 2x6 STUD SHALL BE NO GREATER THAN 2<sup>1</sup>/<sub>4</sub>" DEEP. MINIMUM SPACING OF

C. ALL OTHER HOLES AND/OR NOTCHES SHALL BE REINFORCED WITH SIMPSON STRONG-TIE HSS2-SDS1.5

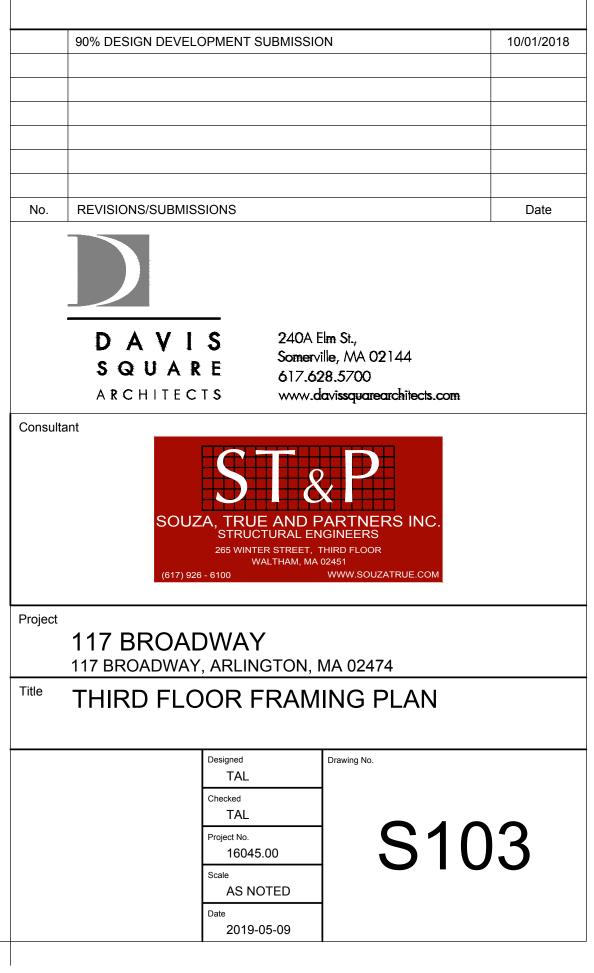
14. WHERE STUDS IN BEARING AND SHEAR WALLS INTERFERE WITH VERTICAL PIPE RUNS, STUDS MAY BE SHIFTED TO AVOID THE PIPE(S). HOWEVER, ADDITIONAL STUDS SHALL BE ADDED SO THAT THE MAXIMUM STUD SPACING DOES

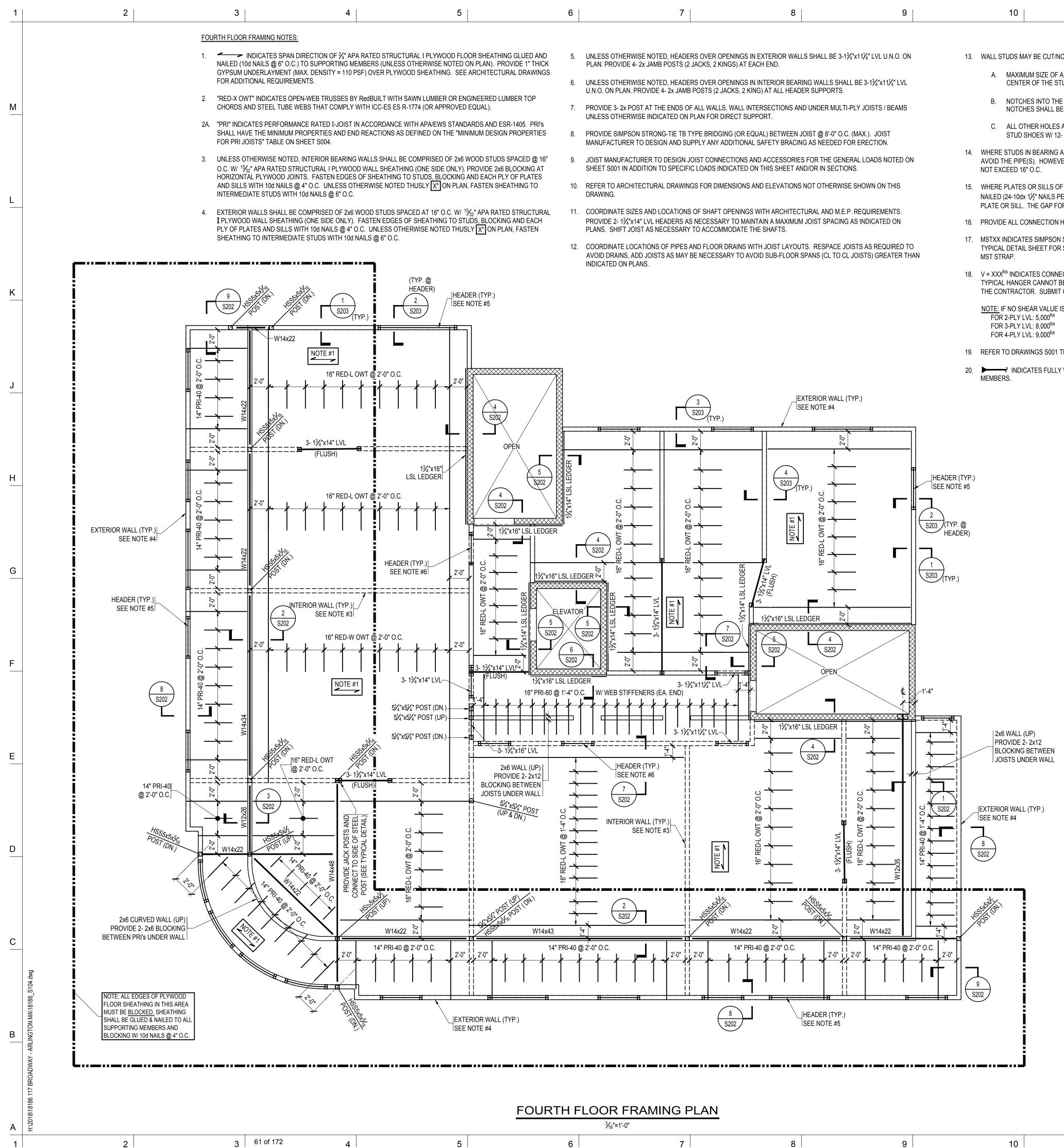
15. WHERE PLATES OR SILLS OF BEARING AND SHEAR WALLS ARE PENETRATED BY VERTICAL PIPES, PROVIDE FULLY NAILED (24-10dx 1<sup>1</sup>/<sub>2</sub>" NAILS PER STRAP) SIMPSON STRONG-TIE CTS218 STRAPS ON EACH SIDE OF EACH PLY OF THE

17. MSTXX INDICATES SIMPSON STRONG-TIE MST STRAP REQUIRED TO CONNECT END OF WALL TO WALL BELOW (SEE TYPICAL DETAIL SHEET FOR SCHEDULE AND DETAILS). PROVIDE 4-2x POST AT ALL LOCATIONS THAT REQUIRE AN

18. V = XXX<sup>lbs</sup> INDICATES CONNECTIONS SHALL BE DESIGNED FOR THE SHEAR LOAD GIVEN. IN THE EVENT THAT A TYPICAL HANGER CANNOT BE FOUND, A CUSTOM HANGER / CONNECTION SHALL BE DESIGNED AND PROVIDED BY

20. Indicates fully welded connections. Provide  $\frac{5}{6}$ " (Min) fillet weld all around between





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- 13. WALL STUDS MAY BE CUT/NOTCHED/BORED AS FOLLOWS:
  - A. MAXIMUM SIZE OF A BORED HOLE ALLOWED THROUGH A 2x6 IS 21/8"Ø. HOLES SHALL BE LOCATED IN THE CENTER OF THE STUD AND A MINIMUM SPACING BETWEEN ADJACENT HOLES IS 8".
  - B. NOTCHES INTO THE SIDE OF A 2x6 STUD SHALL BE NO GREATER THAN 2<sup>1</sup>/<sub>4</sub>" DEEP. MINIMUM SPACING OF NOTCHES SHALL BE 8".
  - C. ALL OTHER HOLES AND/OR NOTCHES SHALL BE REINFORCED WITH SIMPSON STRONG-TIE HSS2-SDS1.5 STUD SHOES W/ 12- SDS25112 SCREWS.
- 14. WHERE STUDS IN BEARING AND SHEAR WALLS INTERFERE WITH VERTICAL PIPE RUNS, STUDS MAY BE SHIFTED TO AVOID THE PIPE(S). HOWEVER, ADDITIONAL STUDS SHALL BE ADDED SO THAT THE MAXIMUM STUD SPACING DOES
- 15. WHERE PLATES OR SILLS OF BEARING AND SHEAR WALLS ARE PENETRATED BY VERTICAL PIPES, PROVIDE FULLY NAILED (24-10dx 1½" NAILS PER STRAP) SIMPSON STRONG-TIE CTS218 STRAPS ON EACH SIDE OF EACH PLY OF THE PLATE OR SILL. THE GAP FOR THE PIPE SHALL NOT BE MORE THE 4<sup>1</sup>/<sub>2</sub> INCHES.
- 16. PROVIDE ALL CONNECTION HARDWARE TO SUPPORT END OF JOISTS.
- 17. MSTXX INDICATES SIMPSON STRONG-TIE MST STRAP REQUIRED TO CONNECT END OF WALL TO WALL BELOW (SEE TYPICAL DETAIL SHEET FOR SCHEDULE AND DETAILS). PROVIDE 4-2x POST AT ALL LOCATIONS THAT REQUIRE AN
- 18. V = XXX<sup>lbs</sup> INDICATES CONNECTIONS SHALL BE DESIGNED FOR THE SHEAR LOAD GIVEN. IN THE EVENT THAT A TYPICAL HANGER CANNOT BE FOUND, A CUSTOM HANGER / CONNECTION SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR. SUBMIT CALCULATIONS FOR REVIEW.
- NOTE: IF NO SHEAR VALUE IS PROVIDED, THE MINIMUM VALUE SHALL BE AS FOLLOWS:
- 19. REFER TO DRAWINGS S001 THROUGH S005 FOR GENERAL NOTES AND TYPICAL DETAILS.
- 20. INDICATES FULLY WELDED CONNECTIONS. PROVIDE  $\frac{5}{16}$ " (MIN) FILLET WELD ALL AROUND BETWEEN

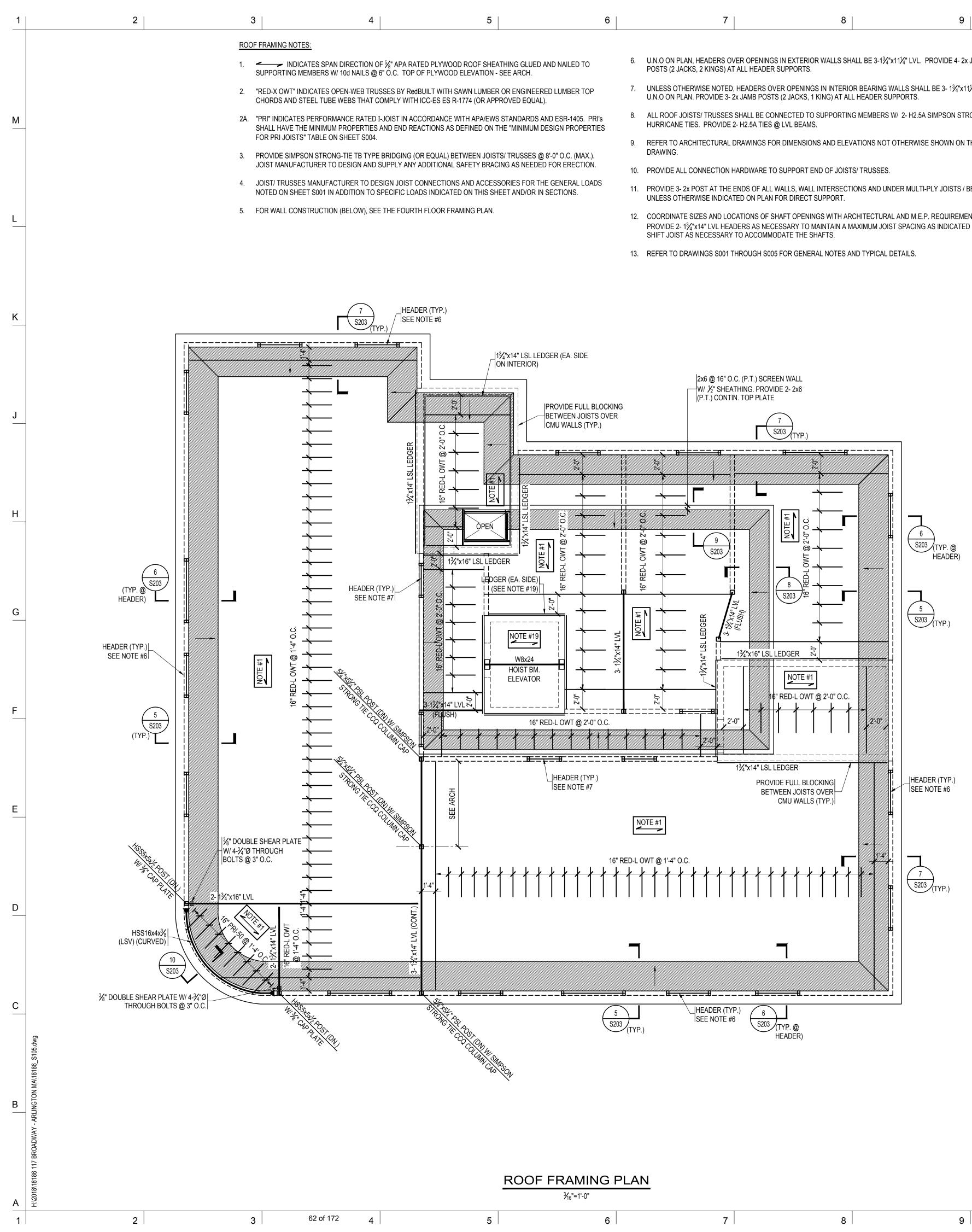
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# NOTES

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DO NOT SCALE DRAWINGS.





- 6. U.N.O ON PLAN, HEADERS OVER OPENINGS IN EXTERIOR WALLS SHALL BE 3-1<sup>1</sup>/<sub>4</sub>"x11<sup>1</sup>/<sub>4</sub>" LVL. PROVIDE 4- 2x JAMB
- 7. UNLESS OTHERWISE NOTED, HEADERS OVER OPENINGS IN INTERIOR BEARING WALLS SHALL BE 3- 1<sup>3</sup>/<sub>4</sub>"x11<sup>1</sup>/<sub>4</sub>" LVL
- 8. ALL ROOF JOISTS/ TRUSSES SHALL BE CONNECTED TO SUPPORTING MEMBERS W/ 2- H2.5A SIMPSON STRONG-TIE
- 9. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT OTHERWISE SHOWN ON THIS
- 11. PROVIDE 3- 2x POST AT THE ENDS OF ALL WALLS, WALL INTERSECTIONS AND UNDER MULTI-PLY JOISTS / BEAMS
- 12. COORDINATE SIZES AND LOCATIONS OF SHAFT OPENINGS WITH ARCHITECTURAL AND M.E.P. REQUIREMENTS. PROVIDE 2- 1<sup>3</sup>/"x14" LVL HEADERS AS NECESSARY TO MAINTAIN A MAXIMUM JOIST SPACING AS INDICATED ON PLANS.

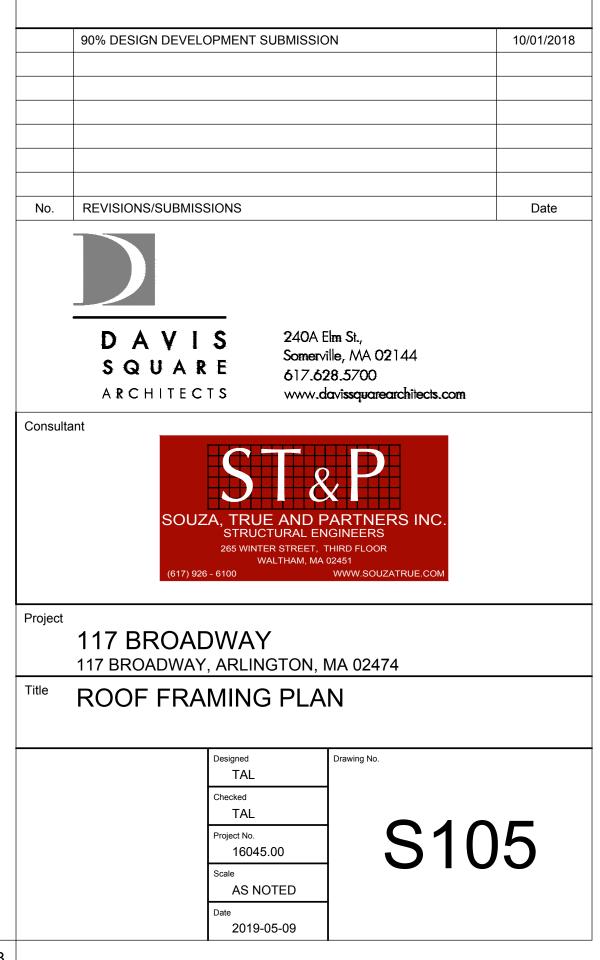
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- 14. WALL STUDS MAY BE CUT/NOTCHED/BORED AS FOLLOWS:
  - A. MAXIMUM SIZE OF A BORED HOLE ALLOWED THROUGH A 2x6 IS 21/8"Ø. HOLES SHALL BE LOCATED IN THE CENTER OF THE STUD AND A MINIMUM SPACING BETWEEN ADJACENT HOLES IS 8".
- B. NOTCHES INTO THE SIDE OF A 2x6 STUD SHALL BE NO GREATER THAN 2<sup>1</sup>/<sub>4</sub>" DEEP. MINIMUM SPACING OF NOTCHES SHALL BE 8".
- C. ALL OTHER HOLES AND/OR NOTCHES SHALL BE REINFORCED WITH SIMPSON STRONG-TIE HSS2-SDS1.5 STUD SHOES W/ 12 - SDS25112 SCREWS.
- 15. V = XXX<sup>Ibs</sup> INDICATES CONNECTIONS SHALL BE DESIGNED FOR THE SHEAR LOAD GIVEN. IN THE EVENT THAT A TYPICAL HANGER CANNOT BE FOUND, A CUSTOM HANGER / CONNECTION SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR. SUBMIT CALCULATIONS FOR REVIEW.
  - NOTE: IF NO SHEAR VALUE IS PROVIDED, THE MINIMUM VALUE SHALL BE AS FOLLOWS: FOR 2-PLY LVL: 5,000<sup>LBS</sup> FOR 3-PLY LVL: 8,000<sup>LBS</sup> FOR 4-PLY LVL: 9,000<sup>LBS</sup>
- 16. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EXACT SIZES AND LOCATIONS OF ANY NEW ROOF OPENINGS (MECHANICAL OR OTHERWISE). THE CONTRACTOR SHALL COORDINATE THE SIZES AND LOCATIONS OF ANY MECHANICAL OPENINGS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS, AND WITH THE EQUIPMENT MANUFACTURER. ALL ROOF OPENINGS/DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO THE SUBMISSION OF SHOP DRAWINGS.
- 17. THE ROOF STRUCTURE IS DESIGNED TO SUPPORT THE MECHANICAL UNITS WITHIN THE SCREEN WALL (ONLY). ALL MECHANICAL UNITS HAVE A MAXIMUM OPERATING WEIGHT OF 300<sup>LBS</sup>. COORDINATE EXACT LOCATION WITH ARCH/ MEP DRAWINGS.
- 19. INDICATES 3¼" LIGHTWEIGHT CONCRETE SLAB OVER 3", 16 GAUGE COMPOSITE FLOOR DECK REINFORCED WITH 6"x6"-W2.9xW2.9 W.W.F. LOCATED 1" BELOW THE TOP OF THE SLAB. SEE ARCHITECTURAL DRAWINGS FOR TOP OF CONCRETE ELEVATION.
- 20.  $\rightarrow$  INDICATES FULLY WELDED CONNECTIONS. PROVIDE  $\frac{5}{16}$ " (MIN) FILLET WELD ALL AROUND BETWEEN MEMBERS

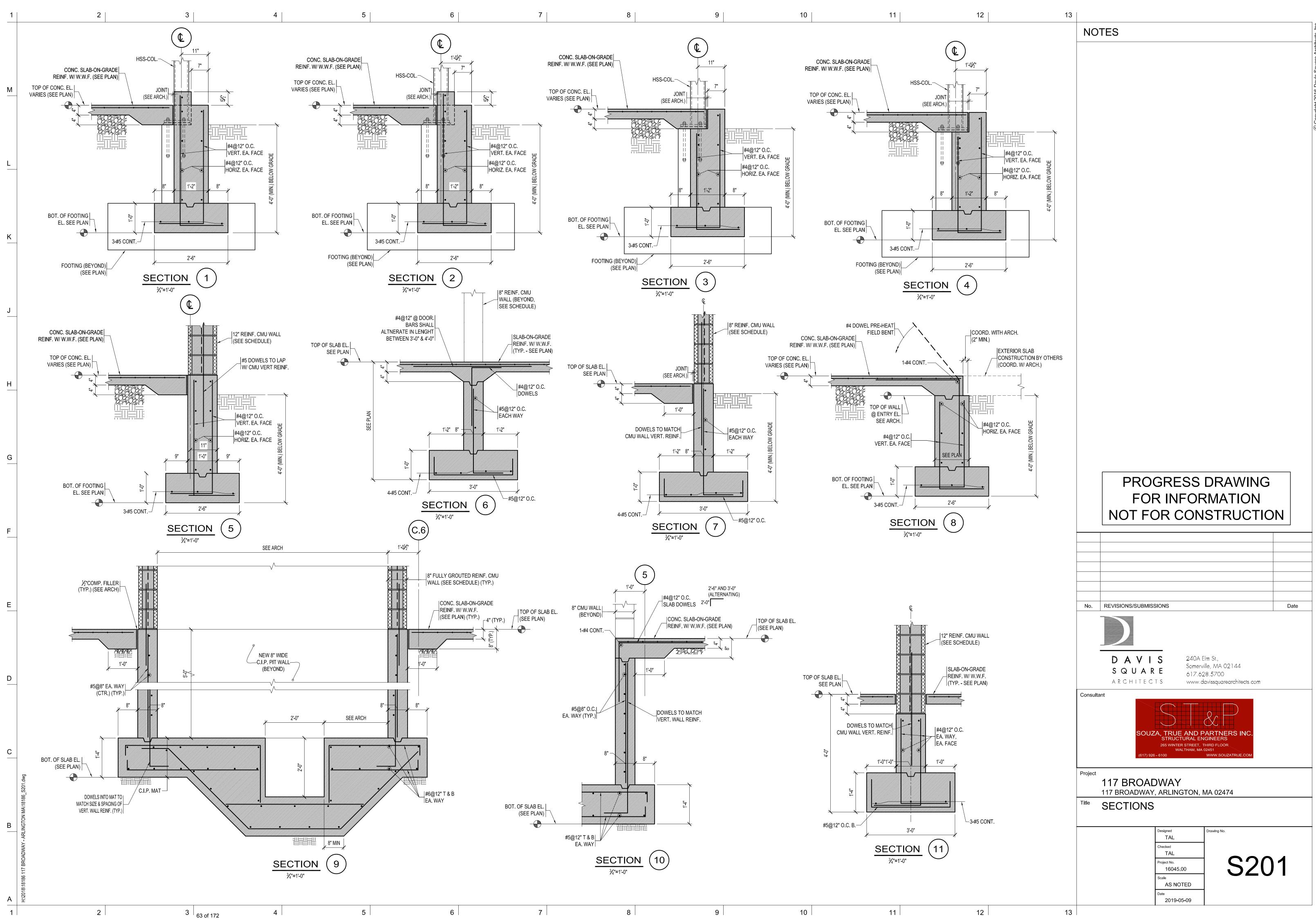
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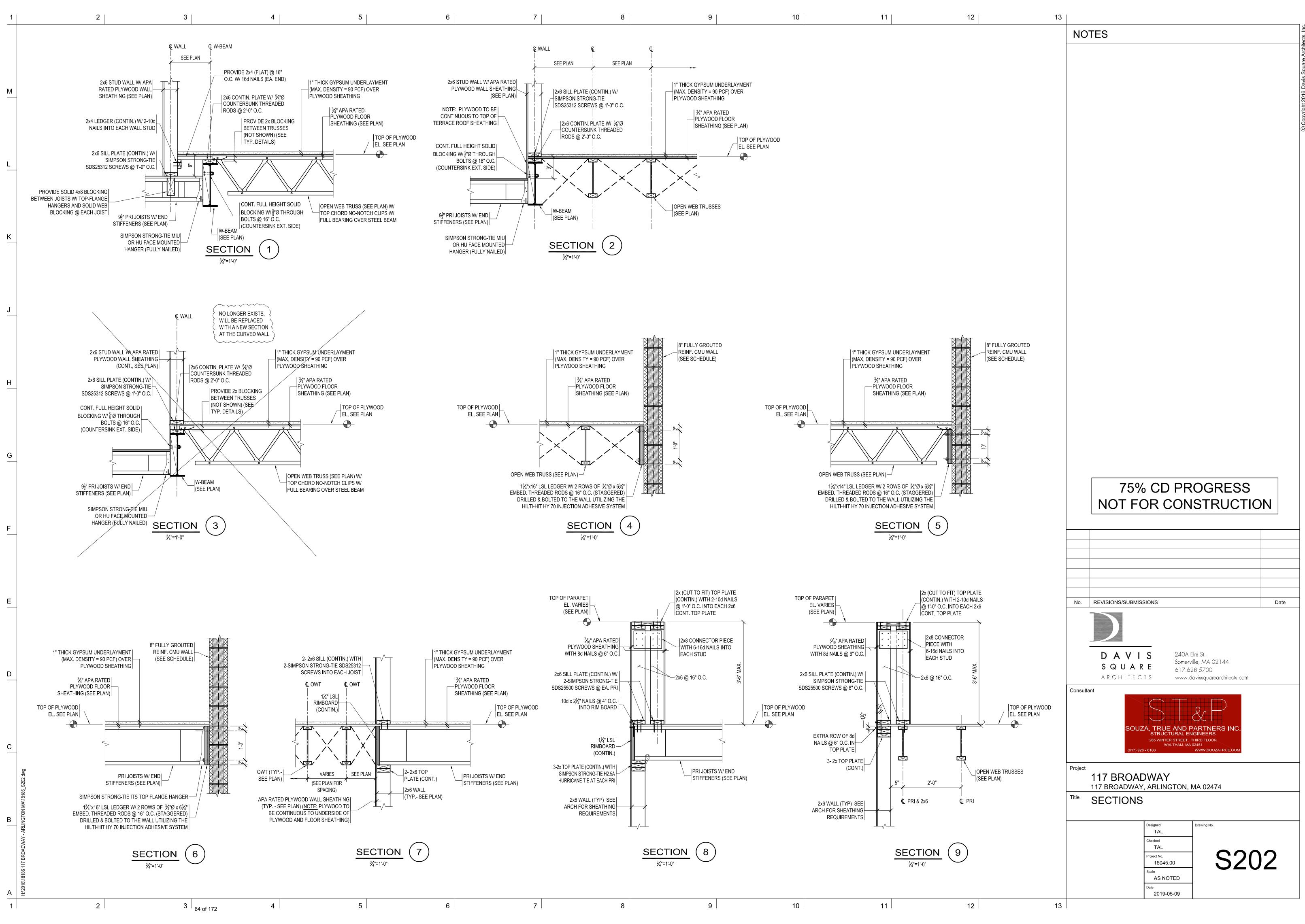
## NOTES

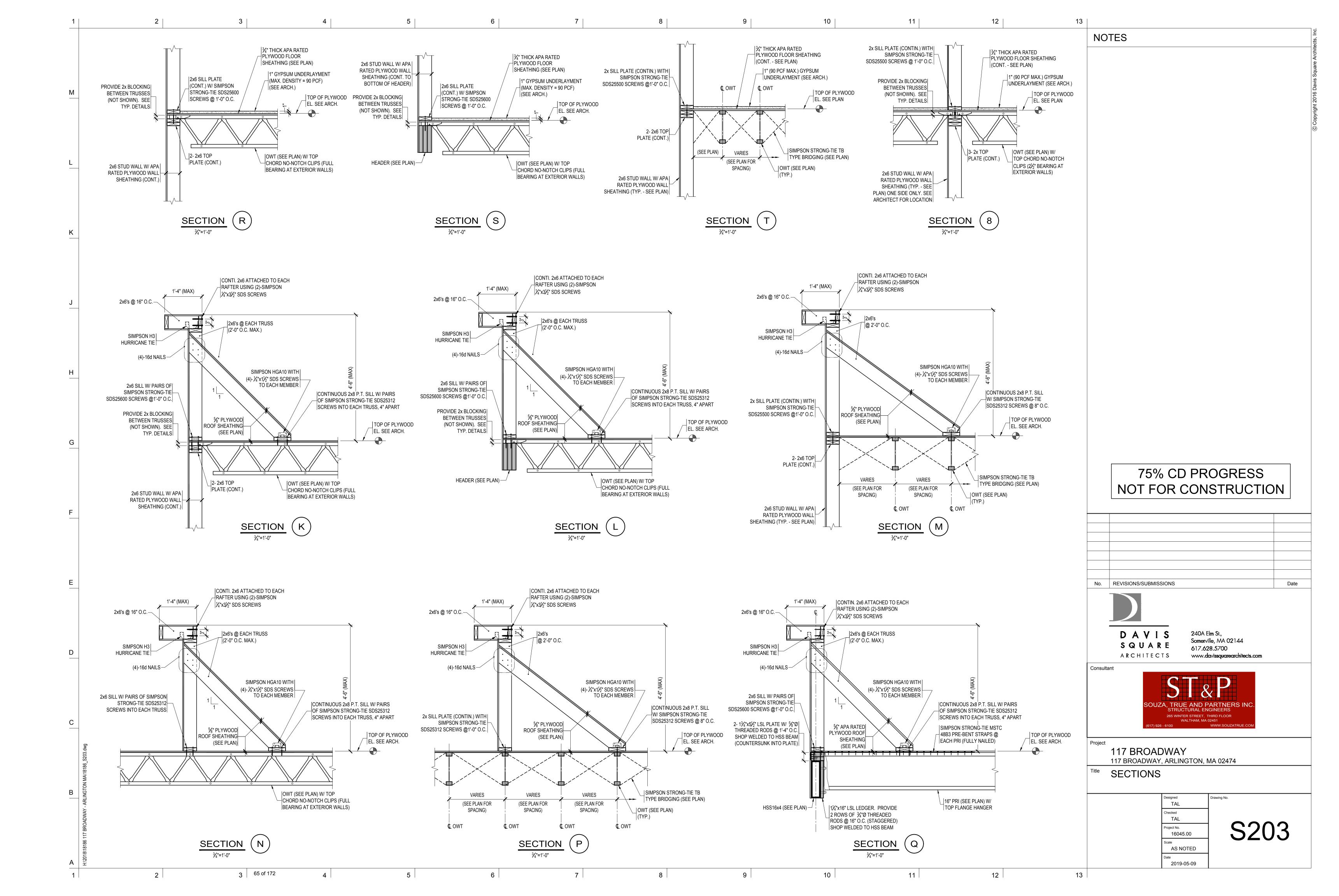
DO NOT SCALE DRAWINGS.

75% CD PROGRESS NOT FOR CONSTRUCTION









			MECHANICAL LEGEN	ID
	BREVIATIONS		NEW WORK	1100
AFF AHU	ABOVE FINISH FLOOR AIR HANDLING UNIT		(BOLD LINE)	HCS-
AS AWT	AIR SEPARATOR AVERAGE WATER TEMPERATURE		EXISTING WORK (LIGHT OR SHADED LINE)	HCR-
BTUH CAF	BRITISH THERMAL UNITS PER HOUR COMBUSTION AIR FAN	_	EQUIPMENT TAG (SEE SCHEDULE)	HWS-
CFC	CABINET FAN COIL	_	DOES NOT REQUIRE ELECTRICAL	HWR-
CFM CH	CUBIC FEET PER MINUTE CABINET HEATER	$\langle - \rangle$	EQUIPMENT TAG (SEE SCHEDULE) REQUIRES ELECTRICAL POWER	CHWS
CHW CMU	CHILLED WATER CONCRETE MASONRY UNIT	A-CFM	DIFFUSER TAG	CHWR CDS
CRD CW	CEILING RADIATION DAMPER COLD WATER	A-CFM	SIZE SHOWN IS INTERIOR CLEAR	
DDC	DIRECT DIGITAL CONTROL	12x12	DIMENSION. WHERE LINER IS CALLED FOR, INCREASE TO ACCOMMODATE.	
DHW DT	DOMESTIC HOT WATER DELTA T	10"ø	FLEXDUCT, 4 FT MAX LENGTH	
DU DX	DWELLING UNIT DIRECT EXPANSION	RETURN/ SUPPLY EXHAUST		——K2-
EAT EC	ENTERING AIR TEMPERATURE ELECTRICAL CONTRACTOR		DUCT DOWN	U
EF	EXHAUST FAN		DUCT UP	
EMS ETR	ENERGY MANAGEMENT SYSTEM EXISTING TO REMAIN			
EWT EX	ENTERING WATER TEMPERATURE EXPANSION TANK	0	ROOF-MOUNTED FAN	
EWT FA	ENTERING WATER TEMPERATURE FREE AREA			
FC	FAN COIL		ROOF MOUNTED EQUIPMENT	0
FD FPC	FLOOR DRAIN FIRE PROTECTION CONTRACTOR		SIDEWALL SUPPLY DIFFUSER	Ţ
FPI FT	FINS PER INCH FEET	$\checkmark$		台
GAL GC	GALLONS GENERAL CONTRACTOR	$\square$	SIDEWALL RETURN GRILLE	Ý
GPM GVSM	GALLONS PER MINUTE GALVANIZED SHEET METAL	×.		φ
HW	HOT WATER HOT WATER RETURN		CEILING SUPPLY DIFFUSER (4-WAY)	Ē
HWS	HOT WATER SUPPLY HEAT EXCHANGER		(+- 11/1)	Т
IFP	INTELLIGENT FIELD PANEL	-\- <b>-</b> \_	RETURN/EXHAUST GRILLE	ГŖ
LAT LWT	LEAVING AIR TEMPERATURE LEAVING WATER TEMPERATURE	۲ <sup>vd</sup>	VOLUME DAMPER	Ŧ
MAU MC	MAKEUP AIR UNIT MECHANICAL CONTRACTOR		VOLOME DAMPER	_ <b>_</b> _
NC NEZV	NORMALLY CLOSED NON-ELECTRIC ZONE VALVE	o SD	SPLITTER DAMPER	->
NO NTS	NORMALLY OPEN NOT TO SCALE			
OA OAF	OUTSIDE AIR OUTSIDE AIR FAN	<b>Γ</b> <sup>FD</sup>	FIRE DAMPER	1×1
OBD	OPPOSED BLADE DAMPER	r CRD		V
PC PROVIE	PLUMBING CONTRACTOR E SUPPLY AND INSTALL		CEILING RADIATION DAMPER	
PRV RA	PRESSURE REDUCING VALVE RETURN AIR		COMBINATION SMOKE &	
RC RCP	ROOFING CONTRACTOR REFLECTED CEILING PLAN	- SFD -	FIRE DAMPER	TP
RTU	ROOF TOP UNIT	<b>□</b> <sup>AR</sup>	AUTOMATIC AIR FLOW	. P.
SA SM	SUPPLY AIR GALVANIZED SHEET METAL		REGULATOR	
SS T&P	STAINLESS STEEL TEMPERATURE & PRESSURE		CAPE BACKDRAFT DAMPER	
TV TYP	TEMPERING VALVE TYPICAL	, ≥ <del>/∖/∖</del>	MOTORIZED DAMPER	
UH	UNIT HEATER	⊡, , , , ⊡ <del>,,,,,,,</del>	ELECTRIC HEATER	
UOS UV	UNLESS OTHERWISE SPECIFIED UNIT VENTILATOR			
VFD	VARIABLE FREQUENCY DRIVE CONNECT TO EXISTING		EXTERIOR LOUVER & PLENUM	
	AQUASTAT	$\frown$	AIR SEPARATOR	
	THERMOSTAT		BASE MOUNTED PUMP	
I I I I I I I I I I I I I I I I I I I	TEMPERATURE SENSOR			
SP (	FAN SPEED CONTROLLER	$\square$	CIRCULATOR/PUMP	Т М
H	HIGH LIMIT SENSOR	UV	UNIT VENTILATOR	—— 举
H	HUMIDISTAT	$\overline{\mathbf{\infty}}$		<b>一</b> 承
	PRESSURE SENSOR	UH	UNIT HEATER	-
	CARBON MONOXIDE SENSOR	0000	HYDRONIC COIL	
	CARBON DIOXIDE SENSOR SMOKE DETECTOR	8	FAN	
	FLOW METER	<del></del>	BARE FINTUBE ELEMENT	
	OCCUPANCY SENSOR	Ē	RADIATOR	
	UNDERCUT DOOR		BASEBOARD	
	VOLTAGE TRANSFORMER (120V/24V)		CAST IRON RADIATOR	
<b>À</b>	REVISION TRIANGLE		EQUIPMENT	

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COMBINATION HOT & CHILLED WATER SUPPLY PIPING

- COMBINATION HOT & CHILLED WATER RETURN PIPING ——HCR——
  - HOT WATER SUPPLY PIPING

- HOT WATER RETURN PIPING
- CHILLED WATER SUPPLY PIPING
- CHILLED WATER RETURN PIPING
- CONDENSOR WATER SUPPLY PIPING
- CONDENSOR WATER RETURN PIPING
- REFRIGERANT LIQUID LINE
- REFRIGERANT SUCTION LINE
- CONDENSATE DRAIN PIPING
- PIPE ANCHOR
- PIPE GUIDE
- FLEX CONNECTOR
- DROP, PIPE DOWN
- RISER, PIPE UP

AIR VENT W/ ISOLATION

COIN VENT

PRESSURE GAUGE

THERMOMETER AND WELL

TEMP AND/OR PRESSURE RELIEF VALVE

VACUUM BREAKER

HOSE BIBB W/ BRASS CAP & CHAIN

BALL VALVE WITH HOSE THREAD, BRASS CAP AND CHAIN

STRAINER WITH BALL VALVE W/ 3/4" HOSE CONNECTION. BRASS CAP AND CHAIN

PeTe's PLUG 3" LONG

- PRESSURE REDUCING VALVE
- FLANGE
- UNION
- CHECK VALVE (SPRING)
- BALL VALVE

BALANCING VALVE

- PRESSURE DIFFERENTIAL BYPASS
- MOTORIZED 4-WAY VALVE
- MOTORIZED 3-WAY VALVE
- MANUAL 3-WAY VALVE
- MOTORIZED 2-WAY VALVE
- COMBINATION VALVE
  - NON-ELECTRIC ZONE VALVE

GENERAL MECHANICAL NOTES:

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1. GENERAL CONDITIONS & SPECIFICATIONS: THE GENERAL CONDITIONS, AND SPECIFICATIONS ARE PART OF THIS WORK. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND BE FAMILIAR WITH THESE CONDITIONS & SPECIFICATIONS.

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- 2. CODES AND ORDINANCES: INSTALLATION OF THE SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL MECHANICAL CODE, AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES.
- 3. REQUIREMENTS: OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES AND CERTIFICATES.

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- 4. DESIGN: EQUIPMENT AND ACCESSORIES NOT SPECIFICALLY DESCRIBED OR IDENTIFIED BY MANUFACTURER'S CATALOG NUMBERS SHALL BE DESIGNED IN CONFORMITY WITH ASME, IEEE, S.M.A.C.N.A. DESIGN MANUAL OR OTHER APPLICABLE TECHNICAL STANDARDS, SUITABLE FOR MAXIMUM REQUIRED WORKING PRESSURE AND SHALL HAVE NEAT AND FINISHED APPEARANCE.
- 5. INSTALLATION: ERECT EQUIPMENT IN NEAT AND WORKMANLIKE MANNER; INSTALL SO THAT CONNECTING AND DISCONNECTING OF PIPES, EQUIPMENT AND ACCESSORIES CAN BE MADE READILY AND SO THAT ALL PARTS ARE EASILY ACCESSIBLE FOR INSPECTION, OPERATION, MAINTENANCE AND REPAIR. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS & REQUIREMENTS AND THE BEST STANDARD PRACTICE FOR THIS TYPE OF WORK.
- 6. BEST PRACTICE: IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY FITTING, CONNECTION, OR APPLIANCE. THIS CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADE.
- 7. EQUIPMENT LOCATION: THE M.C. SHALL VERIFY THE LOCATIONS AND MOUNTING HEIGHTS OF ALL EQUIPMENT AND MATERIALS, AND THE EXACT ROUTING OF ALL PIPES, WITH THE OWNER'S REPRESENTATIVE IN THE FIELD, PRIOR TO COMMENCING ANY WORK. ANY CONFLICTS WITH LOCATIONS, OR PROBLEMS ENCOUNTERED WITH ROUTING, SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- 8. MATERIALS: ALL MATERIALS, FIXTURES AND EQUIPMENT SHALL BE NEW WITHOUT IMPERFECTIONS AND SHALL BE DELIVERED, ERECTED, CONNECTED AND FINISHED IN EVERY DETAIL. WHEREVER POSSIBLE, ALL TRIM, ACCESSORIES AND PARTS SHALL BE OF THE SAME MANUFACTURER AS THE RELATED EQUIPMENT AND FIXTURES.
- 9. DUCTWORK: ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARDS.
- 10. PLUMBING: ALL PLUMBING SHALL BE INSTALLED IN ACCORDANCE WITH COMMONWEALTH OF MASSACHUSETTS FUEL GAS AND PLUMBING CODE (248 CMR, NFPA 54).
- 11. ELECTRICAL: ALL ELECTRICAL SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND ALL LOCAL REQUIREMENTS. COORDINATE ELECTRICAL CHARACTERISTICS FOR ALL EQUIPMENT WITH E.C. BEFORE ORDERING EQUIPMENT.
- 12. CONTROLS: PERFORM A FUNCTIONAL CHECK OF ALL CONTROLS & SYSTEMS THAT WILL REMAIN & ARE AFFECTED BY THIS WORK. REPORT ANY DEFICIENCIES IN WRITING.
- 13. OBJECTIONABLE NOISE AND VIBRATIONS: MECHANICAL AND ELECTRICAL EQUIPMENT SHALL OPERATE WITHOUT OBJECTIONABLE NOISE AND VIBRATION, AS DETERMINED BY THE ENGINEER. CONTRACTOR SHALL SUPPLY ALL NECESSARY HARDWARE FOR NOISE AND VIBRATION ISOLATION.
- 14. GENERAL COORDINATION: EXAMINE ALL DRAWINGS AND OTHER SECTIONS OF THE SPECIFICATIONS FOR REQUIREMENTS WHICH AFFECT THE WORK OF THIS SECTION. COORDINATE WORK WITH THAT OF OTHER TRADES AFFECTING, OR AFFECTED BY, WORK OF THIS SECTION. COOPERATE WITH OTHER TRADES TO ENSURE THE STEADY PROGRESS OF THE WORK.
- 15. PROTECTION OF EQUIPMENT AND MATERIALS: RESPONSIBILITY FOR CARE AND PROTECTION OF ALL MATERIALS AND MECHANICAL WORK RESTS WITH THIS CONTRACTOR AT ALL TIMES UNTIL IT HAS BEEN APPROVED.
- 16. GUARANTEE: ALL NEW COMPONENTS OF THE INSTALLATION SHALL BE GUARANTEED IN WRITING BY THIS CONTRACTOR TO BE FREE FROM DEFECTS OF MANUFACTURE AND INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF WRITTEN ACCEPTANCE BY THE ENGINEER. ANY DEFECTS FOUND SHALL BE REPAIRED BY THE MECHANICAL CONTRACTOR AT THEIR OWN EXPENSE.
- 17. NOTIFICATION: THE M.C. SHALL NOTIFY THE ENGINEER UPON: (1) COMPLETION OF ALL ROUGH PIPING AND DUCT WORK, BEFORE CLOSURE OF ANY TRENCHES, OPEN WALL CAVITIES OR CHASES; AND (2) UPON "SUBSTANTIAL COMPLETION" OF ALL SYSTEMS INCLUDING OPERATIONAL SPACE CONDITIONING. AFTER "SUBSTANTIAL COMPLETION", THE ENGINEER WILL PREPARE A PUNCH LIST OF ITEMS TO BE CORRECTED. THE M.C. SHALL CORRECT ANY DEFICIENCIES FOUND PROMPTLY, AT HIS/HER OWN EXPENSE. PROVIDE ADVANCE NOTICE OF AT LEAST ONE WEEK TO SCHEDULE.
- 18. FINAL COMPLETION: THE WORK SHALL NOT BE CONSIDERED COMPLETE UNTIL THE PUNCH LIST IS COMPLETED TO THE SATISFACTION OF THE ENGINEER AND ALL FINAL INSPECTIONS HAVE BEEN COMPLETED.
- 19. THE REQUIREMENTS OF THE STRETCH CODE HAVE BEEN ADOPTED BY THE LOCAL AUTHORITY, APPENDIX 115 AA, 780CMR. ALL WORK PERFORMED MUST CONFORM TO THESE REQUIREMENTS.

 No.		REVISIONS/SUBMISS		Date
	D A V S Q U A A R C H I T	<b>A K E</b> 617.62	le, MA 02144	
Consulta	nt			
-		43 Bradford Street, 3rd Flor		
	/ Tel:	oncord, MA 01742 : (781) 398-2250 .il: info@NS-Engineering.co	m	
	117 BRO	ADWAY /AY, ARLINGTON, M	A 02474	
Title		NICAL LEGEN		
		DCW Checked	Drawing No.	
		MAB Project No. 16045.00		
		Scale	MOO	11
		As Noted Date		ノー

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		FAN SCHEDULE					EF -				[1][4]	
NO.	SERVICE	TYPE	DRIVE	CFM	ESP	FAN RPM	HP	V/Ph/Hz	MANUFACTURER	MODEL	WEIGHT (LBS)	REMARKS
EF-1	BATH EXHAUST	CEILING	DIRECT	80	0.50	1,725	1/20	115/1/60	PANASONIC	FV-05-11VKSL1	>50	[3]
EF-2	TRASH EXHAUST	ROOF	DIRECT	_	_	_	_	_	GREENHECK	-	-	[2]
DEF-1	DRYER BOOSTER FAN	INLINE	DIRECT	150	0.375	2,800	16.8W	120/1/60	FANTECH	DBF4XLT	36	[5]

[1] COORDINATE VOLTAGE AND HORSEPOWER WITH EC PRIOR TO ORDERING.

[2] FAN TO OPERATE CONTINUOUSLY AT FULL SPEED.

[3] SET FAN TO PROVIDE CONTINUOUS OPERATION AT 40 CFM. FAN TO BOOST TO 80 CFM ON MANUAL WALL SWITCH. [4] SEE PLANS FOR QUANTITY OF EQUIPMENT TO BE PROVIDED.

5] INCLUDE REMOTE INDICATOR PANEL, DUCT CLAMPS, ELECTRONIC PRESSURE SWITCH AND TUBING AND LINE CORD.

		EUH _	[1]						
DWG ID	SERVICE	MANUFACTURER	MODEL NO.	OUTPUT BTU/HR	DI L	MENSIOI H	NS D	REMARKS	ELECTRICAL DATA
EUH-1	-	MODINE	HER30	10,200	-	_	-	3 KW, 380 CFM, 25°F TEMP RISE	208-230/1/60
EUH-2	_	MODINE	HER50	17,100	-	-	-	5 kW, 380 CFM, 42°F TEMP RISE	208–230/1/60
CUH-1	-	QMARK	AWH3150F	6,142	_	-	_	1.5 KW, ELECTRIC WALL HEATER [2][3]	208–230/1/60
CUH-2	-	QMARK	AWH4408F	13,650	_	_	-	4kW, ELECTRIC WALL HEATER [2][3]	208–230/1/60

[1] CONFIRM ELECTRICAL CHARACTERISTICS WITH EC PRIOR TO ORDERING EQUIPMENT.

[2] PROVIDE 24V CONTROLS TRANSFORMER [3] PROVIDE ACCUSTAT ES-H1 THERMOSTAT. (SET POINT 68°F)

		ERV S											
NO.	MANUFACTURER	MODEL	CFM	ESP	DRIVE	ERV EFFECTIVENESS	ELECTRICAL	WEIGHT (LBS)	REMARKS				
ERV-1	REVERSOMATIC	RERV-D100 ES (ECM)	50	1.0	ECM	70%/53%	120/1/60	55	_				
ERV-2	REVERSOMATIC	RERV-D100 ES (ECM)	60	1.0	ECM	70%/53%	120/1/60	55	_				
ERV-3	REVERSOMATIC	RERV-D100 ES (ECM)	65	1.0	ECM	70%/53%	120/1/60	55	-				
ERV-4	REVERSOMATIC	RERV-D100 ES (ECM)	70	0.9	ECM	70%/53%	120/1/60	55	_				
ERV-5	REVERSOMATIC	RERV-D100 ES (ECM)	85	0.8	ECM	70%/53%	120/1/60	55	_				
ERV-6	REVERSOMATIC	RERV-D100 ES (ECM)	95	0.6	ECM	70%/53%	120/1/60	55	_				

[1] CONFIRM ELECTRICAL CHARACTERISTICS WITH EC PRIOR TO ORDERING EQUIPMENT.

[2] PROVIDE MERV 8 FILTER KIT AND FILTERS.

[3] PROVIDE ECM MOTORS AND SPEED CONTROL. [4] FAN TO OPERATE CONTINUOUSLY.

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[5] SEE PLANS FOR REQUIRED APARTMENT AIRFLOW. BALANCE SYSTEM TO ACHIEVE SPECIFIED AIRFLOWS.

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[6] SET AIRFLOW BASED ON RETURN GRILLE CFM.

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			C	EILII	NG DIFFUS	EK 20	HEDULE	[1][2][3][4]
DWG ID	TYPE	CFM RANGE	SIZE WxH	MAX NC	MANUFACTURER	MOD. No.	REMARKS	
A1-CFM	CEILING DIFFUSER	1 - 100	6x6	25	HART & COOLEY	SRE	STEEL, 4-WAY THROW, SR-7 OPPOSED BLADE DAMPER	
A2-CFM	CEILING DIFFUSER	101 – 250	9x9	25	HART & COOLEY	SRE	STEEL, 4-WAY THROW, SR-7 OPPOSED BLADE DAMPER	
A3-CFM	CEILING DIFFUSER	251 - 400	12x12	25	HART & COOLEY	SRE	STEEL, 4-WAY THROW, SR-7 OPPOSED BLADE DAMPER	
A4-CFM	CEILING DIFFUSER	401 - 650	15x15	25	HART & COOLEY	SRE	STEEL, 4-WAY THROW, SR-7 OPPOSED BLADE DAMPER	
A5-CFM	CEILING DIFFUSER	651 - 900	18x18	25	HART & COOLEY	SRE	STEEL, 4-WAY THROW, SR-7 OPPOSED BLADE DAMPER	
A6-CFM	CEILING DIFFUSER	901 - 1,100	21x21	25	HART & COOLEY	SRE	STEEL, 4-WAY THROW, SR-7 OPPOSED BLADE DAMPER	

[1] ALL DIFFUSERS & GRILLES SHALL INCLUDE PAINTABLE FINISH AND OPPOSED BLADE DAMPER.

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[2] COORDINATE BORDER TYPE FOR PLASTER CEILINGS W/ GC. [3] DIFFUSERS ARE 4-WAY THROW UNLESS NOTED OTHERWISE ON PLAN.

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[4] PROVIDE CEILING FIRE DAMPER AT DIFFUSER WHERE DIFFUSER PENETRATES FIRE RATING. SEE PLANS FOR LOCATIONS.

				С	EILING RE	TURN GR	ILLE SCHEDULE	[1][2][3]
DWG ID	TYPE	CFM RANGE	SIZE WxH	MAX NC	MANUFACTURER	MOD. No.	REMARKS	
AA1-CFM	RETURN	1 - 50	6x6	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	
AA2-CFM	RETURN	51 - 150	8x8	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	
AA3-CFM	RETURN	151 – 280	10x10	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	
AA4-CFM	RETURN	281 - 430	12x12	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	
AA5-CFM	RETURN	431 - 1,000	18x18	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	
AA6-CFM	RETURN	1,001 – 1,300	20x20	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	
AA7-CFM	RETURN	1,301 – 2,000	24x24	25	HART & COOLEY	RED5	ALUMINUM, EGG CRATE CORE, OBD, WHITE	

[1] ALL DIFFUSERS & GRILLES SHALL INCLUDE OPPOSED BLADE DAMPER.

[2] COORDINATE OPENINGS AND BORDER TYPE WITH GC.

[3] PROVIDE CEILING FIRE DAMPER AT DIFFUSER WHERE DIFFUSER PENETRATES FIRE RATING. SEE PLANS FOR LOCATIONS.

		SIDEWALL DIFFUSER SCHEDULE									
DWG ID	TYPE	CFM RANGE	SIZE WxH	MAX NC	MANUFACTURER	MOD. No.	REMARKS				
B1-CFM	SIDEWALL DIFFUSER	1 - 120	8X6	25	HART & COOLEY	92VHV	DOUBLE DEFLECTION, OBD, WHITE				
B2-CFM	SIDEWALL DIFFUSER	121 – 185	10X6	25	HART & COOLEY	92VHV	DOUBLE DEFLECTION, OBD, WHITE				
B3-CFM	SIDEWALL DIFFUSER	186 - 230	12X6	25	HART & COOLEY	92VHV	DOUBLE DEFLECTION, OBD, WHITE				
B4-CFM	SIDEWALL DIFFUSER	231 – 340	20X6	25	HART & COOLEY	92VHV	DOUBLE DEFLECTION, OBD, WHITE				
B5-CFM	SIDEWALL DIFFUSER	341 - 460	24X6	25	HART & COOLEY	92VHV	DOUBLE DEFLECTION, OBD, WHITE				

[1] ALL DIFFUSERS SHALL INCLUDE OPPOSED BLADE DAMPER.

[2] COORDINATE OPENINGS AND BORDERS W/ GC.

	SIDEWALL RETURN GRILLE SCHEDULE									
DWG ID	TYPE	CFM RANGE	SIZE WxH	MAX NC	MANUFACTURER	MOD. No.	REMARKS			
BB1-CFM	RETURN	1 - 120	8X6	25	HART & COOLEY	94	STEEL, WHITE			
BB2-CFM	RETURN	121- 185	10X6	25	HART & COOLEY	94	STEEL, WHITE			
BB3-CFM	RETURN	186 - 230	12X6	25	HART & COOLEY	94	STEEL, WHITE			
BB4-CFM	RETURN	231 - 340	20X6	25	HART & COOLEY	94	STEEL, WHITE			
BB5-CFM	RETURN	341 - 460	24X6	25	HART & COOLEY	94	STEEL, WHITE			

[1] ALL DIFFUSERS SHALL INCLUDE OPPOSED BLADE DAMPER. [2] COORDINATE OPENINGS AND BORDER TYPE WITH GC.

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No.	REVISIONS/SUBMISSIONS	Date
	DAVIS 240A Elm St.,	
	<b>SQUARE</b> Somerville, MA 02144 617.628.5700	
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	NORIAN SIANI ENGINEERING, INC 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	<u>2.</u>
Project	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474	
Title	MECHANICAL SCHEDULES	
	Designed DCW Checked MAB Project No. 16045.00 Scale As Noted Date	)02
	08.23.2019	

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	MITSUBISHI HEAT PUMP INDOOR UNIT SCHEDULE													
Tag Reference	Room Name	Model	Associated Outdoor Unit Tag	Туре	Nominal Cooling Capacity (BTU/h)	Nominal Heating	Cooling Design Entering Temp DB/WB (°F)	Heating Design Entering Temp DB/WB (°F)	Corrected Cooling Total Capacity (BTU/h)	Heating Capacity (BTU/h)	Refrig Pipe Dim Liquid/Suction (inch)	Peak Fan Airflow (cfm)	Voltage / Phase	Notes / Options
FCU-1	First Floor Common Space	SLZ-KF09NA.TH	HP-1	Ceiling cassette (4-way airflow) type	9,000	10,000	91.0/67.0	72.0	9145.0	10,218	1/4 / 3/8	300	208/230V/1	1, 2, 3, 4, 5
FCU-2	First Floor Common Space	SLZ-KF09NA.TH	HP-1	Ceiling cassette (4-way airflow) type	9000	10000	91.0/67.0	72.0	9145.0	10218	1/4 / 3/8	300	208/230V/1	1, 2, 3, 4, 5
FCU-3	Second Floor Hallway	MVZ-A12-AA7	HP-2	Vertical Ducted	12,000	13,500	91.0/67.2	72.0	11685.0	10,682	1/4 / 1/2	400	208/230V/1	1, 2, 3, 4, 5
FCU-4	Third Floor Hallway	MVZ-A12-AA7	HP-2	Vertical Ducted	12,000	13,500	91.0/67.2	72.0	11685.0	10,682	1/4 / 1/2	400	208/230V/1	1, 2, 3, 4, 5
FCU-5	Fourth Floor Halwlay	MVZ-A12-AA7	HP-2	Vertical Ducted	12,000	13,500	91.0/67.2	72.0	11685.0	10,682	1/4 / 1/2	400	208/230V/1	1, 2, 3, 4, 5
FCU-6	Elevator Machine Room	PKA-A12HA7	HP-5	Wall mounted type	12,000.0	14,000.0	78.0/67.0	72.0	12,382.2	8,680.6	1/2 / 1/4	425	208/230V/1	1, 2, 3, 4, 6
FCU-7	1.0 - Ton System	PEAD-A12AA7	HP-4	Horizontal Concealed	12000	14000	91.0/67.6	73.0	12095.0	8633.0	1/2 / 1/5	494	208/230V/1	1, 2, 3, 4, 6
FCU-8	1.25 - Ton System	PEAD-A15AA7	HP-5	Horizontal Concealed	15000	21000	91.0/67.7	74.0	14300.0	8430.0	1/2 / 1/6	600	208/230V/1	1, 2, 3, 4, 7
FCU-9	1.5 - Ton System	PEAD-A18AA7	HP-6	Horizontal Concealed	18000	22000	91.0/67.8	75.0	18419.0	11717.0	1/2 / 1/7	600	208/230V/1	1, 2, 3, 4, 8

### Notes & Options:

[1] Nominal cooling capacities are based on indoor coil EAT of 78/67°F (DB/WB), outdoor of 95°F (DB)

[2] Nominal heating capacities are based on indoor coil EAT of 72°F (DB), outdoor of 5°F (WB) [3] Efficiency values for EER, IEER, COP are based on AHRI 1230 test method for mixture of ducted & non-ducted indoor units. [4] For systems with multiple modules, refrigerant pipe dimensions indicate total system combined piping downstream of module twinning.

Nominal Cooling Capacity Nominal Heating

Capacity (BTU/h)

22,000.0

28,600.0

14000

14000

21000

22000

(BTU/h)

20,000.0

28,400.0

12000

12000

15000

18000

[5] System Controls: Provide MHK1 Remote Controller for each indoor unit.

Model Number

MXZ-2C20NAHZ2-U1

MXZ-3C30NAHZ2-U1

PUZ-A12NKA7-BS

PUZ-A12NKA7-BS

SUZ-KA15NAR1

PUZ-A18NKA7-BS

[6] Provide WB-PA4 low ambient hood kit with associated wind baffles for 100% low ambient cooling down to minus (-) 10°F.

[7] Provide optional air outlet guide.

[8] Provide PAC-MKA31BC Branch Box

[9] Provide PAC-MKA50BC Branch Box

[10] Provide 24" quicksling roof rack

Tag Reference

HP-1

HP-2

HP-3

HP-4

HP-5

HP-6

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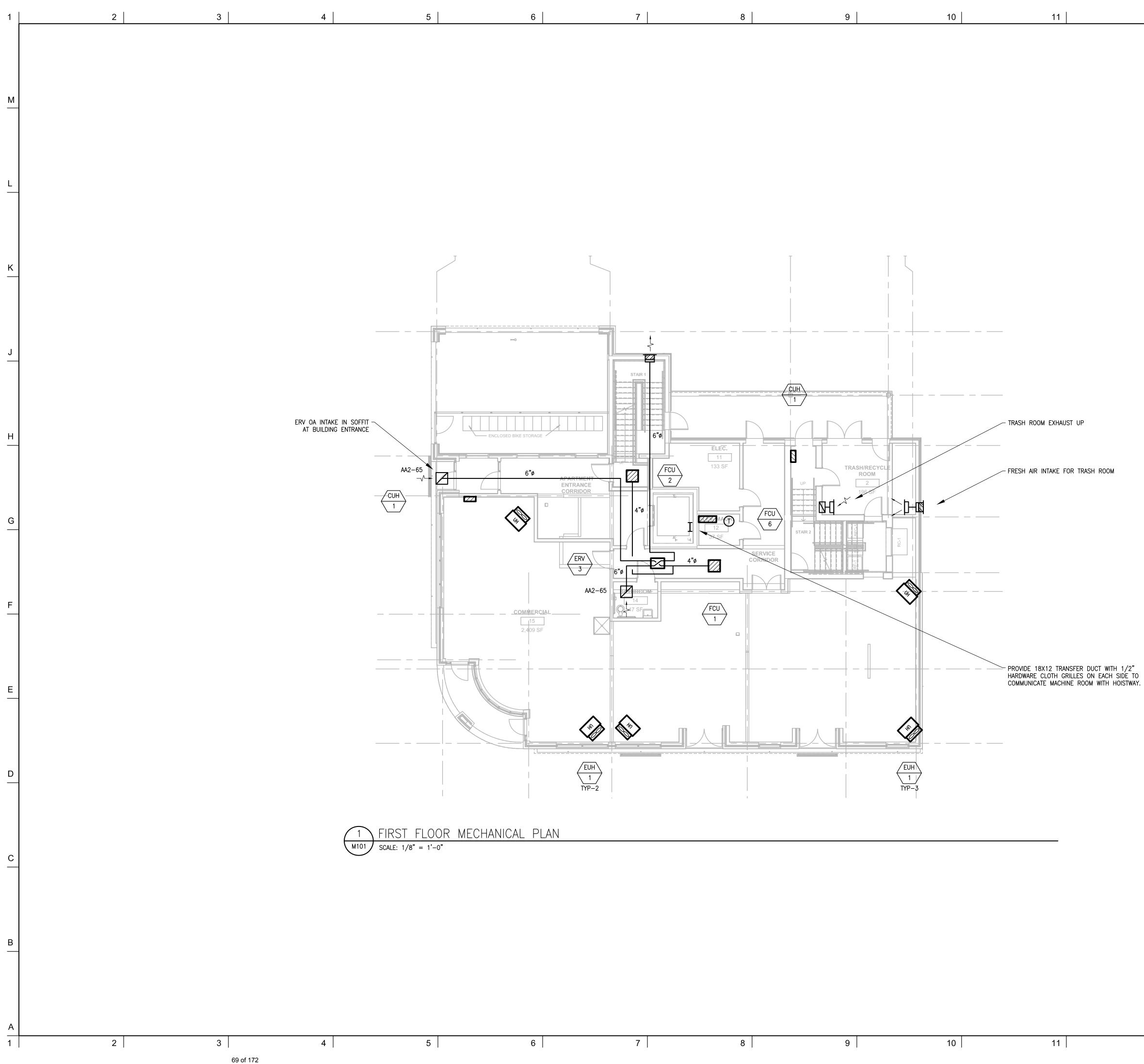
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11 |

	MITSUBISHI HEAT PUMP OUTDOOR UNIT SCHEDULE									
Design Cooling		Design Heating	-		Corrected Heating Consoity	Pofrig Dino Dim		Electrical-Per Module 208V		Notes / Options
Outdoor Temp DB	Outdoor Temp WB	Cooling Efficiency (SEER)		Corrected Heating Capacity (BTU/h)	Refrig Pipe Dim Liquid/Suction (inch)	Voltage / Phase				
,	(°F)	(°F)	(BTU/h)	(02214)				MCA	MOCP	
	91.0	5.0	18,290	17	20,436	N/A	208/230V / 1-phase	29.5	40	1, 2, 3, 4, 6, 7, 10
	91.0	5.0	35,055	16	32,046	N/A	208/230V / 1-phase	30.5	40	1, 2, 3, 4, 6, 7, 11
	91.0	5.0	12,382.2	20.8	8,680.6	1/2 / 1/4	208/230V / 1-phase	11.0	28	1, 2, 3, 4, 6, 7, 12
	91.0	5.0	12,382.2	20.8	8,680.6	1/2 / 1/4	208/230V / 1-phase	11.0	28	1, 2, 3, 4, 6, 7, 13
	91.0	5.0	14300.0	18.6	8430.0	1/2 / 1/6	208/230V / 1-phase	1.7	15	1, 2, 3, 4, 6, 7, 14
	91.0	5.0	18419.0	19.9	11717.0	1/2 / 1/7	208/230V / 1-phase	1.7	15	1, 2, 3, 4, 6, 7, 15

	No.		REVISIONS/SU	BMISSIONS		Date	
	-	DAVI	Sc	40A Elm St., omerville, MA	02144		
		SQUAF architec	KE 6	17.628.5700			
	Consultant						
	<u>/</u>	NORIAN / SI			NG, INC.		
		43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com					
		117 BROADWAY					
	Title	Title       MECHANICAL SCHEDULES					
			Designed DCW	Drawing	No.		
			Checked MAB Project No.				
			16045.00 Scale		M00	3	
			As Noted Date 08.23.2019				
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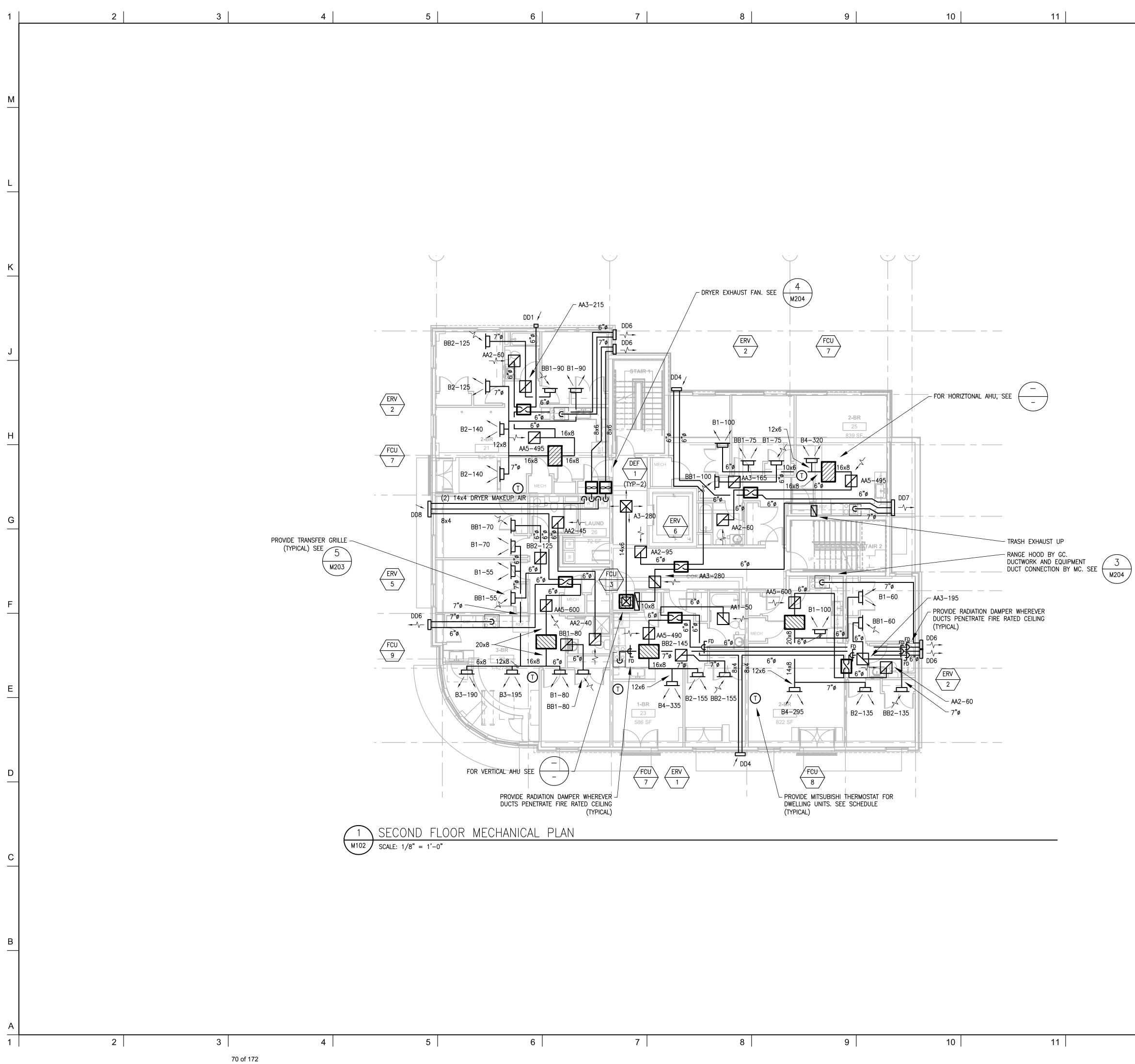


## MECHANICAL NOTES:

- 2. INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURER'S INSTRUCTIONS.
- 3. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO INSPECT AND VERIFY ALL INFORMATION IN FIELDS AND INFORM THE ENGINEERS OF ANY DISCREPANCIES IN WRITING IMMEDIATELY.
- 4. EQUIPMENT, DUCTS AND PIPING MAY BE SHOWN DISPLACED FOR CLARITY.
- 5. MC TO PROVIDE ALL FIRESTOPPING AND ACOUSTICAL SEALANT REQUIRED.
- 6. MC TO SUPPLY ACCESS HATCHES. GC TO INSTALL.
- 7. CONCEAL ALL CONTROL WIRING FOR THERMOSTATS WITHIN WALLS. NO SURFACE MOUNTED RACEWAYS.
- 8. INSTALL ALL DUCTS AND PIPING ON WARM SIDE OF INSULATION.
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- 10. MC TO PROVIDE COORDINATION DRAWINGS. ALL REQUIRED PENETRATIONS OF STRUCTURAL FLOOR FRAMING MUST BE IDENTIFIED ON DRAWINGS, NO FIELD MODIFICATIONS OR PENETRATIONS OF FLOOR FRAMING IS PERMITTED.
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- 12. UNDERCUT ALL DOORS CALLED OUT ON PLAN A MINIMUM OF 3/4". IN DWELLING UNITS, UNDERCUT ALL BATHROOM AND BEDROOM DOORS BY A MINIMUM OF 3/4" MINIMUM.
- 13. ALL EXHAUST TERMINATIONS SHALL BE LOCATED A MINIMUM OF 3'-O" FROM OPERABLE BUILDING OPENINGS.
- 14. MC TO PROVIDE 1" FIRE RATED DUCT WRAP ON ALL RANGE HOOD EXHAUST DUCTS AND DRYER EXHAUST DUCTS WHERE DUCTS ARE LOCATED ABOVE THE FIRE RATED CEILING MEMBRANE.

- **REVISIONS/SUBMISSIONS** No. Date DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title FIRST FLOOR MECHANICAL PLAN Drawing No. Designed DCW Checked MAB Project No. 16045.00 M101 Scale As Noted Date

08.23.2019

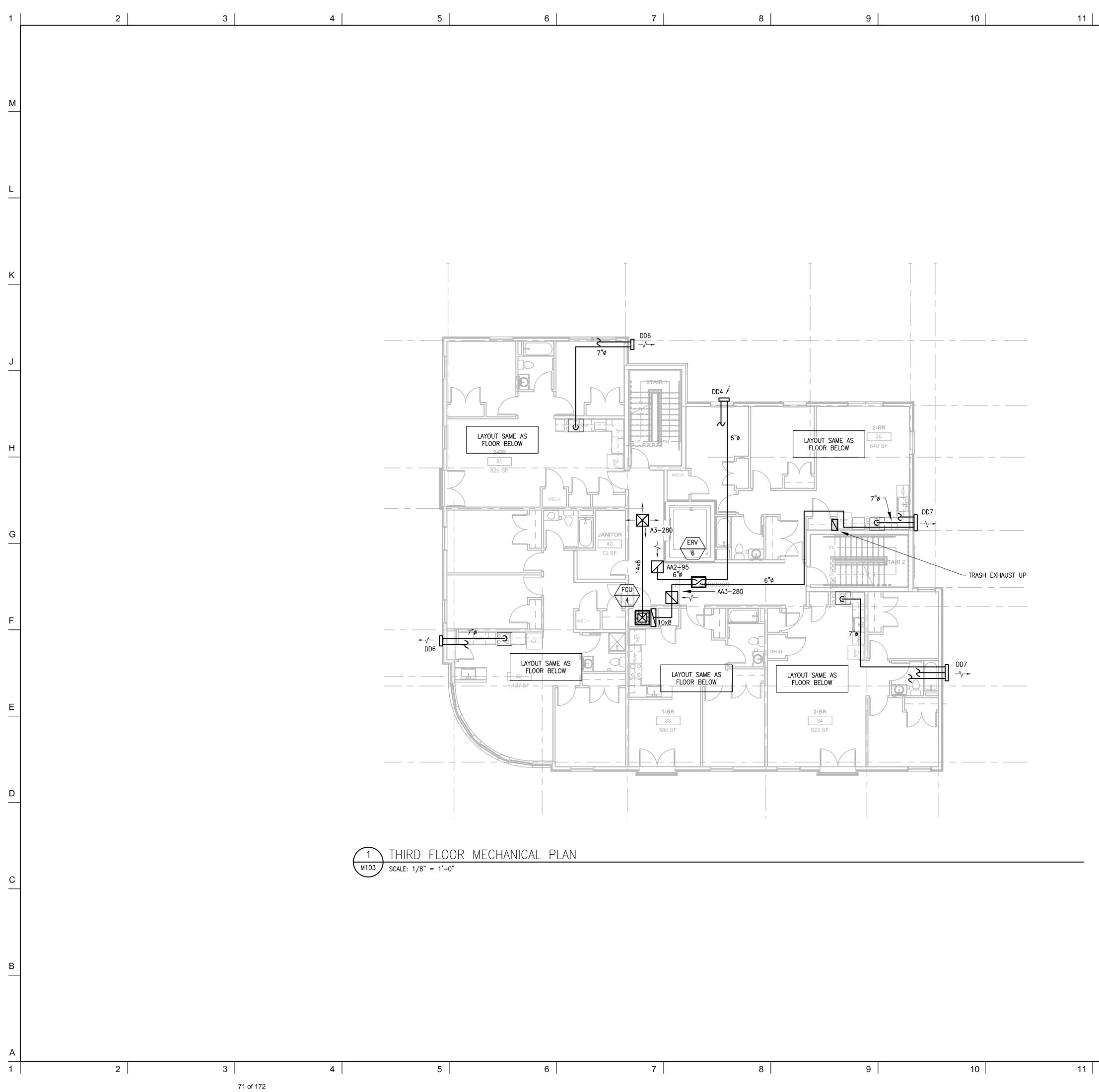


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No.	REVISIONS/SUBMISS	SIONS	Date
D A V I S Q U A R A R C H I T E C	E Somervi 617.62	lle, MA 02144	
Consultant		,	
Concor Tel: (781	adford Street, 3rd Flo d, MA 01742 ) 398-2250 o@NS-Engineering.cc		
Project 117 BROAD 117 BROADWAY,		A 02474	
Title SECOND F			
	Designed DCW Checked MAB	Drawing No.	
	Project No. 16045.00 Scale As Noted Date 08.23.2019	M10	)2



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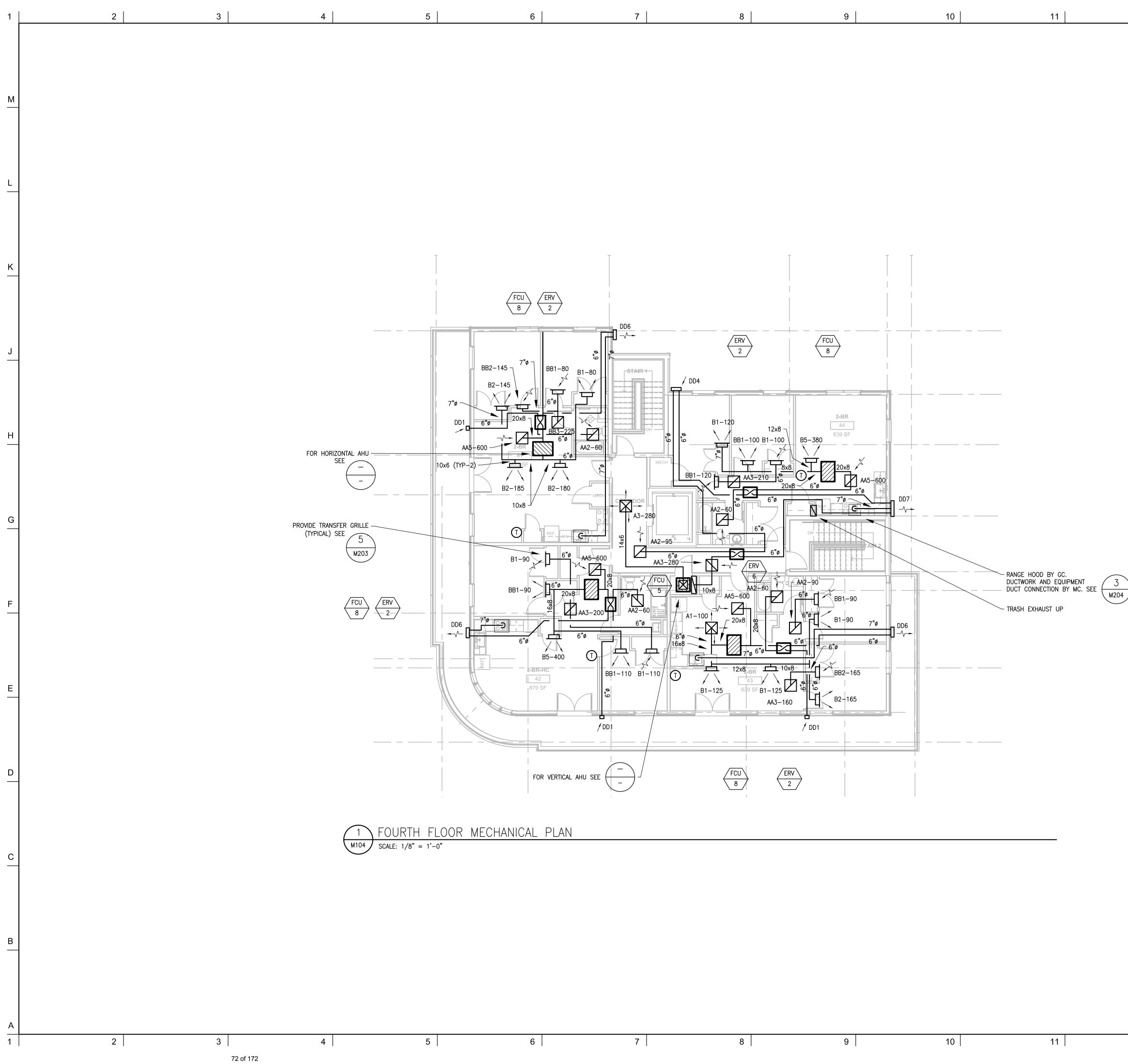
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**REVISIONS/SUBMISSIONS** Date No. DAVIS 240A Elm St., Somerville, MA 02144

SQUAR ARCHITECT	E 617.62	ille, MA 02144 28.5700 avissquarearchitects.com	
Consultant			
NORIAN / SIA	NI ENGINE	EERING, INC.	
Concord Tel: (781)	dford Street, 3rd Flo d, MA 01742 398-2250 o@NS-Engineering.co		
Project 117 BROAD	WAY		
117 BROADWAY,	ARLINGTON, M	1A 02474	
THIRD FLC MECHANIC			
1	Designed DCW	Drawing No.	
-	Checked MAB		
	Project No. 16045.00		
-	Scale As Noted	M103	

Date

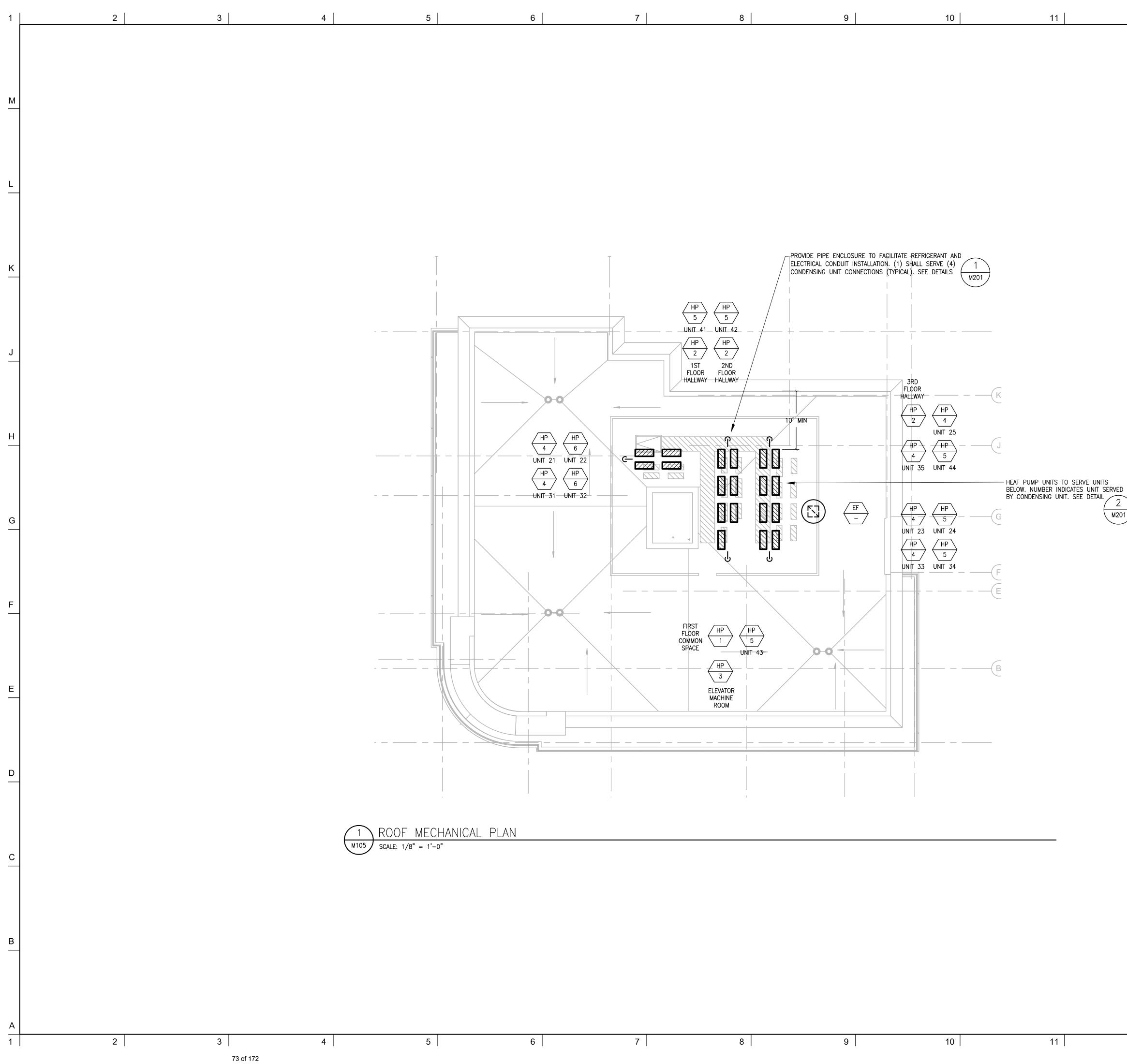
08.23.2019



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No.	REVISIONS/SUBMISSIONS	Date
	DAVIS       240A Elm St.,         SQUARE       Somerville, MA 02144         ARCHITECTS       www.davissquarearchitects.com	
Consult		
	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250	
	Email: info@NS-Engineering.com	
Project	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474	
Title	FOURTH FLOOR MECHANICAL PLAN	
	Designed DCW Checked MAB Project No. 16045.00	_
	Scale As Noted Date 08.23.2019	4



# 1. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

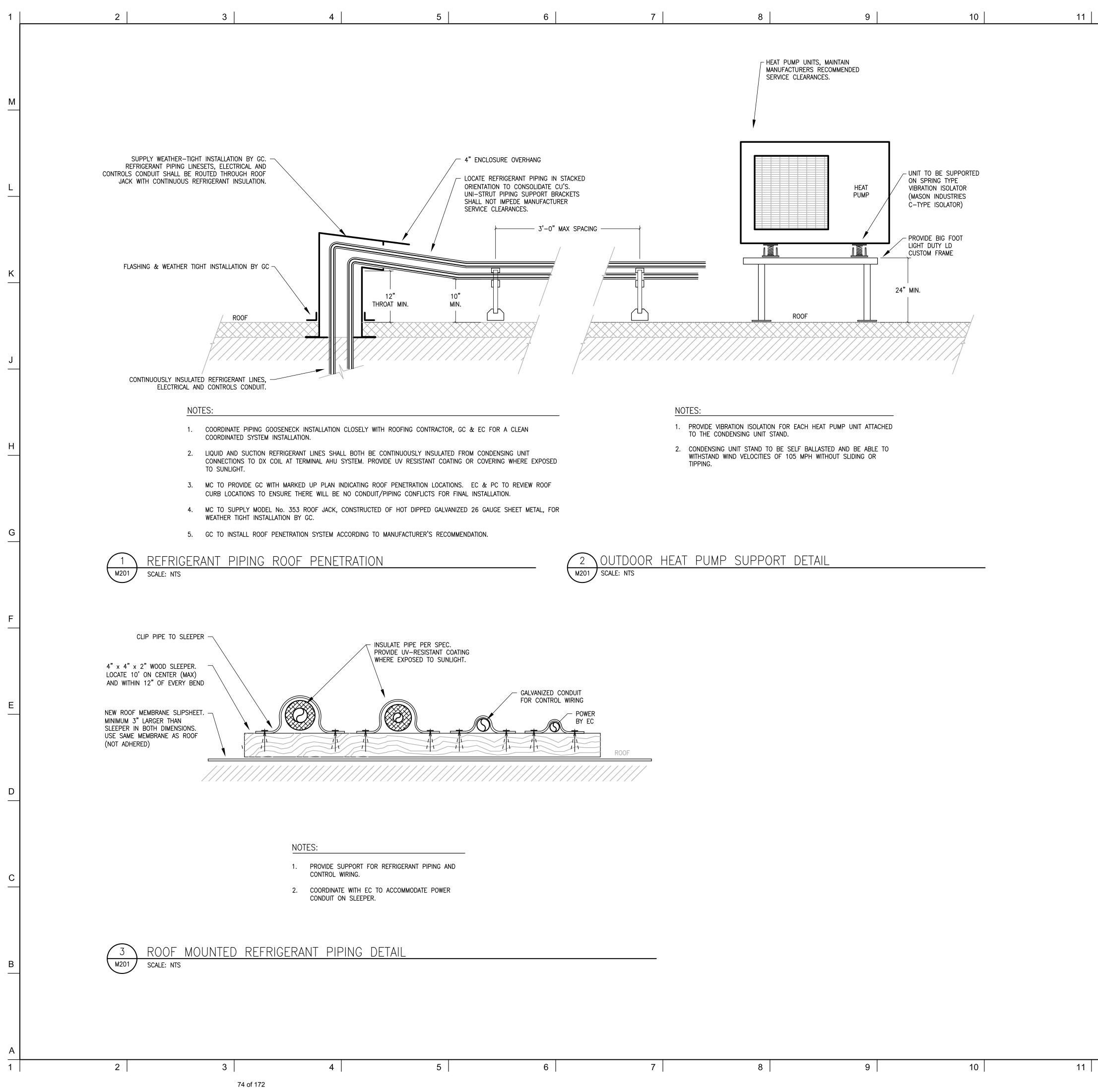
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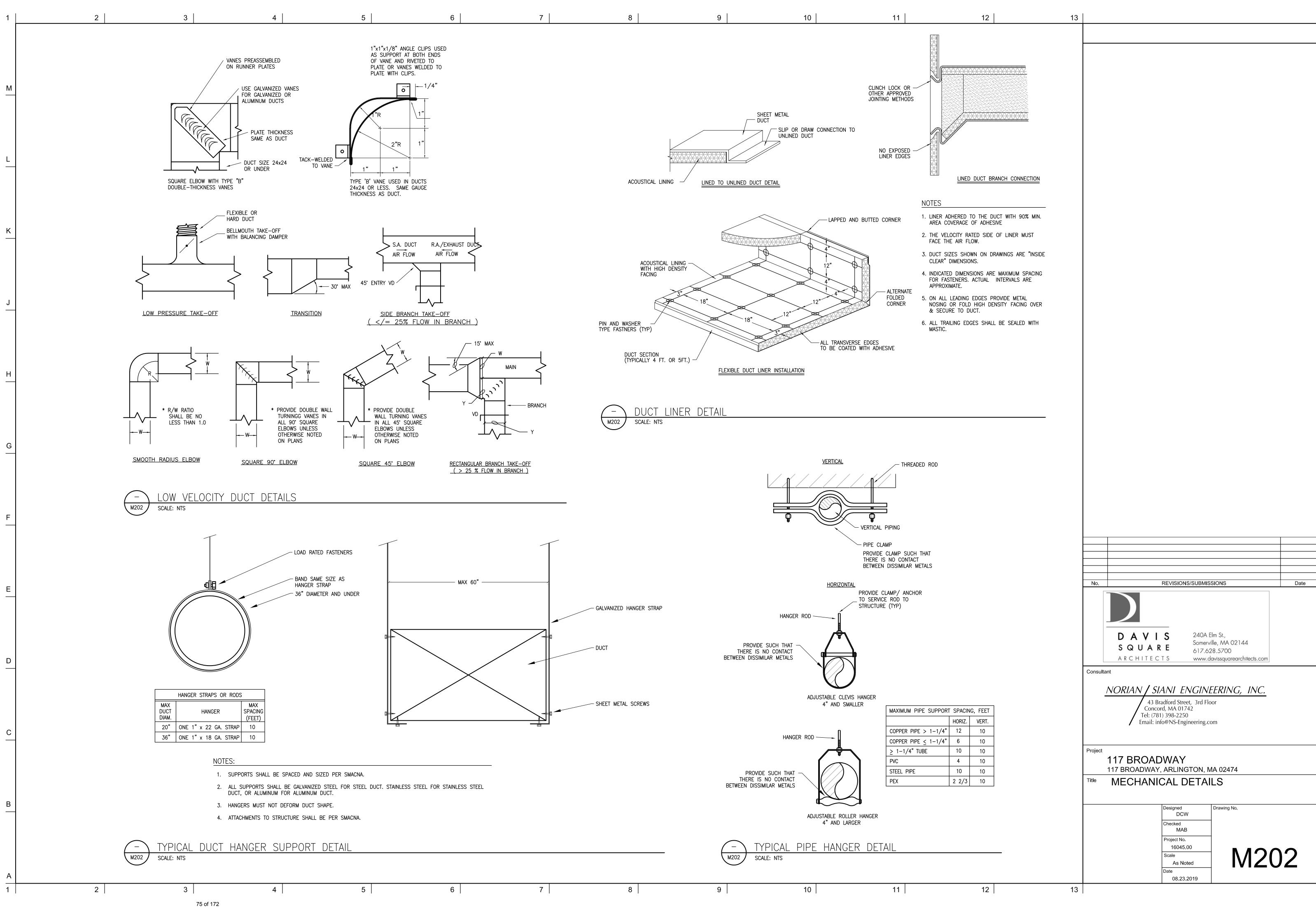
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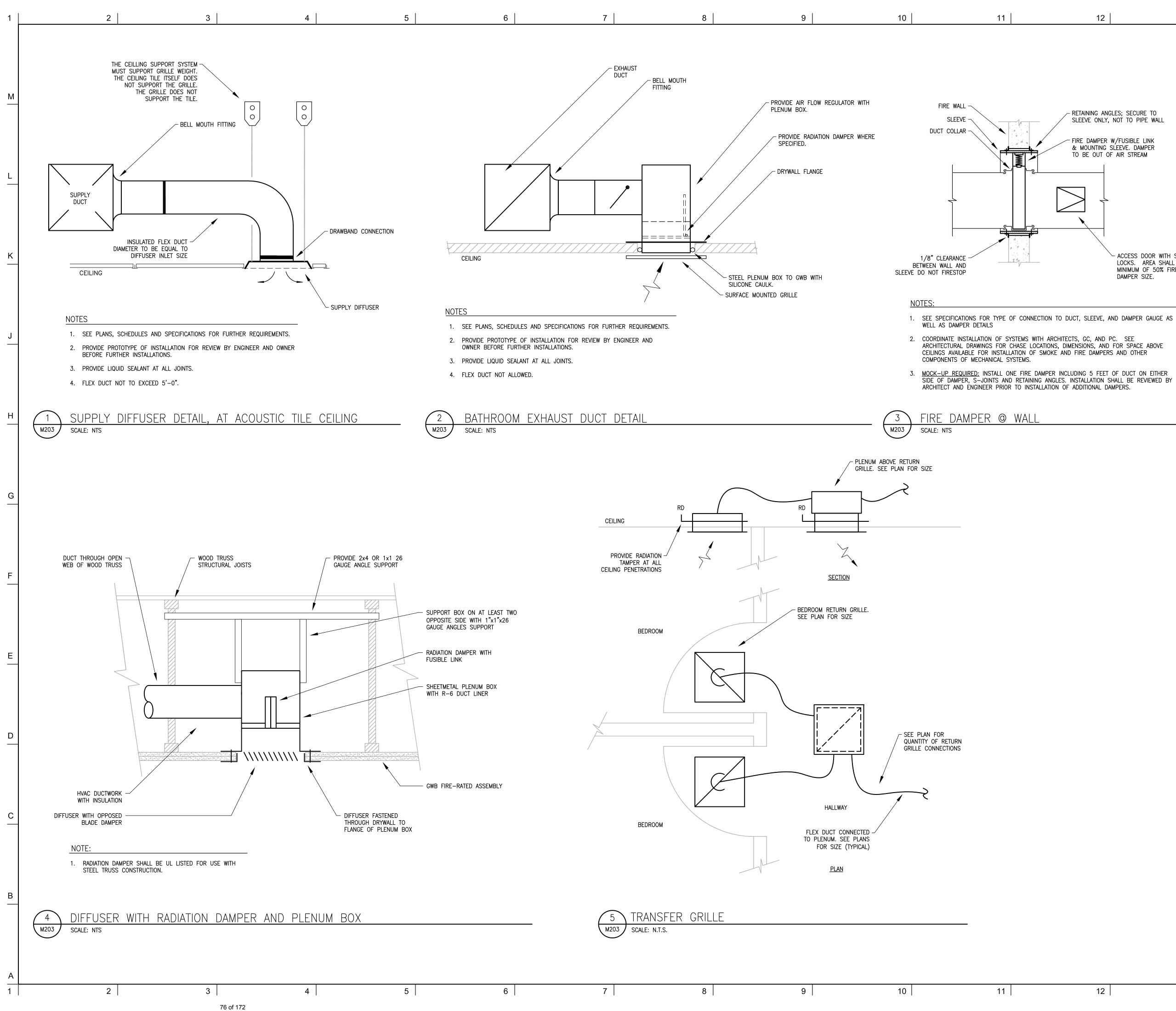
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No.		REVISIONS/SUBMIS	SIONS	Date
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Consulta	int			
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-	NORIAN / SI/	adford Street, 3rd Flo		
	Concor	d, MA 01742 ) 398-2250		
		o@NS-Engineering.co	om	
Project				
	117 BROAD			
Title	117 BROADWAY,	ARLINGTON, N	1A 02474	
	ROOF MECHANIC	CAL PLAN		
		Designed DCW	Drawing No.	
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		As Noted Date		JJ
		08.23.2019		





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		DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	
	Consult	ant	
		NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	
	Project	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474	
	Title	MECHANICAL DETAILS	
		Designed Drawing No. DCW Checked MAB Project No.	
		16045.00 Scale As Noted Date 08.23.2019	1
13			





- RETAINING ANGLES; SECURE TO

- FIRE DAMPER W/FUSIBLE LINK & MOUNTING SLEEVE. DAMPER

- ACCESS DOOR WITH SASH

LOCKS. AREA SHALL BE

MINIMUM OF 50% FIRE

DAMPER SIZE.

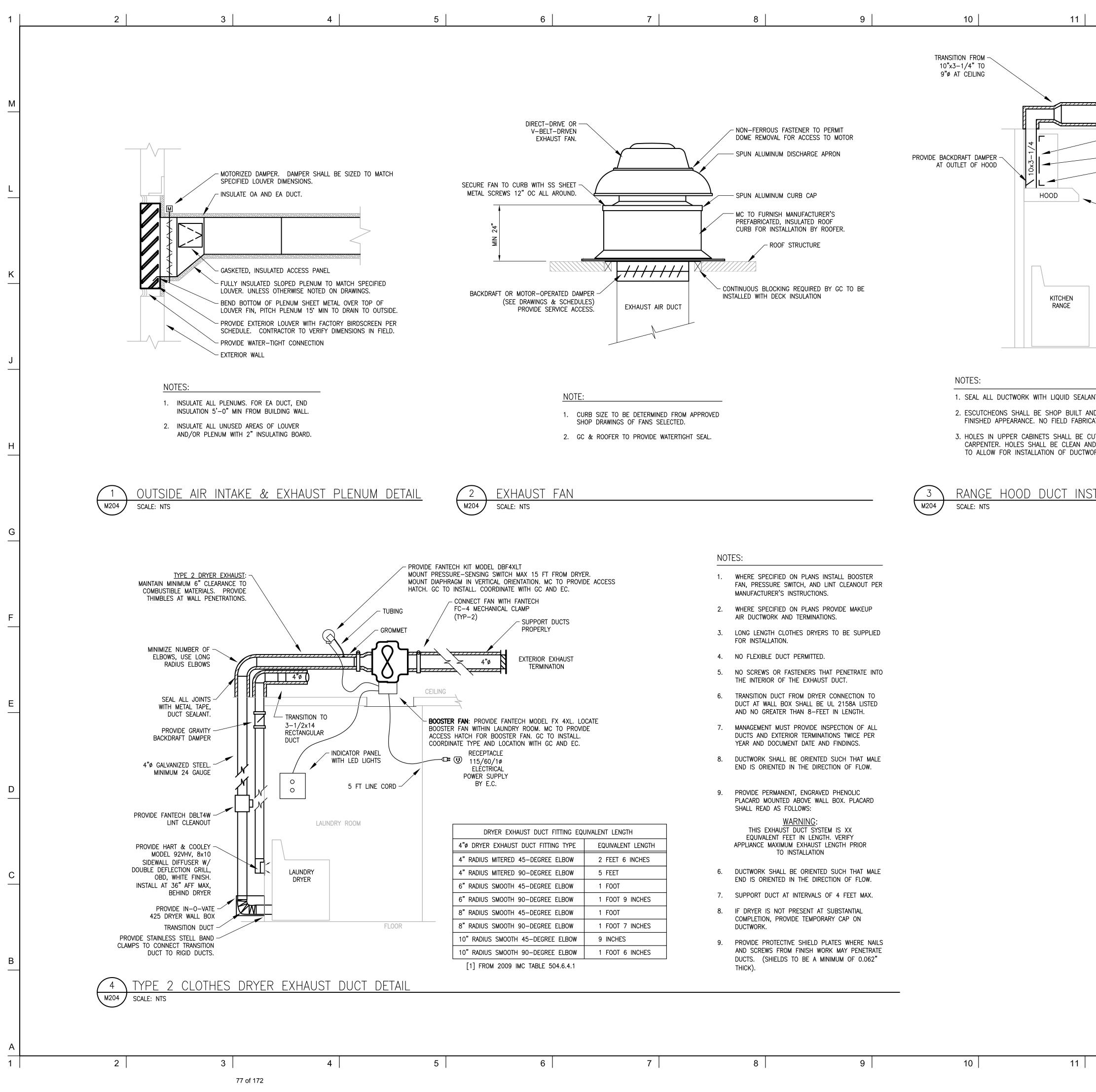
TO BE OUT OF AIR STREAM

SLEEVE ONLY, NOT TO PIPE WALL

13 |



	No.	REVISIONS/SUBMISSI	010	Date
		SQUARE 617.628	e, MA 02144	
	Consulta	ANDRIAN SIANI ENGINEE 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	r	
	Project	117 BROADWAY 117 BROADWAY, ARLINGTON, MA	A 02474	
	Title	MECHANICAL DETAIL		
13		Designed DCWDChecked MABProject No. 16045.00Scale As NotedDate 08.23.2019	Drawing No.	)3



ER EXHAUST DUCT FITTING EQUIVALENT LENGTH								
EXHAUST DUCT FITTING TYPE	EQUIVALENT LENGTH							
IITERED 45-DEGREE ELBOW	2 FEET 6 INCHES							
IITERED 90-DEGREE ELBOW	5 FEET							
MOOTH 45-DEGREE ELBOW	1 FOOT							
MOOTH 90-DEGREE ELBOW	1 FOOT 9 INCHES							
MOOTH 45-DEGREE ELBOW	1 FOOT							
MOOTH 90-DEGREE ELBOW	1 FOOT 7 INCHES							
SMOOTH 45-DEGREE ELBOW	9 INCHES							
SMOOTH 90-DEGREE ELBOW	1 FOOT 6 INCHES							
2009 IMC TABLE 504.6.4.1								

12	13	
PROVIDE FIRE RATED INSULATION ON ALL DUCTWORK AS IT		
PENETRATES THE CEILING FIRE RATING. INSULATION TO CONTINUE TO TERMINATION.		
CEILING		
RUN DUCTWORK TIGHT TO BACK OF CABINET		
ESCUTCHEONS TO COVER HOLES IN CABINET. PROVIDE SHOP DRAWING FOR REVIEW PRIOR TO FABRICATION.		
HOOD MOUNTED BY GC		
FLOOR		
NT. ID SHALL HAVE HEMMED EDGES AND		
ATED ESCUTCHEON WILL BE ACCEPTED. JT BY A SKILLED FINISHED		
D SQUARE AND PROPERLY LOCATED )RK.		
TALLATION DETAIL		
TALLATION DETAIL		
	F	No. REVISIONS/SUBMISSIONS Date
		DAVIS 240A Elm St., Somerville, MA 02144
		SQUARESomething, WK 02144ARCHITECTS617.628.5700www.davissquarearchitects.com
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	Ļ	Droject
		Project <b>117 BROADWAY</b> 117 BROADWAY, ARLINGTON, MA 02474
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	F	Designed Drawing No.
		DCW Checked MAB
		Project No.
		Scale As Noted Date
12	13	08.23.2019

1	2	3	4		5	6
			ELECTRICAL	. LEGEND		
М		POWER LEGEND				VIATIONS
		PANEL BOARD			AC AFCI	ALTERNATING CURRENT ARC FAULT CIRCUIT INTERRUPTER
		JUNCTION BOX JUNCTION BOX WITH EQUIPMENT			AFF AHU	ABOVE FINISH FLOOR AIR HANDLING UNIT
		JUNCTION BOX WITH CONNECTIO			CMU DC DDC	CONCRETE MASONRY UNIT DIRECT CURRENT DIRECT DIGITAL CONTROL
		TO RANGE HOOD FAN-LIGHT			DHW (E)	DOMESTIC HOT WATER EXISTING EQUIPMENT, RETAIN RACEV
L	J. J.	ADJACENT TO MOTOR	MOUNTED		(-)	JUNCTION BOXES, AND BRANCH CIF WIRING.
		SPECIAL PURPOSE RECEPTACLE			EC EF	ELECTRICAL CONTRACTOR EXHAUST FAN
	⊖ ⊖	DUPLEX RECEPTACLE			ems etr	ENERGY MANAGEMENT SYSTEM EXISTING TO REMAIN
	●	DUPLEX RECEPTACLE BOTTOM SWITCHED			FC FPC	FAN COIL FIRE PROTECTION CONTRACTOR
к	<b>e</b>	DUPLEX RECEPTACLE ABOVE COU			FT GFCI	FEET GROUND FAULT CIRCUIT INTERRUPTE
		DOUBLE DUPLEX RECEPTACLE (G	·		IFP MDP	INTELLIGENT FIELD PANEL MAIN DISTRIBUTION PANEL
	⊖ <sup>₩P</sup>	WEATHERPROOF DUPLEX RECEPT FAULT PROTECTION	ACLE WITH GROUND		MLO MAU	MAIN LUG PANEL MAKEUP AIR UNIT
	GF	GROUND FAULT RECEPTACLE			MC NTS	MECHANICAL CONTRACTOR NOT TO SCALE
	GF	GROUND FAULT RECEPTACLE ABO	OVE COUNTER		OH PC	OVERHEAD PLUMBING CONTRACTOR
J		GFI RECEPTACLE UNDERCOUNTER DISPOSAL	FOR		provide Rtu	SUPPLY AND INSTALL ROOF TOP UNIT
		GFI RECEPTACLE FOR DISHWASHI	ER		SA TVSS	SURGE ARRESTOR TRANSIENT VOLTAGE SURGE SUPPRE
	→ MW	RECEPTACLE IN CABINET FOR MI	CROWAVE		TYP UG	TYPICAL UNDERGROUND
		FLOOR-MOUNTED DUPLEX RECEPT	PTACLE (FLUSH)		UH UOS	UNIT HEATER UNLESS OTHERWISE SPECIFIED
		FLOOR-MOUNTED DOUBLE DUPLE	EX RECEPTACLE (FLUSH)		UV VFD	UNIT VENTILATOR VARIABLE FREQUENCY DRIVE
н		FIXED MULTI-OUTLET ASSEMBLY			WP	WEATHER PROOF CONNECT TO EXISTING
	<b>60/40</b>	DISCONNECT SWITCH. 60 AMP D AMP FUSE.	SCONNECT WITH 40			THERMOSTAT
		MAGNETIC STARTER				VOLTAGE TRANSFORMER (120V/24V)
		MOTOR (NUMERAL DENOTED HOR	SEPOWER).		<u></u>	REVISION TRIANGLE
	l	GENERATOR				CLOSED CIRCUIT SECURITY TV OUTLE CABLE TELEVISION OUTLET
G		CIRCUIT BREAKER			$\overline{\mathbf{V}}$	VOICE/DATA OUTLET (1)RJ45 VOICE & (1) RJ45 DATA
		HOMERUN. ARROWS DENOTE THE AND SLASH MARKS DENOTE THE			$\bigtriangledown$	TELEPHONE OUTLET (1) RJ11
		CURRENT-CARRYING CONDUCTOR 3/4" CONDUIT RACEWAY OR CAR	S (PLUS GROUND) IN		$\mathbf{\nabla}$	DATA OUTLET (1) RJ45 CABLE TV TERMINAL CABINET, TELE
		SLASHES INDICATES (2)#12 AWG IN 3/4" CONDUIT.			\$> []	INTERFACE UNIT, & DATA INTERCOM W/ DOOR RELEASE
	o	CONDUIT OR CABLE ASSEMBLY	URNING UP.		Ξv	INTERCOM W/ VISUAL & DOOR RELE
F	•	CONDUIT OR CABLE ASSEMBLY	TURNING DOWN.		IM •	INTERCOM MASTER PUSH BUTTON
		RACEWAY OR CABLE ASSEMBLY	INSTALLED CONCEALED.		С	CHIME
		RACEWAY INSTALLED EXPOSED.			WA PS	WATER ALARM POWER SUPPLY FOR DOOR RELEASE
		LIGHTING LEGEND			DR	ELECTRIC DOOR RELEASE
_	A	LIGHTING FIXTURE. "A" DENOTES LIGHTING FIXTURE			DH	DOOR HOLDER KEY PAD
E	12 <b>L</b> b	"b" SUBSCRIPT DENOTES SWITCH "12" NUMERAL INDICATES CIRCU			CR	CARD READER
		LIGHTING FIXTURE WITH EMERGE	NCY POWER		S	SINGLE POLE SWITCH MOUNTED 4'-
		SURFACE OR PENDENT MOUNTED			S3	THREE WAY SWITCH MOUNTED 4'-0"
	Ю	WALL MOUNTED LIGHTING FIXTUR			S4	FOUR WAY SWITCH MOUNTED 4'-0".
D		WALL MOUNTED EXIT SIGN	<b>–</b>		Sm Sd	MOTOR THERMAL SWITCH MOUNTED
	$\otimes$	EXIT SIGN			•	DIMMER SWITCH OCCUPANCY SENSOR.WALL MOUNTED
		RECESSED DOWNLIGHT			(OC)	INTERGAL SWITCH.
		EMERGENCY BATTERY WITH DOUE	BLE HEAD		©_3	OCCUPANCY SENSOR WALL MOUNTEE TWO (2) INTERGAL SWITCHES.
		LIGHTING FIXTURE			Ţ	GROUND CONNECTION
с		TRACKING LIGHTING SYSTEM WITH FIXTURE			×	LIGHTNING STRIKE AIR TERMINATION
		EMERGENCY CALL SYSTEM DOME				ELECTRIC METER
		EMERGENCY CALL SYSTEM PULL	STATION		CB	EMERGENCY COMM. CALL BOX
	AP	EMERGENCY CALL ANNUNCIATOR	PANEL		BS	EMERGENCY COMM. BASE STATION
	CR	ACCESS CONTROL SYSTEM CARD	READER			
В						
A						
1	2	3	4		5	6

78 of 172

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RRENT UIT INTERRUPTER OOR NIT NRY UNIT
CONTROL WATER IENT, RETAIN RACEWAYS, 6, AND BRANCH CIRCUIT
TRACTOR
MENT SYSTEM MAIN
I CONTRACTOR
CIRCUIT INTERRUPTER D PANEL DN PANEL T ITRACTOR
RACTOR
R AGE SURGE SUPPRESSOR

SECURITY TV OUTLET

SUAL & DOOR RELEASE

FOR DOOR RELEASE RELEASE

ITCH MOUNTED 4'-0".

CH MOUNTED 4'-0".

H MOUNTED 4'-0". SWITCH MOUNTED 4'-0".

SOR.WALL MOUNTED WITH

SOR WALL MOUNTED WITH

GENERAL ELECTRICAL NOTES:

1. GENERAL CONDITIONS & SPECIFICATIONS: THE GENERAL CONDITIONS, AND SPECIFICATIONS ARE PART OF THIS WORK. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND BE FAMILIAR WITH THESE CONDITIONS & SPECIFICATIONS.

2. CODES AND ORDINANCES: INSTALLATION OF THE SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRIC CODE, AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES.

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3. REQUIREMENTS: OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES AND CERTIFICATES.

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4. DESIGN: EQUIPMENT AND ACCESSORIES NOT SPECIFICALLY DESCRIBED OR IDENTIFIED BY MANUFACTURER'S CATALOG NUMBERS SHALL BE DESIGNED IN CONFORMITY WITH NEC, IEEE, UL OR OTHER APPLICABLE TECHNICAL STANDARDS, AND SHALL HAVE NEAT AND FINISHED APPEARANCE.

5. INSTALLATION: ERECT EQUIPMENT IN NEAT AND WORKMANLIKE MANNER; INSTALL SO THAT CONNECTING AND DISCONNECTING OF EQUIPMENT AND ACCESSORIES CAN BE MADE READILY AND SO THAT ALL PARTS ARE EASILY ACCESSIBLE FOR INSPECTION, OPERATION, MAINTENANCE AND REPAIR. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND THE BEST STANDARD PRACTICE FOR THIS TYPE OF WORK.

6. BEST PRACTICE: IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY FITTING, CONNECTION, OR APPLIANCE. THIS CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADE.

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7. EQUIPMENT LOCATION: THE E.C. SHALL VERIFY THE LOCATIONS AND MOUNTING HEIGHTS OF ALL EQUIPMENT AND SWITCHES, AND THE EXACT ROUTING OF ALL CONDUIT AND WIRING, WITH THE OWNER'S REPRESENTATIVE IN THE FIELD, PRIOR TO COMMENCING ANY WORK. ANY CONFLICTS WITH LOCATIONS, OR PROBLEMS ENCOUNTERED WITH ROUTING, SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

8. MATERIALS: ALL MATERIALS, FIXTURES AND EQUIPMENT SHALL BE NEW WITHOUT IMPERFECTIONS AND SHALL BE DELIVERED, ERECTED, CONNECTED AND FINISHED IN EVERY DETAIL. WHEREVER POSSIBLE, ALL TRIM, ACCESSORIES AND PARTS SHALL BE OF THE SAME MANUFACTURER AS THE RELATED EQUIPMENT AND FIXTURES.

9. GENERAL COORDINATION: EXAMINE ALL DRAWINGS AND OTHER SECTIONS OF THE SPECIFICATIONS FOR REQUIREMENTS WHICH AFFECT THE WORK OF THIS SECTION. COORDINATE WORK WITH THAT OF OTHER TRADES AFFECTING, OR AFFECTED BY, WORK OF THIS SECTION. COOPERATE WITH OTHER TRADES TO ENSURE THE STEADY PROGRESS OF THE WORK.

10. PROTECTION OF EQUIPMENT AND MATERIALS: RESPONSIBILITY FOR CARE AND PROTECTION OF ALL MATERIALS AND ELECTRICAL WORK RESTS WITH THIS CONTRACTOR AT ALL TIMES UNTIL IT HAS BEEN APPROVED.

11. GUARANTEE: ALL NEW COMPONENTS OF THE INSTALLATION SHALL BE GUARANTEED IN WRITING BY THIS CONTRACTOR TO BE FREE FROM DEFECTS OF MANUFACTURE AND INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF WRITTEN ACCEPTANCE BY THE ENGINEER. ANY DEFECTS FOUND SHALL BE REPAIRED BY THE ELECTRICAL CONTRACTOR AT THEIR OWN EXPENSE.

12. NOTIFICATION: THE E.C. SHALL NOTIFY THE ENGINEER UPON: (1) COMPLETION OF ALL ROUGH WIRING WORK, BEFORE CLOSURE OF ANY TRENCHES, OPEN WALL CAVITIES OR CHASES. (2) UPON "SUBSTANTIAL COMPLETION" OF ALL SYSTEMS. AFTER "SUBSTANTIAL COMPLETION", THE ENGINEER WILL PREPARE A PUNCH LIST OF ITEMS TO BE CORRECTED. THE E.C. SHALL CORRECT ANY DEFICIENCIES FOUND PROMPTLY, AT HIS/HER OWN EXPENSE.

13. FINAL COMPLETION: THE WORK SHALL NOT BE CONSIDERED COMPLETE UNTIL THE PUNCH LIST IS COMPLETED TO THE SATISFACTION OF THE ENGINEER AND ALL FINAL INSPECTIONS HAVE BEEN COMPLETED.

LIGHTING FIXTURE SCHEDULE

DWG ID	DESCRIPTION	MANUFACTUR ER	MODEL NO.	MOUNTING	VOLTAGE	LAMP WATTS	LUMENS	LUMENS/ WATT	COLOR TEMPERAT URE	FIXTURE COLOR	NOTES			
A	DU ENTRY	TERON	SHRSL13.0-120GVN30K	SURFACE	120	16	1700	106.3	3000K	gold Vein Trim	12"ø LED FIXTURE, 80 CRI, FABRIC TRIM			
В	DU KITCHEN	TERON	EEL25.0-120V-WLLTW-30K	SURFACE	120	25.0	2165	86.6	3000K	WHITE	14"ø LED FIXTURE, 80 CRI, WHITE ACRYLIC DIFFU			
С	DU HALL	TERON	SHRSL13.0-120GVN30K	SURFACE	120	16	1700	106.3	3000K	GOLD VEIN TRIM	12"ø LED FIXTURE, 80 CRI, FABRIC TRIM			
D	DU DINING	TERON	SHRLL37.5 –120GVN30K	SURFACE	120	37.5	4845	129.2	3000K	GOLD VEIN TRIM	19"ø LED FIXTURE, 80 CRI, FABRIC TRIM			
E	DU BATHROOMS	TERON	DC36-23.2-12030KF	SURFACE	120	23.2	3258	140.4	3000K	WHITE / BLACK	36" BATHROOM VANITY LED FIXTURE			
F	DU BEDROOMS	TERON	SHRML21.0-120GVN30K	WALL	120	21.0	2110	100.5	3000K	GOLD VEIN TRIM	15"ø LED FIXTURE, 80 CRI, FABRIC TRIM			
G	STAIRWELL	LITHONIA	WL30L-EZ1LP830-MSD7- DIM50	WALL	120	28.2	3095	109.8	3000K	WHITE	4' LED WALL FIXTURE, PROVIDE OPTIONAL OCCUPANCY CONTROL, FIXTURES DIM TO 50% DUR STANDBY MODE			
н	CORRIDOR	PHILIPS	FRAME: 6RN TRIM: P6R-DL25-830CDZ10U	RECESSED	120	25.0	2500	100.0	3000К	WHITE TRIM	6"Ø LED FIXTURE, 80 CRI, PROVIDE TENTMAT 2-HF FIRE RATED LIGHT COVER			
J	CORRIDOR	TERON	EE-L21.0-PRF-SM30K	SURFACE	120	21.0	2640	125.7	3000K	WHITE / SILVER	14"ø LED FIXTURE, 80 CRI, WHITE ACRYLIC DIFFUS PERFORATED METAL TRIM			
к	CLOSET	TERON	FSL13.0-120SM30K	SURFACE	120	13.0	979	75.3	3000K	WHITE / SILVER	11"Ø LED FIXTURE, 80 CRI, WHITE ACRYLIC DIFFUS METAL TRIM			
L	RECYCLE / LAUNDRY	LITHONIA	2AVL430L-MDR-EZ1-LP830	RECESSED	120	47.0	3870	82.3	3000K	WHITE	2'x4' LED FIXTURE, INDIRECT			
м	ELEVATOR PIT	CRESCENT / STONECO	VWXL-14W-NWG18	WALL	120	14	1390	99.3	4000K	WHITE	LED VAPOR TIGHT, WALL			
N	LAUNDRY	LITHONIA	LBL4400LM-80CRI-30K- MIN10-GZT	SURFACE	120	32.4	4097	126.5	3000K	WHITE	4' LED WRAPAROUND FIXTURE			
Р	CORRIDOR	PHILIPS	FRAME: 6RN TRIM: P6R-DL25-830CDZ10U	RECESSED	120	25.0	2500	100.0	3000K	WHITE TRIM	6"ø LED FIXTURE, 80 CRI, PROVIDE TENTMAT 2–HF FIRE RATED LIGHT COVER			
P1	OVERHANG	PHILIPS	FRAME: 6SN TRIM: P6S-DL35-840CDZ10U	RECESSED	120	25.0	2500	100.0	4000K	WHITE TRIM	6" SQUARE LED FIXTURE, 80 CRI, PROVIDE TENTM 2-HR FIRE RATED LIGHT COVER			
Q	STORAGE	LITHONIA	CLX-L24-3500LM-SEF- MVOLT-EZ1-30K-80CRI	SURFACE	120	25.8	3518	136.4	3000K	WHITE	24" LED LINEAR STRIP FIXTURE			
R	JANITOR / CLOSET	TERON	FSL21.0-120SM30K	SURFACE	120	21.0	2640	125.7	3000K	WHITE / SILVER	14"Ø LED FIXTURE, 80 CRI, WHITE ACRYLIC DIFFUS METAL TRIM			
Т	GARAGE	LITHONIA	CLX-L24-3500LM-SEF- MVOLT-EZ1-30K-80CRI	SURFACE	120	25.8	3518	136.4	3000K	WHITE	24" LED LINEAR STRIP FIXTURE			
U	STORAGE / TRASH / STAIRWELL	LITHONIA	CLX-L24-3500LM-SEF- MVOLT-EZ1-30K-80CRI	SURFACE	120	25.8	3518	136.4	3000K	WHITE	24" LED LINEAR STRIP FIXTURE			
v	EXTERIOR	LITHONIA	WSTLED-P2-30KVFMVOLT- DBLXD	WALL	120	25.0	3237	129.5	3000K	BLACK	LED WALL SCONCE OUTDOOR FIXTURE			
V1	EXTERIOR	LITHONIA	WSTLED-P1-30KVFMVOLT- DBLXD	WALL	120	11.0	1529	139.0	3000K	BLACK	LED WALL SCONCE OUTDOOR FIXTURE			
w	EXTERIOR ROOF	LITHONIA	TWSLEDP150K120PE	WALL	120	25	1476	59.0	5000K	BRONZE	LED WALL FIXTURE WITH INTEGRAL PHOTOCELL CONTROL			
x	PATH OF EGRESS EXIT SIGN	EMERGILITE	WPREM-DN-GW	UNIVERSAL	120	2.5	_	####	_	WHITE / GREEN	LED EXIT FIXTURE, UNIVERSAL SURFACE MOUNT, EMERGENCY BATTERY W/ ADVANCED DIAGNOSTICS			
EM	PATH OF EGRESS EM. LIGHTING	EMERGILITE	PRO-2N-SDNA	WALL	120	4	_	####	_	WHITE	LED EMERGENCY LIGHT FIXTURE, BATTERY W/ ADVANCED DIAGNOSTICS.			
AA	EXTERIOR	KIM	3SY-ALT3-P35120L-4K120BL	POLE	120	135	15538	115.1	4200K	BLACK	LED FIXTURE, PROVIDE (3) FIXTURES PER LOCATIO PROVIDE NEIGHBOR FRIENDLY OPTICS, PROVIDE 14 ROUND ALUMINUM POLE (HUBBELL HAS)			

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No.	REV	ISIONS/SUBMIS	SIONS	Date				
		0.404.5						
	DAVIS	240A E	Im St., Ile, MA 02144					
	SQUARE		8.5700					
	ARCHITECTS		avissquarearchitects.com					
Consult	ant							
Project	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com							
	117 BROADW 117 BROADWAY, AR		IA 02474					
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	Date	As Noted						
		, 08.23.2019						

	2	3	4			5 6		7	
			L		PH/WIRE	<b>A MLO, 24 1-POLE SPACES</b> REMARKS FLUSH MOUNT, PLUG-ON BREAKERS	IR S 10KAIC		117 BROADWAY TYP 1 BDRM APTS
				CIRC. NO.	KVA	DESCRIPTION	BREAKERS	POLES	REMARKS
м				1 2	1.50	APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS	20 20	1	AFCI/GFI AFCI/GFI
				3 4	0.72	DISPOSAL RANGE/RANGE HOOD	15 20	1	AFCI AFCI
				5 6	0.50	MICROWAVE REFRIGERATOR	20 15	1	AFCI AFCI
			-	7 8		DISHWASHER FAN COIL UNIT, FCU-	15 15		AFCI AFCI
			F	9,10 11		CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE	20 15	2 1	AFCI
L				12 13,14		LIGHTING/FIRE ALARM CLOTHES WASHER	15 20	1 2	AFCI
			-	15,16 17		ELECTRIC CLOTHES DRYER BOILER/DHW HEATER	30 15	2 1	
			-	18 19		LIVING ROOM BEDROOM 1	20 20		AFCI AFCI
			-	20 21	0.18	BATHROOM 1 RECEPTACLE	20	1	GFI
			-	22 23		SPARE SPARE	20 20		AFCI AFCI
к			-	24 TOTAL KVA	19.71			22	
			Ē		LCB: 1254 PH/WIRE	A MLO, 24 1-POLE SPACES REMARKS	IR		117 BROADWAY TYP. 2 BDRM APTS
			_	120/208V CIRC. NO.		FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION		POLES	REMARKS
						APPLIANCE BRANCH CIRCUITS	AMPS		
				1	1.50	APPLIANCE BRANCH CIRCUITS	20 20	1	AFCI/GFI AFCI/GFI
<u> </u>				3 4	0.72	DISPOSAL RANGE/RANGE HOOD	15 20	1	AFCI AFCI
				5 6	0.50	MICROWAVE REFRIGERATOR	20 15	1	AFCI AFCI
				7 8	1.13	DISHWASHER FAN COIL UNIT, FCU-	15 15	1	AFCI AFCI
				9,10 11	0.18	CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE	20 15		AFCI
н				12 13,14	2.30	LIGHTING/FIRE ALARM CLOTHES WASHER	15 20	2	AFCI
			_	15,16 17	0.20	ELECTRIC CLOTHES DRYER BOILER/DHW HEATER	30 15	2 1	
				18 19	0.90	LIVING ROOM BEDROOM 1	20 20	1	AFCI AFCI
			F	20 21		BATHROOM 1 RECEPTACLE BATHROOM 2 RECEPTACLE (WHERE	20 E APPLICAE 20		GFI GFI
			F	22 23		BATHROOM 3 RECEPTACLE (WHERE SPARE	E APPLICAE 20 20 20 20		GFI AFCI
G			7	24 TOTAL KVA	20.07	SPARE	20	1 24	AFCI
			L		LCC: 1254	A MLO, 24 1-POLE SPACES			117 BROADWAY TYP. 3 BDRM APTS
				VOLTS	PH/WIRE	REMARKS	IR		ITP. 3 DURIVI AP 13
				VOLTS 120/208V CIRC. NO.	1/3	REMARKS FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION	S 10KAIC	POLES	
			_	120/208V CIRC. NO. 1	1/3 KVA 1.50	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS	S 10KAIC BREAKERS AMPS 20	1	REMARKS AFCI/GFI
F				120/208V	1/3 KVA 1.50 1.50 0.30	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL	S 10KAIC BREAKERS AMPS 20 20 15	1 1 1	REMARKS AFCI/GFI AFCI/GFI AFCI
F				120/208V CIRC. NO. 1 2	1/3 KVA 1.50 1.50 0.30 0.72	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS	S 10KAIC BREAKERS AMPS 20 20	1 1 1 1 1	REMARKS AFCI/GFI AFCI/GFI
F				120/208V CIRC. NO. 1 2 3 4	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD	S 10KAIC BREAKERS AMPS 20 20 20 15 20	1 1 1 1 1 1 1 1	REMARKS AFCI/GFI AFCI/GFI AFCI AFCI
<u>F</u>				120/208V       CIRC. NO.       1       2       3       4       5       6	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.13	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR	S 10KAIC BREAKERS AMPS 20 20 20 15 20 20 20 20 20 15	1 1 1 1 1 1 1 1 1	REMARKS AFCI/GFI AFCI/GFI AFCI AFCI AFCI AFCI
F				120/208V       CIRC. NO.       1       2       3       4       5       6       7       8	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU-	S         10KAIC           BREAKERS AMPS         BREAKERS AMPS           20         20           15         20           20         15           20         15           20         15           15         15           15         15           15         15	1 1 1 1 1 1 1 1 1 1 2 1	REMARKS AFCI/GFI AFCI/GFI AFCI AFCI AFCI AFCI AFCI
F				120/208V       CIRC. NO.       1       2       3       4       5       6       7       8       9,10       11       12       13,14	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER	S         10KAIC           BREAKERS AMPS         BREAKERS AMPS           20         20           15         20           20         15           20         15           15         15           15         20           15         15           15         15           15         15           15         20           15         20           15         20           15         20           15         20           20         15           20         15           20         20	1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 1 2	REMARKS AFCI/GFI AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
F E				120/208V       CIRC. NO.       1       2       3       4       5       6       7       8       9,10       11       12       13,14       15,16       17	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER	S         10KAIC           BREAKERS AMPS         BREAKERS AMPS           20         20           15         20           20         15           20         15           20         15           20         15           15         15           20         15           15         20           15         15           20         15           20         15           30         15           15         15	1 1 1 1 1 1 1 1 1 1 2 1 1 2 2 1 1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
F E				120/208V       CIRC. NO.       1       2       3       4       5       6       7       8       9,10       11       12       13,14       15,16       17       18       19	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER LIVING ROOM BEDROOM 1	S         10KAIC           BREAKERS AMPS         AMPS           20         20           20         15           20         20           15         20           20         15           20         15           15         15           15         15           20         15           15         15           20         15           15         15           20         15           15         15           20         15           20         15           20         15           20         15           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20	1 1 1 1 1 1 1 1 1 1 2 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
F E				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.80 0.20 0.72 0.90 0.90 0.90	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER LIVING ROOM BEDROOM 1 BEDROOM 2 BEDROOM 3	S         10KAIC           BREAKERS AMPS         BREAKERS AMPS           20         20           15         20           20         15           20         15           20         15           20         15           15         15           20         15           15         20           15         15           20         15           20         15           20         15           15         20           15         15           20         15           20         15           20         15           20         20           15         20           300         15           20         20	1         1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         2         1         1         1         1         1         1         1         1         1         1         1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
E				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         22         23	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90 0.90 0.90 0.90 0.18 0.18	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER LIVING ROOM BEDROOM 1 BEDROOM 2 BEDROOM 3 BATHROOM 1 RECEPTACLE BATHROOM 2 RECEPTACLE (WHERE	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         20       15         15       15         20       15         20       15         20       15         15       20         15       20         20       <	1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
E				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         22	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90 0.90 0.90 0.90 0.18 0.18	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER LIVING ROOM BEDROOM 1 BEDROOM 2 BEDROOM 3 BATHROOM 1 RECEPTACLE	S         10KAIC           BREAKERS AMPS         BREAKERS AMPS           20         20           20         15           20         20           15         20           20         15           20         15           15         15           20         15           15         20           15         15           20         15           20         15           20         15           20         15           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20           20         20	1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         22         23         24         TOTAL KVA	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.80 0.20 0.72 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         20       15         15       15         20       15         20       15         20       15         15       20         15       20         20       <	1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         TOTAL KVA	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 2.30 0.20 0.72 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.90 0.18 0.18 0.18 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER LIVING ROOM BEDROOM 1 BEDROOM 2 BEDROOM 2 BEDROOM 3 BATHROOM 1 RECEPTACLE BATHROOM 2 RECEPTACLE (WHERE SPARE	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         15       15         20       15         15       20         15       20         15       20         15       20         20       15         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       <	1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         TOTAL KVA	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 2.30 0.20 0.72 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.90 0.18 0.18 0.18 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         20       15         15       20         15       20         15       20         15       20         20       15         20       15         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       1         20       1         20       1         20       1         20       1         20       1         20       1 </td <td>1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1</td> <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td>	1         1         1         1         1         1         1         1         1         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         TOTAL KVA	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.18 0.18 0.18 0.20 0.72 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.18 0.30 0.48 0.50 0.50 0.72 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.48 0.40 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE         COPPER BUS, SURFACE MOUNT, BO	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         20       15         15       20         15       20         15       15         20       15         20       15         20       20         15       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       1         20       1         20       1         20       1         20       1         20       1<	1         1         1         1         1         1         1         1         1         2         1         1         2         1         1         1         1         1         1         1         1         1         2         2         1         1         2         2         2         1         1         2         1         2         2         1         1         2         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1 <td< td=""><td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td></td<>	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         22         23         24         TOTAL KVA	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.18 0.18 0.18 0.30 0.48 0.18 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.50 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.40 0.40 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE         COPPER BUS, SURFACE MOUNT, BO	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         15       15         20       15         15       20         15       20         15       20         15       20         20       15         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       1         20       1         20       1         20       1         20       1         20       1         20       1         20       1 <td>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 2 1</td> <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 2 1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         107AL KVA	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.18 0.18 0.18 0.30 0.48 0.18 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.50 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.40 0.40 0.	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE         AMB, 42 SPACE         REMARKS         COPPER BUS, SURFACE MOUNT, BO         DESCRIPTION	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       20         15       20         20       15         20       15         20       15         20       15         15       15         20       15         15       15         20       15         15       20         15       20         15       20         20       <	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 2 1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         22         23         24         TOTAL KVA         VOLTS         120/208V         VOLTS         120/208V         CIRC. NO.         1         2         3         4         5         6         7         8	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.18 0.18 0.18 0.30 0.48 0.18 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.50 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.40 0.40 0.	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE         AMB, 42 SPACE         REMARKS         COPPER BUS, SURFACE MOUNT, BO         DESCRIPTION	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       20         15       20         20       15         20       15         20       15         20       15         15       15         20       15         15       15         20       15         15       20         15       20         15       20         20       <	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 2 1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         10         22         23         24         10         22         23         24         TOTAL KVA         VOLTS         120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9         10	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE (WHERE         SPARE         AMB, 42 SPACE         REMARKS         COPPER BUS, SURFACE MOUNT, BO         DESCRIPTION	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       20         15       20         20       15         20       15         20       15         20       15         15       15         20       15         15       15         20       15         15       20         15       20         15       20         20       <	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 2 2 1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         10         22         23         24         TOTAL KVA         VOLTS         120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9         10         11         2         3         4         5         6         7         8         9         10         11         12	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.20 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.16 0.18 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         BATHROOM 2 RECEPTACLE (WHERE         SPARE         SPARE         SPARE         SEDER TO PANEL P1         SEDER TO PANEL P1         SELEVATOR, 15HP	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         15       15         20       15         15       20         15       20         15       20         20       15         20       15         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       10         20       10         150       10         150       10         150       10         100       100	1         1         1         1         1         1         1         2         1         2         1         1         1         2         1         1         2         1         1         1         1         1         2         1         1         1         2         3         3         3	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         33,14         13,14         15,16         17         18         19         20         21         23         24         10         22         23         24         10         22         23         24         TOTAL KVA         VOLTS         120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9         10         11         12         3         4         5         6         7         8         9	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.10 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.18 0.50 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         BATHROOM 2 RECEPTACLE (WHERE         SPARE         DESCRIPTION         FEEDER TO PANEL P1         FEEDER TO PANEL P2         ELEVATOR, 15HP         ELEVATOR CONTROL         ELEVATOR RECEPTACLES	S       10KAIC         BREAKERS AMPS       AMPS         20       20         20       15         20       20         15       20         20       15         20       15         20       15         15       15         15       20         15       15         20       15         20       15         15       20         15       20         15       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       10         150       10         150       10         150       10         150       10         20       2         20       2         20       2         20       10         20	1         1         1         1         1         1         1         1         1         1         1         1         2         1         1         1         1         1         1         1         1         1         1         1         2         2         1         1         1         3         3         3         1         1         1         1         3         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1          1          1          1 <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td>	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
C				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         10         22         23         24         10         22         23         24         TOTAL KVA         VOLTS         120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9         10         11         2         3         4         5         6         7         8         9         10 <t< td=""><td>1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.50 0</td><td>FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         BATHROOM 2 RECEPTACLE (WHERE         SPARE         COPPER BUS, SURFACE MOUNT, BO         DESCRIPTION         FEEDER TO PANEL P1         ELEVATOR, 15HP         ELEVATOR CONTROL         ELEVATOR AIR CONDITIONING</td><td>S       10KAIC         BREAKERS AMPS       AMPS         20       1         20       15         20       20         15       20         20       15         20       15         15       15         15       20         15       15         20       15         15       20         15       20         15       20         15       20         20       15         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       10         20       10         150       1         150       1         150       1         150       1         150       1         150       1         20       2         20       2         20</td><td>1         1         1         1         1         1         1         1         1         2         1         2         1         1         2         1         1         1         1         1         1         1         1         1         2         3         3         3         1         1         2         1         1         2         3         1         1         2         3</td><td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td></t<>	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.80 0.20 0.50 0	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         BATHROOM 2 RECEPTACLE (WHERE         SPARE         COPPER BUS, SURFACE MOUNT, BO         DESCRIPTION         FEEDER TO PANEL P1         ELEVATOR, 15HP         ELEVATOR CONTROL         ELEVATOR AIR CONDITIONING	S       10KAIC         BREAKERS AMPS       AMPS         20       1         20       15         20       20         15       20         20       15         20       15         15       15         15       20         15       15         20       15         15       20         15       20         15       20         15       20         20       15         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       20         20       10         20       10         150       1         150       1         150       1         150       1         150       1         150       1         20       2         20       2         20	1         1         1         1         1         1         1         1         1         2         1         2         1         1         2         1         1         1         1         1         1         1         1         1         2         3         3         3         1         1         2         1         1         2         3         1         1         2         3	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         17         18         19         20         21         22         3         4         15,16         17         18         19         20         21         22         3         24         TOTAL KVA         VOLTS         120/208V         VCIRC. NO.         1         2         3         4         5         6         7         8         9         10         11	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 0.20 0.72 0.90 0.20 0.72 0.90 0.50 0.50 0.50 2.91 0.50 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         WHEATER         IVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         WHEATER         IVING ROOM 2 RECEPTACLE (WHERE         SPARE         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I <t< td=""><td>S       10KAIC         BREAKERS AMPS       AMPS         20       1         20       15         20       1         20       1         20       1         20       1         20       1         20       1         15       1         15       1         20       1         15       1         20       1         15       1         20       1         15       1         20       1         20       1         20       20         20       20         20       20         20       20         20       20         20       20         20       1         20       1         150       1         150       1         150       1         150       1         150       1         150       1         150       1         20       1         20       1</td><td>1         1         1         1         1         1         1         1         1         1         1         1         2         1         1         1         1         1         1         1         1         1         1         1         2         2         1         1         1         3         3         3         1         1         1         1         3         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1          1          1    </td><td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td></t<>	S       10KAIC         BREAKERS AMPS       AMPS         20       1         20       15         20       1         20       1         20       1         20       1         20       1         20       1         15       1         15       1         20       1         15       1         20       1         15       1         20       1         15       1         20       1         20       1         20       20         20       20         20       20         20       20         20       20         20       20         20       1         20       1         150       1         150       1         150       1         150       1         150       1         150       1         150       1         20       1         20       1	1         1         1         1         1         1         1         1         1         1         1         1         2         1         1         1         1         1         1         1         1         1         1         1         2         2         1         1         1         3         3         3         1         1         1         1         3         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1          1          1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9,10         11         12         13,14         15,16         17         18         19         20         21         23         24         19         20         21         23         24         15,16         1         20         21         23         24         10         22         33         4         120/208V         CIRC. NO.         1         2         3         4         5         6         7         8         9         10         11         2         3         4         5         6 </td <td>1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.10 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.50 0</td> <td>FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         BATHROOM 2 RECEPTACLE (WHERE         SPARE         <t< td=""><td>S10KAICBREAKERS AMPS2020201520201520151520151520152015203015202020152015201515015015015015015015015020<!--</td--><td>1         1         1         1         1         1         1         1         1         2         1         2         1         2         1         2         1         1         1         1         1         1         2         3         3         3         3         1         1         2         3         3         1         1         2         3         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1      1</td><td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td></td></t<></td>	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.10 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.50 0	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         BATHROOM 2 RECEPTACLE (WHERE         SPARE         SPARE <t< td=""><td>S10KAICBREAKERS AMPS2020201520201520151520151520152015203015202020152015201515015015015015015015015020<!--</td--><td>1         1         1         1         1         1         1         1         1         2         1         2         1         2         1         2         1         1         1         1         1         1         2         3         3         3         3         1         1         2         3         3         1         1         2         3         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1      1</td><td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td></td></t<>	S10KAICBREAKERS AMPS2020201520201520151520151520152015203015202020152015201515015015015015015015015020 </td <td>1         1         1         1         1         1         1         1         1         2         1         2         1         2         1         2         1         1         1         1         1         1         2         3         3         3         3         1         1         2         3         3         1         1         2         3         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1      1</td> <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td>	1         1         1         1         1         1         1         1         1         2         1         2         1         2         1         2         1         1         1         1         1         1         2         3         3         3         3         1         1         2         3         3         1         1         2         3         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1      1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D				120/208V       CIRC. NO.     1       2     1       2     1       3     4       5     6       7     8       9,10     1       12     1       13,14     1       15,16     1       17     1       18     1       19     20       21     2       23     2       24     1       TOTAL KVA     1       120/208V     1       VOLTS     1       120/208V     1       CIRC. NO.     1       1     2       3     4       5     1       6     1       7     8       9     1       11     1       2     3       4     5       6     1       7     8       9     10       11     1       12     3       4     5       6     1       7     8       9     10       11     1       12     1       13     1       14     1	1/3 KVA 1.50 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.18 0.50 0.50 2.91 0.50 0.50 0.50 0.40 0.	FLUSH MOUNT, PLUG-ON BREAKERS         DESCRIPTION         APPLIANCE BRANCH CIRCUITS         APPLIANCE BRANCH CIRCUITS         DISPOSAL         RANGE/RANGE HOOD         MICROWAVE         REFRIGERATOR         DISHWASHER         FAN COIL UNIT, FCU-         CONDENSING UNIT, CU-         COMMUNICATION RECEPTACLE         LIGHTING/FIRE ALARM         CLOTHES WASHER         ELECTRIC CLOTHES DRYER         BOILER/DHW HEATER         LIVING ROOM         BEDROOM 1         BEDROOM 2         BEDROOM 3         BATHROOM 1 RECEPTACLE         WHERE         SPARE         SPARE         SPARE         SEDROOM 3         BATHROOM 2 RECEPTACLE (WHERE         SPARE         SPARE         SPARE         SEDROOM 3         FEEDER TO PANEL P1         SCOPPER BUS, SURFACE MOUNT, BC         DESCRIPTION         FEEDER TO PANEL P2         SELEVATOR, 15HP         SELEVATOR AIR CONDITIONING         SELEVATOR AIR CONDITIONING         TRASH COMPACTOR (SHP)         TRASH ROOM RECEPTACLES         TELE REC	S10KAICBREAKERS AMPS202020152020152015151520151520152015302030152015015150151501501501501501501501502015020 <td>1         1         1         1         1         1         1         1         1         2         1         2         1         1         2         1         1         1         1         1         1         1         2         3         3         3         3         1       <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td></td>	1         1         1         1         1         1         1         1         1         2         1         2         1         1         2         1         1         1         1         1         1         1         2         3         3         3         3         1 <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td>	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF
D	8	3		120/208V       CIRC. NO.     1       2     3       3     4       5     6       7     8       9,10     1       12     1       13,14     1       15,16     1       17     8       19     20       21     2       23     2       24     1       107AL KVA     1       120/208V     1       20     2       23     2       24     1       107AL KVA     1       2     3       24     1       120/208V     1       CIRC. NO.     1       120/208V     1       2     3       4     5       6     1       1     2       3     4       5     1       6     1       7     8       9     1       11     1       2     3       4     5       6     1       7     8       9     1       10     1       11     1       12     1	1/3 KVA 1.50 0.30 0.72 1.50 0.50 1.30 1.30 1.13 3.68 0.18 0.30 2.30 2.30 2.30 2.80 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.20 0.72 0.90 0.18 0.10 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.50 0	FLUSH MOUNT, PLUG-ON BREAKERS DESCRIPTION APPLIANCE BRANCH CIRCUITS APPLIANCE BRANCH CIRCUITS DISPOSAL RANGE/RANGE HOOD MICROWAVE REFRIGERATOR DISHWASHER FAN COIL UNIT, FCU- CONDENSING UNIT, CU- COMMUNICATION RECEPTACLE LIGHTING/FIRE ALARM CLOTHES WASHER ELECTRIC CLOTHES DRYER BOILER/DHW HEATER LIVING ROOM BEDROOM 1 BEDROOM 2 BEDROOM 3 BATHROOM 1 RECEPTACLE BATHROOM 2 RECEPTACLE (WHERE SPARE A MB, 42 SPACE REMARKS COPPER BUS, SURFACE MOUNT, BO DESCRIPTION FEEDER TO PANEL P1 FEEDER TO PANEL P1	S10KAICBREAKERS AMPS202020152020152015152015152015201520301520202015201501555AMPS15015015015015015015020 </td <td>1         1         1         1         1         1         1         1         1         2         1         2         1         2         1         2         1         1         1         1         1         1         2         3         3         3         3         1         1         2         3         3         1         1         2         3         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1      1</td> <td>REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF</td>	1         1         1         1         1         1         1         1         1         2         1         2         1         2         1         2         1         1         1         1         1         1         2         3         3         3         3         1         1         2         3         3         1         1         2         3         1         1         2         3         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1      1	REMARKS AFCI/GFI AFCI AFCI AFCI AFCI AFCI AFCI AFCI AF

6	7

8 9 10 11 12

	117 BROADWAY	
	TYP 1 BDRM APTS	
LES	REMARKS	
1	AFCI/GFI	
1	AFCI/GFI	
1		

PANELBOAF	RD P1: 200A	MLO, 42 SPACE			117 BROADWAY
VOLTS	PH/WIRE	REMARKS	IR		COMMON
208/120V	3/4	COPPER BUS, FLUSH MOUNT, BOLT ON BREA	K 22 KAIC		
CIRC. NO.	KVA	DESCRIPTION	BREAKERS	POLES	REMARKS
			AMPS		
1		FIRST FLOOR RECEPTS	20	1	
2		FIRST FLOOR LIGHTING	20	1	
3		SECOND FLOOR RECEPTS	20	1	
4		SECOND FLOOR LIGHTING	20	1	
5		THIRD FLOOR RECEPTS	20	1	
6		THIRD FLOOR LIGHTING	20	1	
7		FOURTH FLOOR RECEPTS	20	1	
8		FOURTH FLOOR LIGHTING	20	1	
9					
10					
11					
12					
13	3.02	STORAGE AREA CEILING UNIT HEATER	15	2	
14					
15	3.02	BIKE STORAGE AREA CEILING UNIT HEATER	15	2	
16					
17		ELECTRIC CAR CHARGING STATION	20	2	
18					
19		GARAGE DOOR			
20					
21		GARAGE VENTILATION FAN		3	
22					
23	2.00	EXTERIOR SITE LIGHTING	20	1	
24	2.00	EXTERIOR BUILDING LIGHTING	20	1	
25					
26		VESTIBULE RECEPTACLES	20	1	
27		ELECTRIFIED DOOR POWER SUPPLIES	20	1	
28		AREA OF REFUGE INTERCOM	20	1	
29		DOOR ENTRY SYSTEM INTERCOM	20	1	
30		FIRE ALARM SYSTEM	20	1	
31		FIRE ALARM POWER SUPPLY (2ND FLOOR)	20	1	
32		FIRE ALARM POWER SUPPLY (3RD FLOOR)	20	1	
33		FIRE ALARM POWER SUPPLY (4TH FLOOR)	20	1	
34		STAIRS	20	1	
35		STAIRS	20	1	
36					
37					
38 - 42		SPARE	20	1	(TYP 6)
TOTAL KVA	10.04			30	

PANELBOARD P2:	200A MLO, 42 SPACE

PANELBOAR	D P2: 200A	MLO, 42 SPACE			COMMON
VOLTS	PH/WIRE	REMARKS	IR		
120/208V	3/4	COPPER BUS, FLUSH MOUNT, BOLT ON BREAKERS	22 KAIC		
CIRC. NO.	KVA	DESCRIPTION	BREAKERS	POLES	REMARKS
			AMPS		
1		ROOF RECEPTACLES	20	1	
2		ROOF LIGHTING	20	1	
3					
4- 30		SPARE	20	1	
31 - 42		SPACE			
TOTAL KVA	0.00			3	

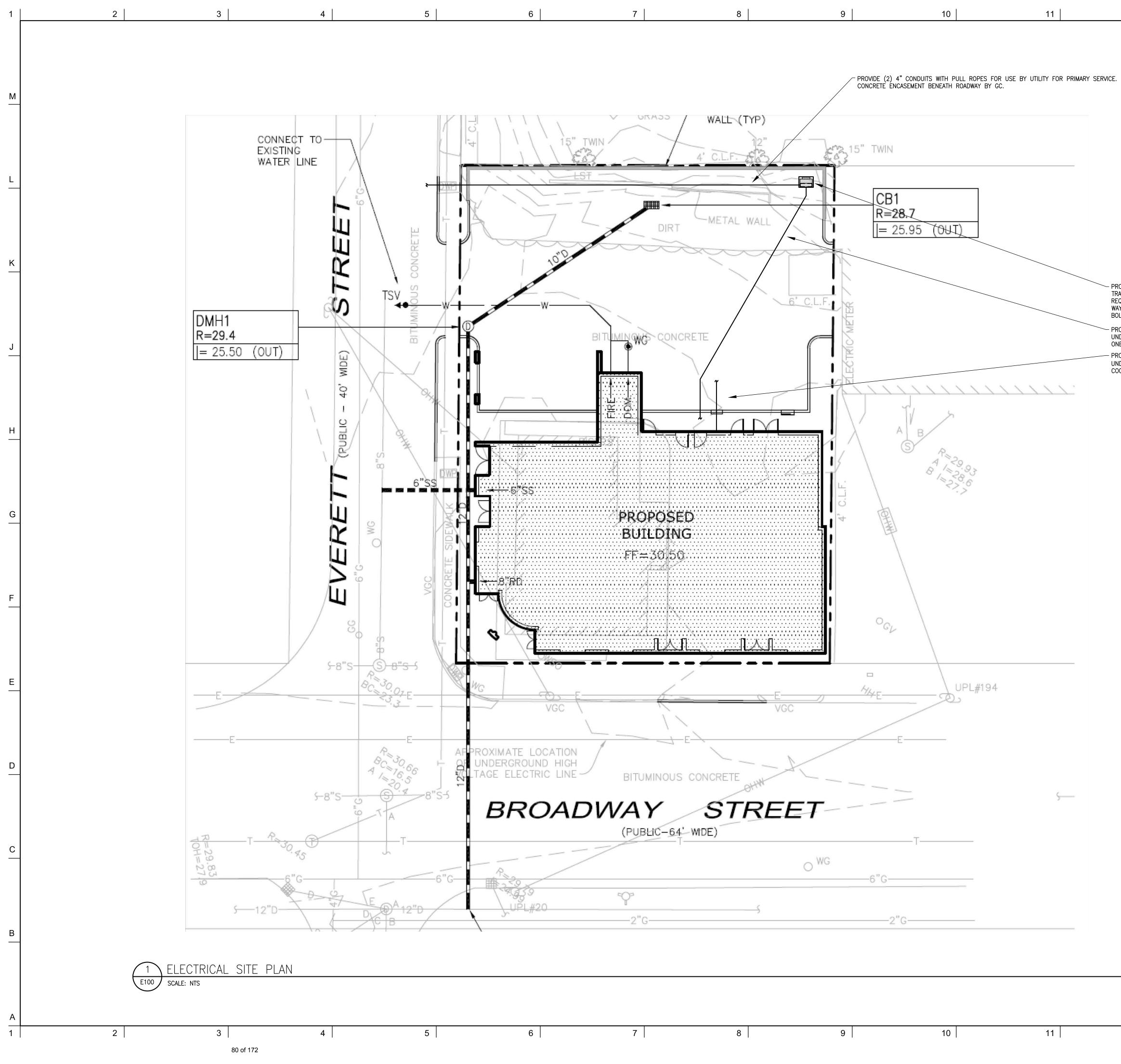
F	PANELBOAF	RD C1: 225A MLO, 42 SPAC	E
	VOLTS	PH/W/IRE	REMARK

PANELBOARD C1: 225A MLO, 42 SPACE					
VOLTS	PH/WIRE	REMARKS	IR		
120/208V	3/4	COPPER BUS, FLUSH MOUNT, BOLT ON BREAKERS	22 KAIC		
CIRC. NO.	KVA	DESCRIPTION	BREAKERS	POLES	REMARKS
			AMPS		
1		LIGHTING	20	1	
2		LIGHTING	20	1	
3		LIGHTING	20	1	
4		RECEPTACLES	20	1	
5, 6		UNIT HEATER		2	
7, 8		UNIT HEATER		2	
9, 10		UNIT HEATER		2	
11 - 30		SPARE	20	1	
31 - 42		SPACE			
TOTAL KVA	0.00			11	

PANELBOARD C2: 225A MLO, 42 SPACE						
VOLTS	PH/WIRE	REMARKS	IR			
120/208V	3/4	COPPER BUS, FLUSH MOUNT, BOLT ON BREAKERS	22 KAIC			
CIRC. NO.	KVA	DESCRIPTION	BREAKERS	POLES	REMARKS	
			AMPS			
1		LIGHTING	20	1		
2		LIGHTING	20	1		
3		LIGHTING	20	1		
4		RECEPTACLES	20	1		
5, 6		UNIT HEATER		2		
7, 8		UNIT HEATER		2		
9, 10		UNIT HEATER		2		
11 - 30		SPARE	20	1		
31 - 42		SPACE				
TOTAL KVA	0.00			11		

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		_
	No.         REVISIONS/SUBMISSIONS         Date	_
	DAVIS 240A Elm St.,	
RKS	SQUARE Somerville, MA 02144 617.628.5700	
	A R C H I T E C T S www.davissquarearchitects.com	
	Consultant	
	NORIAN / SIANI ENGINEERING, INC.	
	43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250	
	Email: info@NS-Engineering.com	
	Project	
	117 BROADWAY	
	117 BROADWAY, ARLINGTON, MA 02474         Title       ELECTRICAL PANEL SCHEDULES	$\neg$
	LLLUINIUAL FAINEL JUNEDULEJ	
	Designed	$\square$
	Designed Drawing No. BMK	
	Checked GAC	
	Project No.	
	16045.00 Scale As Noted	
	As Noted	
	08.23.2019	
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PROVIDE NEW CONCRETE PAD FOR NEW TRANSFORMER COORDINATE WITH UTILITY REQUIRED CLEARANCES FROM PUBLIC WAY FOR MAINTENANCE, PROVIDE BOLLARDS TO PROTECT EQUIPMENT.

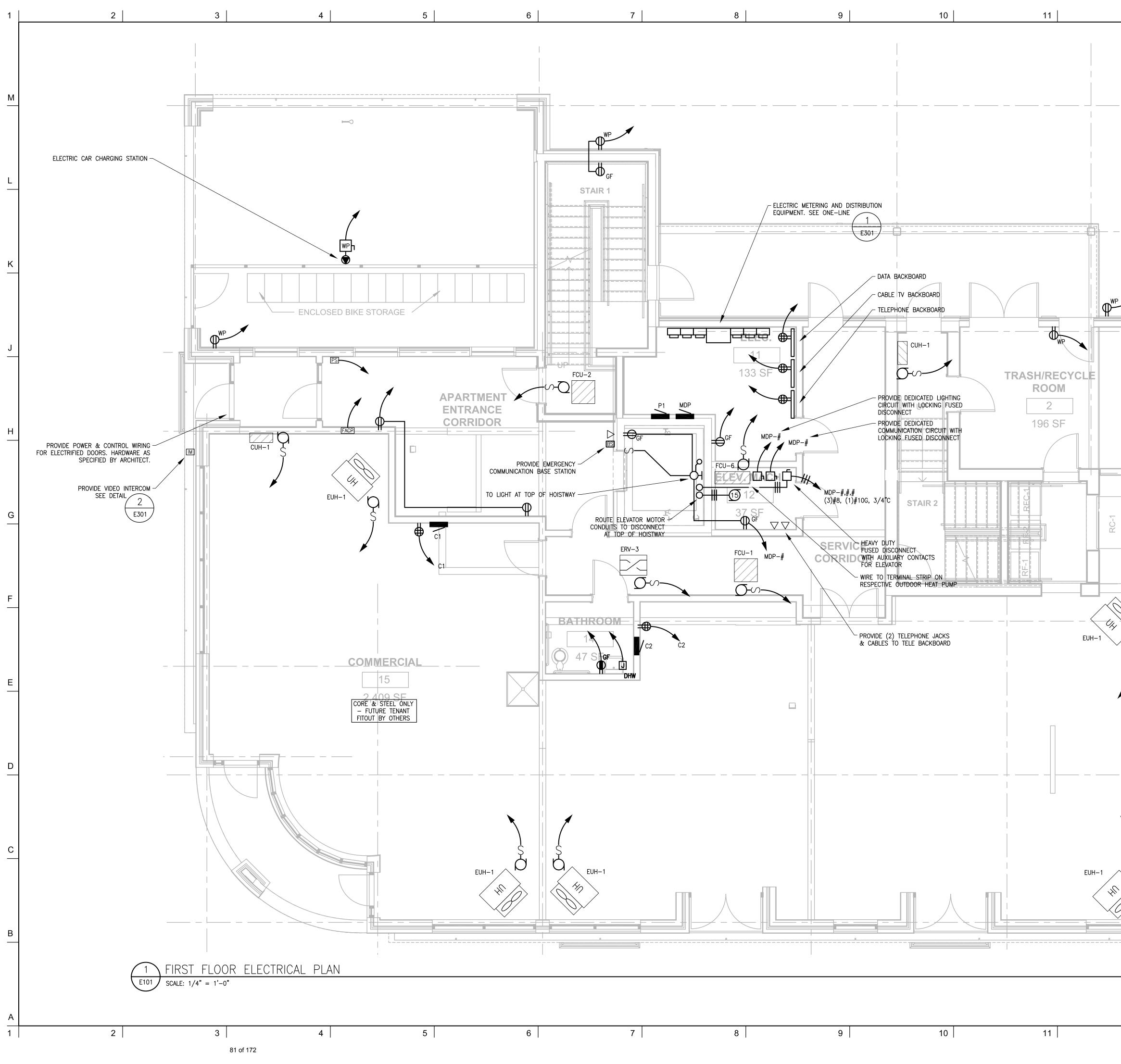
PROVIDE SECONDARY CONDUCTORS AND UNDERGROUND CONDUIT, SEE ONE-LINE ON E301.

UNDERGROUND CONDUITS. (4' TYP-4) COORDINATE WITH SERVICE PROVIDERS

- PROVIDE TELE, CATV AND DATA



No.	REVISIONS/SUBMISSIONS	Date			
	DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com				
Consulta	Consultant				
<u> </u>	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com				
	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 ELECTRICAL SITE PLAN				
	Designed BMK Checked GAC Project No.				
	16045-00	0			
	Consulta	DAVIS       240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com         Consultant       ARCHITECTS         Consultant         MORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com         Project         Project         Designed BMK         Drawing No.         E100			

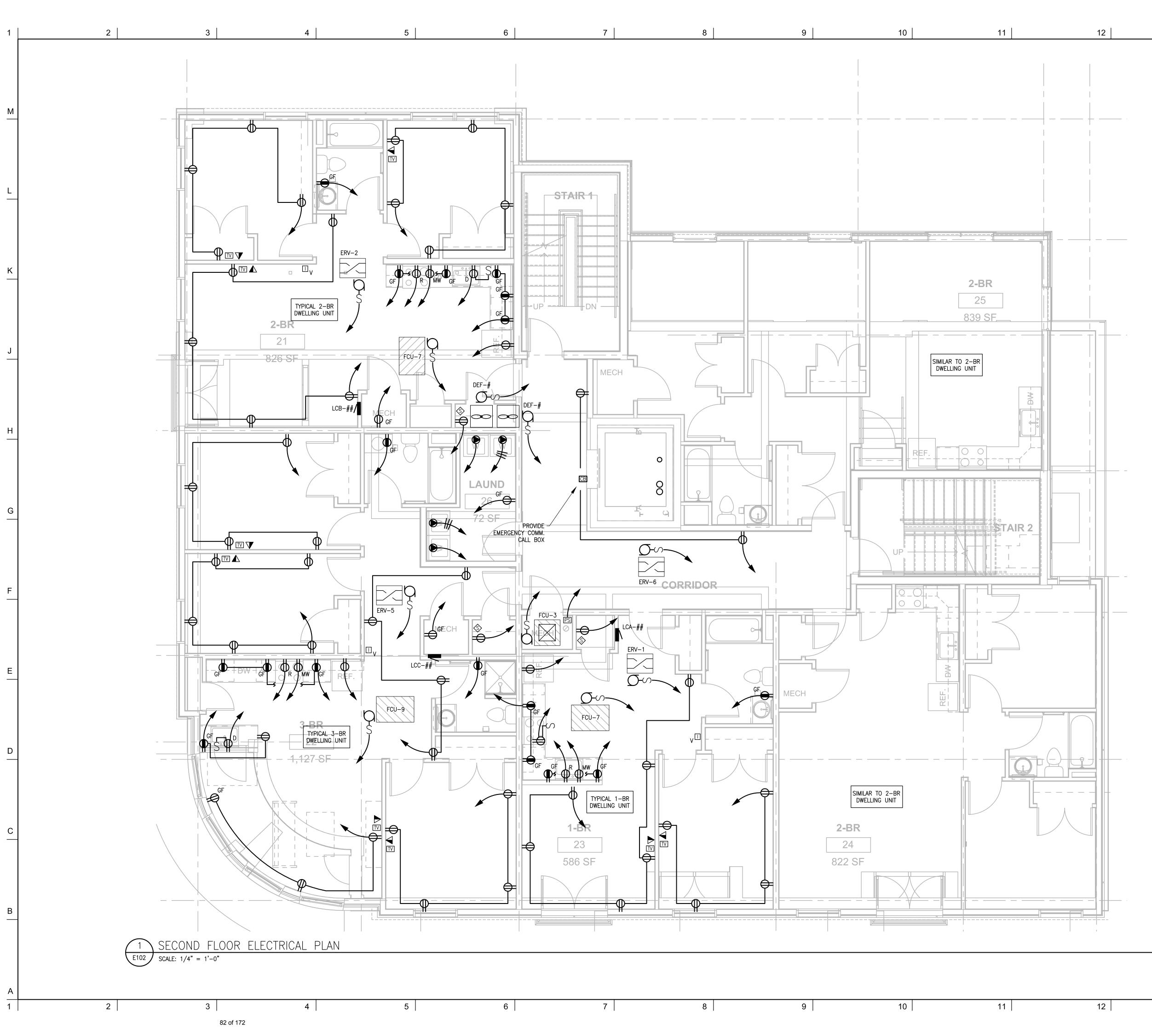


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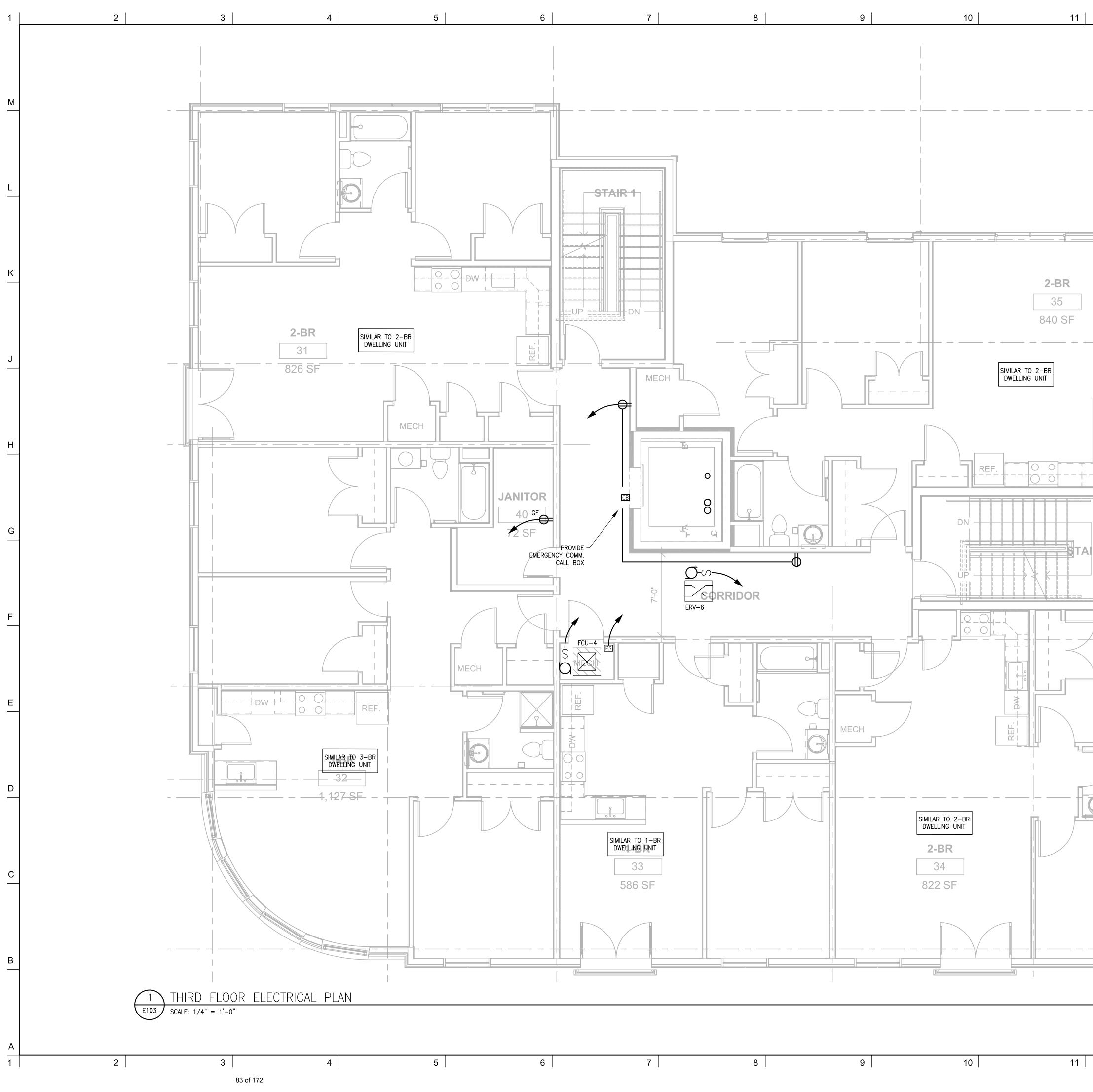
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EUH-1

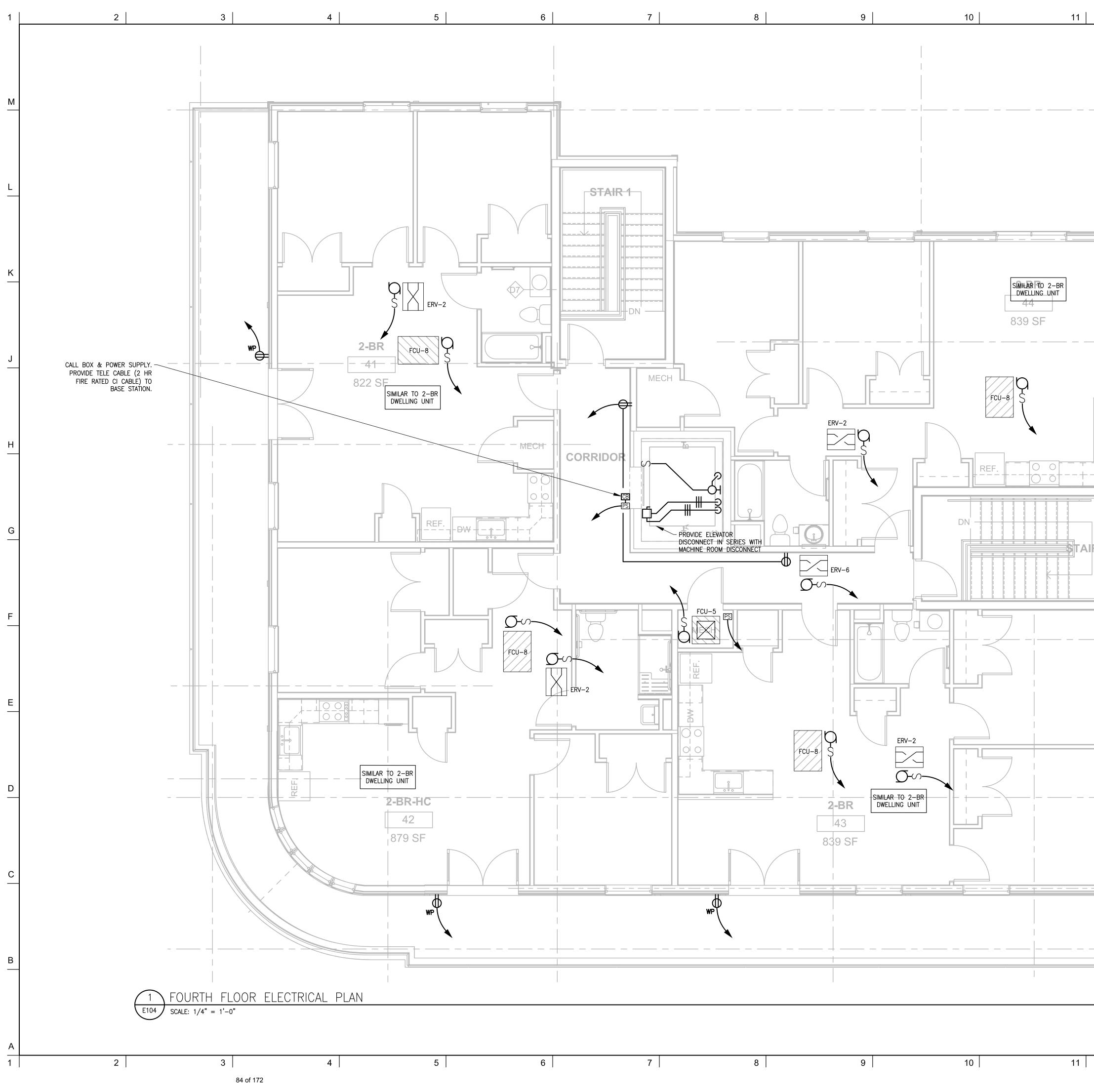
	ELECTRICAL NOTES:
	<ol> <li>THE ELECTRICAL CONTRACTOR SHALL FOLLOW ALL APPLICABLE NEC, STATE, LOCAL, AND FEDERAL CODES RELATING TO THE WORK.</li> </ol>
	2. ELECTRICAL CONTRACTOR SHALL PAY FOR AND SECURE ALL PERMITS FOR ASSOCIATED WORK.
	3. INSTALL ALL ELECTRICAL EQUIPMENT AND MATERIALS FOR COMPLETE AND OPERABLE SYSTEMS.
	4. TYPE "NM" WIRING MAY BE USED WHERE ALLOWED BY CODE. ALL WIRING IN MECHANICAL ROOMS SHALL BE "MC".
	<ol> <li>ALL CONDUCTORS SHALL BE COPPER WITH TYPE "THHN/THWN" INSULATION. THE MINIMUM CONDUCTOR SIZE FOR BRANCH CIRCUITS SHALL BE NO. 12 AWG.</li> </ol>
	6. SEAL ALL CONDUIT PENETRATIONS THROUGH WALLS AND FLOORS FOR FIREPROOFING AND WEATHERPROOFING.
	7. ALL MATERIAL SHALL BE NEW AND BEAR THE U.L. LABEL AND SHALL BE INSTALLED IN THE MANNER FOR WHICH THEY WERE DESIGNED AND APPROVED.
	8. E.C. SHALL PROVIDE SUBMITTALS FOR ALL ELECTRICAL EQUIPMENT DEVICES, LIGHTING AND SPECIALTY SYSTEMS.
	9. GROUND ALL EQUIPMENT PER NATIONAL ELECTRIC CODE. 10. ALL ELECTRICAL EQUIPMENT SHALL HAVE ENGRAVED PLASTIC
	NAMEPLATES. ALL PANEL BOARDS' CIRCUIT DIRECTORIES SHALL BE TYPED.
	<ol> <li>THE CONDUIT/WIRE SIZES AND WIRING DIAGRAM REPRESENTS A SUGGESTED DESIGN BASED UPON STANDARD ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE ACTUALLY INSTALLED EQUIPMENT. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE ALL EQUIPMENT WIRING REQUIREMENTS, PRIOR TO CONSTRUCTION.</li> <li>COORDINATE EXACT EQUIPMENT LOCATIONS AND POWER REQUIREMENTS WITH OWNER AND ARCHITECT PRIOR TO ROUGH-INS.</li> </ol>
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	No.     REVISIONS/SUBMISSIONS     Date       D     D     Q
	Consultant
S S	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com
	Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title FIRST FLOOR ELECTRICAL PLAN
	Designed BMK Checked GAC Project No. 16045.00 Scale As Noted Date 08.23.2019



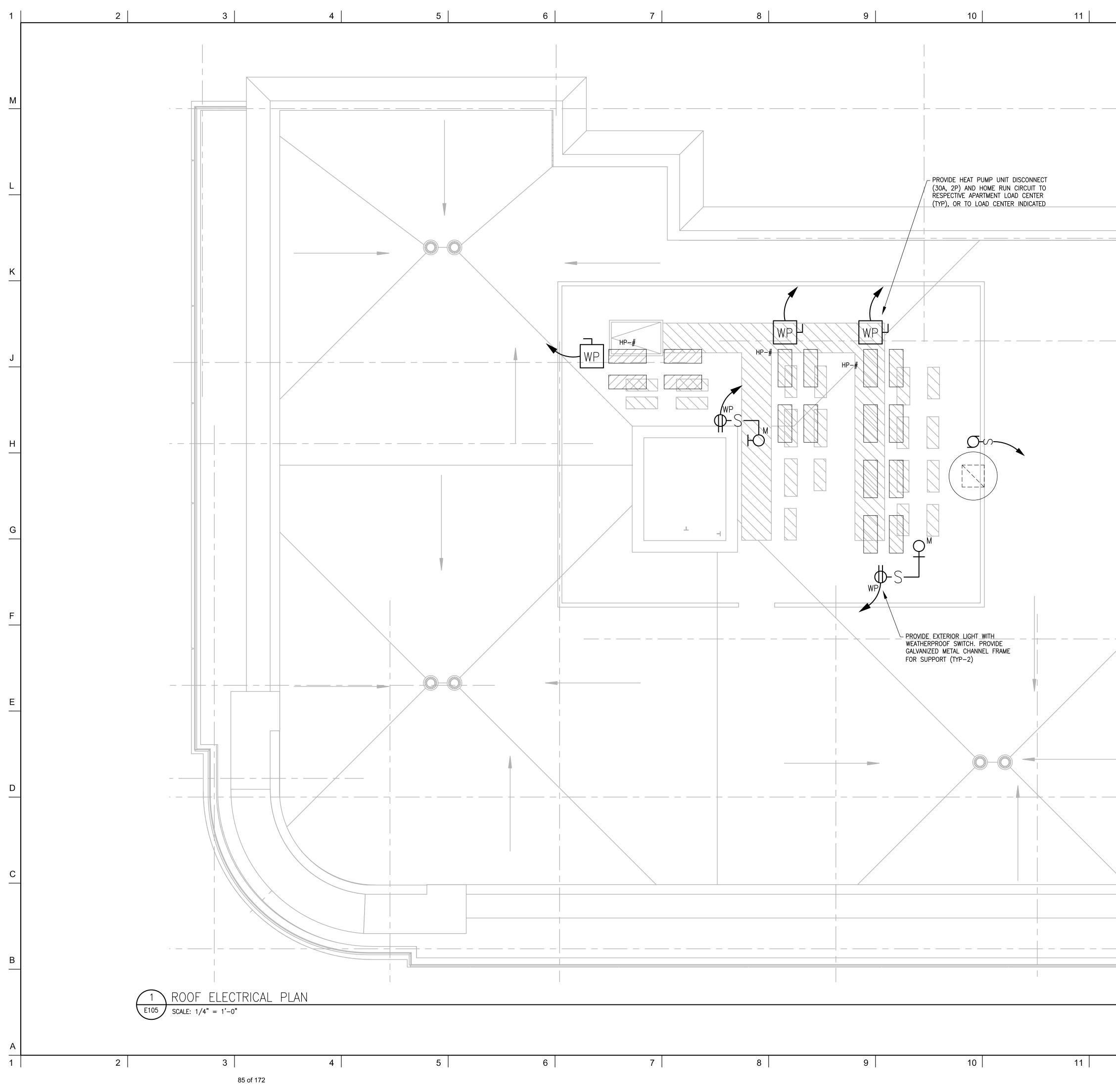
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Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com Consultant NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title SECOND FLOOR ELECTRICAL PLAN Designed BMK Checked GAC Project No. 16045.00 Scale As Noted Date Drawing No. E1002						
Consultant NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title SECOND FLOOR ELECTRICAL PLAN Designed BMK Checked GAC Project No. 16045.00 Scale As Noted Date						
A3 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title SECOND FLOOR ELECTRICAL PLAN Designed BMK Checked GAC Project No. 16045.00 Scale As Noted Date Date ELECTQ		<b>SQUARE</b> Somerville, MA 02144 617.628.5700				
117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474         Title       SECOND FLOOR ELECTRICAL PLAN         Designed BMK       Drawing No.         Checked GAC       Project No. 16045.00         Scale As Noted       As Noted         Date       E1022	Con	SQUARESomerville, MA 02144ARCHITECTS617.628.5700www.davissquarearchitects.com				
Title SECOND FLOOR ELECTRICAL PLAN Designed BMK Checked GAC Project No. 16045.00 Scale As Noted Date	Con	SQUARE ARCHITECTS Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250				
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GAC Project No. 16045.00 Scale As Noted Date GAC Project No. 16045.00 E102		Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant <u>NORIAN SIANI ENGINEERING, INC.</u> 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ect 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR				
Telebox Contract of the second scale As Noted E102	Proje	somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant MORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ect 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR ELECTRICAL PLAN				
Date	Proje	sultant ARCHITECTS Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant MORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ect 117 BROADWAY 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR ELECTRICAL PLAN Designed BMK Checked Drawing No.				
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		ELECTRICAL NOTES:
		1. THE ELECTRICAL CONTRACTOR SHALL FOLLOW ALL APPLICABLE NEC, STATE, LOCAL, AND FEDERAL CODES RELATING TO THE
		WORK. 2. ELECTRICAL CONTRACTOR SHALL PAY FOR AND SECURE ALL
		3. INSTALL ALL ELECTRICAL EQUIPMENT AND MATERIALS FOR
		COMPLETE AND OPERABLE SYSTEMS.
		4. TYPE "NM" WIRING MAY BE USED WHERE ALLOWED BY CODE. ALL WIRING IN MECHANICAL ROOMS SHALL BE "MC".
		5. ALL CONDUCTORS SHALL BE COPPER WITH TYPE "THHN/THWN" INSULATION. THE MINIMUM CONDUCTOR SIZE FOR BRANCH CIRCUITS SHALL BE NO. 12 AWG.
		6. SEAL ALL CONDUIT PENETRATIONS THROUGH WALLS AND FLOORS FOR FIREPROOFING AND WEATHERPROOFING.
		7. ALL MATERIAL SHALL BE NEW AND BEAR THE U.L. LABEL AND SHALL BE INSTALLED IN THE MANNER FOR WHICH THEY WERE DESIGNED AND APPROVED.
		8. E.C. SHALL PROVIDE SUBMITTALS FOR ALL ELECTRICAL EQUIPMENT DEVICES, LIGHTING AND SPECIALTY SYSTEMS.
		9. GROUND ALL EQUIPMENT PER NATIONAL ELECTRIC CODE.
		<ol> <li>ALL ELECTRICAL EQUIPMENT SHALL HAVE ENGRAVED PLASTIC NAMEPLATES. ALL PANEL BOARDS' CIRCUIT DIRECTORIES SHALL BE TYPED.</li> </ol>
		11. THE CONDUIT/WIRE SIZES AND WIRING DIAGRAM REPRESENTS A SUGGESTED DESIGN BASED UPON STANDARD ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE ACTUALLY INSTALLED EQUIPMENT. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE ALL EQUIPMENT WIRING REQUIREMENTS, PRIOR TO CONSTRUCTION.
		12. COORDINATE EXACT EQUIPMENT LOCATIONS AND POWER REQUIREMENTS WITH OWNER AND ARCHITECT PRIOR TO ROUGH-INS.
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7 '		
		No.     REVISIONS/SUBMISSIONS     Date
		DAVIS 240A Elm St., Somerville, MA 02144
		SQUARE     617.628.5700       ARCHITECTS     www.davissquarearchitects.com
		Consultant
	_	NORIAN / SIANI ENGINEERING, INC.
		43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250
		Email: info@NS-Engineering.com
		Project
		117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474
		ELECTRICAL PLAN       Designed   Drawing No.
		BMK Checked
		GAC Project No. 16045.00
		Scale E103
		Date 08.23.2019
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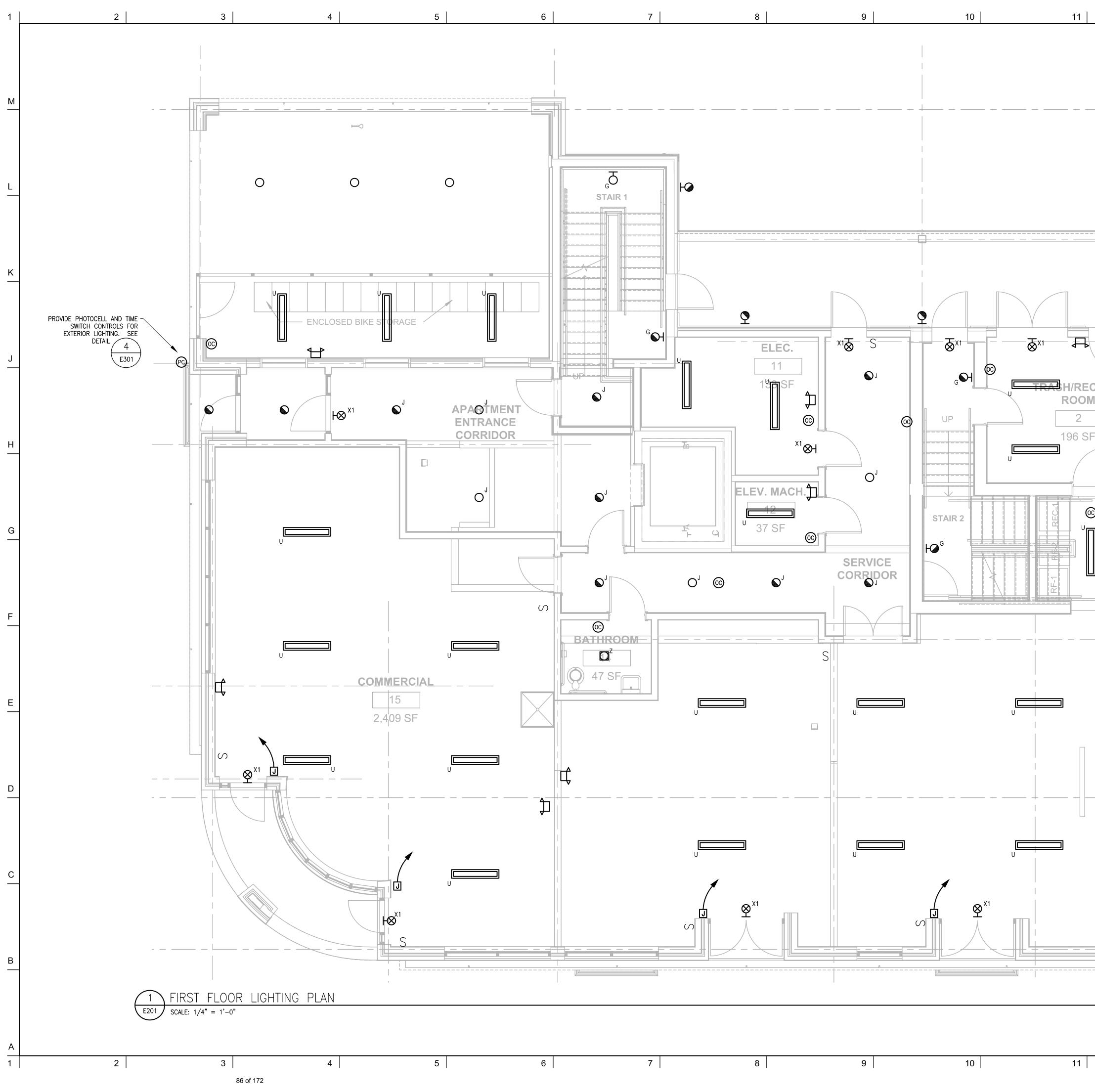


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		COORDINATE EXACT EQUIPMENT LOCATIONS AND POWER REQUIREMENTS WITH OWNER AND ARCHITECT PRIOR TO ROUGH-INS.
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WP	No	D. REVISIONS/SUBMISSIONS Date
l =₹ <sup>™</sup>		
		DAVIS SQUARE 240A Elm St., Somerville, MA 02144
		ARCHITECTS     617.628.5700
	Cons	sultant
		NORIAN SIANI ENGINEERING, INC.
		43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250
		Email: info@NS-Engineering.com
	Proje	ect
		117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474
	Title	FOURTH FLOOR
		ELECTRICAL PLAN
		Designed Drawing No. BMK
		Checked GAC Project No.
		16045.00
		As Noted <b>CIU4</b>
12	13	08.23.2019



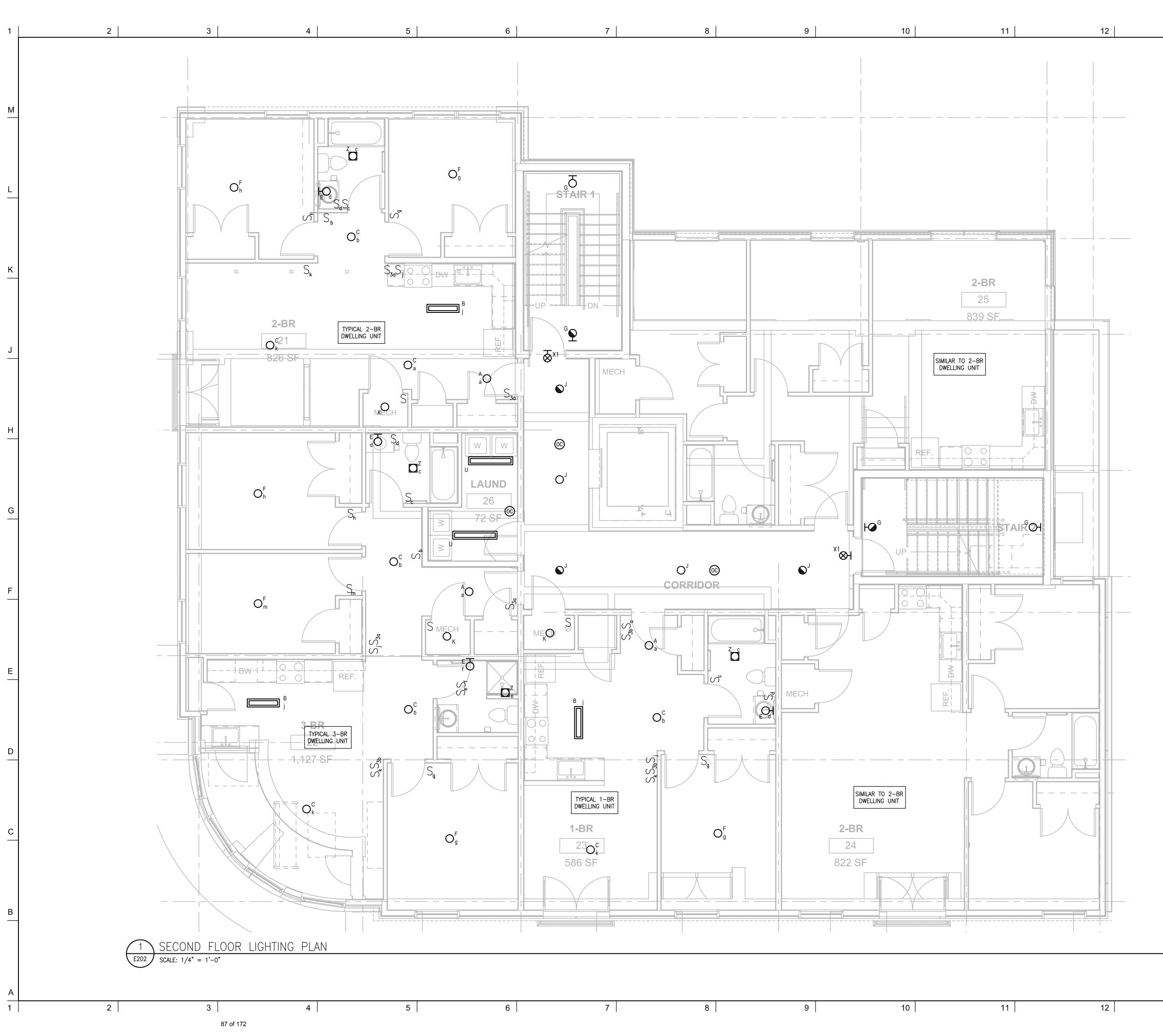
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	No. REVISIONS/SUBMISSIONS	Date
	DAVIS SQUARE 240A Elm St., Somerville, MA 02144 617 628 5700	
	SQUARE     617.628.5700       ARCHITECTS     www.davissquarearchitects.com	
	Consultant	
	NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor	
	Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	
	- 0 0	
	Project 117 BROADWAY	
	117 BROADWAY, ARLINGTON, MA 02474	
	NOUL LEUTRICAL FLAIN	
	Designed Drawing No. BMK	
	Checked GAC Project No.	
	Project No.       16045.00       Scale       As Noted	
	Date	)
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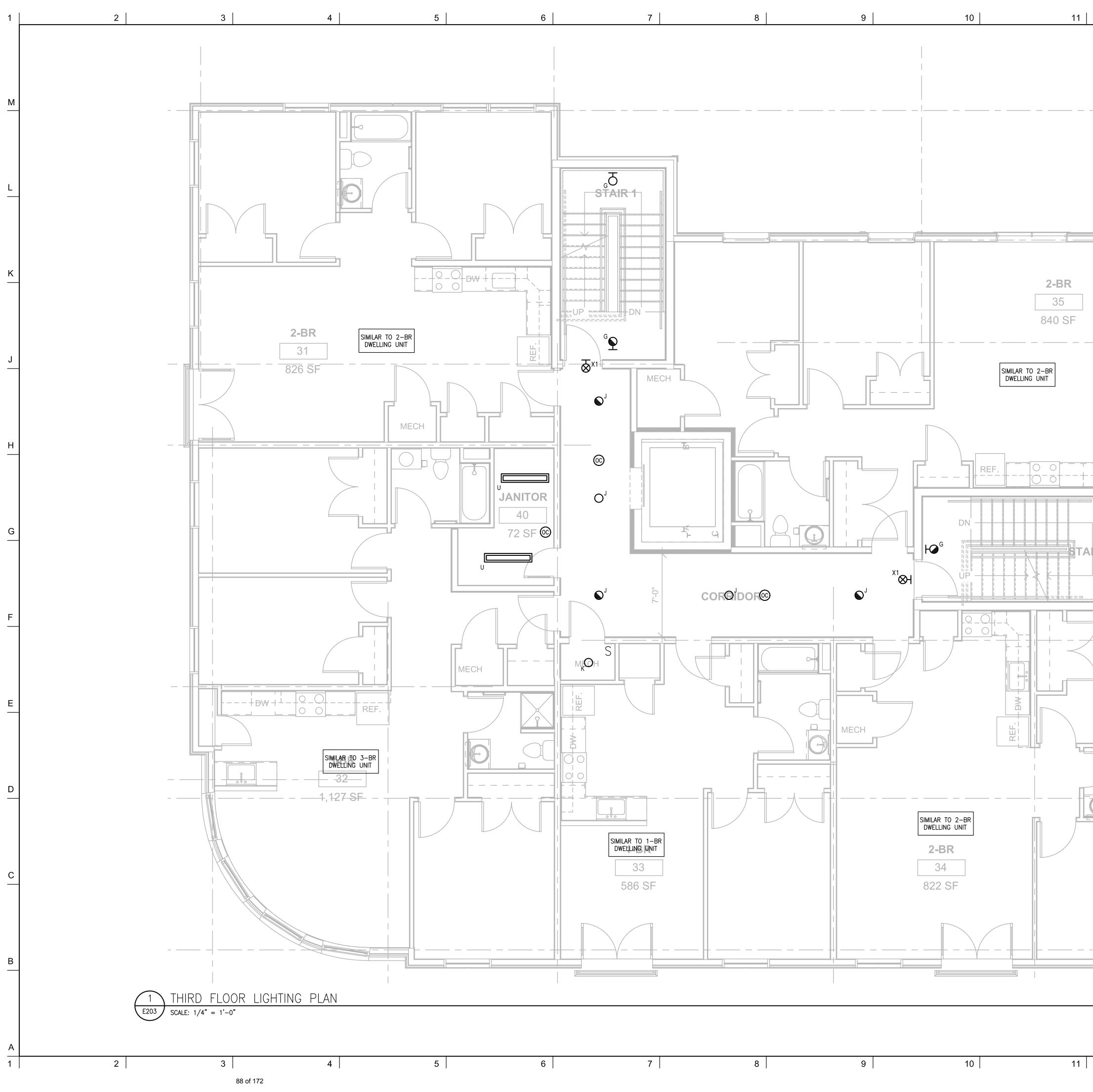




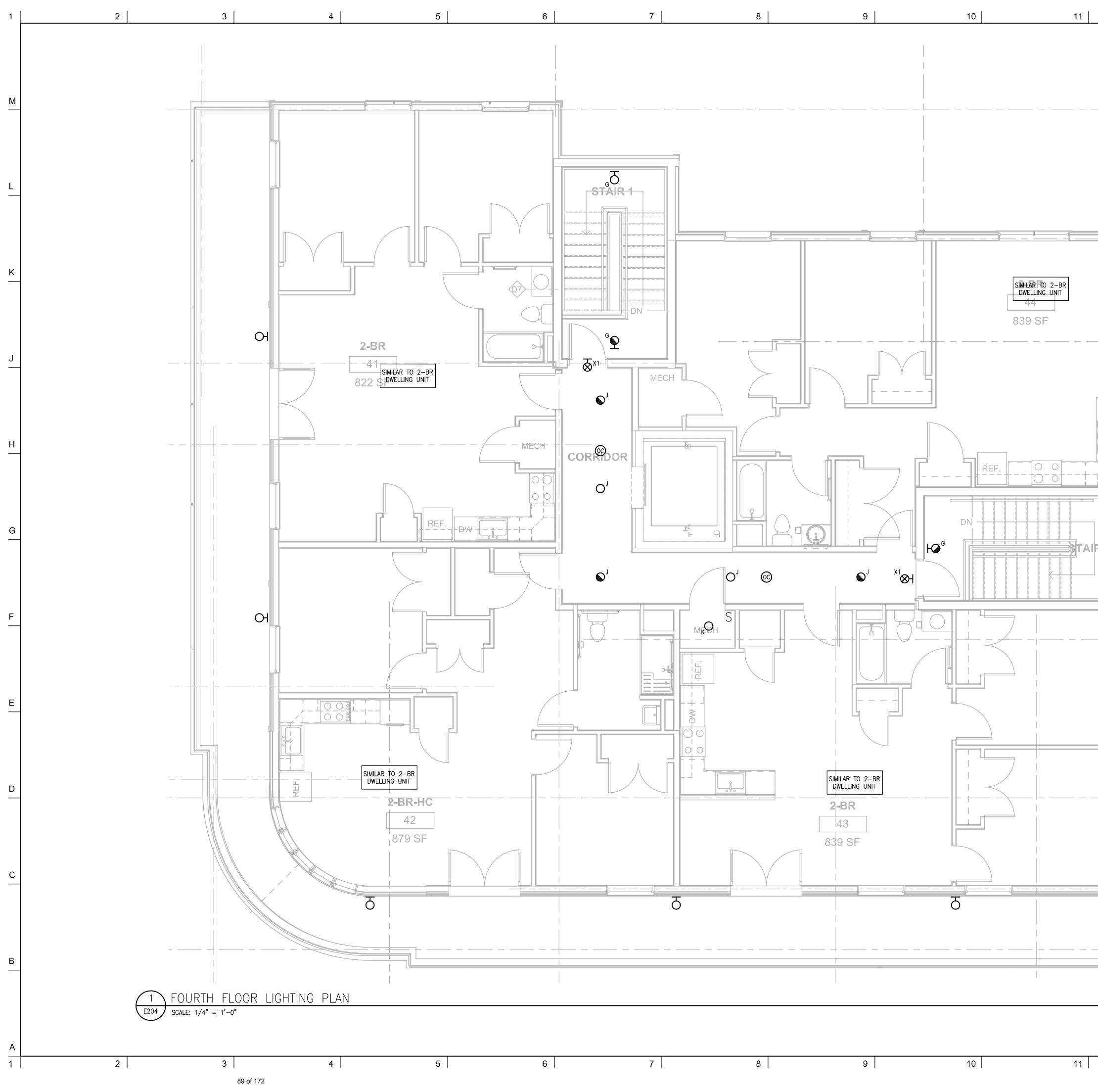
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	No. REVISIONS/SUBMISSIONS Date
<u></u>	SQUARE Somerville, MA 02144 617.628.5700
	A R C H I T E C T S www.davissquarearchitects.com Consultant
	NORIAN / SIANI ENGINEERING, INC.
	43 Bradford Street, 3rd Floor Concord, MA 01742
	Tel: (781) 398-2250 Email: info@NS-Engineering.com
	Project
	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474
	LIGHTING PLAN Designed Drawing No.
	BMK Checked GAC
	Project No.
	Scale E201
12 13	Date 08.23.2019
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EL	ECTRICAL NOTES:
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N	o. REVISIONS/SUBMISSIONS Date
	DAVIS 240A Elm St.,
	SQUARE ARCHITECTS Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com
Con	Isultant
	NODIANI / SIANII ENICINIEEDINIC INIC
	NORIAN / SIANI ENGINEERING, INC.
	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742
	43 Bradford Street, 3rd Floor
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Proj	43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com
Proj Title	43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com
	ect 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR
	ect 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR LIGHTING PLAN Designed Drawing No.
	A3 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ect 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR LIGHTING PLAN Designed BMK Checked GAC Project No. 16045 00
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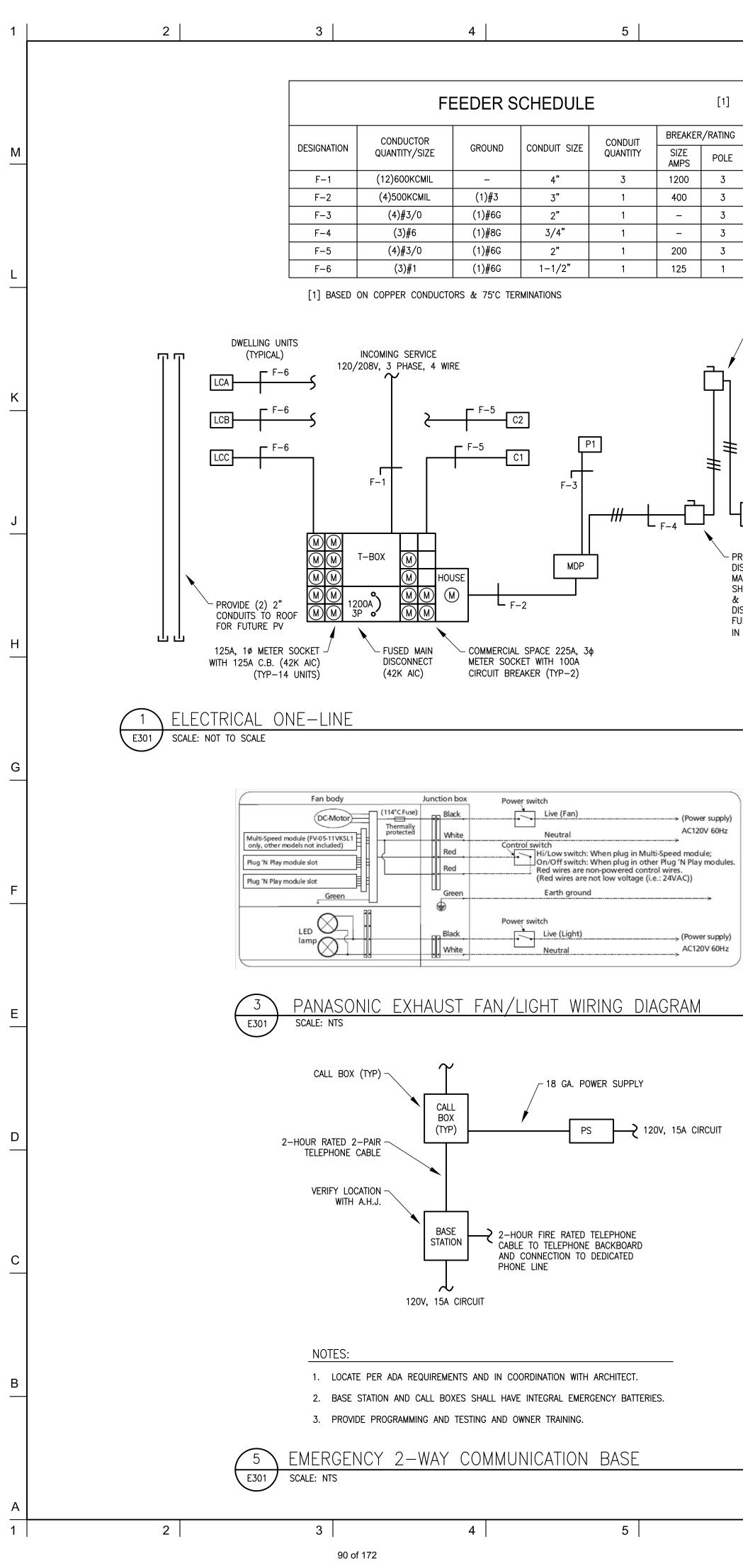


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	COMPLETE AND OPERABLE SYSTEMS.       Image: Complete and operable systems.         4. TYPE "NM" WIRING MAY BE USED WHERE ALLOWED BY CODE.       Image: Complete and operable systems.
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	No.     REVISIONS/SUBMISSIONS     Date
	DAVIS 240A Elm St., Somerville, MA 02144
	SQUARE     Somervine, WV 02144       ARCHITECTS     617.628.5700       www.davissquarearchitects.com
	Consultant
	NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor
	Concord, MA 01742 Tel: (781) 398-2250
	Email: info@NS-Engineering.com
	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474
	Title THIRD FLOOR LIGHTING PLAN
	Designed Drawing No.
	BMK Checked
	GAC Project No. 16045.00
	Scale As Noted E203
1	Date 08.23.2019
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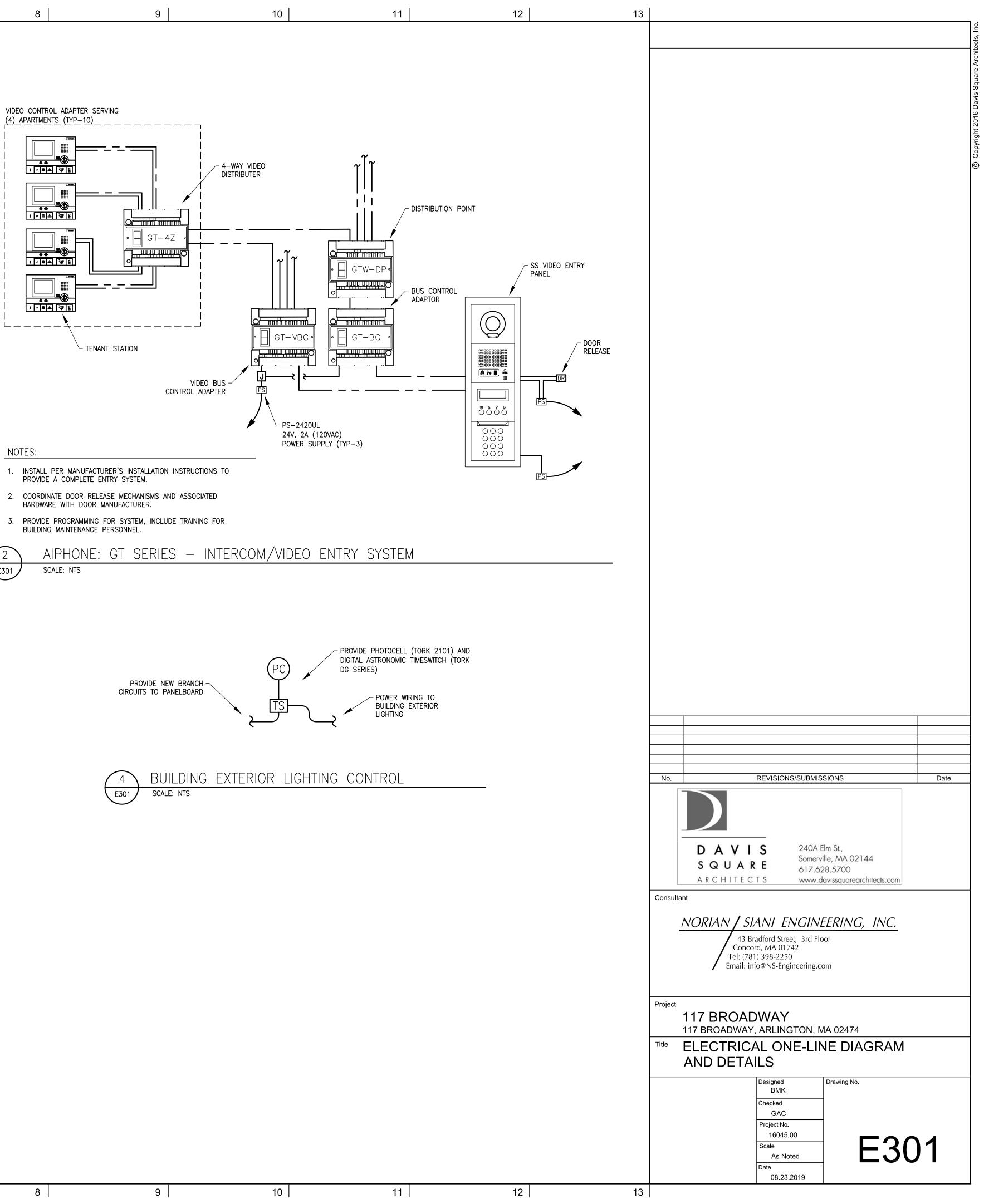
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	DAVIS 240A Elm St., Somerville, MA 02144
	SQUARE     Sometime, Web2144       617.628.5700     617.628.com
	Consultant
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	Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com
	Project 117 BROADWAY
	117 BROADWAY, ARLINGTON, MA 02474         Title       FOURTH FLOOR
	LIGHTING PLAN Designed Drawing No.
	BMK Checked
	GAC Project No. 16045.00
	Scale E204
40	Date 08.23.2019
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7

8 VIDEO CONTROL ADAPTER SERVING / LOCATE IN HOISTWAY AT TOP OF LANDING ELEVATOR CONTROLLER # 15.0 HP PROVIDE HEAVY DUTY FUSED DISCONNECT, FUSED PER MANUFACTURER, DISCONNECT NOTES: SHALL INCLUDE A SET OF N.O. & N.C. AUXILLIARY CONTACTS TO DISABLE THE BATTERY LOWERING FUNCTION WHEN DISCONNECT IS IN THE "OFF" POSITION. E301



$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				PLUMBING LEGEND				, , , , , , , , , , , , , , , , , , ,		PLUMBING FIXTURE SCHEDULE					
	ABE	REVIATIONS		NEW WORK (BOLD LINE)	- SD - STORM DRAIN	PIPING	DWG ID FIXTURE	MANUFACTURER	MODEL NO	REMARKS	GPM GPF	WASTE	VENT	CW	D
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	AFF AHU			EXISTING WORK			P-1 TOILET SEAT	ТОТО ТОТО		FLOOR-MOUNT, TANK-TYPE, ELONGATED, UNIVERSAL-HEIGHT, ADA, MaP: 1000G [4][6 SOFTCLOSE SEAT, ELONGATED, CLOSED FRONT, WITH LID	/] 1.28 –	3"	1-1/2"	1/2"	
Control of the control of th	BFP BWV	BACKWATER VALVE	-	EQUIPMENT TAG (SEE SCHEDULE)			P-2			SINGLE HANDLE, SINGLE HOLE DECK-MOUNT, POP-UP DRAIN, LIFT-ROD ASSEMBLY, LOW-FLOW	-	1-1/2"	1-1/4"		
The state water         The state	0	CLEAN OUT	$\longleftrightarrow$		GAS VENT LINE					AMERICAST, RECESS BATH, INTEGRAL OVERFLOW, LIFT & TURN DRAIN STOPPER, INTEGRAL APRON, [12		1-1/2"	1-1/4"		-
Image: Notice of the Vertex of the Verte	W W	COLD WATER						SYMMONS	S-5502-X-1.5 ELM		۶] <u>1.5</u>	-		1/2"	
Image: Instance wave $\Theta_{11}$ $A_{12}$ (constance wave $\Theta_{12}$ $A_{12}$ (constance wave $\Theta_{12}$ (constance wave		DOMESTIC HOT WATER		FLOOR DRAINS				COMFORT DESIGNS	SST 6232 TR .75	PHENOLIC FOLD-UP SEAT, INTEGRAL FRONT TRENCH DRAIN, 3/4" THRESHOLD	-   -	2"	1-1/4"	_	
R       Desk to the full part of	)LW )U	DEDICATED LAUNDRY WASTE	⊗ <sub>AD</sub>	AREA DRAINS				SYMMONS	C-96-300-B30-V-X			_		1/2"	
$ \begin{array}{c} \\ \hline \\ $	R C	ELECTRICAL CONTRACTOR	⊗ <sub>RD</sub>				P-4A			DRAIN (CENTER), 3/4" THRESHOLD [12		2"			
CONSTRUCTOR CONSTRUCTO	<u>_</u>	FIREPLACE	• C(	)		line	KITCHEN SINK	ELKAY	ECTSR25220BG CROSSTOWN	UNIVERSAL-MOUNT, SINGLE BOWL, 18 GA SS, 33"x22"x9, WITH SOUND GUARD UNDERCOAT [13][15	6] _	1-1/2"		_	-
NOTICE         CLARENCY INST.         CLARENCY INST.<		GENERAL CONTRACTOR	● <sub>C0</sub> 〒			PIPING		ELKAY	LK99	TYPE 304 STAINLESS STEEL BODY, REMOVABLE CONICAL BASKET STRAINER, RUBBER STOPPER	-			1/2" 	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		INDIRECT WASTE	ு		-					UNDER-MOUNT, SINGLE BOWL, 18 GA SS, 30-1/2"x18-1/2"x5-3/8, WITH REAR CENTER PERFECT	-	1-1/2"	1-1/4"		
OPERION STORE DRAW       Image: Draw in the integration of the integrated of the integration of the integration of the integ		NOT IN CONTRACT	ţ X	· · · · ·				DELTA IN-SINK-ERATOR		SINGLE HANDLE, DECK-MOUNT, 2-FUNCTION PULL-DOWN SPRAYER [13][15]	] 1.5		_ ! 	1/2"	
PLANE       PLANE <t< td=""><td></td><td>OVERFLOW STORM DRAIN</td><td></td><td>BRASS CAP AND CHAIN</td><td>-</td><td>/ DRAIN</td><td>JANITOR'S SINK</td><td>FIAT</td><td>MSB2424</td><td>STRAINER, STAINLESS STEEL LINT BASKET, STAINLESS STEEL WALL GUARD</td><td>_</td><td>3"</td><td>1-1/2"</td><td></td><td></td></t<>		OVERFLOW STORM DRAIN		BRASS CAP AND CHAIN	-	/ DRAIN	JANITOR'S SINK	FIAT	MSB2424	STRAINER, STAINLESS STEEL LINT BASKET, STAINLESS STEEL WALL GUARD	_	3"	1-1/2"		
Pressure EXECUTO VALCE       Pressure Concent       Presure Concent       Pressure Concent		PLUMBING CONTRACTOR	'   \			LATION VALVE		FIAT	830 AA	SPOUT, 4-ARM HANDLES, 3" HEAVY DUTY 5/8" RUBBER HOSE, STAINLESS STEEL BRACKET WITH	-	-	_	1/2"	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		PRESSURE REDUCING VALVE		EMERGENCY DRENCH SHOWER	<b>→</b>			J R SMITH	2005-P050-NB	GENERAL SERVICE, DUCO CAST IRON BODY, FLASHING COLLAR, ADJUSTABLE STRAINER HEAD, 1/2"	-	2"	1-1/4"		•
STORM DRAIN TYPICAL       Image: Concentratic Boilter vent       Image: Concent       Image: Concentratic Boilter ve	-	REDUCED PRESSURE ZONE	сШ С		REDUCED PRES	SSURE ZONE (RPZ)	TRAP PRIMER			AUTOMATIC, CAST BRONZE, 1/2" CONNECTION		-	'	1/2"	_
UNLESS NOTED OTHERWISE       VM       FLEXIBLE CONNECTOR       Image: FLAXISE       FLAXISE<		TYPICAL	٦	· · · · · · · · · · · · · · · · · · ·		3-WAY VALVE				FREEZE-PROOF, VACUUM BREAKER, ANTI-SIPHON, TEE KEY-OPERATED, CHROME FINISH, WITH BRASS				3/4"	_
SANTARY WASTE       W       Water Meter       Image: Cast iron Domé       Cast iron Domé       Santary       Santary       Water Meter       Santary       Santary       Water Meter       Cast iron Domé       Santary       Santary       Santary       Water Meter       Santary       Santary       Water Meter       Santary       Santary       Water Meter       Santary       Santary       Water Meter       Santary       Sant	)	VENT			.1.		D 11 ROOF DRAIN			DUCO CAST IRON BODIES, COMBINED FLASHING CLAMP & GRAVEL STOP, DECK PLATE, OVERFLOW			!		-
COLL SOLIDUCLY       THERMOMETER       STRAINER WITH BALL VALVE W/ 3/4" HOSE       STRAINE WITH BALL VALVE W/ 3/4" HOSE       STR		SANITARY WASTE			BWV		OVERFLOW DRAIN					SIZING	'		
TEMPERATURE SENSORIntervine Convection, Brass cap and chainAquastatOverflow downspout nozzle $P-13$ Laundry valveSYMMONS $w-602-x$ IN-wall supply & DRAIN, Brass sump PAN, Lever control, with service stops $[14]$ $ 2"$ $1-1/4"$ $1/2"$ Aquastat $Pressure gauge$ $Overflow downspout nozzleP-13Laundry valveSYMMONSw-602-xIN-wall supply & DRAIN, Brass sump PAN, Lever control, with service stops[14] 2"1-1/4"1/2"Pressure gaugeOverflow downspout nozzleP-13Laundry valveSYMMONSw-602-xIN-wall supply & DRAIN, Brass sump PAN, Lever control, with service stops  -$		· · · · · · · · · · · · · · · · · · ·	Ē		BACKWATER VA		P-12 NOZZLE	J R SMITH	1770-NB-BS	CAST NICKEL-BRONZE AND FLANGE, BIRD SCREEN		FOR	!	-	
P-14 PRESSURE GAUGE COMMERCIAL FOLLET AMERICAN STANDARD AMERICAN STANDARD AMERICAN STANDARD 6047.121.002 MANUAL FLUSH, PISTON-TYPE, HIGH PRESSURE VACUUM BREAKER, NON-HOLD OPEN HANDLE – – – 1" PRESSURE GAUGE OUTY, OPEN FRONT, LESS COVER – – – – – 1" PRESSURE CARRIER VALVE, FOR STANDARD 6047.121.002 MANUAL FLUSH, PISTON-TYPE, HIGH PRESSURE VACUUM BREAKER, NON-HOLD OPEN HANDLE – – – – 1" PRESSURE GAUGE OUTY, OPEN FRONT, LESS COVER – – – – – – – – – – – – – – – – – – –			₽ A								<u> </u>		,	1/2"	
CLOSET CARRIER J.R. SMITH 0450 COMPACT, CENTER LINE TYPE				UYLNILUW DUWWSFUUT NUZZLE			P-14 FLUSH VALVE SEAT	AMERICAN STANDARD AMERICAN STANDARD	6047.121.002 5901.100	MANUAL FLUSH, PISTON-TYPE, HIGH PRESSURE VACUUM BREAKER, NON-HOLD OPEN HANDLE HEAVY DUTY, OPEN FRONT, LESS COVER	- - -	3" — —	1-1/2"     _ _	- 1" -	
	-						CLOSET CARRIER	J R SMITH	0450 0954.000 MURRO	COMPACT, CENTER LINE TYPE WALL-MOUNT, REAR OVERFLOW, RECESSED SELF-DRAINING DECK, DRILLED FOR CONCEALED ARM	-	- 1-1/2"	 1-1/4"	-	-

# GENERAL PLUMBING NOTES

1

GENERAL CONDITIONS & SPECIFICATIONS: THE GENERAL CONDITIONS, AND SPECIFICATIONS ARE PART OF THIS WORK. IT IS THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND BE FAMILIAR WITH THESE CONDITIONS & SPECIFICATIONS.

2 3

- 2. CODES AND ORDINANCES: INSTALLATION OF THE SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL MECHANICAL CODE, AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, CODES, AND ORDINANCES.
- 3. REQUIREMENTS: OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES AND CERTIFICATES.
- 4. DESIGN: EQUIPMENT AND ACCESSORIES NOT SPECIFICALLY DESCRIBED OR IDENTIFIED BY MANUFACTURER'S CATALOG NUMBERS SHALL BE DESIGNED IN CONFORMITY WITH ASME, ASPE, AGA, UL OR OTHER APPLICABLE TECHNICAL STANDARDS, SUITABLE FOR MAXIMUM REQUIRED WORKING PRESSURE AND SHALL HAVE NEAT AND FINISHED APPEARANCE.
- INSTALLATION: ERECT EQUIPMENT IN NEAT AND WORKMANLIKE MANNER; INSTALL SO THAT CONNECTING AND DISCONNECTING OF PIPES, EQUIPMENT AND ACCESSORIES CAN BE MADE READILY AND SO THAT ALL PARTS ARE EASILY ACCESSIBLE FOR INSPECTION, OPERATION, MAINTENANCE AND REPAIR. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND THE BEST STANDARD PRACTICE FOR THIS TYPE OF WORK.
- 6. STANDARD PRACTICE: IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY FITTING, CONNECTION, OR APPLIANCE. THIS CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS IN ACCORDANCE WITH THE BEST STANDARD PRACTICE OF THE TRADE.
- 7. EQUIPMENT LOCATION: THE P.C. SHALL VERIFY THE LOCATIONS AND MOUNTING HEIGHTS OF ALL EQUIPMENT AND MATERIALS, AND THE EXACT ROUTING OF ALL PIPES, WITH THE OWNER'S REPRESENTATIVE IN THE FIELD, PRIOR TO COMMENCING ANY WORK. ANY CONFLICTS WITH LOCATIONS, OR PROBLEMS ENCOUNTERED WITH ROUTING, SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR RESOLUTION. COORDINATE ELECTRICAL CHARACTERISTICS FOR ALL EQUIPMENT WITH E.C. BEFORE ORDERING EQUIPMENT. COORDINATE WITH M.C. FOR CW FEEDS, CONDENSATE, DHW, ETC.
- D MATERIALS: ALL MATERIALS, FIXTURES, AND EQUIPMENT SHALL BE NEW WITHOUT IMPERFECTIONS AND SHALL BE DELIVERED, ERECTED, CONNECTED, AND FINISHED IN EVERY DETAIL. WHEREVER POSSIBLE, ALL TRIM, ACCESSORIES, AND PARTS SHALL BE OF THE SAME MANUFACTURER AS THE RELATED EQUIPMENT AND FIXTURES.
- 9. PLUMBING: ALL PLUMBING SHALL BE INSTALLED IN ACCORDANCE WITH COMMONWEALTH OF MASSACHUSETTS FUEL GAS AND PLUMBING CODE, 248 CMR, & NFPA 54.
- 10. ELECTRICAL: ALL ELECTRICAL SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND ALL LOCAL REQUIREMENTS.
- 11. GENERAL COORDINATION: EXAMINE ALL DRAWINGS AND OTHER SECTIONS OF THE SPECIFICATIONS FOR REQUIREMENTS WHICH AFFECT THE WORK OF THIS SECTION. COORDINATE WORK WITH THAT OF OTHER TRADES AFFECTING, OR AFFECTED BY, WORK OF THIS SECTION. COOPERATE WITH OTHER TRADES TO ENSURE THE STEADY PROGRESS OF THE WORK.
- 12. PROTECTION OF EQUIPMENT AND MATERIALS: RESPONSIBILITY FOR CARE AND PROTECTION OF ALL MATERIALS AND WORK RESTS WITH THIS CONTRACTOR AT ALL TIMES UNTIL IT HAS BEEN APPROVED.
- 13. GUARANTEE: ALL NEW COMPONENTS OF THE INSTALLATION SHALL BE GUARANTEED IN WRITING BY THIS CONTRACTOR TO BE FREE FROM DEFECTS OF MANUFACTURE AND INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF WRITTEN ACCEPTANCE OF THE ENTIRE BUILDING BY THE ENGINEER. ANY DEFECTS FOUND SHALL BE REPAIRED BY THE PLUMBING CONTRACTOR AT THEIR OWN EXPENSE.
- 14. NOTIFICATION: THE P.C. SHALL NOTIFY THE ENGINEER UPON: (1) COMPLETION OF ALL ROUGH PIPING, BEFORE CLOSURE OF ANY TRENCHES, OPEN WALL CAVITIES OR CHASES. (2) UPON "SUBSTANTIAL COMPLETION" OF ALL SYSTEMS INCLUDING OPERATIONAL SYSTEMS AND FINISH WORK. AFTER "SUBSTANTIAL COMPLETION", THE ARCHITECT WILL PREPARE A PUNCH LIST OF ITEMS TO BE CORRECTED. THE P.C. SHALL CORRECT ANY DEFICIENCIES FOUND PROMPTLY, AT THEIR OWN EXPENSE.
- 15. FINAL COMPLETION: THE WORK SHALL NOT BE CONSIDERED COMPLETE UNTIL THE PUNCH LIST IS COMPLETED TO THE SATISFACTION OF THE ENGINEER AND ALL FINAL INSPECTIONS HAVE BEEN COMPLETED.
- 16. THE REQUIREMENTS OF THE STRETCH CODE HAVE BEEN ADOPTED BY THE LOCAL AUTHORITY, APPENDIX 115 AA, 780CMR. ALL WORK PERFORMED MUST CONFORM TO THESE REQUIREMENTS.

91 of 172

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[1] PROVIDE QUARTER-TURN STOP VALVES. FOR CONCEALED-TYPE FIXTURES PROVIDE INTEGRAL STOP VALVES OR CONCEALED STOP VALVES WITH ACCESS PANEL. FOR EXPOSED FIXTURES PROVIDE CHROME-PLATED VALVES, PIPING, AND ESCUTCHEONS FOR EACH FIXTURE.

PROVIDE AIR CHAMBERS @ CONNECTIONS TO ALL FIXTURES. ARCHITECT WILL SELECT COLOR AND FINISH DURING SUBMITTAL REVIEW. COLOR AND FINISH WILL BE SELECTED FROM MANUFACTURER'S STANDARD OPTIONS UNLESS

SPECIFICALLY NOTED OTHERWISE. SELECT HANDEDNESS OF FIXTURE SUCH THAT HANDLE IS LOCATED ON APPROACH SIDE

[5] ALL PLUMBING FIXTURES SHALL BE LEAD-FREE AS REQUIRED BY THE "REDUCTION OF

LEAD IN DRINKING WATER ACT".

[6] FIXTURE SHALL BE EPA WATERSENSE LABELLED. WHERE FIXTURE MANUFACTURER HAS NOT APPLIED FOR WATERSENSE CERTIFICATION, FIXTURE HAS BEEN SPECIFIED TO MEET WA ALL TRAPS SHALL BE CHROME-PLATED BRASS.

PROVIDE CLEANOUT AT KITCHEN SINKS.

PROVIDE MANUFACTURER'S FLOW-LIMITING SPINDLE TO LIMIT FLOW TO 1.5 GPM.

10] CONFIRM LOCATION OF SHOWER VALVE AND HEAD WITH ARCHITECT PRIOR TO INSTALLATION.

PROVIDE TRU-BRO PIPE PROTECTION PADDING VERIFY MEASUREMENT/SIZE IN FIELD BEFORE ORDERING (E.G TUBS & HC SHOWERS).

PROVIDE WASTE AND DHW CONNECTION FOR DISHWASHER. PROVIDE ASSE-1010 COMPLIANT WATER HAMMER ARRESTER. UNIT SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION

PROVIDE CW CONNECTION TO REFRIGERATOR ICE MAKER. PROVIDE DEDICATED 1/4-TURN ISOLATION VALVE IN SINK BASE CABINET AND 1/4" PIPING TO ICE MAKER.

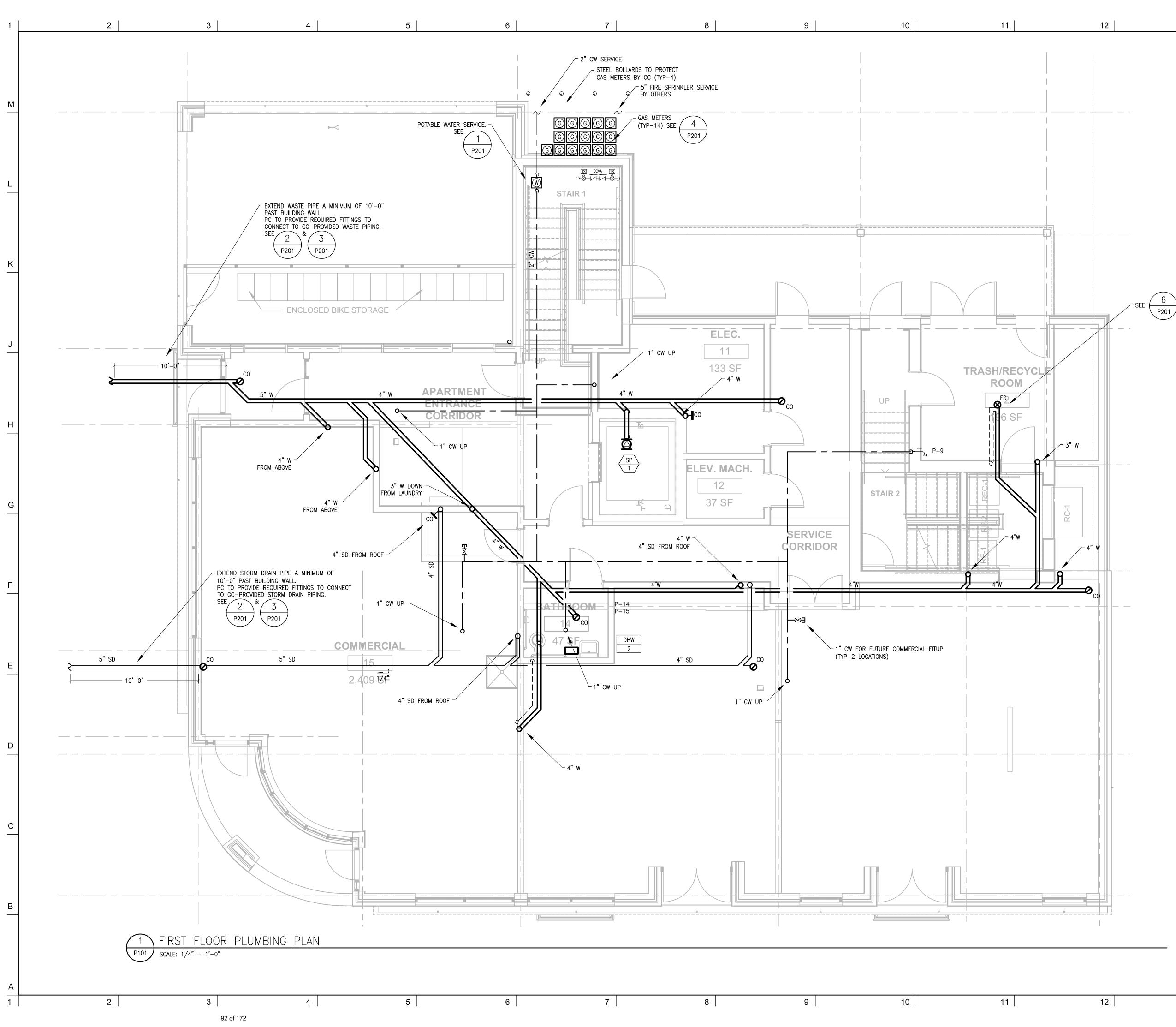
			PLUMBIN	NG EQUIPMENT SCHEDULE	CTRICITY [1]
DWG ID	EQUIPMENT	MANUFACTURER	MODEL NUMBER	PERFORMANCE	ELECTRICAL DATA V/ø/Hz HP
DHW-1	DHW HEATER	NAVIEN	NPE-240A	199,000 BTU/Hr, 96 EFF., 5.6 GPM @ 67*∆T, 3/4" CW/DHW CONNECTION, 82 LBS, DIRECT VENT	120/1/60
DHW-2	ELECTRIC INSTANTANEOUS DHW HEATER	EEMAX	SP4208-EX	UNDER SINK MOUNT, NI CHROME ELEMENT, UL-LISTED, 1/2" COMPRESSION FITTINGS AT BOTTOM OF UNIT	208/1/60
SP-1	SIMPLEX PUMP ALARM/CONTROLS	ZOELLER ZOELLER	MODEL 161 MODEL 10-2149	OIL GUARD SYSTEM, POWDER COATED EPOXY CAST IRON, STAINLESS STEEL FITTINGS, 85 GPM/15 FT HD NEMA 4X WATERTIGHT ENCLOSURE, OIL SMART LIQUID ALARM SWITCH, AUDIBLE/VISUAL ALARMS, VARIABLE LEVEL FLOAT SWITCH, LINE CORD	115/1/60 1/2Нр
TV-1	DHW TEMPERING VALVE	HONEYWELL	AM-101-1	PROPORTIONAL THERMOSTATIC MIXING AND DIVERTING VALVE, MAX FLOW 12 GPM, CV 3.1	N/A

[1] COORDINATE ALL ELECTRICAL CHARACTERISTICS W/ EC BEFORE ORDERING EQUIPMENT.

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ATERSENSE	GUIDELINES.	

No.		REVISIONS/SUBMIS	SIONS	Date
	D A V I S Q U A R ARCHITEC	E Somerv 617.62	Elm St., ille, MA 02144 28.5700 lavissquarearchitects.com	
Consultant				
	43 Bra Concor Tel: (781	ANI ENGINA adford Street, 3rd Flo rd, MA 01742 ) 398-2250 fo@NS-Engineering.c		
	17 BROAD	)WAY , ARLINGTON, N	1A 02474	
Title PL	UMBING L	EGEND, N	OTES, & SCHE	DULES
		Designed	Drawing No.	
		RWS Checked		
		МАВ	-	
		Project No. 16045.00		
		Scale		
		As Noted	POC	
		Date 08.23.2019		



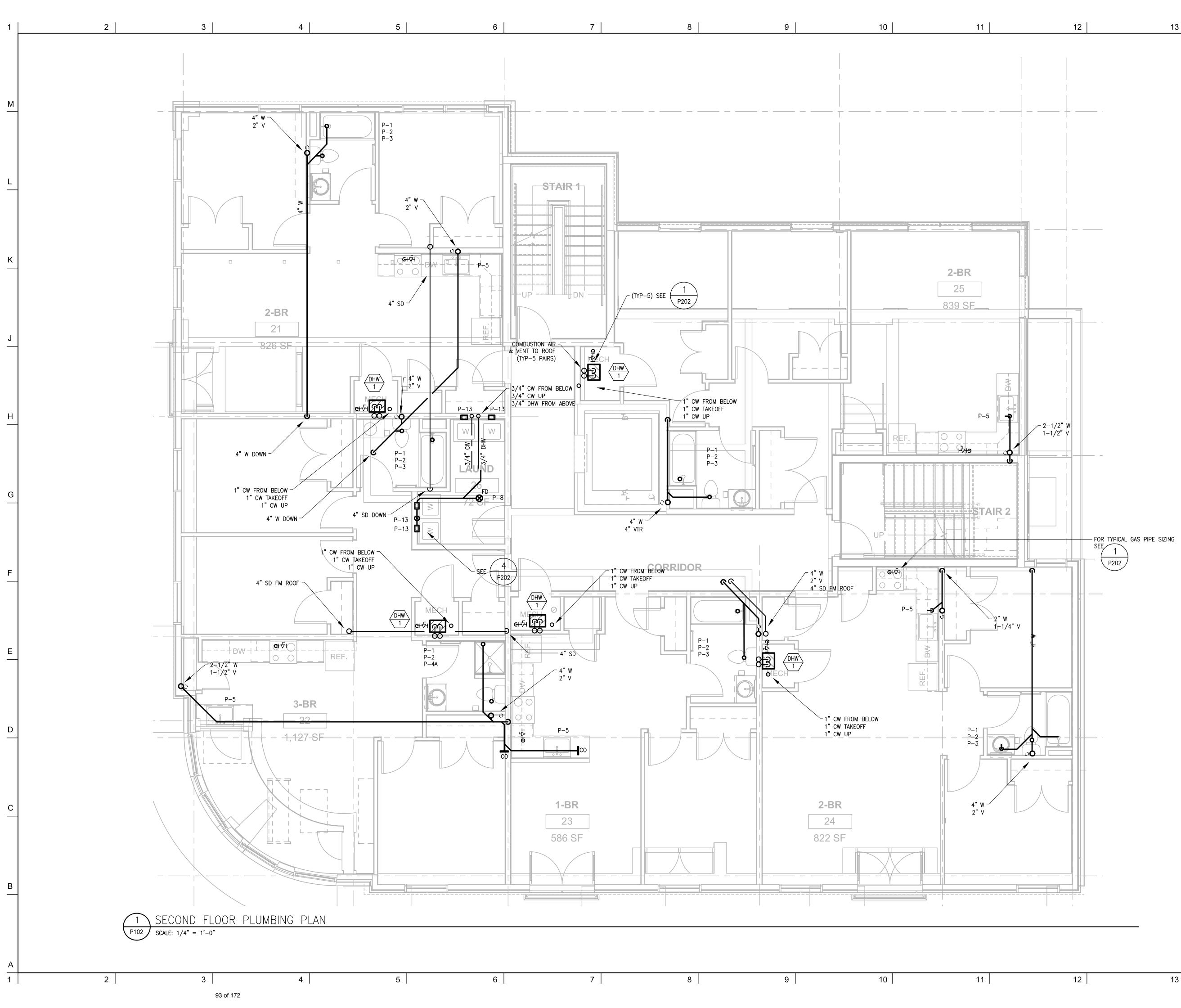
- 1. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.
- 2. INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURER'S INSTRUCTIONS.
- 3. THIS PROJECT MUST CONFORM TO THE REQUIREMENTS OF THE "STRETCH CODE", 780 CMR 120AA.
- 4. PC TO PROVIDE COORDINATION DRAWINGS. ALL REQUIRED PENETRATION OF STRUCTURAL FLOOR FRAMING MUST BE IDENTIFIED IN DRAWINGS. NO FIELD MODIFICATIONS OF FLOOR FRAMING IS PERMITTED.
- 5. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO INSPECT AND VERIFY ALL INFORMATION IN FIELD AND INFORM THE ENGINEERS OF ANY DISCREPANCIES IN WRITING IMMEDIATELY.
- 6. PIPING MAY BE SHOWN DISPLACED FOR CLARITY.
- 7. INSTALL ALL PIPING ON WARM SIDE OF BUILDING INSULATION.
- 8. INSULATE ALL CW, DHW, DHWR, & STORM DRAIN PIPING.
- 9. ALL WASTE & STORM PIPING RUNNING THROUGH GARAGE AREAS SHALL BE INSULATED WITH 1" FIBERGLASS.
- 10. PITCH WASTE AT MINIMUM 1/8" PER FOOT FOR 4" DIAMETER AND LARGER PIPES, 1/4" FOR PIPES LESS THAN 4" IN DIAMETER.
- 11. PC TO PROVIDE ALL REQUIRED FITTINGS AND CONNECTIONS TO CONNECT WITH SITE CONTRACTOR PROVIDED WASTE, STORM DRAINS, GAS, AND CW SERVICES.
- 12. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLID CORE PVC. ALL WASTE AND VENTS WITHIN AND/OR SERVING COMMERCIAL SPACES AND GARAGE TO BE CAST IRON. ALL WASTE AND VENT BELOW SLAB TO BE CAST IRON.
- 13. ALL VERTICAL WASTE & STORM PIPING RISERS RUNNING THROUGH GARAGE AREAS SHALL INCLUDE ALUMINUM PROTECTIVE COVERING
- 14. ALL PVC WASTE PIPE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1" FIBERGLASS
- 15. PROVIDE 1/2" CLOSED-CELL FOAM SLEEVES FOR ALL PIPE WHICH PENETRATES SLAB-ON-GRADE FLOOR PRIOR TO POURING CONCRETE.
- 16. PROVIDE LOCAL ISOLATION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMBING FIXTURE
- 17. VENT FIXTURES PER SCHEDULE AND CONNECT TO RISERS & VENT MAINS SHOWN ON PLAN. ALL VENT PIPING NOT SHOWN.
- 18. PC TO PROVIDE REQUIRED FIRESTOPPING AND AIR SEALING.
- 19. PC TO SUPPLY ACCESS HATCHES. GC TO INSTALL.
- 20. PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC.
- 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.

No.	REVISION	S/SUBMISSIONS	Date
	DAVIS SQUARE ARCHITECTS	240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	

Consultant

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Project								
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	117 BROADWAY		1A 02474					
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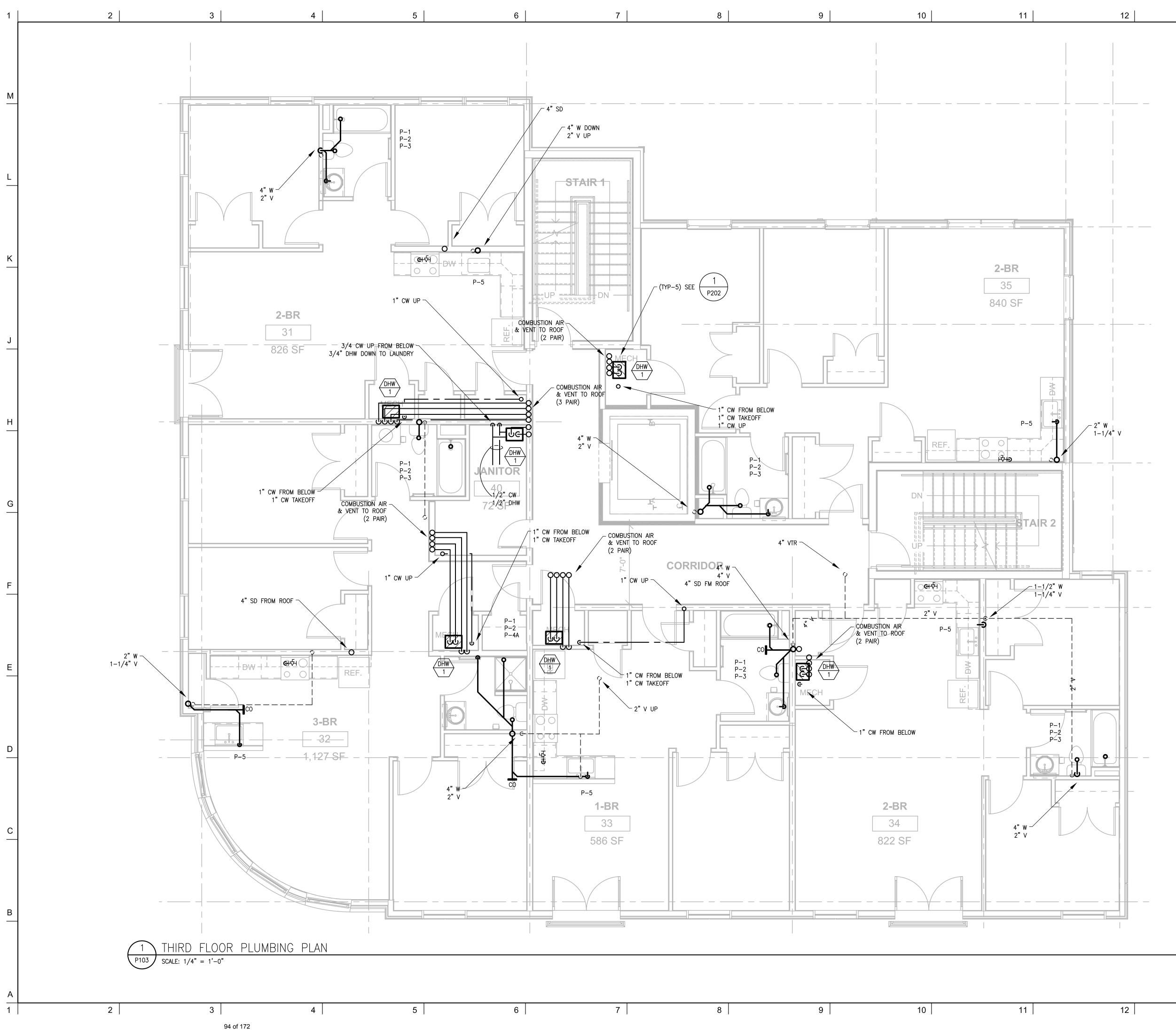


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8. INSULATE ALL CV, DHV, DHVR, & STORM DRIVIN PIPING. 9. ALL MASTE & STORM PIPING RUINING THROUGH GARGE AREAS SHALL BE INSULATED WITH 'T PERCILASS. 11. POT ON PROVIDE ALL PEQUIRED FITTINGS AND CONNECTIONS TO CONNECT WITH STE CONTRACTOR PROVIDED WAST, STORM DRIVIN, GAR, AND CV STREMES. 12. ALL WASTE AND VINTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PYC. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PYC. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PYC. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES NUMBER THROUGH GARAGE AREAS SHALL NOLUDE ALLMANUM PROFECTIVE COVERING 13. ALL WASTE AND VENTS ENDER MENNES RUINING THROUGH GARAGE AREAS SHALL NOLUDE ALLMANUM PROFECTIVE COVERING 14. ALL PYC WASTE PIPE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 'T PREMARKASS 15. PROMOE 1/2" CLOSED-CELL FOM SLEEVES FOR ALL PIPE WHICH PENETRATES SLAB-ON-GONDE FLOOR PINOR TO POURING CONCERTE. 14. ALL PYC WASTE PIPE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1'T REPREATASS 15. PROMOE 1/2" CLOSED-CELL FOM SLEEVES FOR ALL PIPE WHICH PENETRATES SLAB-ON-GONDE FLOOR PINOR TO POURING CONCERTE. 15. PROMOE 1/2" CLOSED-CELL FOM SLEEVES FOR ALL PIPE WHICH PENETRATES SLAB-ON-GONDE FLOOR PINOR TO POURING CONCERTE. 16. PROMOE AND PART ALL EXTERIOR GAS PIPE FER SPC. 17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. CHAR ALL PIPEN ROLES AND SHOWING THROUGH RESIDENTS  17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. OR RISER DAGRAMS AND PIPE SZES, SEE P301. P302, P303, & P304.  17. DE ROADWAY, ARLINGTON, MA 02474  17. BROADWAY, ARLINGTON, MA 02474  17. BROADWAY, ARLINGTON, MA 02474  17. BROADWAY, ARLINGTON, MA 02474  17. PAULA NO PIPE PARSE.  17. OR ROADWAY, ARLINGTON, MA 02474  17. PAU	6.	PIPING MAY BE SHOWN DISPLACED FOR CLARITY.	
9. ALL WASTE & STORM PIPING RUNNING THROUGH GARAGE AREAS SHALL BE 10. PITCH WASTE AT WINNION 14/2" OPE FOOT FOR 4" DAMETER AND LARGER PIPES, 1/4" FOR PIPES LESS THAN 4" IN DAMETER. 11. PC TO PROVIDE JALL REQUIRED FITTINGS AND CONNECTIONS TO CONNECT WITH STE CONTRACTOR PROVIDED WASTS. STORM DPAINS, SAN, AND OR SERVESS. 12. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PIC. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PIC. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PIC. ALL WASTE AND VENTS WITHIN AND/OR BEENIS COMMERCIAL SPACES AND CONNECTION 13. ALL VERTCAL, WASTE & STORM PIPING RESEAS RUNNING THROUGH CARAGE AREAS SHALL INCLUE ALLIMINUM THOTOTECTIVE COVERING 14. ALL VERTCAL, WASTE AS STORD PIPING TO POURING CONCRETE. 15. PROVDE LOCAL, SOLDION, STOP VALVE, ECL. FOR DHIN AND CW FEEDS TO PACH PLUMENT PIPING REGION PIPIOR TO POURING CONCRETE. 16. PROVDE LOCAL, SOLDION, STOP VALVE, ECL. FOR DHIN AND CW FEEDS TO PACH PLUMENT PIPING REGIONED FIRSTOPPING AND AR SEALING. 17. PLOT PROVDE REQUIRED FIRSTOPPING AND AR SEALING. 18. PC TO SUPPLY ACCESS HATCHES. GC TO INSTALL 20. PRIME AND PANT ALL EXTERIOR GAS PIPE PER SPEC. 21. FOR RESER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   INC.  REVERIONS/SUBMISSIONS  Data  INC.  REVERIONS/SUBMISSIONS  Data  INC.  NORLAN, SLANT ENCLINEERTING, INC.  AS BOAD AR SLAND PIPE SIZES, SEE P301. P302, P303, & P304.  INC.  NORLAN, SLANT ENCLINEERTING, INC.  AS BOAD AR BATT ALL EXTERIOR GAS PIPE PER SPEC. 21. FOR RESER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.  INC.  NORLAN, ALL WENT PIPING AND AR SLAND ENCLINEERT.  AR HITTE CT S  PROVE INCL.  AS BOAD AR BATT ALL EXTERIOR GAS PIPE PER SPEC. 21. FOR RESER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.  INC.  AR HITTE CONTACT AND	7.	INSTALL ALL PIPING ON WARM SIDE OF BUILDING INSULATION.	
NSULATED WITH 1" FIRERQLASS.  10. PITCH WASTE AT INNUMUM 1/8" PER FOOT FOR 4" DIAMETER AND LARGER PIPES, 1/4" TOR PERSILSS THAN 4" IN DIAMETER CONTRACTOR PROVIDED WASTE, STORN DRAINS, AGS, AND CW SERVICES.  12. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SUDD CORP. PVC. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE CONTROL SHALL NOLUCE ALLINNUM PROTECTIVE COVERING COMMETCIAL SPACES SHALL BE INSULATED WITH 1" FIBERCLASS  13. ALL VERTICAL WASTE, BEERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1" FIBERCLASS  14. ALL POR WASTE PIPE RESERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1" REPROLASS  15. PROMOE LOCAL SOLUTION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMENCE FRUTURE  16. PROVIDE LOCAL SOLUTION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMENCE REQUIRED RESIDENTIAL SPACES A VENT MAINS SHOWN O FEAN. ALL VENT PHONE TO FOURING CONTRETE.  15. PROMOE LOCAL SOLUTION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMENCE REQUIRED RESIDENTIAL MAIN SHOWN O FEAN. ALL VENT PHONE TO FOURING CONTRETE.  15. PROMOE LOCAL SOLUTION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMENCE REQUIRED RESIDENTIAL SPACES A VENT MAINS SHOWN O FEAN. ALL VENT PHONE TO FOURING CONTRETE.  16. PROMOE LOCAL SOLUTION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMENCE REQUIRED RESIDENTING AND AR SEALING.  19. PC TO SUPPLY ADCESS HARDLES OL TO INSTALL  20. PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC.  21. FOR RESER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.    MORITARY ARE UNAVAANA AND PIPE SIZES, SEE P301. P302, P303, & P304.   MORITARY ARE AND AND SALVES, THE FOR THE SECONDER   MORITARY ARE AND AND FEREID AND CONTRETE.   ARE AND PAINT ALL EXTERIOR CAS PIPE PER SPEC.  21. FOR RESER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.    MORITARY ARE AND AND SALVES, THE CONTRESE TO AND AND CONTRETE AND AND CONTRETE.   MORITARY ARE AND AND SALVES, THE AND AND CONTRETE AND AND CONTRETE AND			
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CONTRACTOR PROVIDED WASTE, STORM DRAINS, GAS, AND CW SERVICES.  A ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLID CORE PVC, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLID CORE PVC, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES SHALL BE INSULATED WITH 1'S TREERGLASS  S. ALL VERTIONAL WASTE, STORM PHONE RESIDENTIAL SPACES SHALL BE INSULATED WITH 1'S TREERGLASS  S. PROMOE 1/2' CLOSED-CELL FOAM SLEEVES FOR ALL PIPE WHICH PENETRATES SAAB-ON-GRUE FLOOR PROOF TO POURING CONNERT.  PROMOE 1/2' CLOSED-CELL FOAM SLEEVES FOR ALL PIPE WHICH PENETRATES SAAB-ON-GRUE FLOOR PROOF TO POURING CONNERT.  PROMOE 1/2' CLOSED-CELL FOAM SLEEVES FOR ALL PIPE WHICH PENETRATES SAAB-ON-GRUE FLOOR PROOF TO POURING CONNERT.  PROMOE TOTURE  PROMOE FROUNDE REQUIRED FRESTOPPING AND AN SEALING.  PROMO SUPPLY ACCESS HATCHES. GC TO INSTALL  PROMO PROVIDE REQUIRED FRESTOPPING AND AN SEALING.  PROMO SUPPLY ACCESS HATCHES. GC TO INSTALL  PROMO SUPPLY ACCESS HATCHES. GC TO INSTALL  PROMO PROVIDE REQUIRED FRESTOPPING AND AN SEALING.  PROMO SUPPLY ACCESS HATCHES. GC TO INSTALL  PROMO PROVIDE REQUIRED FRESTOPPING AND AN SEALING.  PROMO PROVIDE REQUIRED FRESTOPPING AND AND AND SEALING.  PROVIDE AND PAINT ALL EXTERIOR GAS PIPE PER SPEC.  PROVIDE AND PAINT ALL EXTERIOR CAS PIPE PER SPEC.  PROVIDE AND PAINT ALL EXTERIOR CAS PIPE PER SPEC.  PROVIDE AND AND AND PIPE SIZES, SEE P301, P302, P303, & P304.  PROVIDE AND AND AND PIPE SIZES, SEE P301, P302, P303, & P304.  PROVIDE AND AND AND AND PIPE SIZES.  PROVIDE AND		1/4" FOR PIPES LESS THAN 4" IN DIAMETER.	
WASTE AND VENTS WITHIN AND/OR SERVING COMMERCIAL SPACES AND CARAGE TO BE CAST ROW. ALL WASTE AS TORM PIPING RISERS RUNNING THROUGH GARAGE AREAS SHALL INCLUDE ALLMINIUM PROTECTIVE COVERING 14. ALL PCW WASTE PROTECTIVE COVERING 15. PROVIDE 1/2* CLOSED-CELL FOAM SLEEVES FOR ALL PIPE WHICH PENETRATES SUB-ON-ORDER FLOOR PRIOR TO POURING CONCRETE. 15. PROVIDE LOCAL SOLATION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLAN. BLL VENT PIPING NOT SHOWN. 16. PC TO SUPPLY ACCESS HATCHES, GC TO INSTALL 20. PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC. 21. FOR RISER DURGAMS AND PIPE SIZES, SEE P301. P302, P303, & P304. 21. FOR RISER DUAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304. 22.40A Etm SL, Somewille, MA 02144 617.628.5700 WWW davissiguereorchiteds.com 23.000 20.000 20.000 20.00000 20.0000 20.00000 20.00000 20.0		CONTRACTOR PROVIDED WASTE, STORM DRAINS, GAS, AND CW SERVICES.	
SHALL INCLUDE ALUMINUM PROTECTIVE COVERING 14. ALL INCLUDE ALUMINUM PROTECTIVE COVERING 14. ALL PVC WASTE PIPE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1' REREGASS 15. PROVIDE 1/2" CLOSED-CELL FOAM SLEEVES FOR ALL PIPE WHICH PENETRATES SLAD-ON-GRADE FLOOR FRIGHT TO POURING CONCRETE. 16. PROVIDE CAL ISOLATION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMBING PIXTURE 17. VENT FINTURES SHER SCHEDULE AND CONNECT TO RISERS & VENT MAINS SHOWN O PLAN. ALL VENT PIPING NOT SHOWN. 18. PC TO PROVIDE REQUIRED FIRESTOPPING AND AR SEALING. 19. PC TO SUPPLY ACCESS HATCHES. GC TO INSTALL 20. PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.		WASTE AND VENTS WITHIN AND/OR SERVING COMMERCIAL SPACES AND GARAM	
WITH 1" FIBERGLASS         15. PROVIDE 1/27 CLOSED-CELL FORM SLEDVES FOR ALL PIPE WHICH PENETRATES SLAB-ON-GRADE FLOOR FROM FOR OF DURING CONCRETE.         16. PROVIDE LOCAL ISOLATION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMBING FIXTURE         17. VENT FIXTURES PER SCHEDULE AND CONNECT TO RISERS & VENT MAINS SHOWN OF PLAN. ALL VENT PIPINE NOT SHOWN.         18. PC TO PROVIDE REQUIRED FRESTOPPING AND AIR SEALING.         19. PC TO SUPPLY ACCESS HATCHES. GC TO INSTALL         20. PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC.         21. FOR RISER DUAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.         DECUSIONS/SUBMISSIONS         DATE IS: SQUARE         ACCHITECTS         ACCHITECTS         240A Elm St, Somerville, MA 02144 617.628.5700 www.dowlaspporeorchitects.com         OF ISER SIZES SIZE P301. P302. P303, & P304.         MERCIPSIONS/SUBMISSIONS         DATE IS: SQUARE         ALONE MARK AND PIPE SIZES, SEE P301. P302, P303, & P304.         IMAGENER PLAN         MERCIPSIONS/SUBMISSIONS         DATE IS: SQUARE         ALONE IS INT ENCINEERING, INC. (ACCHITECTS)         AND ALL ENCINEERING, INC. (ACCHITECTS)         MERCIPSION			REAS
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21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.			
No.       REVISIONS/SUBMISSIONS       Date         No.       REVISIONS/SUBMISSIONS       Date         D A V I S S Q U A R E       240A Em St, Somerville, MA 02144 617.628.5700 www.dowissquarearchitects.com       Date         Consultant       MORIAN / SIANI ENCINEERING, INC. (Or Control, MA 0174) Tel: (781) 198-2250 Email: info@NS-Engineering.com       A C H ITE C I WWW. dowing No.         Project       117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474       Drawing No.         Vroject       117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474       Drawing No.         Vroject No. 18045.00 Scale As Noted       Drawing No.       P1002	20.	PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC.	
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Project Title SECOND FLOOR PLUMBING PLAN			
S Q U A R E A R C HITE C T S Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com Consultant NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title SECOND FLOOR PLUMBING PLAN Designed RWS Checked MAB Project No. 16045.00 Scale As Noted P1022			
Consultant          NORIAN       SIANI ENGINEERING, INC.         43 Bradford Street, 3rd Floor         Concord, MA 01742         Tel: (781) 398-2250         Email: info@NS-Engineering.com         Project         117 BROADWAY         117 BROADWAY, ARLINGTON, MA 02474         Title         SECOND FLOOR         PLUMBING PLAN         Designed         RWS         Checked         MAB         Project No.         16045.00         Scale         As Noted	  	REVISIONS/SUBMISSIONS	Date
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PLUMBING PLAN Designed RWS Checked MAB Project No. 16045.00 Scale As Noted Drawing No. Project No. 16045.00 P102	Consu	DAVIS DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	Date
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PLUMBING NOTES

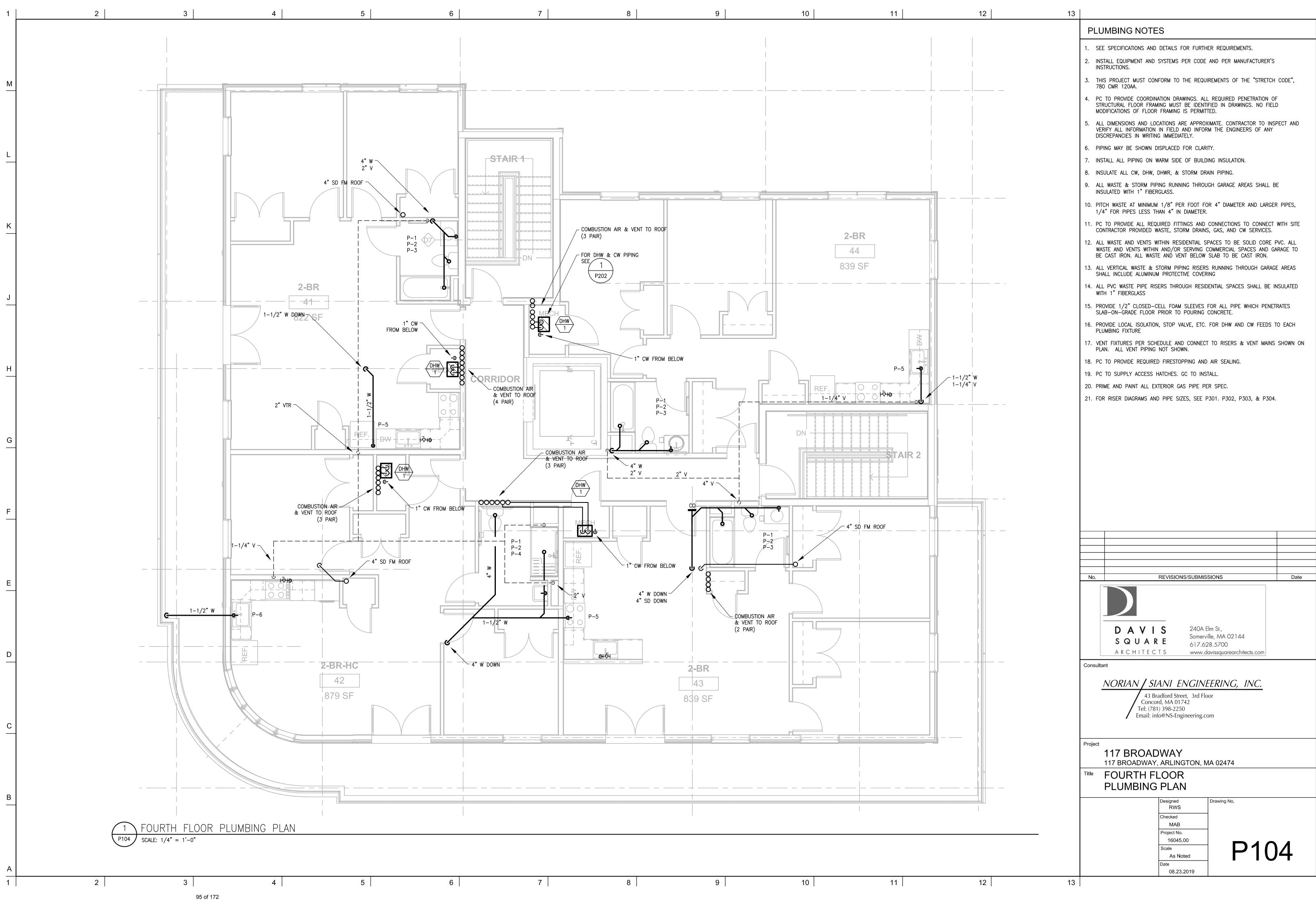
1. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

2. INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURER'S

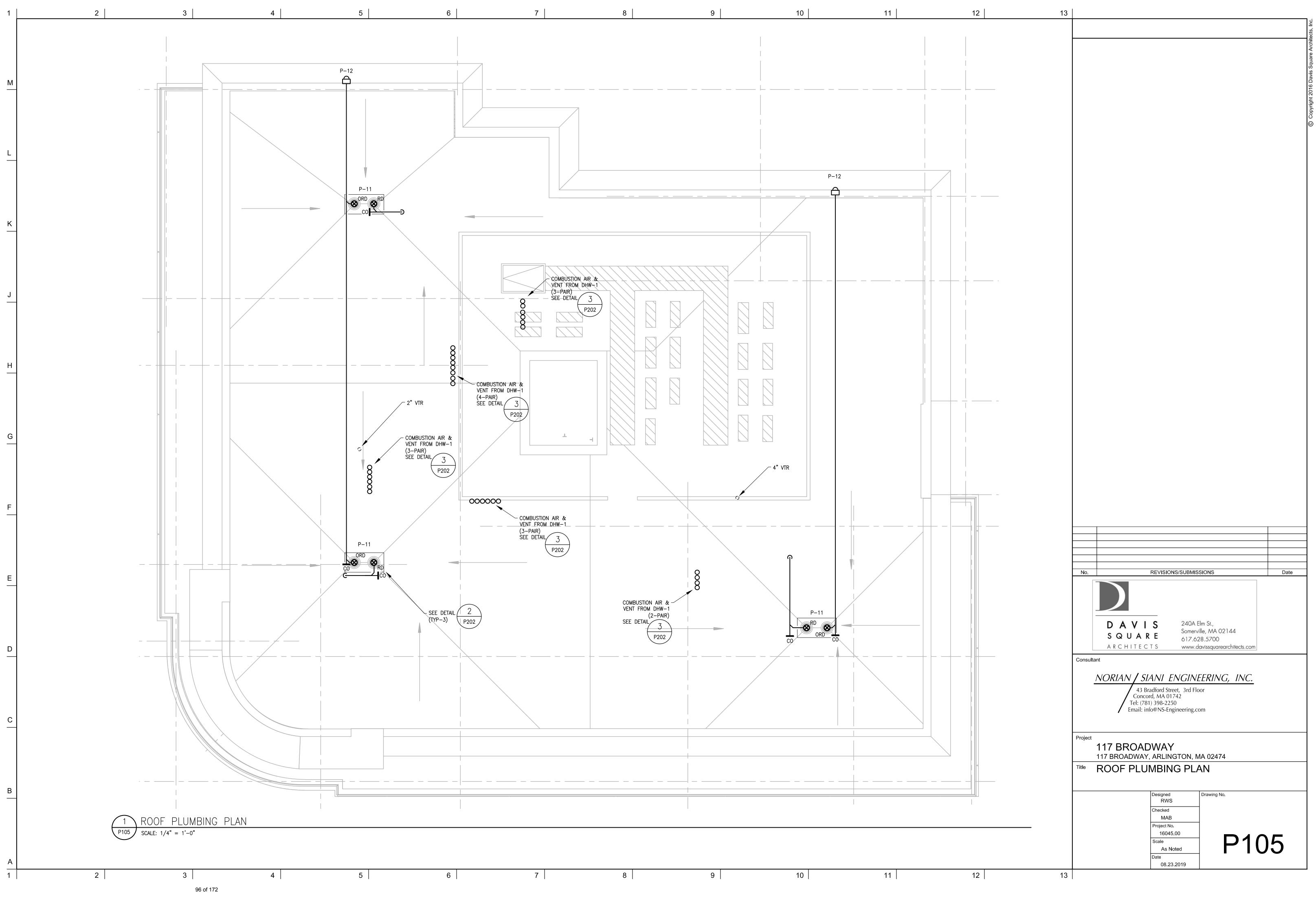


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ALL DAYSENDATES AND LOATIONE ARE APPROXIMEE CONTRACTOR TO INSPECT AND USEREDWICES IN WRITING IMACDATESY.     PENNG MAY BE SHOWN DEPLACED FOR CLARITY.     INSTALL ALL PANG ON WRAN SEED OF BUILDING INSLATION.     INSLALE ALL CA, DHA, DHAR, A STORU BRAN PIPING.     INSLALE ALL CA, DHA, DHAR, A STORU BRAN PIPING.     INSLALE ALL CA, DHA, DHAR, A STORU BRAN PIPING.     INSLALE ALL CA, DHA, DHAR, A STORU BRAN PIPING.     INSLALE ALL CA, DHA, DHAR, A STORU BRAN PIPING.     INSLALE ALL CH, DHA, DHAR, A STORU BRAN PIPING.     INSLALE ALL CH, DHAR DAY STORU DRANG DARGE AREAS SHALL BE     INSLALED WITH 1' PERCENSE.     IN ANY E HARDER ALL RECENTLY DRANG THROUGH CARACE AREAS SHALL BE     INSLALED WITH 1' PERCENSE.     INSLALE ALL CARACE AREAS STORUMETER. COLORESTOR NO ON SERVICE ALL COMERCIANS TO COMMETCIAL SPACES FOR ALL RECENTLY.     INSTE AND PANK WITH REEDOTING CARACE TO BE SOLD ONE FUC. ALL     INSTE AND PANK INTER PIPING RESER RUNNEE THROUGH CARACE AREAS SHALL BE INSLATED     INSLALE ALL CARES AND PANK RESER TOWNEE THROUGH CARACE AREAS SHALL BE INSLATED     INSLALE ALL CARES AND PANK RESERVICE. SPACE AREAS SHALL BE INSLATED     INSLALE ALL CARES AND PANK RESERVICE. SPACE AREAS SHALL BE INSLATED     INSLALE ALL CARES AND PANK RESERVICE. SPACE AREAS SHALL BE INSLATED     INSLALE ALL CARES AND PANK RESERVICE. SPACE AREAS SHALL BE INSLATED     INSLALE ALL CARES AND PANK RESERVICE. SPACE AREAS SHALL BE INSLATED     INSLALE ALL CARE, SALE AREAS SHALL BE INSLATED     INSLALE ALL CARE, MARKE AREAS SHALL BE INSLATED     INSLALE ALL CARE, CARES STORUMET THROUGH CARACE AREAS SHALL BE INSLATED     INSLALE ALL CARE, MARKE AREAS SHALL BE INSLATED     INSLALE ALL CARE, MARKE AREAS SHALL BE INSLATED     INSLALE AND PANK RESERVICE AREA CONNELL.     ALL PARK MARKE SHALL BARKE MARKES CONNELL     INSLATE AND PANK RESERVICE AREA CONNELL.     INSTALE ALL PARKE MARKES AND PIPE SIZES, SEE POID POID, PSO2, PSO3, & PSO4.     INTERVIEW SHALE AND PARKE RESERVICE AREAS SHALL BE     INTERVIEW SHALE AND PARKE RESERVICE AREAS SHALL BE     INTE	ALL NUMERING AND LODUCING ME AND APPROXIME CONTRACTOR TO INSPECT AND DISCREPANCES IN WRITING IMAGE/INSPECT REPAIR AND RESERVED DISPLACED FOR CLARITY.     INSTALL ALL PINKS ON WARK SO FOR BURNING INSULATION.     INSULATE ALL ON, DIM, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIM, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIM, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIM, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIMP, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIMP, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIMP, DIMP, A STORM DEAN PINK.     INSULATE ALL ON, DIMP, DIMP, A STORM DEAN PINK.     INSULATE ALL ONE THE MEMORY STORMAL CONNECTIONS TO CONNECT WITH STEE CONTRACTOR PROVIDED WARK. STORM DEANS, CAS, AND CARDER DIPES, 11/4/1 FOR PIPES LESS THAN 4 'N INDUMETER.     INSULATED WITH MAD/OR STRANG, CAS, AND CARDER TO BEST, AND CARDER TO BE COST. THE STOLED CASE FOR ALL PERTURBES SHALL BE INSULATED WITH MAD/OR STRANG, COMPETING THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH THE PROVE DIACE THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH THE RESIDENT TO PURE SPACE TO BEST.     ALL PCU, DAYS THE RESIDENT FOR CALL PREVENCE TO EACH PLANTAGES SHALL BE INSULATED WITH THE RESIDENT TO RESER A VERT MANK SHOWN ON PARAME, AREAS SHALL BE INSULATED WITH THE RESIDENT TO RESER SHALL BE INSULATED WITH THE RESIDENT TO RESER SHALL BE INSULATED WITH THE RESIDENT TO RESER SHALL BE INSULATED TO RESER SHALL BE INSULATED TO RESER SHALL BE INSULATED WITH THE RESIDENT TO RESER SHALL BE INSULATED BEAK THAN SHOWN ON PARAME, AREA SHALL BE INSULATED TO RESER SHALL	4.	PC TO PROVIDE COORDINATION DRAWINGS. ALL REQUIRED PENETRATION OF STRUCTURAL FLOOR FRAMING MUST BE IDENTIFIED IN DRAWINGS. NO FIELD
PPING MAY BE SHOWN DISPLACED FOR CLARTY.     INSTALL ALL PIPING ON WARK SIDE OF BUILDING INSULATION.     INSULATE ALL CRUPPING ON WARK SIDE OF BUILDING INSULATION.     INSULATE ALL CRUPPING ON WARK SIDE OF BUILDING INSULATION.     INSULATE ALL CRUPPING ON WARK SIDE OF BOULDING CARAGE AREAS SHALL BE     INSULATE ALL CRUPPING DITING'S PER POOT FOR 4" DIAMETER AND LARGER PIPES,     1/4" FOR PRESILES THAN 4" IN IDMATTER     INCOMPACTAL REQUERED DITING'S AND CONNECT TO INNECT WITH SIDE     CONTRACTOR PROVIDED WISTLE STORM IDMANS, GAS, AND CARSEND CARAGE TO     BE COST INFO. ALL MARE AND VARIS WITHIN REGIONAL SALESS TO BE SOUL CORE FIC. ALL     WASTE AND VARIS WITHIN REGIONAL SALESS TO BE SOUL CORE FIC. ALL     WASTE AND VARIS WITHIN REGIONAL SALESS TO BE SOUL CORE FIC. ALL     WASTE AND VARIS WITHIN REGIONAL SALESS TO BE SOUL CORE FIC. ALL     SHALL AND/OR SERVICE COMPERCIAL SALESS AND GARAGE TO     BE COST INCO. ALL MARE AND VARIS BERGE RUANING THROUGH REGIONAL     ALL VERT CAN STOP VARIE, FCC. FOR DHW AND CHEEDS TO EACH     HUMBING TRUESE AND THE SUBSTITUTION OF THE DEVENT FORMULA SHOWN ON     PAIN. ALL VERT SERVICE AND LEAVES TOR ALL PIPE WHICH PENELRAIES     SHALL AND/OR SERVICES OF TO INSTALL     FOR TRUESE TRUES PER SOULE AND COMPECT TO RESER & VENT MARE SHOWN ON     PAIN. ALL VERT PIPING HOT SHOWN.     R. FC TO PROVIDE DUBLE PRESIDENTS AND AR SEALING.     FOR TO SUPPLY ACCESS HATCHESS OF TO INSTALL     ORIGINAL MARE SHOWN ON PAINS INCOMPANY AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR RESER DARGEMES AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR RESER DARGEMES AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR RESER DARGEMESTER AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR RESER DARGEMESTER AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR RESER DARGEMESTER AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR ADARDY AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR ADARDY AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR ADARDY AND PIPE SIZES, SEE PIOL PIOL PIPE SIZE     FOR ADARDY AND PIPE SIZES, SEE PIOL PIOL	6. PIPING MAY BE SHOWN DISPLACED FOR CLARITY. 7. INSTALL ALL PIPING ON WARM SIDE OF BUILDING INSULATION. 8. INSULATE ALL ON, DIN, DINK, & STOOM DRAN PIPING. 9. ALL WASTE AT MUMINUM 1/21 "REFOOLS. 10. PICON WARM & STORM PIPING RUNNIG THROUGH OWARE AREAS SHALL BE INSULATED WITH 1" PIEPEGIASS. 11. PICON WASTE AT MUMINUM 1/21 "REFOOLS. SAID CONNECTIONS TO CONNECT INTH STEELESS THAT 'N DAMAFTER AND LARGER PIPES. 12. ALL WASTE AND WITH STUDIED PITINGS SHOW DRANG RUNNIG THROUGH OWARED STO DOINECT WITH STEELESS THAT 'N DAMAFTER' STORM PIPING SEEDER TOWNION THROUGH CARACE AREAS SHALL BE INSULATED WITH A STORETING. PROVED AND CARACE AREAS SHALL BE INSULATED WITH PIPING WITH RESIDENTIAL SPACES SHALL BE INSULATED WITH PIPING WITH SHOWN ON POSING CONCRETE. 10. PROVIDE LALL BAUMAR PIPING NOT SHOW AND CONFECTION AND AN SPACES. 11. POR UNPERVISE PER SCIENCE AND CONNECT TO RESIDE & MOUNT PEDING WITH PIPING WITH SHOWN ON PARMA. ALL VENT PIPING NOT SHOWN. 13. POR TO SUPPING MOT SHOWN. 14. ALL VENT PIPING NOT SHOWN. 14. POR UNDER CONSECT TO RESIDE AND CONSECT TO RESIDE AND ON FEDES TO EACH PIPANA. ALL VENT PIPING NOT SHOWN. 15. PROVIDE ALL BAUKAM PIPING SUBMISSIONS 16. TO SUPPING WITH ALL STERIOR GAS PIPE PER SPEC. 21. FOR RESER DAGRAPS AND PIPE SIZES, SEE P301. P302, P303, & P304. 240A EIR SI, STEME TOWNING THROUGH AREAGE AND INFORMATION ON PARMA. ALL VENT PIPING NOT SHOWN. 240A EIR SI, STOWNING THROUGH AREAGE AND PIPE SIZES. 240A EIR SI, STOWNING TOWNING AND PIPE SIZES. SEE P301. P302, P303, & P304. 2407 EIR PIPING	5.	ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO INSPECT AND VERIFY ALL INFORMATION IN FIELD AND INFORM THE ENGINEERS OF ANY
ALL WATE ALL CW, DHW, DHWR, & STORN DRAIN PIPING.     ALL WATE A STORM PIPING RUNNING THROUGH GARAGE AREAS SHALL BE     NULATED WITH 1' PERFORMASS.     IN PICT WASTE AT MINIMUM 1/2" FER FOOT FOR 4" DIAMETER AND LARGER PIPES,     1/4" FOR PIPES LESS THAN 4" IN DUMETER.     PICT MOVINE ALL REQUESTIONS THROUGH CONNECTIONS TO CONNECT WITH STEE     CONTRACTOR PROVIDED WASTE, STORM DRAINS, GAS, AND CW SERVICES.     12. ALL WASTE AND YORTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE FOR. ALL     WASTE AND YORTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE FOR. ALL     WASTE AND YORTS WITHIN AND/FE SERVICE COVERING.     ALL POR UNITS WITHIN WASTE AND YORT BELOW SUBT TO BE COST RON.     13. ALL YETE CARE RESIDENT THROUGH CARAGE AREAS     SHALL INCLUE ALUNNAM PROTECTIVE COVERING.     ALL POR WASTE PIPE RESIDENT THROUGH CARAGE AREAS     SHALL INCLUE ALUNNAM PROTECTIVE COVERING.     ALL POR WASTE PIPE RESIDENTIAL SPACES FOR ALL PIPE WHICH PENETRATES     SAAD-ON-DEADE FLOOR FROM PIPEN RESIDENTIAL SPACES     TO SUPPLY ACCESS HATCHES. OC TO INSTALL     ALL YEAR PIPENE NOT SHOW.     REVERSIONS THROUGH CARAGE AREAS     SHALL INCLUE ALUNNAM PROTECTIVE COVERING.     ROT OS UPPLY ACCESS HATCHES. OC TO INSTALL     ALL YEAR PIPENE NOT SHOW.     ROUTE TALE TO SHOW AND CONTECT TO RESER & VENT MAINS SHOWN ON     PAUNA.     ALL YEAR PIPENE NOT SHOW.     ROUTE TALE STOREMUS AND AN A SALUNG.     ROT TO SUPPLY ACCESS HATCHES. OC TO INSTALL     ROUTE FLUXES OR FLUXES TOR ALL PIPE WHICH PENETRATES     SAAD-ON-DEVICE ECOURDED HEROTORING AND AN EXAMINE.     ROUTE FLUXES ONE FOLLOWER THEORY AND AND AN EXAMINE.     ROUTE TALE STOREMUS AND AN A RESULT.     ROUTE FLUXES ONE FROM THE AND AND AND AND     ROUTE FLUXES ONE FLUXES TOR ALL PIPE WHICH PENETRATES     SAAD-ON-DEVICE ECOURDED HILD AND CONTENTS     ROUTE FLUXES ONE FLUXES.     ROUTE FLUXES ONE FLUXES TOR AND AN AND AND AND     ROUTE FLUXES ONE FLUXES.     ROUTE FLUXES ONE FLUXES ONE AND AND AND AND     ROUTE FLUXES ONE FLUXES ONE AND AND AND     ROUTE FLUXES ONE AND AND AND AND     ROUTE FLU	6. INSULATE ALL OK, DHW, DHWR, & STORM DRAN PIPING. 9. ALL WASTE & STORM PIPING RUNNING THROUGH GARAGE AREAS SHALL BE NUMBER IN MASTE AN DIREGUESS. 10. PICH WASTE AT MINIMUM 1/9" PER FOOT FOR 4" DIAMETER AND LARGER PIPES, 11. PC TO FROMBED HANGE THROUGH OF AND CONNECTION TO CONNECT WITH STEE CONTINNOTOR FROMOBED WASTE, STORM DRANK, GAS, AND CW SERVICES. 11. PC TO FROMBE ALL REQUER DUPING SPECIE COMPARIAL, SPACES TO BE SOLD CORE FOR, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE FOR, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE FOR, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE COST IRON. ALL WASTE AND VENTS WITHIN AND VENT BELOW SUB TO BE COST IRON. 13. ALL VENT DIPONE TO FOURISE COMPARE AND A SPACE AREAS SHALL INCLUE ALUMINAM PROTECTIVE COVERNO. 14. ALL WASTE AND VENT BEDIEST THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1" FREUDOLSS. 15. PROVIDE 1/2" CLOSED -CELL DRAW SELENS: TOR ALL PIPE WHICH PRINTRATES SLAR-ON-CRADE FLORE FROM FOR TO PUBLIKE CONCENT. 16. TO BROWDE REQUERED FREUESTOPHING AND AR SEALING. 19. PC TO SUMPLY ACCESS HARDERS OR TO INSTALL. 20. TO REPORT COCES HARDES OR TO INSTALL. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE PDOT. PDO2, PDO3, & PDO4. 21. FOR RISER DIAGRAMS SIGNAL DIAGE. 21. FOR RISER DIAGRAMS SIGNAL DIAGE. 22. CONTECTION SIZEMANISSIONS 240A EI	6.	
ALL WASTE & STORM PIPING RUNNING THROUGH GARAGE AREAS SHALL BE     INFOLMED WITH IT PIERCASS.     ID PICH WASTE AT UNAMUM IN 126° PER FOOT FOR 4° DAMETER.     ID FOOT PROVIDE ALL REQUIRES THINGS AND CONNECTIONS TO CONNECT WITH STEE     CONTRACTOR PROVIDE WASTES. STORM DAMES, GAS, AND CON SERVICES.     ID ALL WASTE AND WHITS WITHIN RESIDENTIAL SPACES TO A SUID CORE FOR. ALL WASTE AND WASTES WITHIN MODOR SERVICE COMMERCIAL SPACES MAD CARAGE TO     BE CAST IRON. ALL WASTE AND WASTES WITHIN RESIDENTIAL SPACES SHALL BE INSULATED     WITH THROUGH AND/OR SERVICE COMMERCIAL SPACES MAD CARAGE TO     BE CAST IRON. ALL WASTE AND WASTE STORM DEVICE RESEAR FUNNING THROUGH GARAGE AREAS     SINUL WASTE PIPE RESEARS THROUGH RESEAR FUNNING THROUGH GARAGE TO     BE CAST IRON. ALL WASTE AND WASTE OPEN PIPE. RESEAR STRUMENG THROUGH GARAGE AREAS     SINUL INCLUE ALLIMMAN MOTOR COMMERCIAL SPACES SHALL BE INSULATED     WITH PIPERGRAPS.     B. PROVIDE 1/2° CLOSED-OELL FOAM SEEDES FOR ALL PIPE WHICH PENETRATES     SUBJECTION FORM THE RESTREME THROUGH RESEAR VENT MAIN CONFERED TO EACH     PLAN. ALL VENT PIPING NOT SERVIN.     B. PC TO PROVE FACULARS INTO MAJES FOR DATA ALL EXTERIOR CONCINECT     PLAN. ALL VENT PIPING NOT SERVIN.     B. PC TO PROVE RESEAR FUNCTION AND AR SELENCE.     TOR RESER DAGRAMS AND PIPE SIZES, SEE P301, P302, P303, & P304.      MON     REVISIONSSUDMISSIONS     Dev      PLUM ALL STRUCT CON PIPE CERES FOR ALL PIPE WASTE APPONENCE      TO ROMER TA THE RESULT OF THE PERCENCE.     TO RESER DAGRAMS AND PIPE SIZES, SEE P301, P302, P303, & P304.      TO RESER DAGRAMS AND PIPE SIZES, SEE P301, P302, P303, & P304.      TO RESER DAGRAMS AND PIPE SIZES, SEE P301, P302, P303, & P304.      TO RESER DAGRAMS AND PIPE SIZES, SEE P301, P3	9. ALL WASTE & STORM FIPING RUNNING THROUGH GRAVE AREAS SHALL BE INSULATED WITH 1" INBRRCASS. 10. PROVIDE ALL REQUIRED FITTINGS AND CONNECT WITH STEE CONTRACTOR PROVIDE WASTE AND CONNECT ON TO CONNECT WITH STEE CONTRACTOR PROVIDE WASTE, STORM DRWA, GRAVES, NO DE SENSO CONNECT, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PROV. ALL WASTE AND VENTS WITHIN WASTE AND VENT BELOW SUAR TO BE CAST ROW. 13. ALL WASTE AND WASTE AND VENT BELOW SUAR TO BE CAST ROW. 14. ALL PAC WASTE AND WASTE AND VENT BELOW SUAR TO BE CAST ROW. 15. REPORE 1/2" CLOSED-CELL FROM SEENSE FOR ALL PREVENTED HERMED ASSES SHALL INCLUDE ALLWINDH PROTECTIVE CONFERNMENT HERMOLEH CAMPE AREAS SHALL INCLUDE ALLWINDH STORE TO POURING CONCETT. 16. PROVE LCCAL ISOLATION, STOP WAVE, ETC. FOR DHY AND CHI FERES TO FACH PLAN. ALL VENT PHINK DOT SHOW. 17. OT DISTORUE REQUIRED FRESTOR/FING AND ARE SEALING. 18. PC TO SUPPLY ACCESS HATCHES GG TO INSTALL 20. PROVE DAY ALL DETROR OR SPIRE PER SPEC. 21. FOR RISER DARRAWS AND PIPE SIZES, SEE P301. P302, P303, & P304. CONTRACTORS FRANKS AND PIPE SIZES, SEE P301. P302, P303, & P304. CONTRACTORS SUBMISSIONS Date VIENT FILL RECEASE 240A EIE SL. 260 TO SLOPPLY ACCESS HATCHES, CON DIVING THROUGH CONDENDED THEOLOGIC TO RESER SOLD. 21. FOR RISER DARRAWS AND PIPE SIZES, SEE P301. P302, P303, & P304. 21. FOR RISER DARRAWS AND PIPE SIZES, SEE P301. P302, P303, & P304. 21. FOR RISER DARRAWS AND PIPE SIZES, SEE P301. P302, P303, & P304. 21. FOR RIS	7.	INSTALL ALL PIPING ON WARM SIDE OF BUILDING INSULATION.
NOULATED WITH 1" FIBERCLASS.  10. PITCH WASTE AT MANUAL 1/2" PER POOT FOR 4" DUARTER AND LARGER PIPES, 1/4" TOR PROVIDE ALL REQUERED FITNISS AND CONNECTIONS TO CONNECT WITH SITE CONTRACTOR PROVIDE MALL REQUERED FITNISS AND CONNECTIONS TO CONNECT WITH SITE CONTRACTOR PROVIDE MALL REQUERED FITNISS AND CONNECTIONS TO CONNECT WITH SITE CONTRACTOR PROVIDE MALL REQUERED FITNISS AND CONNECTS AND CAPACE TO SE CAST TROM. ALL WASTE WITHIN AND/OR DERIVATION CONNECTS AND CAPACE TO SE CAST TROM. ALL WASTE WITHIN AND/OR DERIVATION CONNECTS AND CAPACE TO SECOND FICAL LEVELS FOR ALL PIPE WHICH PRACTRATES SHALL ROLL PER LIDER ALL VERTICE. ALL VERTICE, AND LEVELS FOR ALL PIPE WHICH PENETRATES IS A DUART ALL VERTICE. CONTRACT, FOR DHW AND ON FEED STO EACH PLUMAING FATURE COLORED FIRSTOPPING AND AIR SEALING.  19. PO TO SUPPLY ACCESS HATCHES. OC TO INSERS & VENT MAINS SHOWN ON FRAM. ALL VENT PIPEN FOR TO DISKING.  19. PO TO SUPPLY ACCESS HATCHES. OC TO INSERL & UNIT WAINS SHOWN ON FRAM. ALL VENT PIPEN FOR TO DISKING.  19. PO TO SUPPLY ACCESS HATCHES. OC TO INSERL & UNIT WAINS SHOWN ON FRAM. AND PART ALL EXTERIOR GAS PIPE PER SPEC.  21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   10. REVENDENCES HATCHES AND PIPE SIZES, SEE P301. P302, P303, & P304.   11. POINT ALL EXTERIOR CAS PIPE PER SPEC.  21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   12. POINT ALL EXTERIOR GAS PIPE PER SPEC.  21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   13. PAIL THE CIT S  240A EIN SIL, SALAR AND PAIL SALE ENGLISHESTOPS.  14. PAIL SILE PAIL OF A DIAGONAL AND PAIL SALE AND CONSERVES.  15. PROVIDE AND CONSERVESTIONS.  16. POINT ALL EXTERIOR GAS PIPE PER SPEC.  21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   16. POINT ALL AND PAIL ALL EXTERIOR GAS PIPE PER SPEC.  21. FOR RISER DIAGRAMS AND PIPE SIZES.  240A EIN SILE AND CONSERVEST DIAGONAL AND PAIL ALL EXTERIOR GAS PIPE PER SPEC.  21. FOR RISER DIAGRAMS AND PIPE SIZES.  240A EIN SILE AND CONSERVEST DIAGONAL AND PAIL AN	HISULATED WITH 1* PIECRUASS.  10. PITCH WASTE AT MINUMU 15" PER POOT FOR 4" DUAMETER AND LARGER PIPES, 11/4" FOR PIESS LISS THAN 4" N DUALTER.  11. PC TO PROVIDE ALL REQUIRED FITTINGS AND CONNECTORYS TO CONNECT WITH STE CONTRACTOR PROVIDED WISTE, STORM PIPMES, GAS, MOL OVE STRUEDS.  12. ALL WASTE AND VENTS WITHIN NGJOR SERVING COMMERCIAL, SPACES AND GARAGE TO BE CAST IRON. ALL WASTE AND VENTS BLOW USED TO ELCAST IRON.  13. ALL VERTICAL WASTE & STORM, PIPME RISERS RUNNING THROUGH GARAGE AREAS SHALL INCLORE ALLOWER MOTORY STORM PIPMER RISERS RUNNING THROUGH GARAGE AREAS SHALL INCLORE ALLOWER MOTORY DEVELOPMENTS.  14. ALL VENT FRANCH POTCHTIC CONSERNS.  15. PROVIDE LICOR HOUSING, STOP WALKE, ETC. FOR DHM AND CW FEEDS TO EACH PLUMBING THRUE.  16. PROVIDE REQUIRED PIESES THROUGH RESIDENTIAL SPACES SHALL BE INSULATED  17. WAST FAIL USET PIPE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED  18. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO PROVIDE REQUIRED ARESTOPHING AND AR SEALING.  19. PC TO SUPPLY ACCESS HARDLES. CC TO INSTALL  20. PRIME AND PNAT ALL EXTERIOR GAS PHE PER SPEC.  21. FOR RISER DIADRAWS AND PIPE SIZES, SEE P301. P302, P303, & P304.   220A EINS S.  220A EI		
1/4" FOR PRESLESS THAN 4" IN DUMETER. 11. PC TO PROVIDE ALL REQUIRED FITTINGS AND CONNECTIONS TO CONNECT WITH SITE CONTROLOGY PROVIDE WARKS, GAS, AND CON SERVICES. 12. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PC, ALL WASTE AND VENTS WITHIN AND/OR SERVICE COMMERCIAL SPACES AND GARAGE TO BE CAST IRON. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES SHALL BE INSULATED WITHIN THEREPLASS. 13. ALL VENT BURN, MAND FOR THE BLOW SLAP TO BE CAST IRON. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES SHALL BE INSULATED WITHIN THEREPLASS. 14. PROVIDE 1/2" CLOSED-CELL FOM SLEEVES FOR ALL PIPE WICH PENETRATES SUBJIC COLLECTION FRANCE TO RESEAS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITHIN THEREPLASS. 15. PROVIDE 1/2" CLOSED-CELL FOM SLEEVES FOR ALL PIPE WICH PENETRATES SUBJIC COLL, GUALTONIC STOP WAVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMEING FRATURE. 15. PROVIDE 1/2" CLOSED-CELL FOM SLEEVES FOR ALL PIPE WICH PENETRATES SUBJIC COLL, GUAL DECH, STOP WAVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMEING FRATURE. 16. PROVIDE COL, ISOLATION STOP WAVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMEIN FRATURES. CO TO INSTALL. 17. VENT FIXTURES PER SCHEDULE AND CONNECT TO INSERS & VENT MAINS SHOWN ON PLUM. ALL VENT PRIVE OF SHOW. 18. PC TO SUPPLY ACCESS HATCHES. CC TO INSTALL. 20. PRIVE AND PAINT ALL DATERIOR GAS PIPE PER SPEC. 21. FOR RISER DAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.	1/4" FOR PIPES LESS THAN 4" IN DWHETER      11. PC TO PROVIDE ALL REQUIRED FITTINGS AND CONNECTION STORMED, WITH STEE     CONTRACTOR PROVIDE WATHS STORM DWARS, GAS, AND ON SERVICES.     12. ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES TO BE SQLD CORP. PC, ALL WASTE AND VENTS WITHIN RESIDENTIAL SPACES SHOULGH GARGE AREA     SHALL INCLUDE ALUMINUM PROTECTIVE COVERING      13. ALL APPC WASTE PIPER RESES THROUGH RESIDENTIAL SPACES SHALL BE INSULATED     WITH 1" BREADASS      15. PROVIDE ALUMINUM PROTECTIVE COVERING      14. ALL PCC WASTE PIPE RESES THROUGH RESIDENTIAL SPACES SHALL BE INSULATED     WITH 1" BREADASS      15. PROVIDE ALUMINUM PROTECTIVE COVERING      14. ALL PCC WASTE PIPE RESES THROUGH RESIDENTIAL SPACES SHALL BE INSULATED     WITH 1" BREADASS      15. PROVIDE COLL ISOLATION, STOP WAYE, FIC. FOR DWARD GONCETE      16. PROVIDE COLL ISOLATION, STOP WAYE, FIC. FOR DWARD GON FEEDS TO FACH     PLAN. ALL VENT PIPHO NOT SHOWN.      19. PC TO PROVIDE REQUIRED AREACOND CAS PIPE PER SPEC.      10. FOR THESE DURING THE SECOND CAS PIPE PER SPEC.      11. FOR RESER DIAGONALS AND PIPE SIZES, SEE P301, P302, P303, & P304.      12. FOR RESER DIAGONALS AND PIPE SIZES, SEE P301, P302, P303, & P304.      14. CHITECTS     240A Elin SL,		INSULATED WITH 1" FIBERGLASS.
CONTRACTOR PROVIDED WASTL, STORM DRAINS, GAS, AND ON SERVICES. 12. ALL WASTLE MOVEN'S WITHIN RESIDENTIAL SPACES TO BE SOLD CORE PC, ALL WASTLE AND VENTS WITHIN RESIDENTIAL SPACES THE SOLD CORE PC, ALL WASTLE AND VENTS WITHIN RESIDENTIAL SPACES THE SOLD CORE PC, ALL WASTLE AND VENTS WITHIN RESIDENTIAL SPACES SHALL BE INSULATED WITH IT TREERLASS 13. ALL PC WASTLE PPER RISERS THROUCH RESIDENTIAL SPACES SHALL BE INSULATED WITH IT TREERLASS 14. ALL PC WASTLE PPER RISERS THROUCH RESIDENTIAL SPACES SHALL BE INSULATED WITH IT TREERLASS 15. PROVIDE 1/2" CLOSED-CELL FOM SLEWES FOR ALL PPE WHICH PENETRATES SUBJ-ON-GRADE FLOOR PHONE ROSE CONRECT. 16. PROVIDE LOCAL ISOLATION, STOP VALVE, ETC. FOR DHY MAND ON FEEDS TO EACH PLAN. ALL VENT PIPING NOT SHOWN. 18. PC TO PROVIDE RESIDENCE AND CONNECT TO RISERS & VENT MAINS SHOWN ON PLAN. ALL VENT PIPING NOT SHOWN. 19. PC TO SUPPLY ACCESS HATCHES. CC TO INSTAL. 20. PRINE AND PANT ALL EXTERIOR GAS PRE PER SPEC. 21. FOR RISER DAGRAMS AND PIPE SIZES, SEE P 301. P302, P303, & P304.   IND.  REVISION/SUBMISSIONS  Date  AC HITECTS  ACAM PLUSS PREVENTION ON PREVENTION  AC HITECTS  ACAM PLUSS  AC HITECTS  ACAM PLUSS  ALL PLUSS  ACAM PLUSS  ACA	CONTRACTOR PROVIDED WASTE, STORM DRANKS, CAS, AND CW SERVICES.  12. ALL WASTE AD VENTS WITHIN RESIDENTIAL SPACES TO IE SOLD CORE PC, ALL WASTE ADA VENTS WITHIN RESIDENTIAL SPACES THE COME TO BE CAST ROW.  13. ALL VERTAGE, WASTE & STORM PUPING RESIDENTIAL SPACES SHALL BE INSULATED WITH 1' PRECRUASS  14. ALL PCO WASTE EIPER RESERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1' PRECRUASS  15. SPONDE LOCAL ISOLATION, STOP VALVE, EIC, FOR DWA AND CW FEEDS TO EACH WITH 1' PRECRUASS  16. PROVIDE LOCAL ISOLATION, STOP VALVE, EIC, FOR DWA AND CW FEEDS TO EACH WITH 1' PRECRUASS  17. VENT TRUNCES PR SCHEDULE AND CONNECT TO RISERS & VENT MAINS SHOWN ON PLAN. ALL VENT PPING NOT SHOWN.  18. PC TO PROVIDE REQUIRED RESIDENTIAL SPACES SHALL BE INSULATED  19. PC TO SUPPLY ACCESS HATCHES, GC TO INSTALL  20. PRIME AND PANT ALL EXTERIOR CAS PIPE PER SPEC.  21. FOR RISER DAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   22. FOR RISER DAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   23. ACCHITECTS  240A EIm SJ., 35. CU A RE  240A EIm SJ., 36. CONTROL SOLUCED AND CONSTRUCT ON RESERVED TO CONTROL  240A EIm SJ., 37. BORONDAWS, AND PIPE SIZES, SEE P301. P302, P303, & P304.   240A EIm SJ., 38. CU A RE  39. PC TO SUPPLY ACCESS HATCHES, GC TO INSTALL  30. PRIME AND PANT ALL EXTERIOR CAS PIPE PER SPEC.  31. FOR RISER DAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.   33. MORE AND PANT ALL EXTERIOR CAS PIPE PER SPEC.  34. CONTACT SIZES AND CONTROL TO RESERVED TO CONTROL  35. CONTACT SIZES AND CONTROL TO RESERVED TO CONTROL  36. CONTACT SIZES AND CONTROL TO RESERVED TO CONTROL  37. CONTROL REQUIRED AND AND PRE SIZES, SEE P301. P302, P303, & P304.   34. AND CONTACT AND AND PART SIZES AND CONTROL TO RESERVED TO CONTROL  34. CONTACT AND AND AND PART SIZES AND CONTROL TO RESERVED TO CONTROL  35. CONTACT AND		1/4" FOR PIPES LESS THAN 4" IN DIAMETER.
Note and vents within ME/OR SERVING COMMERCIAL SPACES AND CARAGE TO BE CAST STORM, ALL WASTE AS STORM PIPMO RESERS RUNNING THROUGH GAPAGE AREAS SHALL INCLUE ALUMINUM PROTECTIVE COVERING 14. ALL YOU WASTE PIPE RESIDENTIAL SPACES SHALL BE INSULATED WITH 1 <sup>+</sup> REPRESS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1 <sup>+</sup> REPRESS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1 <sup>+</sup> REPRESS THROUGH AND CONNECT TO RESERS & VENT MAINS SHOWN ON PLAN ALL YEST PIPHON NOT SHOWN. 18. PC TO PROVE REQUIRED RESTORMING AND AR SEALING. 19. PC TO SHOWE REQUIRED RESTORMING AND AR SEALING. 19. PC TO SHOW REAL AND PIPE SIZES, SEE P301. P302, P303, & P304. TO REAL AND PAINT ALL EXTERIOR CAN BE REAL SEALING. 10. REVISIONS'SUBMISSIONS DATE SEALING. 10. REVISI	WRITE AND VENTS WITHIN NOU/OR SERVING COMMERCIAL, SPACES AND GRAVALE TO BE CAST IRON. ALL WASTE & STORM PIPHO RISERS RUNNING THROUCH CARACE AREAS SMALL INCLUDE AUMANUM REDIECTIVE CONTINUES       13. ALL VERTICAL WASTE & STORM PIPHO RISERS RUNNING THROUCH CARACE AREAS SMALL INCLUDE AUMANUM REDIECTIVE CONTINUES       14. ALL POW WASTE PIPE RESIST THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 1° FIBERCLASS       15. PROVIDE 1/2° CLOSED-CELL FOM SLEVES FOR ALL PIPE WHICH PENETRATES SLAB-ON-BACK FLOOR PIREOR TO FORMER CONCRETE:       16. PROVIDE LOCAL ISOLATION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMBING FIRTURE       17. VENT INTURES PER SCHEDULE AND CONNECT TO RISERS & VENT MAINS SHOWN ON PLAN. ALL VENT PIPHON NOT SHOWN.       18. PC TO SUPPLY ACCESS HATCHES GO TO INSTALL       19. PC TO SUPPLY ACCESS HATCHES GO TO INSTALL       10. OF RISER DMAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.       Stand-ON-STALL ENGLINES (SUBMISSIONE)       Date VIS       SUBMISSIONS       Date VIS       NOT SHOWN.       SUBMISSIONS       Date VIS       A C HITE CT S       SUBMISSIONS		CONTRACTOR PROVIDED WASTE, STORM DRAINS, GAS, AND CW SERVICES.
SHALL INCLUEE ALUMINUM PROTECTIVE COVERING 14. ALL PVC WASTE PIPE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH IT PEREOLASS 15. PROVIDE 1/27 CLOSED-CELL FORM SLEDES FOR ALL PIPE WHICH PENETRATES SLAB-ON-ORADE FLOOR PROR TO POURING CONGRETE. 16. PROVIDE LOCAL ISOLATION, STOP VALVE, ETC. FOR DHW AND OW FEEDS TO EACH PLUMENG FIXTURE 17. VENT FRITURES 18. PC TO SUPPLY ACCESS HATCHES. GC TO INSTALL 20. PRIME AND PAINT ALL EXTERIOR GAS PIPE PER SPEC. 21. FOR RISER DIAGRAMS AND PIPE SIZES, SEE P301. P302, P303, & P304.  No. REVISIONS/SUBMISSIONS Duite NO. REVISION/SUBMISSIONS DUITE NO. REVISIONS/SUBMISSIONS DUITE NO. REVISIO	SHALL INCLUDE ALUMINIUM PROTECTIVE COVERING  14. ALL PNC WASTE PHE RISERS THROUGH RESIDENTIAL SPACES SHALL BE INSULATED WITH 17 THERESGUES  15. PROVIDE 1/27 CLOSED-CLU. FOAM SLEDES FOR ALL PIPE WHICH PENETRATES  35. SUB-ON-GRADE FLOOR PROVIDE CONCRETE  16. PROVIDE LOCAL ISOLATION, STOP VALVE, ETC. FOR DHW AND CW FEEDS TO EACH PLUMEING FIXTURE  17. WENT FIXTURES PER SCHEDULE AND CONNECT TO RISERS & VENT MAINS SHOWN ON PROV. ALL VENT PERMS 001 SHOW.  18. PC TO PROVIDE REQUIRED PRESIDENTIAL CONCRETE  20. PROVIDE ACCESS HATCHES. CC TO INSTALL  20. PROVE ACCESS HATCHES. CC TO INSTALL  20. PROVE ACCESS HATCHES. CC TO INSTALL  20. PROVE ACCESS HATCHES. CC TO INSTALL  20. PROVIDE REQUIRED PRESIDENCE AS PER PER SPEC.  21. FOR RISER DIACRAMS AND PPE SIZES, SEE P301. P302, P303, & P304.		WASTE AND VENTS WITHIN AND/OR SERVING COMMERCIAL SPACES AND GARAGE TO
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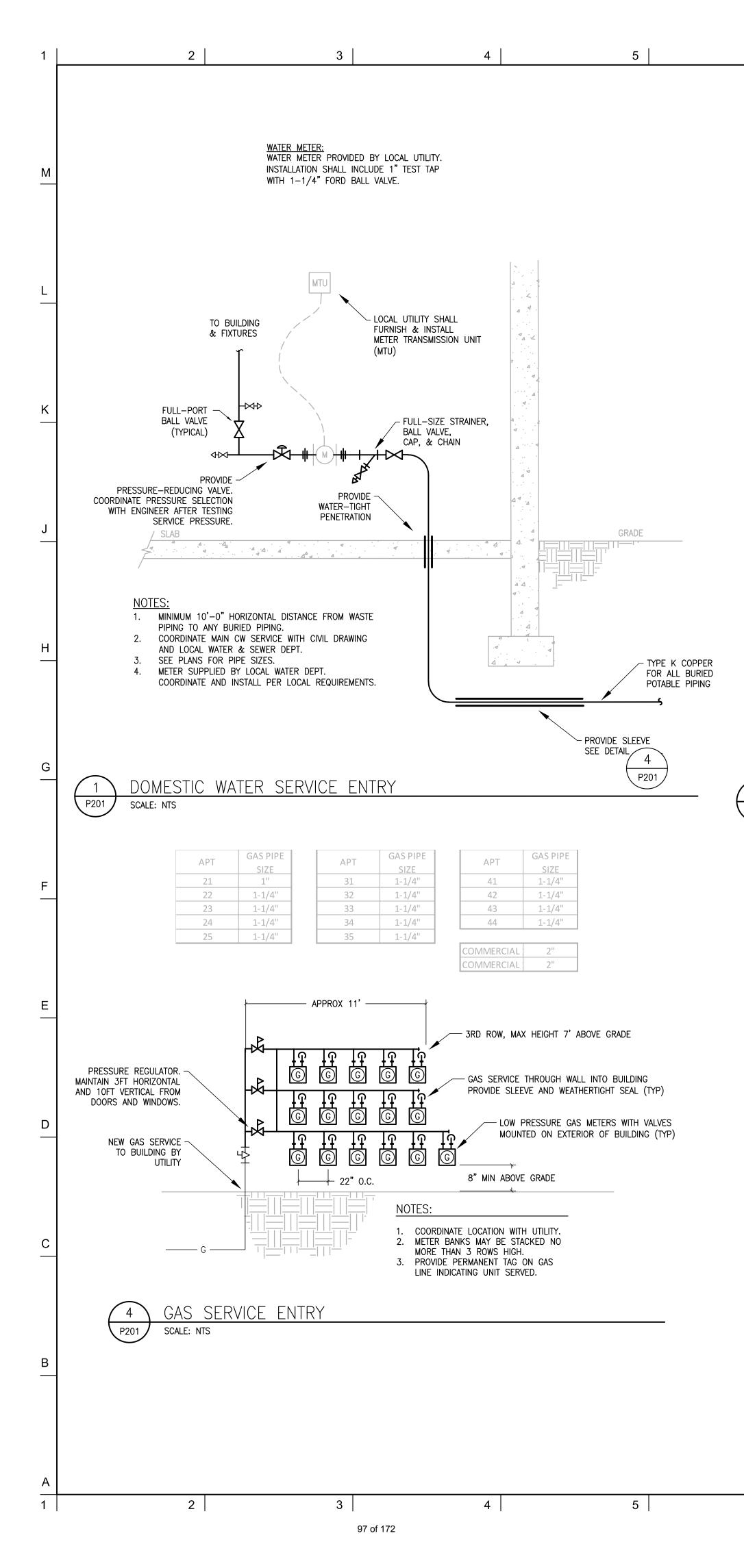
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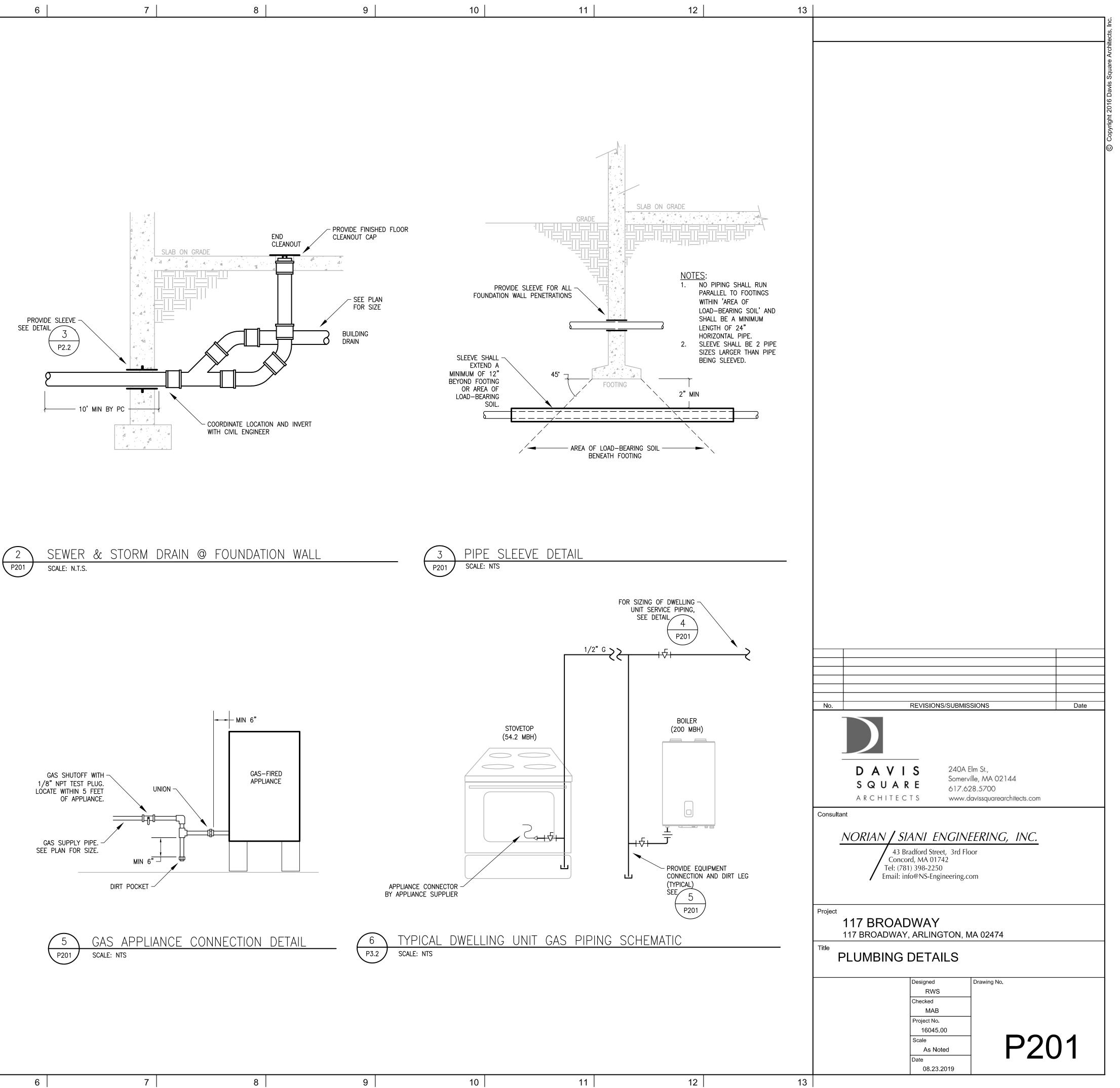


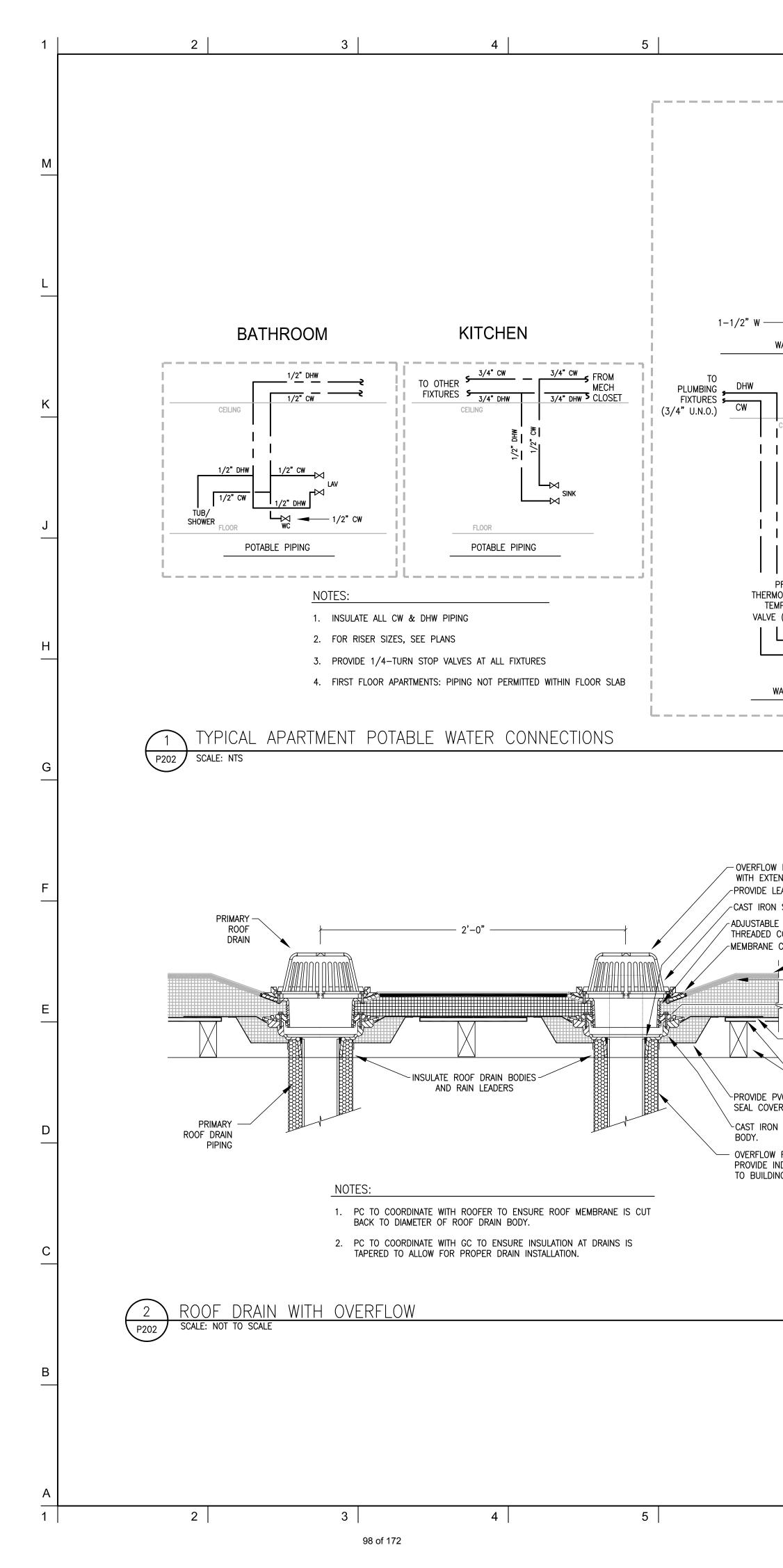
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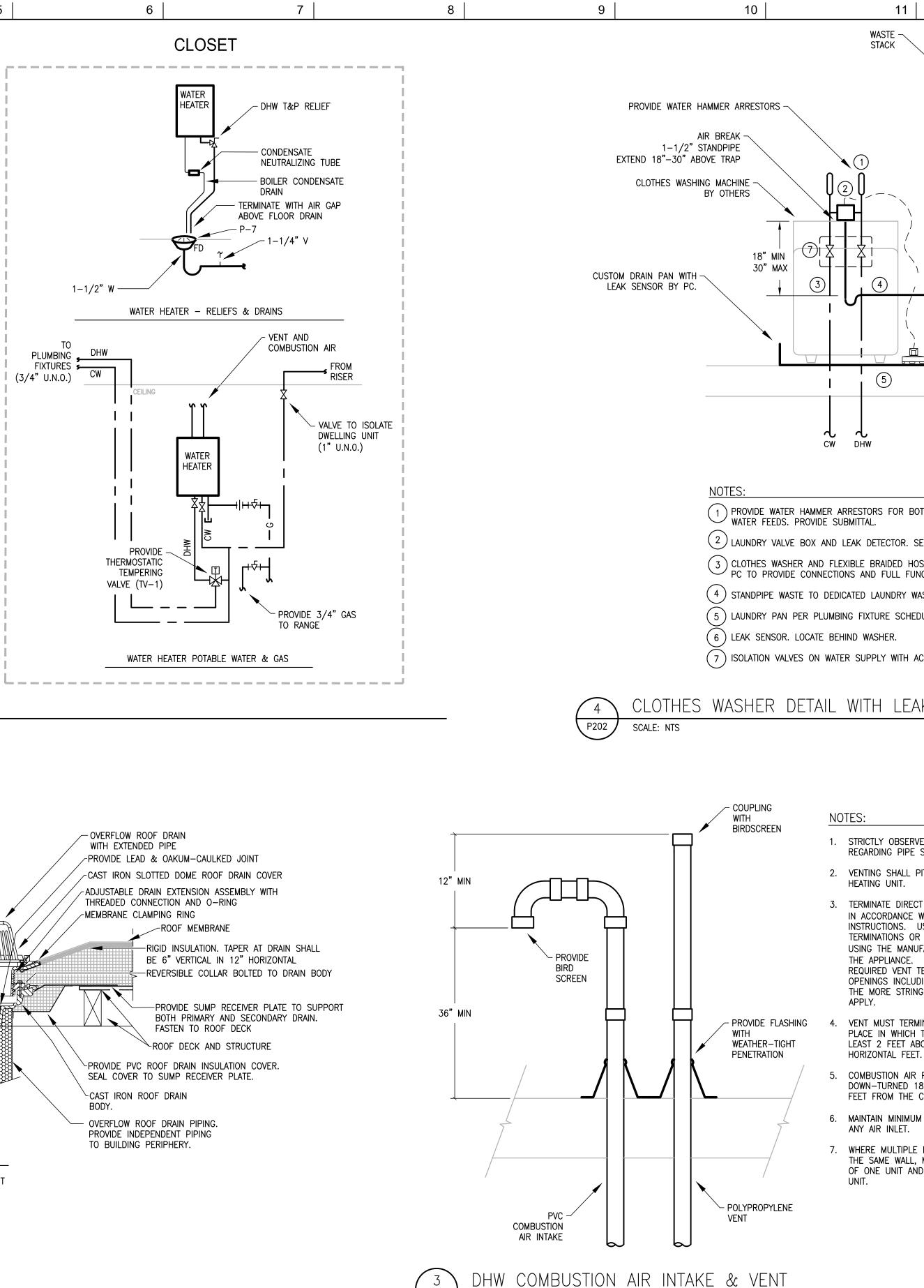


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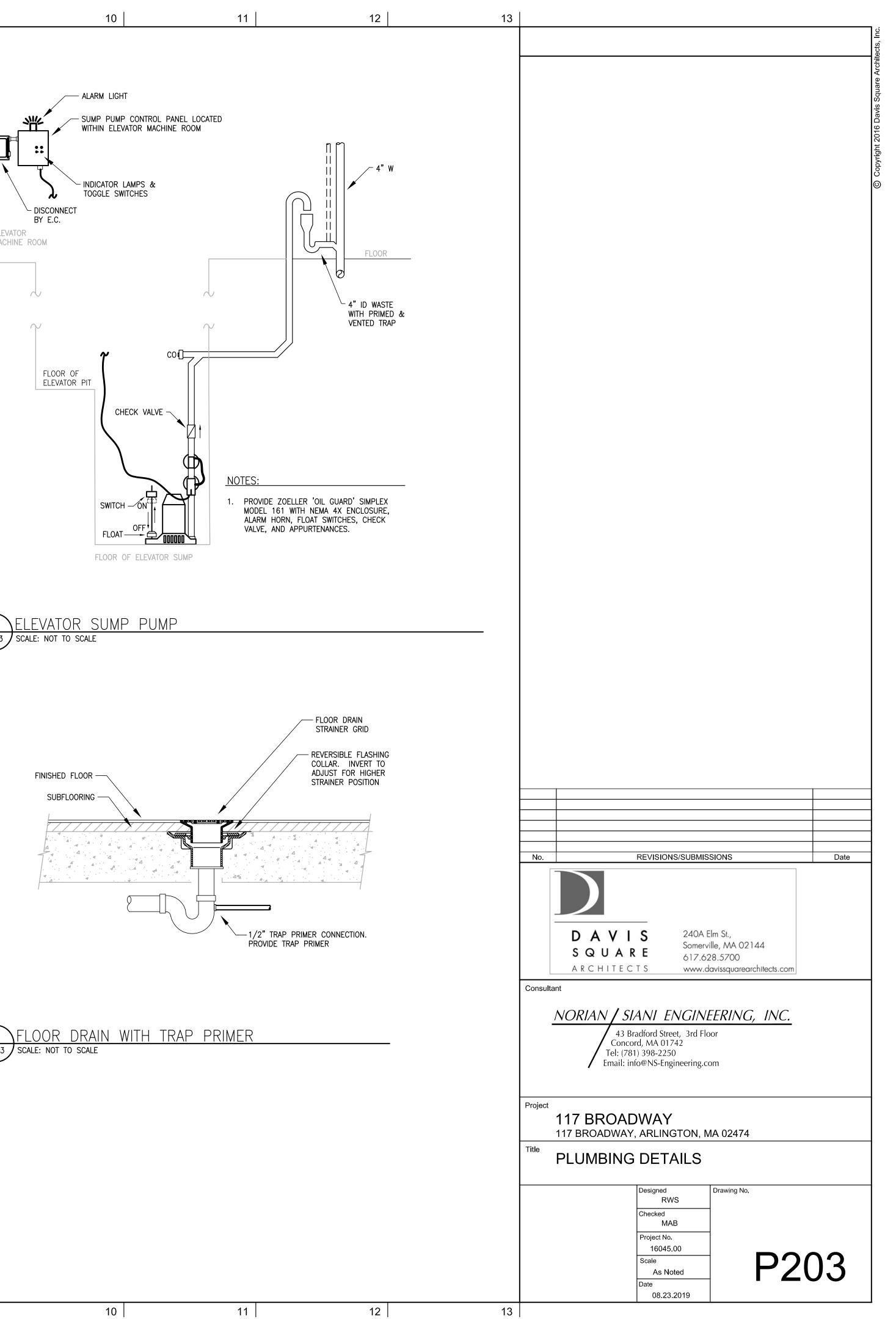
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VE THE MANUFACTURER'S REQUIREMENTS SIZING AND MAXIMUM EQUIVALENT LENGTH. PITCH CONTINUOUSLY DOWNWARD TOWARDS CT VENT AT THE EXTERIOR OF THE BUILDING WITH THE MANUFACTURER'S INSTALLATION	
USE ONLY MANUFACTURER—SUPPLIED R FIELD—SUPPLIED FITTINGS ASSEMBLED JFACTURER'S APPROVED CONFIGURATION FOR	
OBSERVE MANUFACTURER'S AND NFPA 54 TERMINATION CLEARANCES TO BUILDING DING DOORS, WINDOWS, AND AIR INLETS.	No. REVISIONS/SUBMISSIONS
IGENT OF THE TWO REQUIREMENTS SHALL MINATE AT LEAST 3 FEET ABOVE THE HIGHEST THE VENT PENETRATES THE ROOF AND AT BOVE ANY PART OF THE BUILDING WITHIN 10 T.	
PIPING MUST TERMINATE IN A 180° RETURN PIPE NO FURTHER THAN 2 CENTER OF THE VENT PIPE.	DAVIS SQUARE240A Elm St., Somerville, MA 02144 617.628.5700ARCHITECTSwww.davissquarearchitects.com
M VERTICAL 12" FROM ANY VENT OUTLET TO	Consultant
E DIRECT VENT APPLIANCES TERMINATE ON MAINTAIN AT LEAST 12" BETWEEN THE VENT ID COMBUSTION AIR INTAKE OF ADJACENT	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com
	Project <b>117 BROADWAY</b> 117 BROADWAY, ARLINGTON, MA 02474
	Designed Drawing No. RWS Checked MAB Project No. 16045.00
	Scale As Noted Date 08.23.2019
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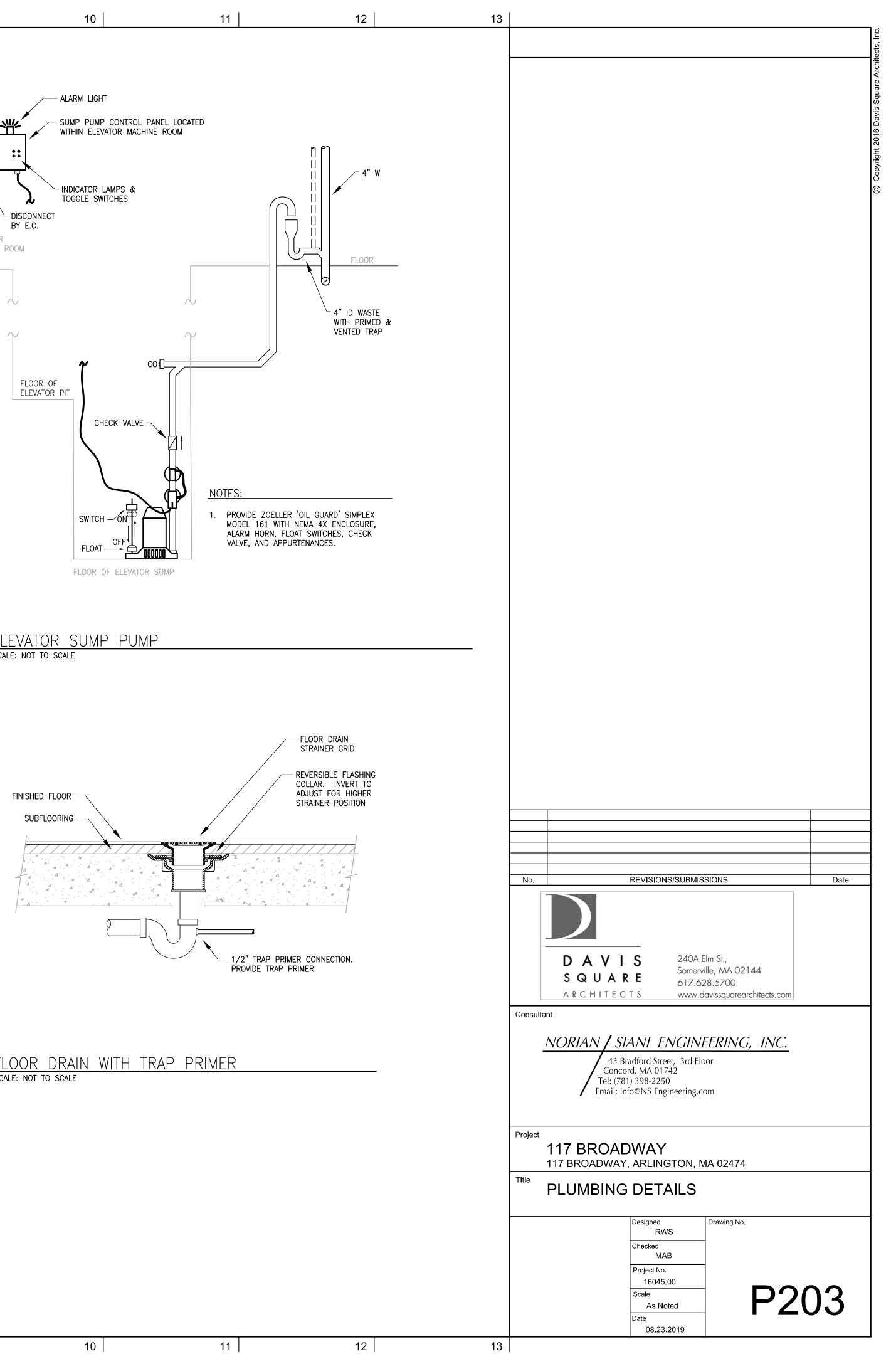
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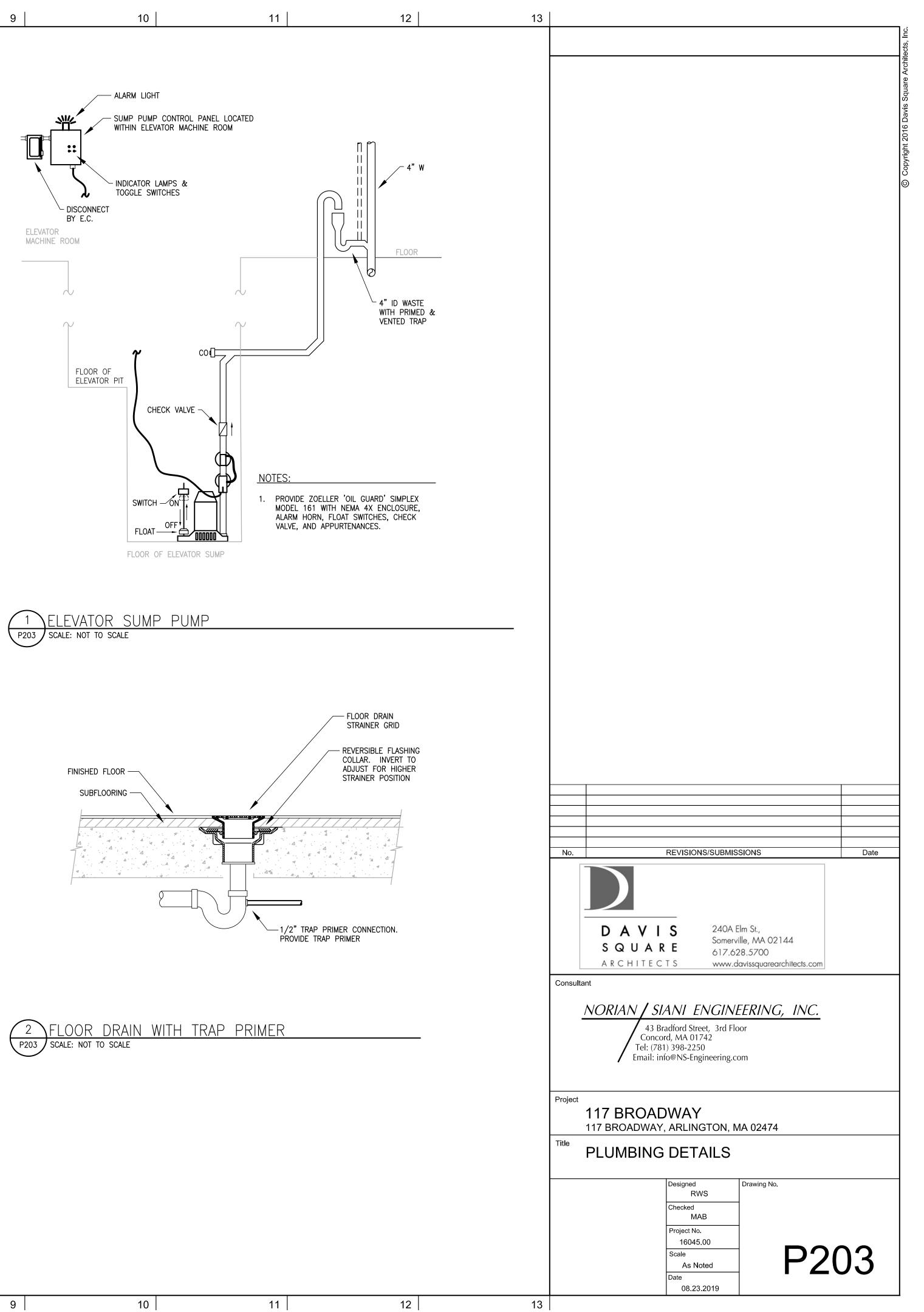
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N 4					SPRIN
M		FLOW TEST	DATA		DWELLING CONCEAL (BASIS C
	ТІ	EST DATE: -			MECHANI
		OURCE: – OCATION: –			K FACTO (BASIS C
			er main: -" Dia	A	GARAGE:
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		TATIC PRESSURE: – psi ESIDUAL PRESSURE: – psi			
		LOW: – gpm			
K					
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		TABLE 8			
		POSITIONING OF SP OBSTRUCTION			CEILING
				ABLE DISTANCE OF	
		DISTANCE FROM SPRINKLERS TO SIDE OF OBSTRUCTION	DEFLECTOR A	BOVE BOTTOM OF ION (INCHES)	•
		(A)		B)	
Η		LESS THAN 1 FT		0	
		1'-0" TO LESS THAN 1'-6"	0,	-0"	
		1'-6" TO LESS THAN 2'-0"		<u>-1"</u>	
		2'-0" TO LESS THAN 2'-6" 2'-6" TO LESS THAN 3'-0"	-	<u> </u>	POSITION
		3'-0" TO LESS THAN 3'-6"	0	-3"	OBS
G		3'-6" TO LESS THAN 4'-0"		-3"	
		4'-0" TO LESS THAN 4'-6" 4'-6" TO LESS THAN 5'-0"		/-5" /-7"	
		5'-0" TO LESS THAN 5'-6"		<sup>2</sup> -7"	
		5'-6" TO LESS THAN 6'-0"		2–7"	
		6'-0" TO LESS THAN 6'-6" 6'-6" TO LESS THAN 7'-0"		-9" -11"	
_		7'-0" AND GREATER			
F		<u></u>			
	NF	PA 13 TABLE 8.10.	6.1.2 + F	IGURE 8.10.6.1.	2(A) I
		PENDENT AN		GHT SPRAY SPI	RINK
	$\begin{pmatrix} 1 \end{pmatrix}$	BSTRUCTION RULES	FOR INS	STALLATION	
E		CALE: NTS			
				TABLE 8.3.2.5(c)	
D		TEMPERATURE	RATINGS OF	SPRINKLERS IN SPECIFIE	D RESID
				MINIMUM DISTANCE FROM EDGE OF SOURCE TO	M
		HEAT SOURCE		ORDINARY TEMPERATURE SPRINKLER (INCHES)	INT
		SIDE OF OPEN OR RECESS	ED FIREPLACE	36	
		FRONT OF RECESSED F	FIREPLACE	60	
C		KITCHEN RANG	E	18	
		WALL OVEN SIDE OF CEILING OR WAL	I MOUNTED	18	
		HOT AIR DIFFUS	ER	24	
		FRONT OF WALL MOUNT DIFFUSER	ED HOT AIR	36	
		HOT WATER HEATER OR		6	
В		LIGHT FIXTURE: 0W- LIGHT FIXTURE: 250V		<u> </u>	
					I
	<u> </u>				
		MPERATURE RATINGS .e: nts	UF SPF	KINKLERS IN SPE	<u>-</u> CIFIE
	FP001 SCAL	mu			
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		100 of 172			

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## SPRINKLER HEAD SCHEDULE

- ING UNITS, RESIDENTIAL HALLWAYS: RESIDENTIAL TYPE, EXTENDED COVERAGE, ALED PENDANT, 4.9 K FACTOR, 16x16 COVERAGE, WHITE FINISH. S OF DESIGN: TYCO MODEL LFII)
- NICAL SPACES: STANDARD COVERAGE, QUICK RESPONSE, UPRIGHT HEAD, 5.6 TOR, 12x10 MAX COVERAGE, NATURAL BRASS FINISH. GOF DESIGN: TYCO MODEL TY RFII)
- E: STANDARD COVERAGE, STANDARD RESPONSE, DRY RECESSED PENDENT 5.6 K FACTOR, 12x10 MAX COVERAGE, NATURAL BRASS FINISH. S OF DESIGN: TYCO MODEL DS-ECC)

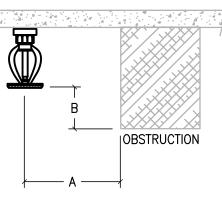


FIGURE 8.10.6.1.2(A) IONING OF SPRINKLERS TO AVOID BSTRUCTION TO DISCHARGE

# ) RESIDENTIAL KLERS

# SIDENTIAL AREAS MINIMUM DISTANCE FROM EDGE OF SOURCE TO NTERMEDIATE TEMPERATURE SPRINKLER (INCHES) 12 36 9 9 12 18 3 3

6

# IED RESIDENTIAL AREAS

		FIRE PROTECTION LEG
ABBREVIATIONS         AFF       ABOVE FINISHED FLOOR         AHJ       AUTHORITY HAVING JURISDIC         BFP       BACK FLOW PREVENTER         DCVA       DOUBLE CHECK VALVE ASSE         DN       DOWN         DR       DRAIN         EC       ELECTRICAL CONTRACTOR         ELEC       ELECTRICAL         ELEV       ELECTRICAL         ELEV       ELEVATOR         ETR       EXISTING         FCA       FLOOR CONTROL ASSEMBLY         FD       FIRE DEPARTMENT         FDC       FIRE DEPARTMENT CONNECTI         FDV       FIRE DEPARTMENT VALVE         FS       FLOW SWITCH         FPC       FIRE PROTECTION CONTRACTOR         LPS       LOW PRESSURE SWITCH         MC       MECHANICAL CONTRACTOR         LPS       LOW PRESSURE SWITCH         MC       MECHANICAL CONTRACTOR         NIC       NOT IN CONTRACT         PROVIDE       SUPPLY AND INSTALL         PC       PLUMBING CONTRACTOR         PRV       PRESSURE REDUCING VALVE         SP       STANDPIPE         SPR       SPRINKLER         TS       TAMPER SWITCH <td< td=""><td>TION TION MBLY ION TOR TOR TOR TOR</td><td>- NEW WORK (BOLD LINE) - EXISTING WORK (LIGHT OR SHADED LINE) FIRE DEPARTMENT CONNECTION ELECTRIC BELL HYDRAULIC REFERENCE POINT CONNECT TO EXISTING CONCEALED PENDANT * RECESSED SIDEWALL * EXPOSED UPRIGHT RECESSED PENDANT * RECESSED DRY PENDANT * DRY SIDEWALL * BSCRIPT NUMERAL INDICATES RINKLER HEAD TEMPERATURE TING. IF NO NUMERAL IS INDICATED EN HEAD SHALL BE ORDINARY MPERATURE RATING.</td></td<>	TION TION MBLY ION TOR TOR TOR TOR	- NEW WORK (BOLD LINE) - EXISTING WORK (LIGHT OR SHADED LINE) FIRE DEPARTMENT CONNECTION ELECTRIC BELL HYDRAULIC REFERENCE POINT CONNECT TO EXISTING CONCEALED PENDANT * RECESSED SIDEWALL * EXPOSED UPRIGHT RECESSED PENDANT * RECESSED DRY PENDANT * DRY SIDEWALL * BSCRIPT NUMERAL INDICATES RINKLER HEAD TEMPERATURE TING. IF NO NUMERAL IS INDICATED EN HEAD SHALL BE ORDINARY MPERATURE RATING.

SPRINKLER NOTES:

SURFACE.

- 1. THE FOLLOWING PLANS ARE TIER ONE CONSTRUCTION DOCUMENTS. LAYOUT OF SPRINKLER HEADS AND HYDRAULIC CALCULATIONS ARE FOR BUILDING DEPARTMENT USE ONLY. SPRINKLER CONTRACTOR SHALL PREPARE TIER TWO SHOP DRAWINGS/WORKING PLANS, INCLUDING HYDRAULIC CALCULATIONS. CONTRACTOR TO OBTAIN ALL APPROVALS AS REQUIRED PRIOR TO STARTING CONSTRUCTION. UPON SUBSTANTIAL COMPLETION, CONTRACTOR TO PROVIDE TIER THREE RECORD DRAWINGS/AS-BUILT DRAWINGS.
- 2. THE BASE BUILDING "CONTRACT DRAWINGS" AND "SPECIFICATIONS" INCLUDING ALL RESPECTIVE ADDENDA AND BULLETINS SHALL FORM A PART OF THIS WORK AND ALL WORK SHALL BE SUBJECT TO RESPECTIVE PROVISIONS THEREFORE.
- 3. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES, NOTIFY ENGINEER OF CONFLICTS PRIOR TO INSTALLATION OF PIPING OR EQUIPMENT.
- 4. PROVIDE NFPA 13 COMPLIANT SPRINKLER SYSTEM. PROVIDE FULL COVERAGE IN ALL AREAS EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.
- 5. SPRINKLERS SHALL COVER THE ENTIRE AREA OF THE ROOM INCLUDING ALCOVES. SPRAY SHALL NOT BE BLOCKED BY WALLS OR PARTITIONS.
- 6. SPRINKLER CONTRACTOR SHALL ADJUST AND/OR ADD SPRINKLER HEADS AS REQUIRED UTILIZING ARCHITECT'S REFLECTED CEILING PLAN FOR LOCATION OF LIGHTS, DIFFUSERS, CABLE TRAYS, ETC...
- 7. SPRINKLER CONTRACTOR SHALL ARRANGE AND PAY FOR A NEW HYDRANT FLOW TEST TO PREPARE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS. 8. ALL SPRINKLER WORK SHALL BE IN STRICT CONFORMANCE WITH THE REQUIREMENTS OF NFPA-13, LOCAL FIRE DEPARTMENT, MASSACHUSETTS STATE BUILDING CODE, AND
- THE OWNER'S INSURANCE COMPANY. 9. CONTRACTOR SHALL DETERMINE BEST LOCATION FOR ROUTING ALL ASSOCIATED SPRINKLER LINES. PIPE ROUTING SHOWN SHALL BE USED AND ANY ADDITIONAL OFFSETS OR
- FITTINGS REQUIRED FOR PROPER INSTALLATION, COORDINATION WITH OTHER TRADES, AND/OR TO MAINTAIN PROPER CLEARANCES SHALL BE PROVIDED. VERIFY EXISTING STRUCTURAL, MECHANICAL, ELECTRICAL INSTALLATIONS AND AVOID ANY/ALL OBSTRUCTIONS OR INTERFERENCES WITH FIRE PROTECTION PIPE ROUTING. 10. ALL NEW VALVES CONTROLLING THE FIRE PROTECTION SYSTEM TO BE ELECTRICALLY SUPERVISED. TYPE AND EXACT LOCATION OF FLOOR, PRESSURE AND SUPERVISORY
- SWITCHES SHALL BE COORDINATE BETWEEN THE RESPONSIBLE TRADES.
- 11. SEE PLANS FOR THE MANUFACTURER, MODEL, SIZE, TEMPERATURE RATING, AND FINISH OF ALL SPRINKLER HEADS. 12. WATER-FILLED SPRINKLER PIPE SHALL NOT BE INSTALLED IN ANY AREA SUBJECT TO FREEZING. THE OWNER SHALL PROVIDE SUFFICIENT HEAT AT ALL TIMES TO PREVENT WATER-FILLED SPRINKLER PIPE FROM FREEZING.
- 13. MATERIALS: A. ALL PIPING AND FITTINGS SHALL CONFORM TO SPECIFICATIONS.
- B. ALL PIPING AND FITTINGS SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. 14. REFER TO ARCHITECTURAL DRAWINGS FOR HUNG CEILING HEIGHTS AND CONSTRUCTION. WHERE WORK BETWEEN THIS DRAWING AND ARCHITECTURAL PLANS ARE IN CONFLICT, ADVISE PRIOR TO INSTALLATION OF PIPING.
- 15. CONTRACTOR SHALL NOT INSTALL ANY SPRINKLER PIPING THAT WILL INTERFERE WITH THE MAINTENANCE/REMOVAL OF HVAC EQUIPMENT.
- 16. ALL SPRINKLER HEADS MOUNTED IN CEILING SHALL BE LOCATED A MINIMUM OF 4" AWAY FROM ANY WALLS, CEILING HEIGHT CHANGES, OR ANY OTHER VERTICAL INTERSECTING
- 17. PROVIDE HEAD GUARDS ON SPRINKLER HEADS IN MECHANICAL AREAS AND WHERE NOTED ON PLANS.
- 18. CUTTING OF STRUCTURAL AND/OR ARCHITECTURAL MEMBERS TO BE DONE ONLY WITH THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.
- 19. FIRESTOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, FLOORS, ROOFS, ETC. FLASH AND COUNTERFLASH ROOF PENETRATIONS.
- 20. PROVIDE ACCESS PANELS TO ALL VALVES ABOVE NON-ACCESSIBLE CEILINGS AND WITHIN CHASES.
- 21. PROVIDE STOCK OF EXTRA SPRINKLERS IN ACCORDANCE WITH NFPA-13 SECTION 6.2.9.
- 22. METHODS OF HANGING PIPES, HEADERS AND BRANCHES SHALL BE IN ACCORDANCE WITH NFPA-13.
- 23. SEISMIC BRACING SHALL BE PROVIDE AND INSTALLED IN ACCORDANCE WITH THE MASSACHUSETTS STATE BUILDING CODE AND NFPA 13.
- 24. ALL VALVES FOR FIRE SERVICE SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. AND THEY FACTORY MUTUAL LABORATORIES. VALVES SHALL BE FACTORY MARKED "UL" AND "FM", 175 PSI WORKING PRESSURE.
- 25. ALL 120V OR GREATER POWER WIRING SHALL BE ACCOMPLISHED UNDER THE ELECTRICAL DIVISION. ALL 24V WIRING BY THIS CONTRACTOR. ALL ALARM AND TAMPER SWITCHES SHALL BE PROVIDED, AND TESTED UNDER THIS SECTION OF THE SPECIFICATIONS WITH WIRING PROVIDED IN THE ELECTRICAL DIVISION. COORDINATE ALL ELECTRICAL ITEMS WITH ELECTRICAL CONTRACTOR.
- 26. PROVIDE LABELING OF ALL CONTROL VALVES, BACKFLOW PREVENTER, FIRE DEPARTMENT CONNECTION, ELECTRIC BELL, ETC AS REQUIRED BY NFPA-13 AND NFPA-14. ALL SIGNAGE SHALL BE ENGRAVED PHENOLIC OR PRINTED ALUMINUM. PROVIDE CUSTOM PRINTED OR ENGRAVED SIGNS WHERE REQUIRED (HAND PRINTED SIGNS ARE NOT ACCEPTABLE). ALL SIGNS SHALL BE CONNECTED WITH STAINLESS STEEL OR BRASS CHAINS.
- 27. PROVIDE A PERMANENTLY ATTACHED HYDRAULIC DESIGN INFORMATION SIGN STATING THE REQUIRED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
- 28. SEISMIC BRACING SHALL BE PROVIDE AND INSTALLED IN ACCORDANCE WITH THE MASSACHUSETTS STATE BUILDING CODE AND NFPA 13.

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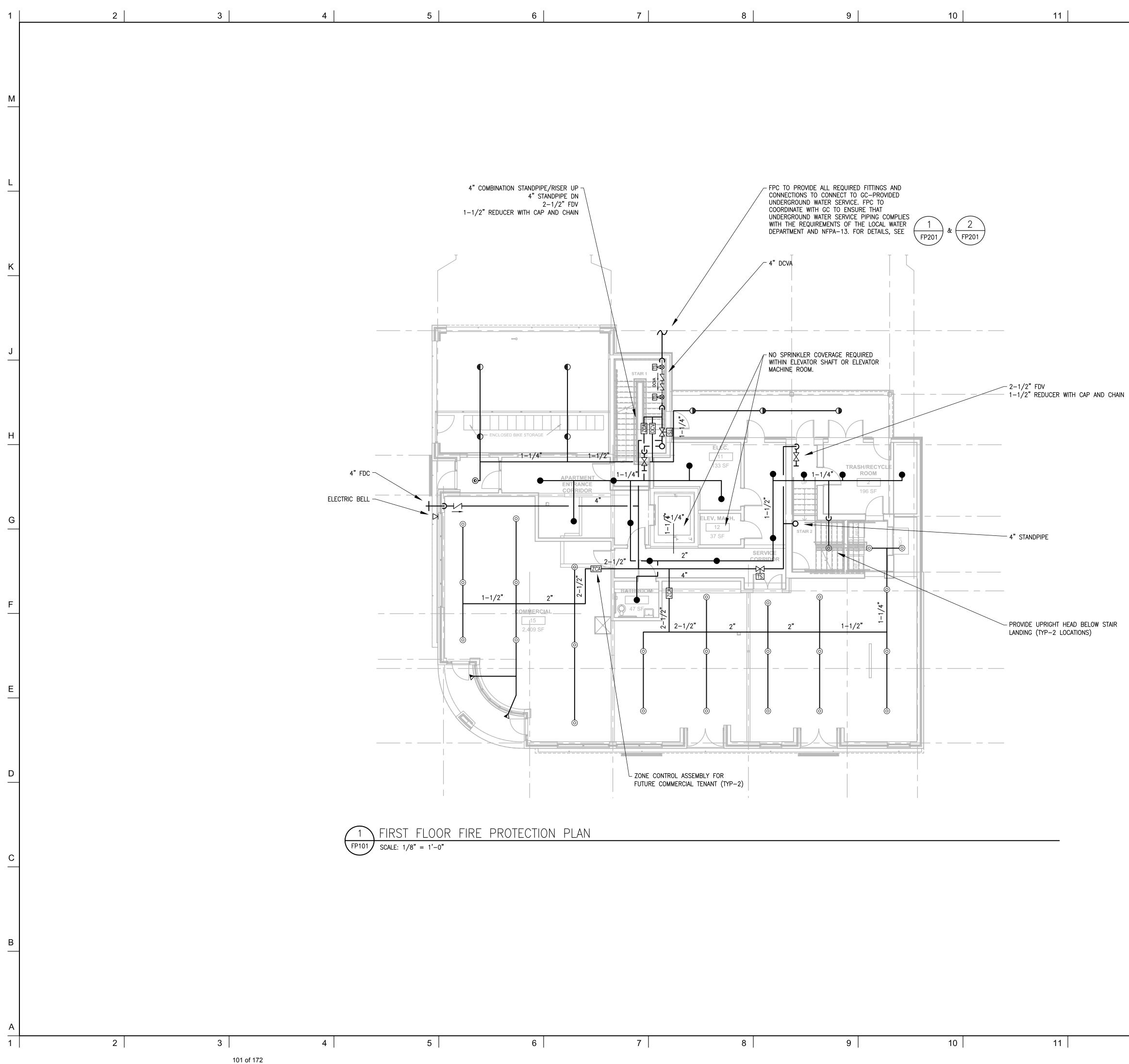
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GEND	
 C	CONCEALED FIRE PROTECTION PIPING EXPOSED FIRE PROTECTION PIPING DROP, PIPE DOWN RISER, PIPE UP
	ISOLATION VALVE WITH TAMPER SWITCH
	SPRING CHECK VALVE
&	O.S. & Y. VALVE WITH TAMPER SWITCH
	FLANGE
	BALL VALVE WITH HOSE THREAD, BRASS CAP AND CHAIN
	DOUBLE CHECK VALVE ASSEMBLY BACKFLOW PREVENTER
FS	WATERFLOW ALARM SWITCH
TS	TAMPER SWITCH
LPS	LOW-PRESSURE SWITCH
T&D	SPRINKLER TEST & DRAIN ASSEMBLY
DCV	DRY CONTROL VALVE
ZCV	ZONE CONTROL VALVE
ZCA	ZONE CONTROL ASSEMBLY

No.	REVISIONS/SUBMISSIONS	Date
	DAVIS 240A Elm St., Somerville, MA 02144	
	SQUARE ARCHITECTS www.davissquarearchitects.com	
Consult	ant	
	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	
Project	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474	
<b>Fitle</b>	FIRE PROTECTION LEGEND AND NOTES	
	Designed DCW Checked MAB Project No. 16045.00 Scale As Noted	01

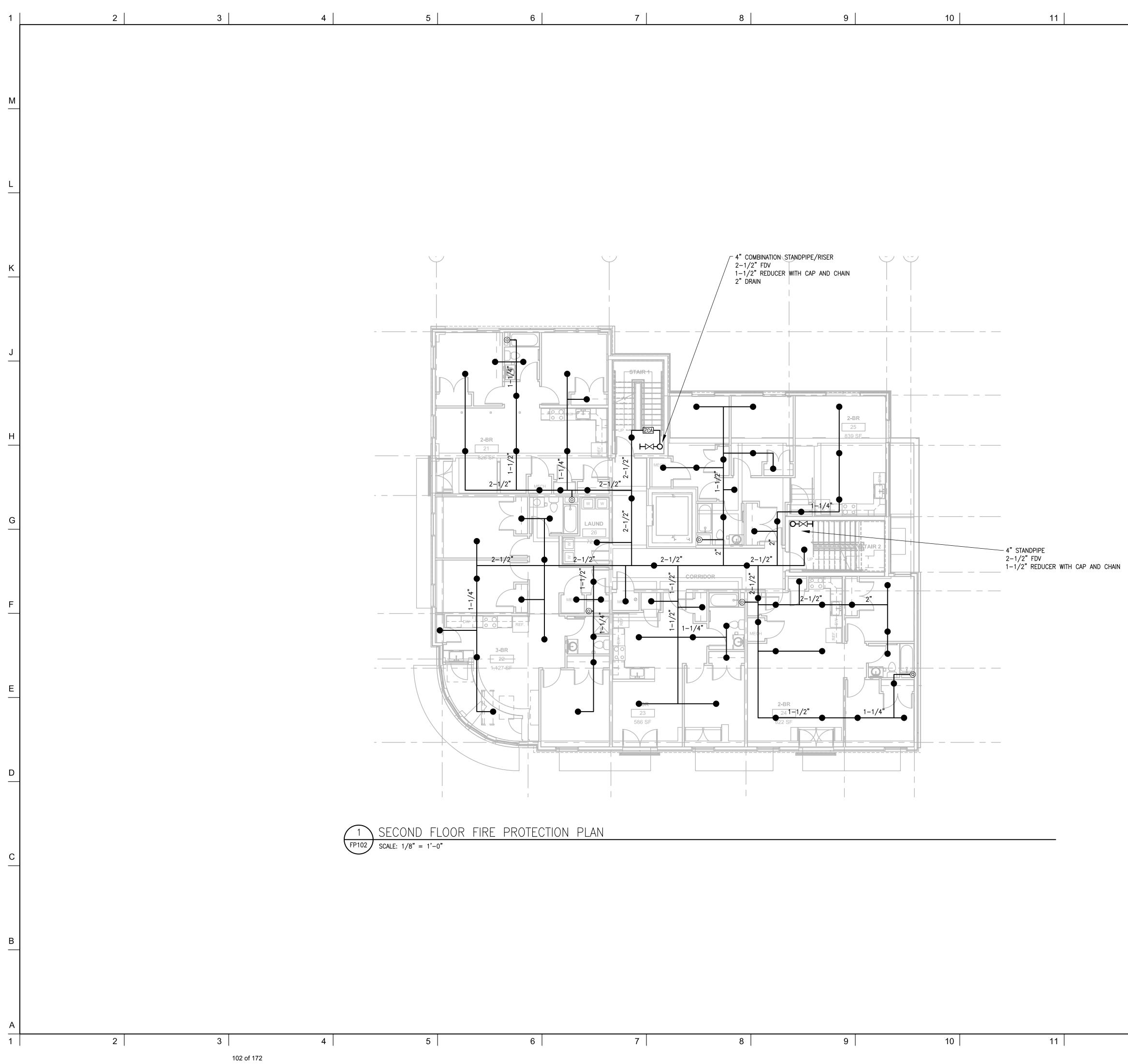
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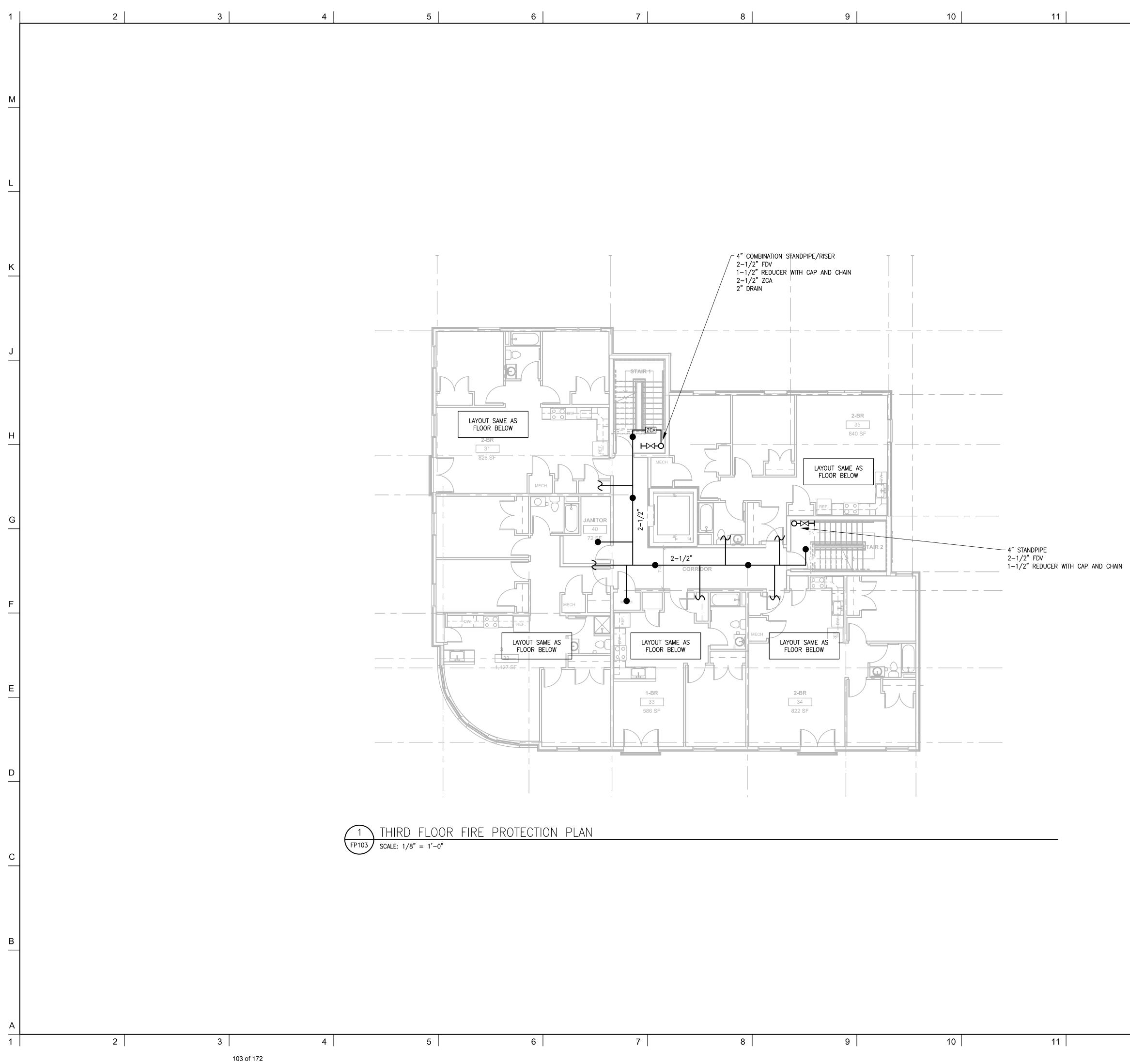
FIRE PROTECTION NOTES 1. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS. 2. INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURERS' INSTRUCTIONS. 3. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO INSPECT AND VERIFY ALL INFORMATION IN FIELD AND INFORM THE ENGINEERS OF ANY DISCREPANCIES IN WRITING IMMEDIATELY. 4. FPC TO PROVIDE REQUIRED FIRESTOPPING AND AIR SEALING. 5. PIPING MAY BE SHOWN DISPLACED FOR CLARITY. 6. PROVIDE NFPA 13-2013 COMPLIANT SPRINKLER SYSTEM. PROVIDE FULL SPRINKLER COVERAGE IN ALL AREAS OF THE BUILDING EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. 7. ALL EXPOSED PIPING WITHIN STAIRS AND MECHANICAL ROOMS SHALL BE STEEL. CONCEALED PIPING WITHIN DWELLING UNITS AND COMMON SPACES TO BE STEEL OR CPVC. 8. DURING INSTALLATION, FPC SHALL EXAMINE ALL SPACES WITHIN BUILDING TO DETERMINE IF ANY ADDITIONAL COMBUSTIBLE VOID SPACES EXIST. NOTIFY ENGINEER IN WRITING OF ANY SUSPECT AREAS. 9. FPC TO COORDINATE WITH ARCHITECTURAL RCPs AND APPROVED LIGHTING FIXTURE PRODUCT CUTS TO ENSURE LIGHTING FIXTURES AND OTHER CEILING MOUNTED DEVICES DO NOT CREATE OBSTRUCTIONS TO SPRINKLER HEADS. 10. FPC TO PROVIDE CODE REQUIRED EQUIPMENT LABELS AND SIGNS FOR ALL FIRE PROTECTION EQUIPMENT. 11. ALL PIPING SHALL BE 1" UNLESS NOTED OTHERWISE. CONCEALED SPACE SPRINKLER REQUIREMENTS: 1. PROVIDE UPRIGHT SPRINKLER HEADS TO PROTECT COMBUSTIBLE VOID SPACE WITHIN FLOOR STRUCTURE (TYPICAL). 2. HEADS SHALL BE LOCATED 12'-0" ON CENTER. 3. HEADS SHALL BE LOCATED 6'-0" MAX EITHER SIDE OF SHEAR WALLS AND BEAMS (SEE STRUCTURAL PLANS FOR DETAILS). HYDRAULIC DESIGN INFORMATION 0.10 1500 LIGHT HAZARD FOR ALL AREAS EXCEPT WHERE NOTED OTHERWISE

**REVISIONS/SUBMISSIONS** Date No. DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title FIRST FLOOR FIRE PROTECTION PLAN Drawing No. Designed DCW Checked MAB Project No. 16045.00 **FP101** Scale As Noted Date 08.23.2019



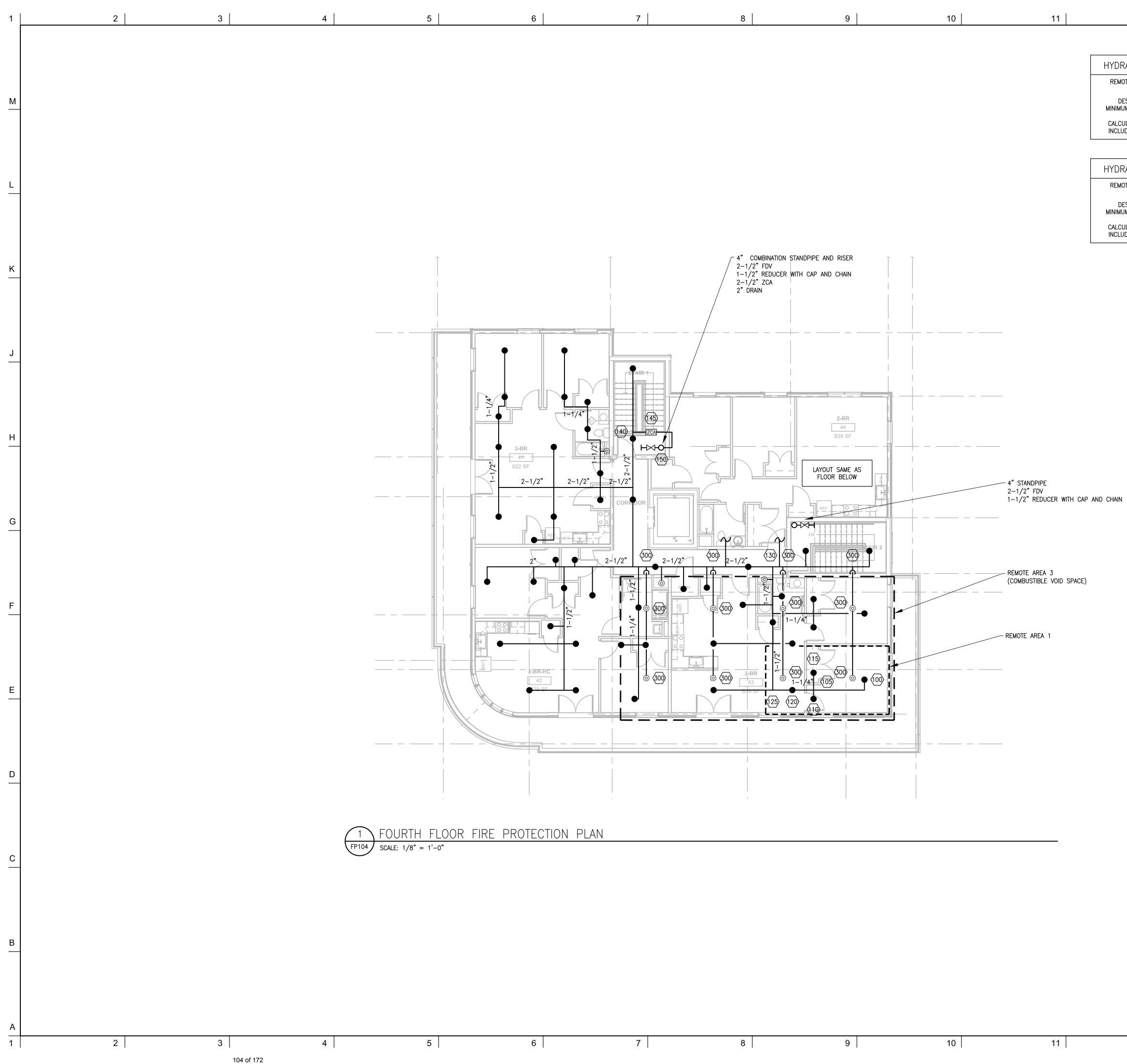
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2	SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.	
۲.	INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURERS' INSTRUCTIONS.	
3.	ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO INSPECT VERIFY ALL INFORMATION IN FIELD AND INFORM THE ENGINEERS OF ANY DISCREPANCIES IN WRITING IMMEDIATELY.	AND
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No.	REVISIONS/SUBMISSIONS	Date
  	REVISIONS/SUBMISSIONS         D         REVISIONS/SUBMISSIONS         D         A         RCHITECTS         240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	Date
	DAVIS SQUARE 240A Elm St., Somerville, MA 02144 617.628.5700	Date
	DAVIS       240A Elm St., Somerville, MA 02144         SQUARE       Somerville, MA 02144         ARCHITECTS       www.davissquarearchitects.com         sultant       NORIAN SIANI ENGINEERING, INC.         43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com         ect       117 BROADWAY	Date
Cons	DAVIS DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ext 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR	Date
Cons	DAVIS DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant <u>NORIAN SIANI ENGINEERING, INC.</u> 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	Date
Cons	DAVIS DAVIS SQUARE SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.dovissquarearchitects.com sultant <u>NORIAN SIANI ENGINEERING, INC.</u> 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ext 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR FIRE PROTECTION PLAN Drawing No. Checked MAB	Date
Cons	DAVIS DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com sultant <i>NORIAN SIANI ENGINEERING, INC.</i> 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com ext 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR FIRE PROTECTION PLAN	

08.23.2019



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F	FIRE PROTECTION NOTES	
1	. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.	
2	. INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURERS' INSTRUCTIONS.	
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	HYDRAULIC DESIGN INFORMATION0.101500LIGHT HAZARDFOR ALL AREAS EXCEPT WHERE NOTED OTHERWISE	
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	No. REVISIONS/SUBMISSIONS Date	_
	DAVIS SQUARE 240A Elm St., Somerville, MA 02144 617.628.5700	
	A R C H I T E C T S www.davissquarearchitects.com	
	NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742	
	Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	
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	FIRE PROTECTION PLAN	
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08.23.2019



# HYDRAULIC SUMMARY TABLE

REMOTE AREA 2 – LIGHT HAZARD DESIGN AREA: 1000 SQ.FT. MINIMUM DENSITY: 0.1 GPM/SQ FT

CALCULATED FLOW: - GPM @ - PSI

INCLUDING 100 GPM HOSE ALLOWANCE

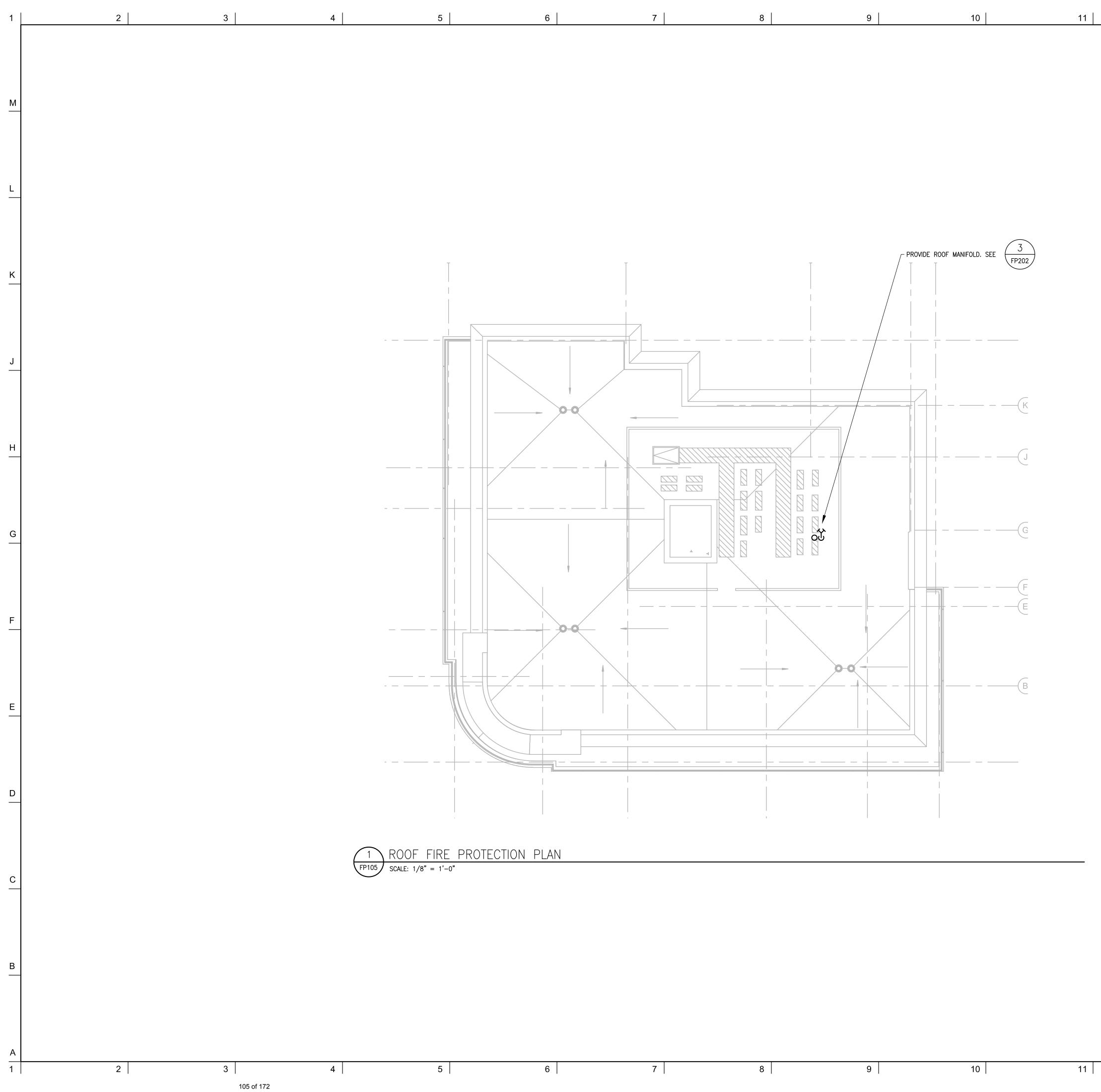
FIRE PROTECTION NOTES

1. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS. 2. INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURERS' INSTRUCTIONS. 3. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO INSPECT AND VERIFY ALL INFORMATION IN FIELD AND INFORM THE ENGINEERS OF ANY DISCREPANCIES IN WRITING IMMEDIATELY. 4. FPC TO PROVIDE REQUIRED FIRESTOPPING AND AIR SEALING. 5. PIPING MAY BE SHOWN DISPLACED FOR CLARITY. 6. PROVIDE NFPA 13-2013 COMPLIANT SPRINKLER SYSTEM. PROVIDE FULL SPRINKLER COVERAGE IN ALL AREAS OF THE BUILDING EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. 7. ALL EXPOSED PIPING WITHIN STAIRS AND MECHANICAL ROOMS SHALL BE STEEL. CONCEALED PIPING WITHIN DWELLING UNITS AND COMMON SPACES TO BE STEEL OR CPVC. 8. DURING INSTALLATION, FPC SHALL EXAMINE ALL SPACES WITHIN BUILDING TO DETERMINE IF ANY ADDITIONAL COMBUSTIBLE VOID SPACES EXIST. NOTIFY ENGINEER IN WRITING OF ANY SUSPECT AREAS. 9. FPC TO COORDINATE WITH ARCHITECTURAL RCPs AND APPROVED LIGHTING FIXTURE PRODUCT CUTS TO ENSURE LIGHTING FIXTURES AND OTHER CEILING MOUNTED DEVICES DO NOT CREATE OBSTRUCTIONS TO SPRINKLER HEADS. 10. FPC TO PROVIDE CODE REQUIRED EQUIPMENT LABELS AND SIGNS FOR ALL FIRE PROTECTION EQUIPMENT. 11. ALL PIPING SHALL BE 1" UNLESS NOTED OTHERWISE. CONCEALED SPACE SPRINKLER REQUIREMENTS: 1. PROVIDE UPRIGHT SPRINKLER HEADS TO PROTECT COMBUSTIBLE VOID SPACE WITHIN FLOOR STRUCTURE (TYPICAL). 2. HEADS SHALL BE LOCATED 12'-0" ON CENTER. 3. HEADS SHALL BE LOCATED 6'-0" MAX EITHER SIDE OF SHEAR WALLS AND BEAMS (SEE STRUCTURAL PLANS FOR DETAILS). HYDRAULIC DESIGN INFORMATION 0.10 1500 LIGHT HAZARD FOR ALL AREAS EXCEPT WHERE NOTED OTHERWISE **REVISIONS/SUBMISSIONS** Date No. DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title FOURTH FLOOR FIRE PROTECTION PLAN Drawing No. Designed DCW Checked MAB Project No. 16045.00 FP104 Scale

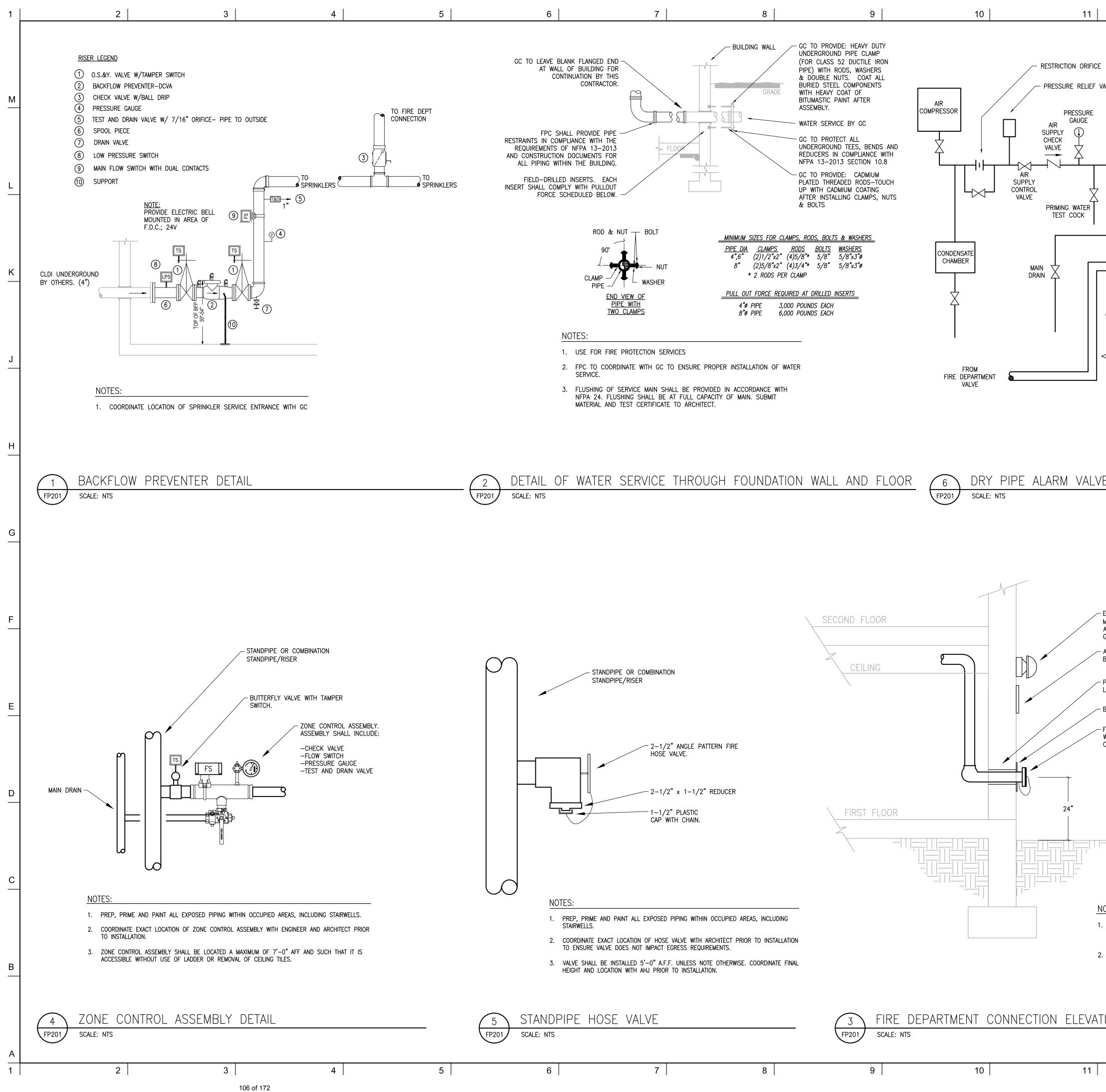
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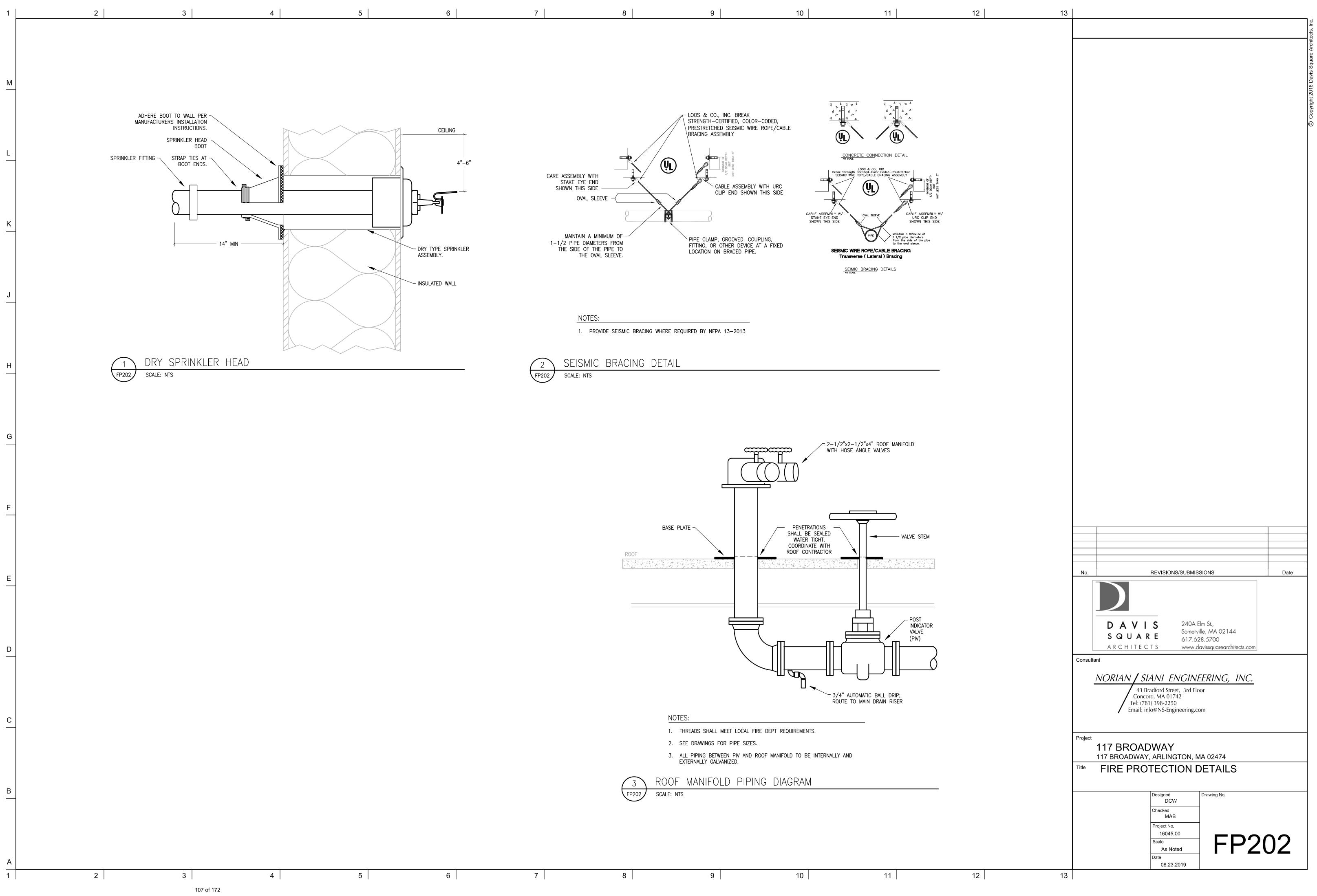


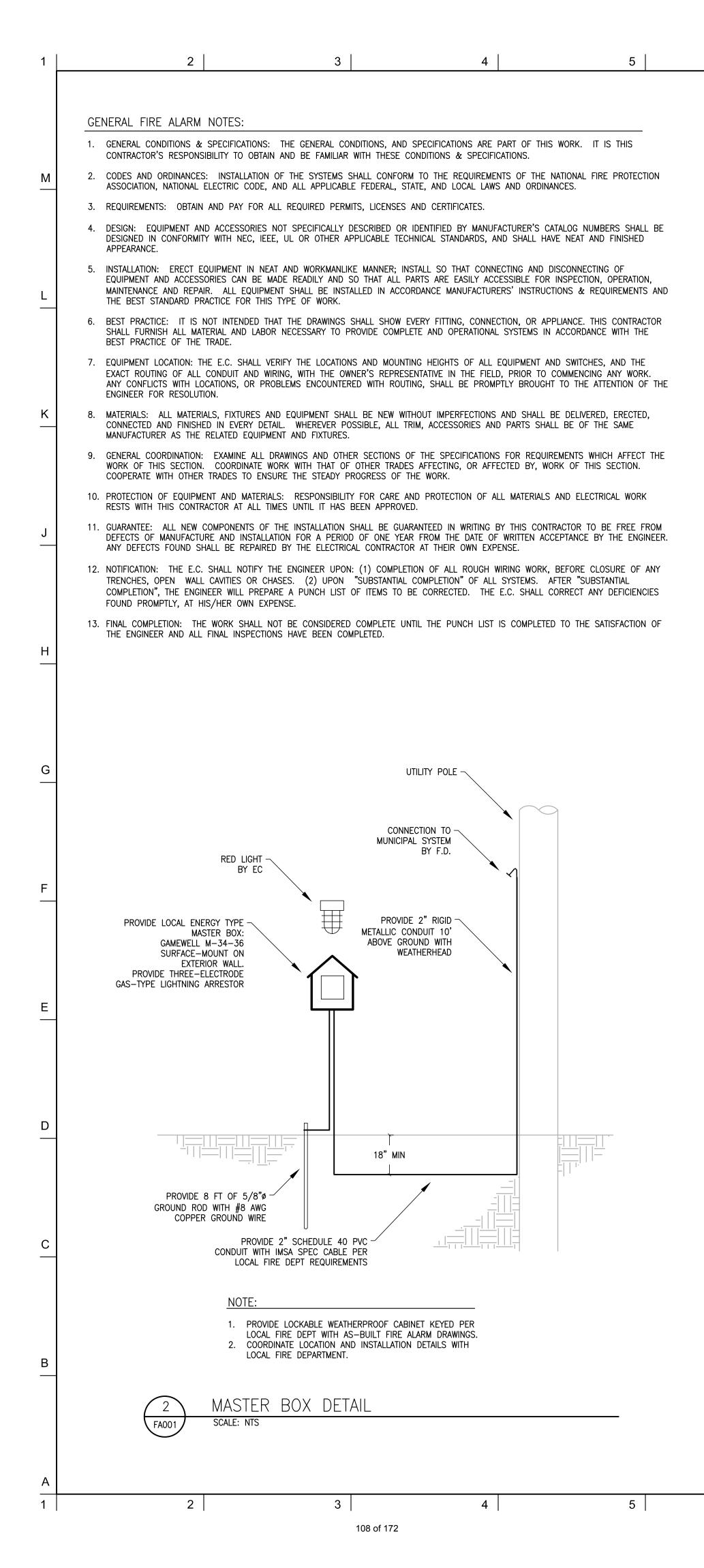
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2.	SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.	
	INSTALL EQUIPMENT AND SYSTEMS PER CODE AND PER MANUFACTURER INSTRUCTIONS.	S
3.	ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR TO IN VERIFY ALL INFORMATION IN FIELD AND INFORM THE ENGINEERS OF AN DISCREPANCIES IN WRITING IMMEDIATELY.	
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5.	PIPING MAY BE SHOWN DISPLACED FOR CLARITY.	
•	PROVIDE NFPA 13-2013 COMPLIANT SPRINKLER SYSTEM. PROVIDE FULL COVERAGE IN ALL AREAS OF THE BUILDING EXCEPT WHERE SPECIFICALI OTHERWISE.	
7.	ALL EXPOSED PIPING WITHIN STAIRS AND MECHANICAL ROOMS SHALL B CONCEALED PIPING WITHIN DWELLING UNITS AND COMMON SPACES TO CPVC.	
3.	DURING INSTALLATION, FPC SHALL EXAMINE ALL SPACES WITHIN BUILDIN DETERMINE IF ANY ADDITIONAL COMBUSTIBLE VOID SPACES EXIST. NOTIF WRITING OF ANY SUSPECT AREAS.	
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	2. HEADS SHALL BE LOCATED 12'-0" ON CENTER.	
	3. HEADS SHALL BE LOCATED 6'-0" MAX EITHER SIDE OF SHEAR WALLS AND BEAMS (SEE STRUCTURAL PLANS FOR DETAILS).	
	REVISIONS/SUBMISSIONS	Date
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	DAVIS SQUARE 240A Elm St., Somerville, MA 02144 617.628.5700	Date
	DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	Date
	DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com	Date
	UDAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com ultant NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	Date
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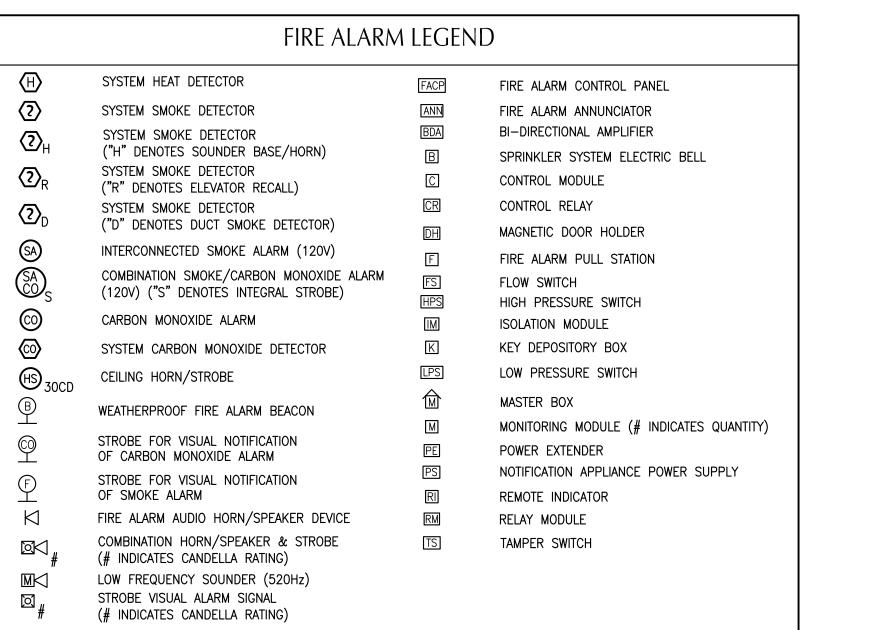
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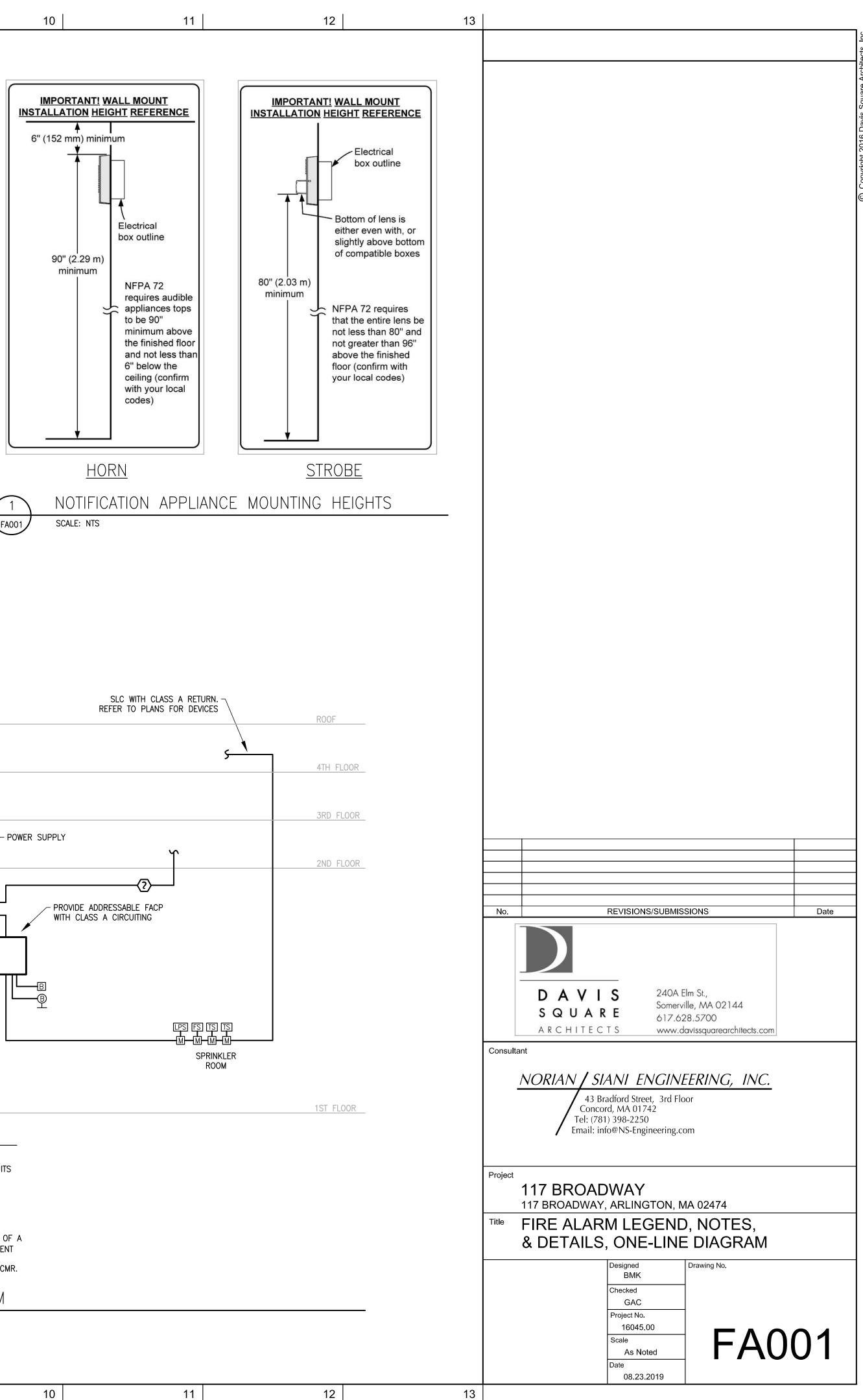
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OS&Y GATE VALVE SUPPLY LINE <u>NOTES:</u> 1. PROVIDE ACCELERATOR	
'E DETAIL	
ELECTRIC BELL. MOUNT +/- 84" ABOVE FINISHED GRADE. ALUMINUM SPRINKLER BELL SIGN.	
PROVIDE PIPE SLEEVE AND	
LINKSEAL WATERPROOF SEAL	No.     REVISIONS/SUBMISSIONS     Date
BRASS IDENTIFICATION PLATE. FIRE DEPARTMENT CONNECTIONS WITH THREADED PLASTIC CAP AND CHAIN.	DAVIS       240A Elm St.,         SQUARE       Somerville, MA 02144         ARCHITECTS       Somerville, MA 02144         Consultant       NORIAN / SIANI ENGINEERING, INC.         43 Bradford Street, 3rd Floor         Concord, MA 01742
IOTES:	Tel: (781) 398-2250       Email: info@NS-Engineering.com       Project
. FIRE DEPARTMENT CONNECTION SHALL BE LOCATED WITHIN 100 FT OF NEAREST FIRE	117 BROADWAY         117 BROADWAY, ARLINGTON, MA 02474         Title       FIRE PROTECTION DETAILS
HYDRANT. . COORDINATE FDC LOCATION WITH LOCAL FIRE DEPARTMENT PRIOR TO INSTALLATION.	
ΓΙΟΝ	Designed DCW Checked MAB Project No. 16045.00 Scale As Noted Date 08.23.2019

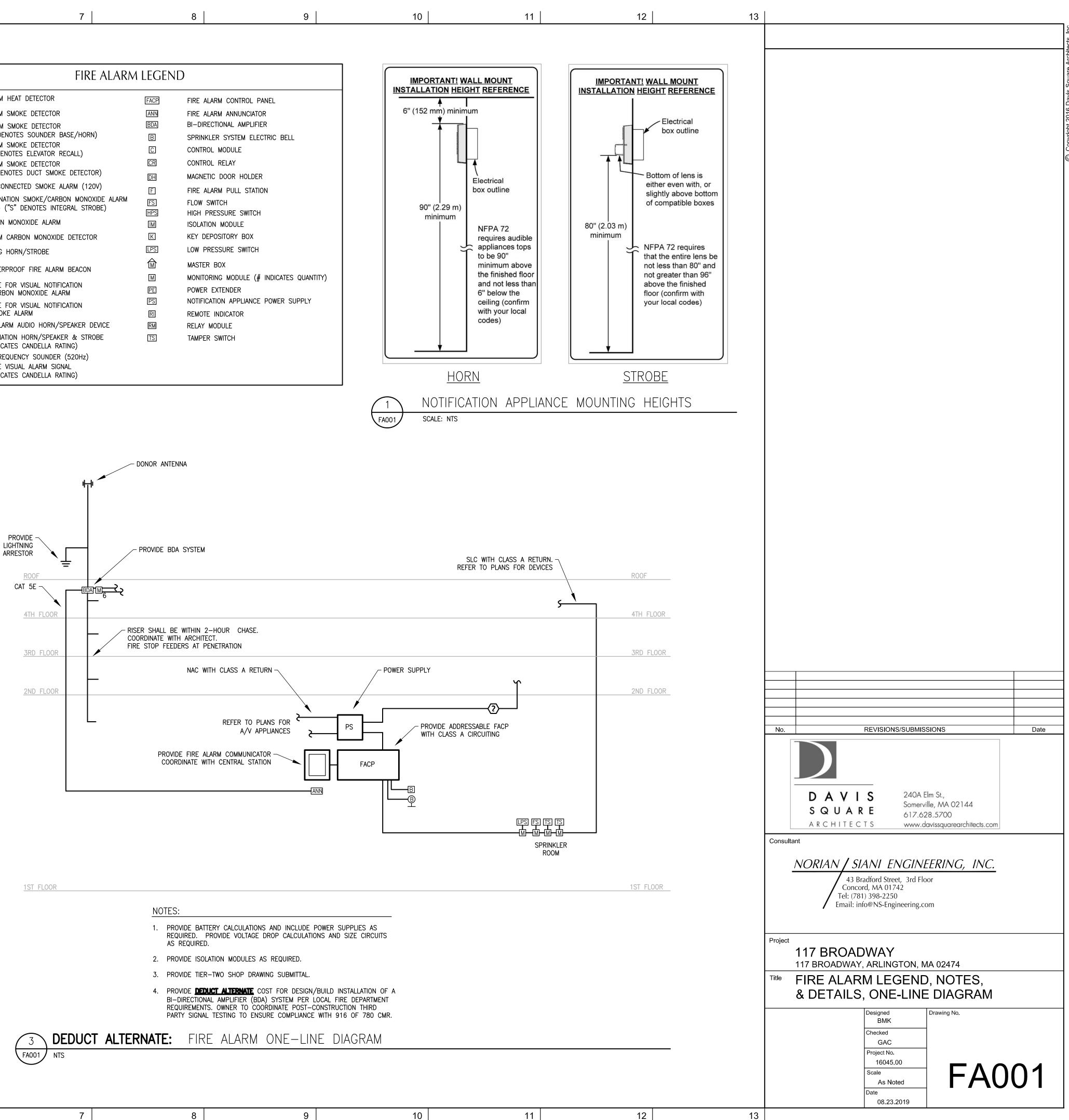


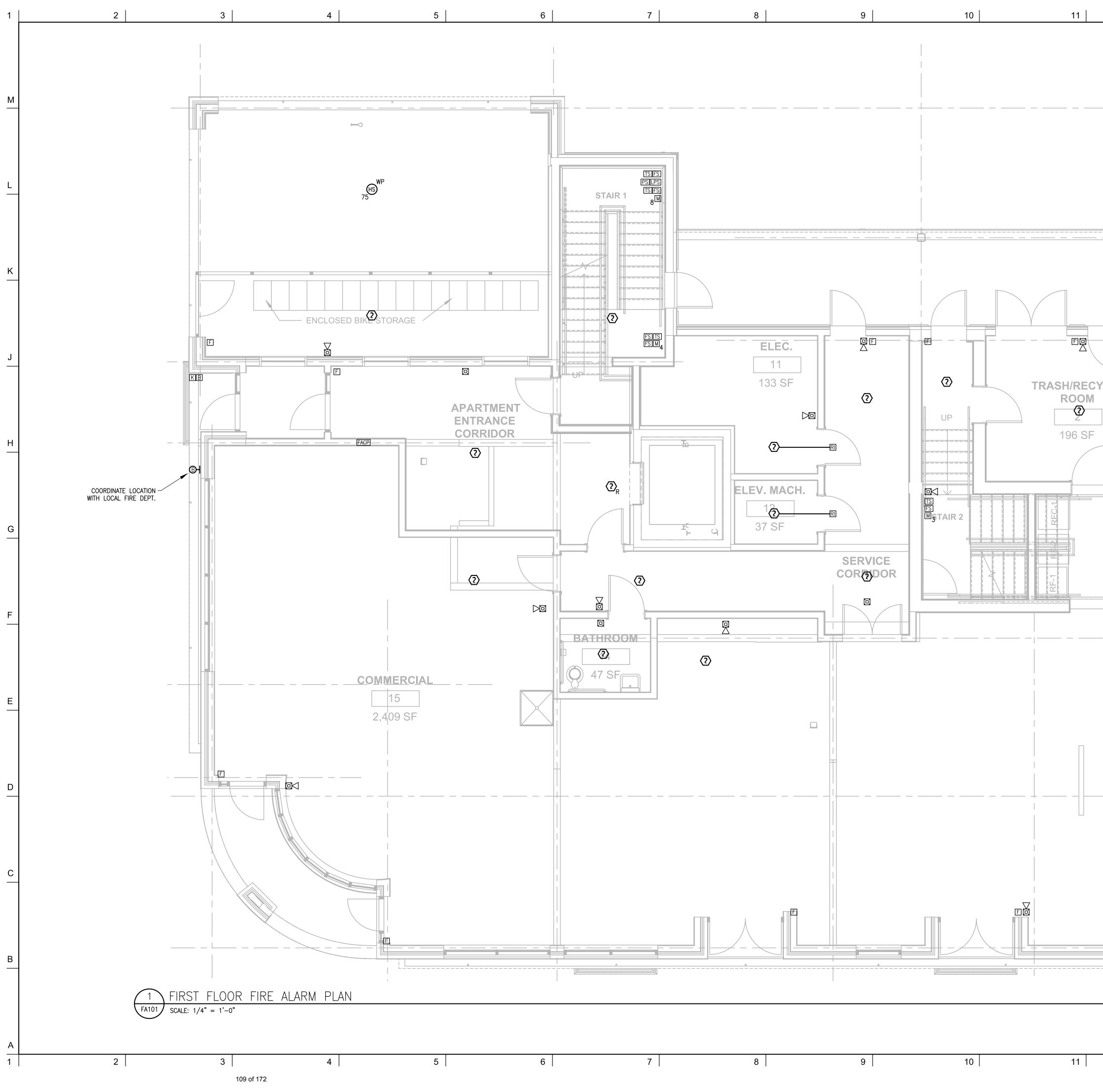


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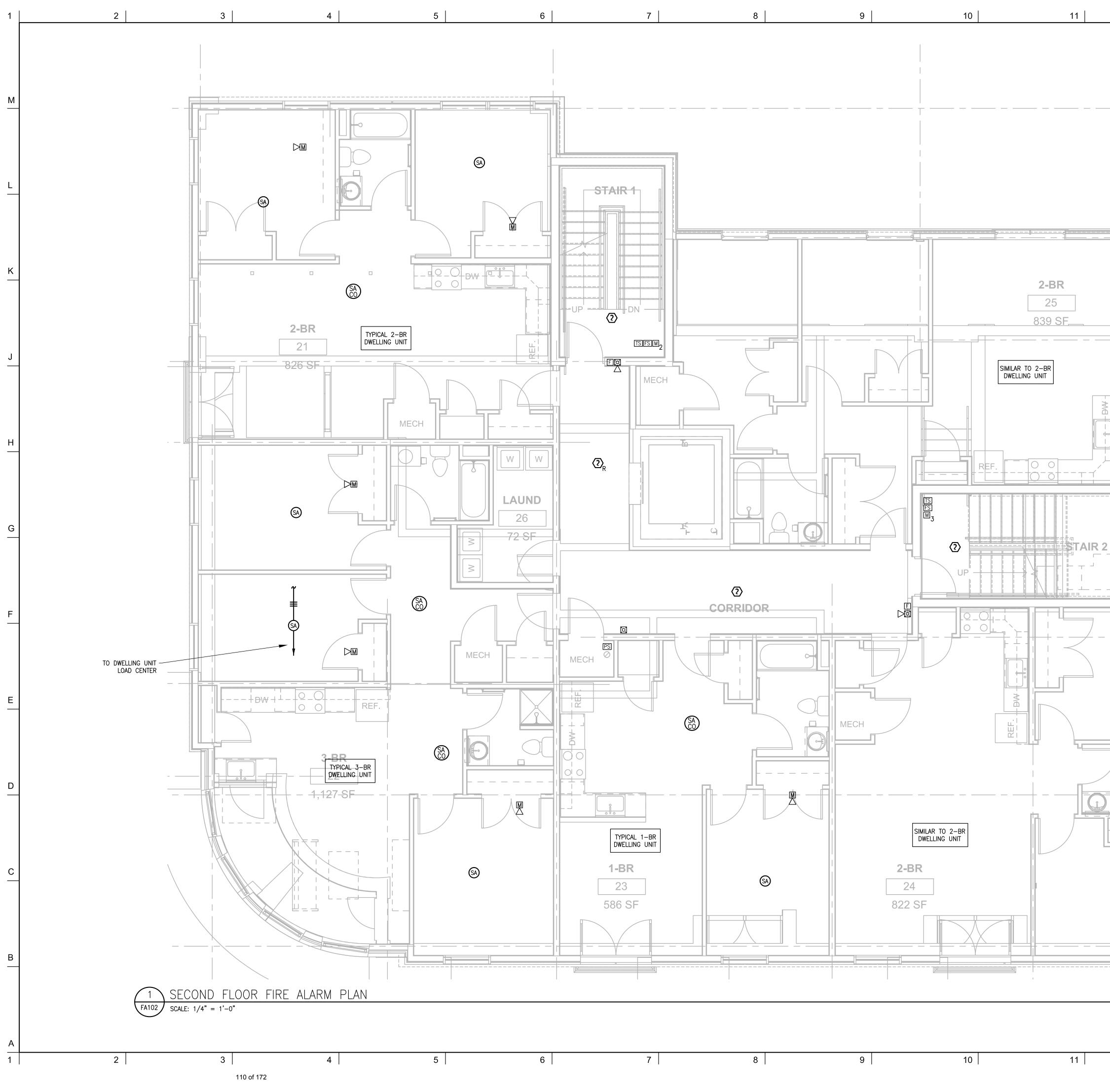




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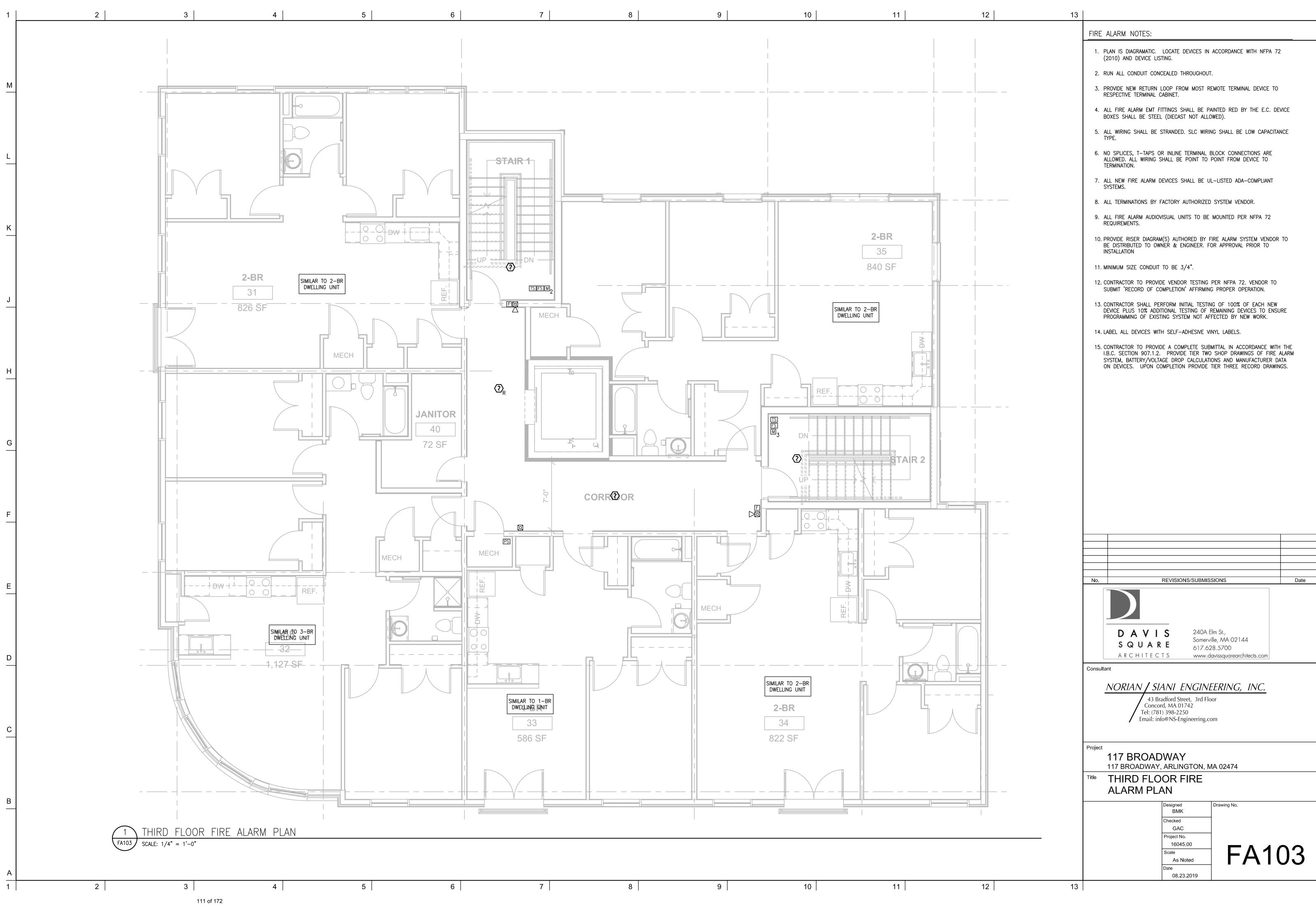
	FIRE ALARM NOTES:	
	1. PLAN IS DIAGRAMATIC. LOCATE DEVICES IN ACCORDANCE WITH NFPA 7 (2010) AND DEVICE LISTING.	72
	2. RUN ALL CONDUIT CONCEALED THROUGHOUT.	
	3. PROVIDE NEW RETURN LOOP FROM MOST REMOTE TERMINAL DEVICE TO RESPECTIVE TERMINAL CABINET.	)
	<ol> <li>ALL FIRE ALARM EMT FITTINGS SHALL BE PAINTED RED BY THE E.C. D BOXES SHALL BE STEEL (DIECAST NOT ALLOWED).</li> </ol>	EVICE
	5. ALL WIRING SHALL BE STRANDED. SLC WIRING SHALL BE LOW CAPACIT TYPE.	ANCE
	<ol> <li>NO SPLICES, T-TAPS OR INLINE TERMINAL BLOCK CONNECTIONS ARE ALLOWED. ALL WIRING SHALL BE POINT TO POINT FROM DEVICE TO TERMINATION.</li> </ol>	
	7. ALL NEW FIRE ALARM DEVICES SHALL BE UL-LISTED ADA-COMPLIANT SYSTEMS.	
	8. ALL TERMINATIONS BY FACTORY AUTHORIZED SYSTEM VENDOR.	
	9. ALL FIRE ALARM AUDIOVISUAL UNITS TO BE MOUNTED PER NFPA 72 REQUIREMENTS.	
	10. PROVIDE RISER DIAGRAM(S) AUTHORED BY FIRE ALARM SYSTEM VENDO BE DISTRIBUTED TO OWNER & ENGINEER. FOR APPROVAL PRIOR TO INSTALLATION	r to
	11. MINIMUM SIZE CONDUIT TO BE 3/4".	
	12. CONTRACTOR TO PROVIDE VENDOR TESTING PER NFPA 72. VENDOR TO SUBMIT 'RECORD OF COMPLETION' AFFIRMING PROPER OPERATION.	
	13. CONTRACTOR SHALL PERFORM INITIAL TESTING OF 100% OF EACH NEW DEVICE PLUS 10% ADDITIONAL TESTING OF REMAINING DEVICES TO ENS PROGRAMMING OF EXISTING SYSTEM NOT AFFECTED BY NEW WORK.	
YCLE	14. LABEL ALL DEVICES WITH SELF-ADHESIVE VINYL LABELS.	
	15. CONTRACTOR TO PROVIDE A COMPLETE SUBMITTAL IN ACCORDANCE WIT I.B.C. SECTION 907.1.2. PROVIDE TIER TWO SHOP DRAWINGS OF FIRE SYSTEM, BATTERY/VOLTAGE DROP CALCULATIONS AND MANUFACTURER I ON DEVICES. UPON COMPLETION PROVIDE TIER THREE RECORD DRAW	ALARM DATA
	No. REVISIONS/SUBMISSIONS	Date
	DAVIS SQUARE 240A Elm St., Somerville, MA 02144 617.628.5700	
	A R C H I T E C T S www.davissquarearchitects.com	
	Consultant	
	NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor	
	Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com	
	Project	
	117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title FIRST FLOOR FIRE	
	ALARM PLAN	
	Designed Drawing No. BMK Checked	
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	As Noted Date 08.23.2019	



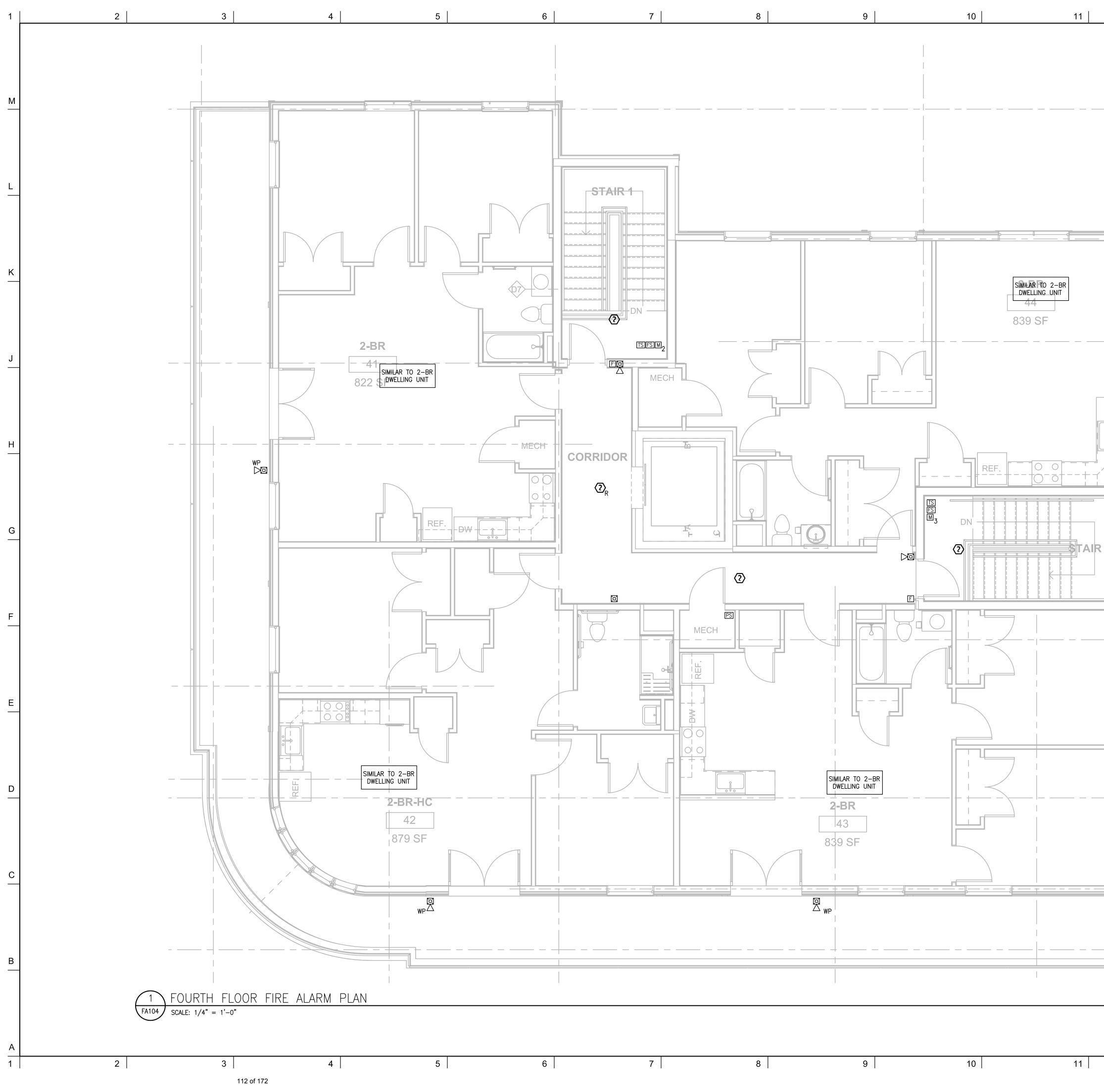


FIRE ALARM NOTES:

1. PLAN IS DIAGRAMATIC. LOCATE DEVICES IN ACCORDANCE WITH NFPA 72 (2010) AND DEVICE LISTING. 2. RUN ALL CONDUIT CONCEALED THROUGHOUT. 3. PROVIDE NEW RETURN LOOP FROM MOST REMOTE TERMINAL DEVICE TO RESPECTIVE TERMINAL CABINET. 4. ALL FIRE ALARM EMT FITTINGS SHALL BE PAINTED RED BY THE E.C. DEVICE BOXES SHALL BE STEEL (DIECAST NOT ALLOWED). 5. ALL WIRING SHALL BE STRANDED. SLC WIRING SHALL BE LOW CAPACITANCE TYPE. 6. NO SPLICES, T-TAPS OR INLINE TERMINAL BLOCK CONNECTIONS ARE ALLOWED. ALL WIRING SHALL BE POINT TO POINT FROM DEVICE TO TERMINATION. 7. ALL NEW FIRE ALARM DEVICES SHALL BE UL-LISTED ADA-COMPLIANT SYSTEMS. 8. ALL TERMINATIONS BY FACTORY AUTHORIZED SYSTEM VENDOR. 9. ALL FIRE ALARM AUDIOVISUAL UNITS TO BE MOUNTED PER NFPA 72 REQUIREMENTS. 10. PROVIDE RISER DIAGRAM(S) AUTHORED BY FIRE ALARM SYSTEM VENDOR TO BE DISTRIBUTED TO OWNER & ENGINEER. FOR APPROVAL PRIOR TO INSTALLATION 11. MINIMUM SIZE CONDUIT TO BE 3/4". 12. CONTRACTOR TO PROVIDE VENDOR TESTING PER NFPA 72. VENDOR TO SUBMIT 'RECORD OF COMPLETION' AFFIRMING PROPER OPERATION. 13. CONTRACTOR SHALL PERFORM INITIAL TESTING OF 100% OF EACH NEW DEVICE PLUS 10% ADDITIONAL TESTING OF REMAINING DEVICES TO ENSURE PROGRAMMING OF EXISTING SYSTEM NOT AFFECTED BY NEW WORK. 14. LABEL ALL DEVICES WITH SELF-ADHESIVE VINYL LABELS. 15. CONTRACTOR TO PROVIDE A COMPLETE SUBMITTAL IN ACCORDANCE WITH THE I.B.C. SECTION 907.1.2. PROVIDE TIER TWO SHOP DRAWINGS OF FIRE ALARM SYSTEM, BATTERY/VOLTAGE DROP CALCULATIONS AND MANUFACTURER DATA ON DEVICES. UPON COMPLETION PROVIDE TIER THREE RECORD DRAWINGS. **REVISIONS/SUBMISSIONS** Date No. DAVIS 240A Elm St., Somerville, MA 02144 SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant NORIAN / SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 SECOND FLOOR FIRE Title ALARM PLAN Designed BMK Drawing No. Checked GAC Project No. 16045.00 FA102 Scale As Noted Date 08.23.2019

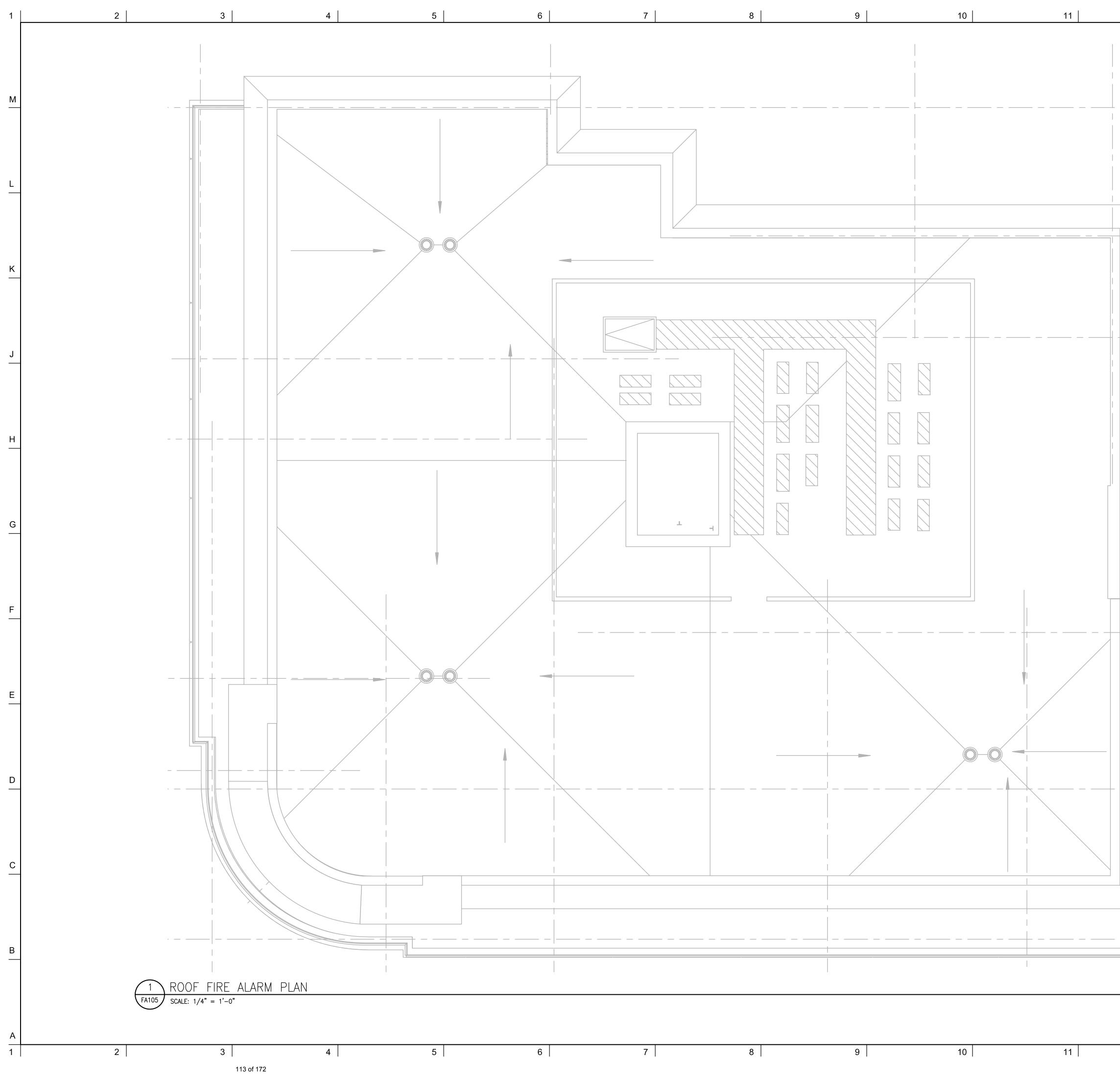






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	FIRE ALARM NOTES:
	1. PLAN IS DIAGRAMATIC. LOCATE DEVICES IN ACCORDANCE WITH NFPA 72 (2010) AND DEVICE LISTING.
	2. RUN ALL CONDUIT CONCEALED THROUGHOUT.
	3. PROVIDE NEW RETURN LOOP FROM MOST REMOTE TERMINAL DEVICE TO RESPECTIVE TERMINAL CABINET.
	4. ALL FIRE ALARM EMT FITTINGS SHALL BE PAINTED RED BY THE E.C. DEVICE BOXES SHALL BE STEEL (DIECAST NOT ALLOWED).
	5. ALL WIRING SHALL BE STRANDED. SLC WIRING SHALL BE LOW CAPACITANCE TYPE.
	<ol> <li>NO SPLICES, T-TAPS OR INLINE TERMINAL BLOCK CONNECTIONS ARE ALLOWED. ALL WIRING SHALL BE POINT TO POINT FROM DEVICE TO TERMINATION.</li> </ol>
	7. ALL NEW FIRE ALARM DEVICES SHALL BE UL-LISTED ADA-COMPLIANT SYSTEMS.
	8. ALL TERMINATIONS BY FACTORY AUTHORIZED SYSTEM VENDOR.
	9. ALL FIRE ALARM AUDIOVISUAL UNITS TO BE MOUNTED PER NFPA 72 REQUIREMENTS.
	10. PROVIDE RISER DIAGRAM(S) AUTHORED BY FIRE ALARM SYSTEM VENDOR TO BE DISTRIBUTED TO OWNER & ENGINEER. FOR APPROVAL PRIOR TO INSTALLATION
	11. MINIMUM SIZE CONDUIT TO BE 3/4".
	12. CONTRACTOR TO PROVIDE VENDOR TESTING PER NFPA 72. VENDOR TO SUBMIT 'RECORD OF COMPLETION' AFFIRMING PROPER OPERATION.
	13. CONTRACTOR SHALL PERFORM INITIAL TESTING OF 100% OF EACH NEW DEVICE PLUS 10% ADDITIONAL TESTING OF REMAINING DEVICES TO ENSURE PROGRAMMING OF EXISTING SYSTEM NOT AFFECTED BY NEW WORK.
	14. LABEL ALL DEVICES WITH SELF-ADHESIVE VINYL LABELS.
	15. CONTRACTOR TO PROVIDE A COMPLETE SUBMITTAL IN ACCORDANCE WITH THE I.B.C. SECTION 907.1.2. PROVIDE TIER TWO SHOP DRAWINGS OF FIRE ALARM SYSTEM, BATTERY/VOLTAGE DROP CALCULATIONS AND MANUFACTURER DATA ON DEVICES. UPON COMPLETION PROVIDE TIER THREE RECORD DRAWINGS.
	No.     REVISIONS/SUBMISSIONS     Date
	DAVIS 240A Elm St.,
	SQUARE ARCHITECTS Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com
	Consultant
	NORIAN / SIANI ENGINEERING, INC.
	43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250
	Email: info@NS-Engineering.com
	Project 117 BROADWAY
	117 BROADWAY, ARLINGTON, MA 02474 Title FOURTH FLOOR FIRE
	ALARM PLAN
	Designed     Drawing No.       BMK     Checked
	GAC Project No.
	16045.00 Scale As Noted FA104
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FIRE ALARM NOTES:
1. PLAN IS DIAGRAMATIC. LOCATE DEVICES IN ACCORDANCE WITH NFPA 72 (2010) AND DEVICE LISTING.
2. RUN ALL CONDUIT CONCEALED THROUGHOUT.
3. PROVIDE NEW RETURN LOOP FROM MOST REMOTE TERMINAL DEVICE TO RESPECTIVE TERMINAL CABINET.
4. ALL FIRE ALARM EMT FITTINGS SHALL BE PAINTED RED BY THE E.C. DEVICE BOXES SHALL BE STEEL (DIECAST NOT ALLOWED).
5. ALL WIRING SHALL BE STRANDED. SLC WIRING SHALL BE LOW CAPACITANCE TYPE.
6. NO SPLICES, T-TAPS OR INLINE TERMINAL BLOCK CONNECTIONS ARE ALLOWED. ALL WIRING SHALL BE POINT TO POINT FROM DEVICE TO TERMINATION.
7. ALL NEW FIRE ALARM DEVICES SHALL BE UL-LISTED ADA-COMPLIANT SYSTEMS. DEVICES SHALL BE COMPATIBLE WITH EXISTING NOTIFIER SYSTEM.
8. ALL TERMINATIONS BY FACTORY AUTHORIZED SYSTEM VENDOR.
9. ALL FIRE ALARM AUDIOVISUAL UNITS TO BE MOUNTED PER NFPA 72 REQUIREMENTS.
10. INCLUDE FIRE ALARM PANEL MODIFICATIONS REQUIRED FOR COMPLETE AND FUNCTIONAL INSTALL. COORDINATE WITH ARCHITECTURAL PLANS AND SECTIONS.
11. PROVIDE RISER DIAGRAM(S) AUTHORED BY FIRE ALARM SYSTEM VENDOR (SIMPLEX) TO BE DISTRIBUTED TO OWNER & ENGINEER. FOR APPROVAL PRIOR TO INSTALLATION
12. MINIMUM SIZE CONDUIT TO BE 3/4".
13. PROVIDE A/V CIRCUIT LOAD TEST & UPDATED RISER DIAGRAM(S) AUTHORED BY APPROVED FIRE ALARM SYSTEM VENDOR PRIOR TO INITIATING WORK.
14. CONTRACTOR TO PROVIDE VENDOR TESTING PER NFPA 72. VENDOR TO SUBMIT 'RECORD OF COMPLETION' AFFIRMING PROPER OPERATION.
15. CONTRACTOR SHALL PERFORM INITIAL TESTING OF 100% OF EACH NEW DEVICE PLUS 10% ADDITIONAL TESTING OF REMAINING DEVICES TO ENSURE PROGRAMMING OF EXISTING SYSTEM NOT AFFECTED BY NEW WORK.
16. UPDATE ROOM NAMES ON ANNUNCIATORS.
17. LABEL ALL DEVICES WITH SELF-ADHESIVE VINYL LABELS.
18. CONTRACTOR TO PROVIDE A COMPLETE SUBMITTAL IN ACCORDANCE WITH THE I.B.C. SECTION 907.1.2. PROVIDE TIER TWO SHOP DRAWINGS OF FIRE ALARM SYSTEM, BATTERY/VOLTAGE DROP CALCULATIONS AND MANUFACTURER DATA ON DEVICES. UPON COMPLETION PROVIDE TIER THREE RECORD DRAWINGS.
No.     REVISIONS/SUBMISSIONS     Date       D     D     Q
Consultant
NORIAN SIANI ENGINEERING, INC. 43 Bradford Street, 3rd Floor Concord, MA 01742 Tel: (781) 398-2250 Email: info@NS-Engineering.com
Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA 02474 Title ROOF FIRE ALARM PLAN
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GAC Project No. 16045.00 Scale As Noted Date 08 23 2019 GAC Project No. 16045.00 FA105



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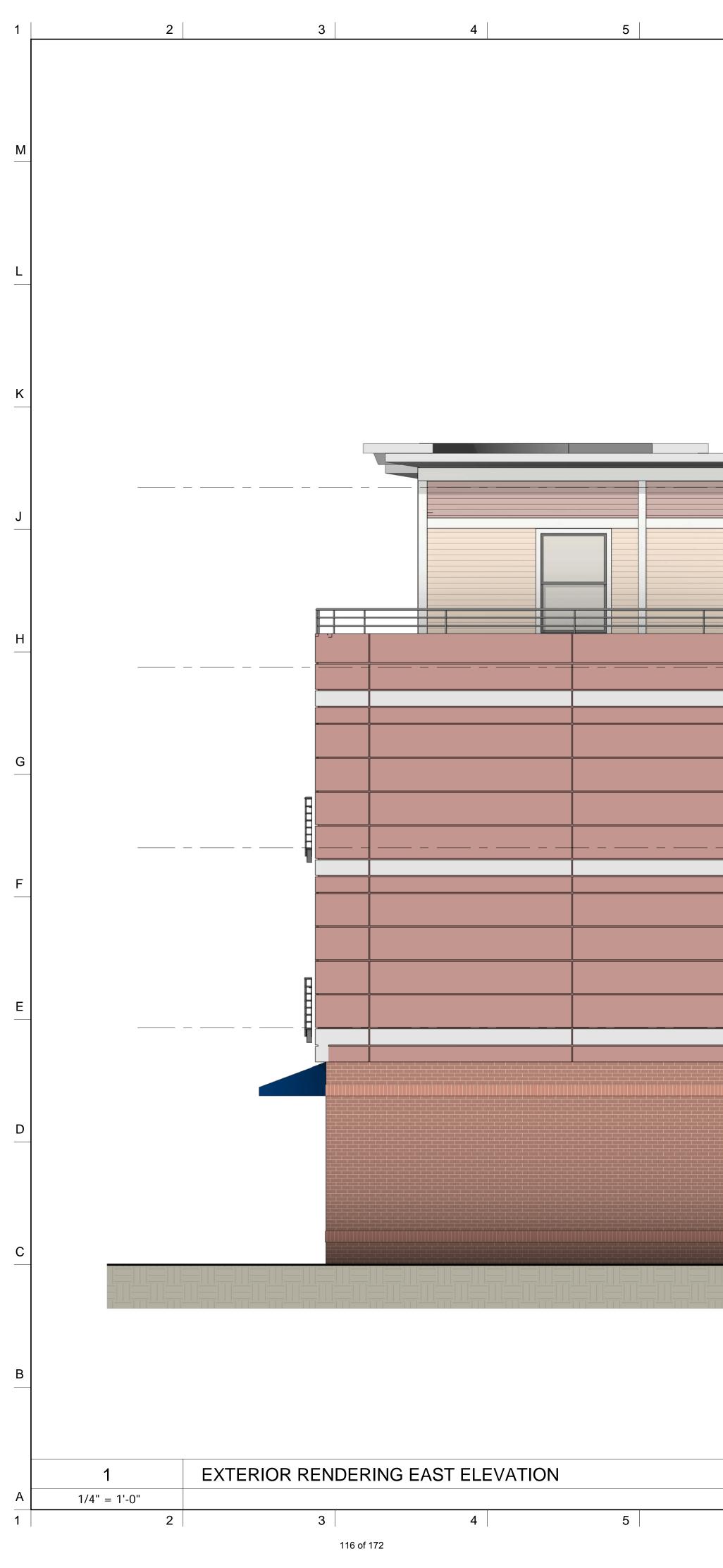
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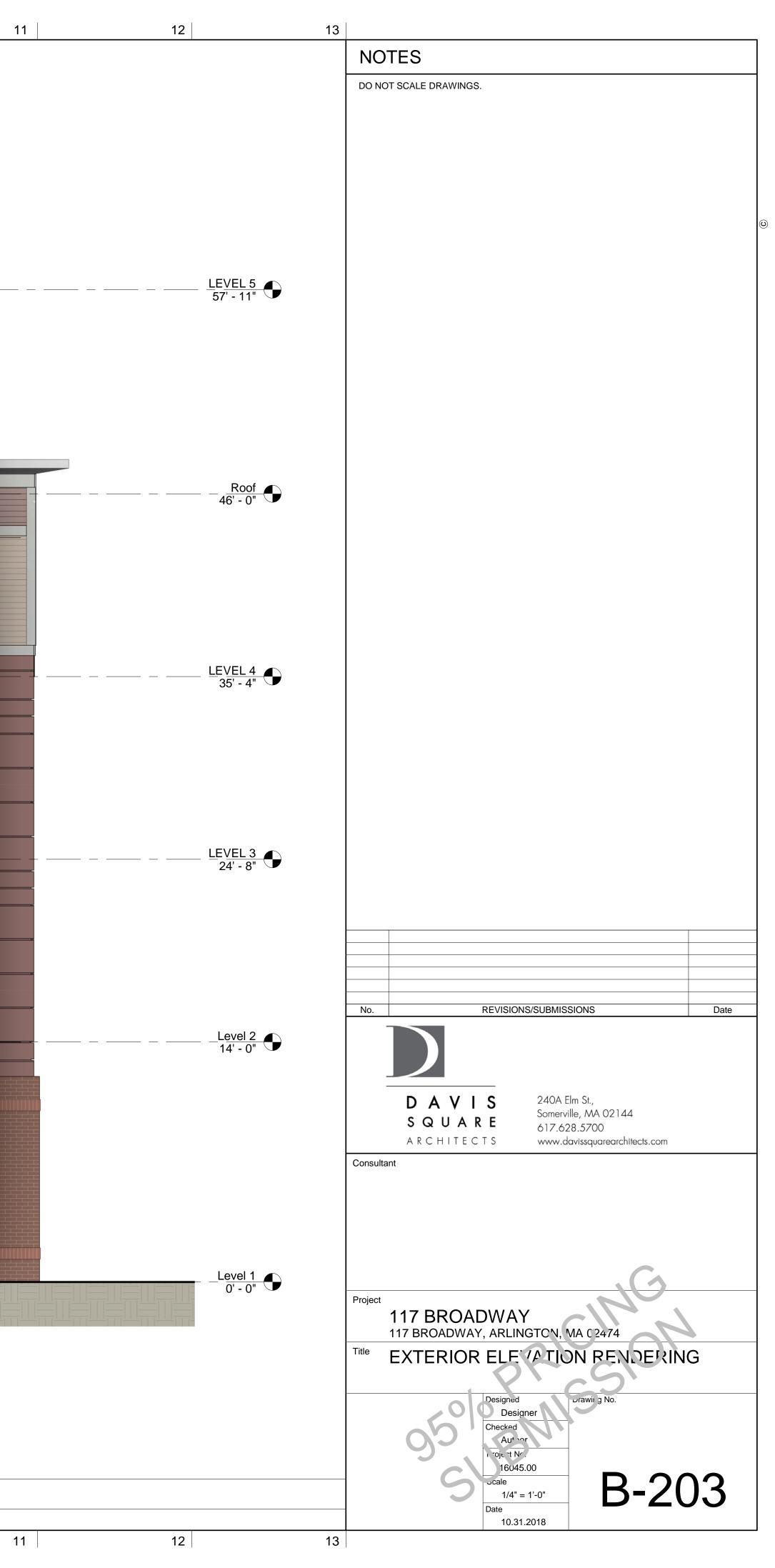
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12 13 11 NOTES DO NOT SCALE DRAWINGS. \_\_\_<u>Roof</u> 46' - 0" LEVEL 4 35' - 4" LEVEL 3 24' - 8" REVISIONS/SUBMISSIONS Date No. Level 2 14' - 0" 240A Elm St., Somerville, MA 02144 DAVIS SQUARE 617.628.5700 ARCHITECTS www.davissquarearchitects.com Consultant Level 1 0' - 0" Project 117 BROADWAY 117 BROADWAY, ARLINGTON, MA C 2474 Title EXTERIOR ELE /A TION RENDERING 16045.00 B-201 cale 1/4" = 1'-0" Date 10.31.2018



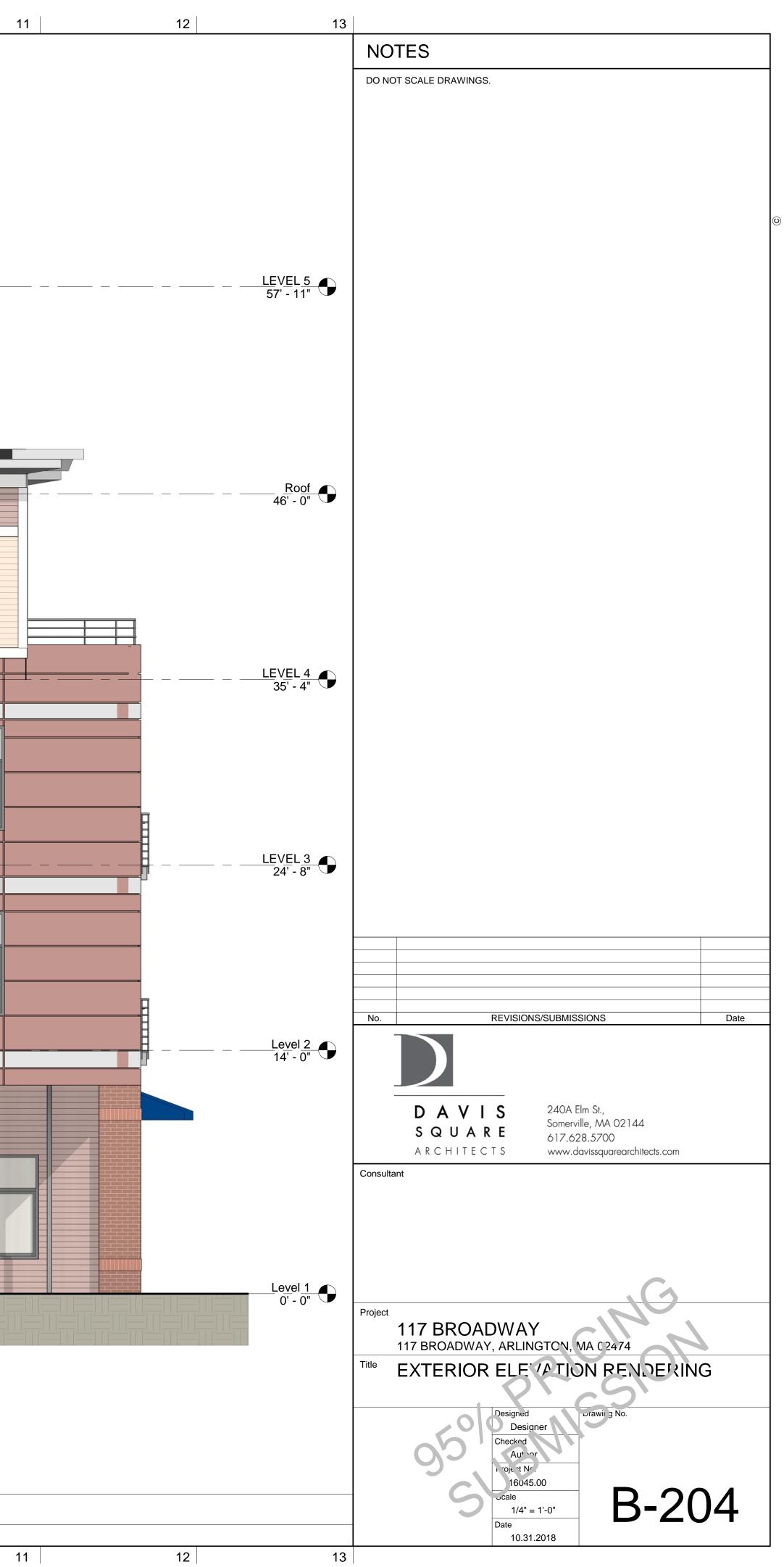
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	NOTES
	DO NOT SCALE DRAWINGS.
<u> </u>	
35' - 4"	
<u>LEVEL 3</u> 24' - 8"	
	No. REVISIONS/SUBMISSIONS Date
<u>Level 2</u>	
	DAVIS 240A Elm St., Somerville, MA 02144
	S Q U A R ESomerville, MA 02144A R C H I T E C T S617.628.5700www.davissquarearchitects.com
	Consultant
Level 1 0' - 0"	
	Project 117 BROADWAY
	117 BROADWAY, ARLINGTCN, MA C 2474
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	B-202
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D A V I S S Q U A R E ARCHITECTS

240A Elm Street Somerville, MA 02144 617.628.5700, tel davissquarearchitects.com

Clifford J. Boehmer, AIA Ross A. Speer, AIA Iric L. Rex, AIA

September 18, 2019

Jennifer Raitt, Director Department of Planning and Community Development 730 Massachusetts Ave. Annex Arlington, MA 02476

RE: 19R Park Ave (Downing Square) and 117 Broadway Arlington, MA DSA Project No. 16045

Dear Ms. Raitt:

In accordance with the conditions of the Special Permit decisions for 19R Park Ave (Downing Square) and 117 Broadway, we are submitting our current set of 95% complete drawings for review by the ARB. While we are doing some final coordination of details prior to submission for a building permit, we do not anticipate that those issues will have any impact on the appearance of the buildings. Following is a list of items requested in the decisions, and where each can be found in the drawings:

#### 19R Park Ave:

- Exterior Lighting See sheets A-E100 and B-E100, Electrical site plans.
- Landscaping See sheet C-3, Planting Plan.
- Bike Racks Bike Storage room shown on sheet B-A101. See attached 'Dero' product information for detail of bike rack, capacity to be (2) 8' sections for 18 bicycles.
- Sidewalk Materials & Dimensions See sheet C-1, Layout and Materials Plan.
- Exterior Materials Identified on elevations A-A201-2 & B-A201-3. Additional colored elevations are attached and color samples of materials will be brought to the hearing.
- Signs Building A to have lettering identifying as 'Downing Square', shown on elevation sheet A-A201.

<u>117 Broadway</u>:

- Exterior Lighting See sheet C-1 indicating pole mounted light; style shall be similar to that at the Downing site. (Building-mounted lighting is shown on sheet E201.)
- Landscaping See sheet C-3, Planting Plan.
- Bicycle Racks Exterior Bike Storage area shown on sheet A101. See attached 'Dero' product information for detail of rack, capacity to be (2) 8' sections for 18 bicycles.
- Sidewalk Materials & Dimensions See sheet C-1, Layout and Materials Plan.

- Exterior Materials Identified on elevations A201-4. Additional colored elevations are attached and color samples of materials will be brought to the hearing.
- Signs Identifying signage for the first floor commercial space will be designed by the prospective tenant in accordance with Town requirements.

I hope that I have provided the information you were looking for. If there is anything else you need, or if you have any additional questions, please contact me.

Sincerely, DAVIS SQUARE ARCHITECTS, INC.

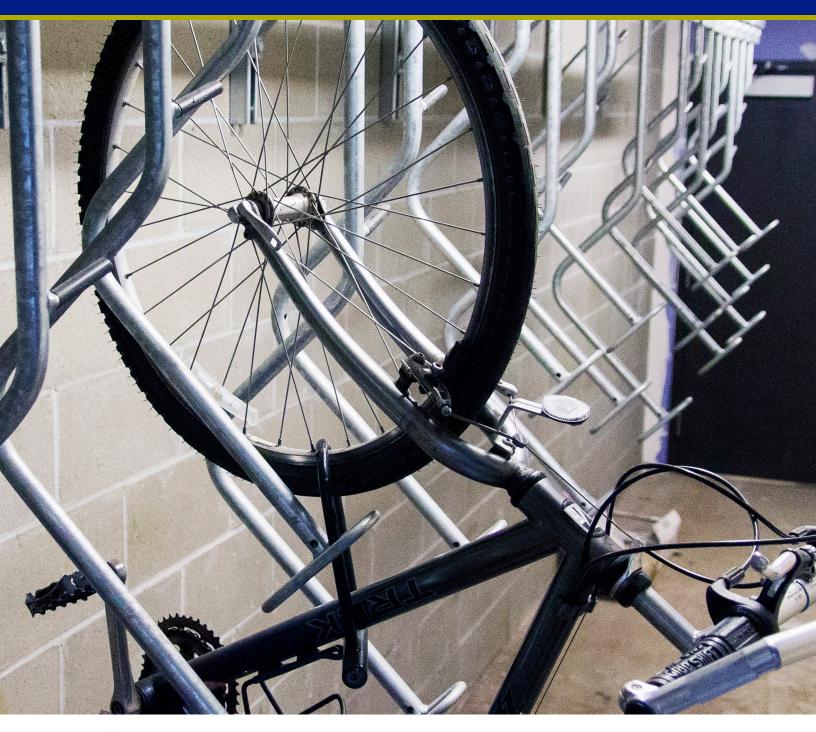
Part Wint:

Paul Warkentin, Associate

<u>Attachments</u>: Downing Square 95% drawings 117 Broadway 95% set Downing Square – colored elevations 117 Broadway – colored elevations 'Dero' Bicycle Rack product information

Cc: Pam Hallett, Housing Corporation of Arlington

## **BIKE FILE**



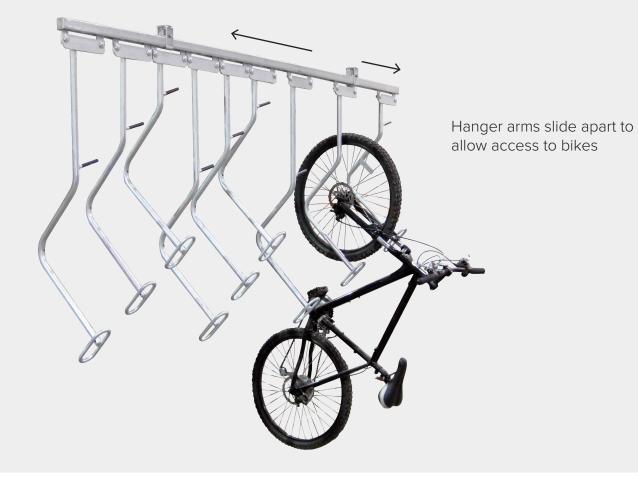


## High Efficiency

The Bike File is our most space efficient u-lock compatible product. Sturdy sliding hangers allow nine bikes to be securely stored in an eight-foot section while allowing for easy loading and unloading of bikes.



## **BIKE FILE**



#### **FINISH OPTIONS**

Galvanized

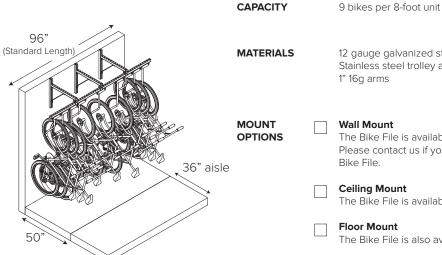








## **BIKE FILE** Submittal Sheet



12 gauge galvanized steel trolley track Stainless steel trolley assembly 1" 16g arms

#### Wall Mount

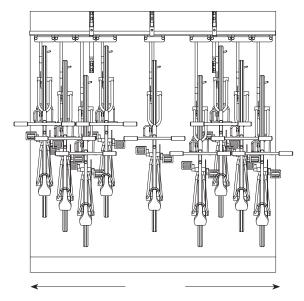
The Bike File is available in a wall-mounted configuration. Please contact us if you are interested in a floor-mounted Bike File.

#### **Ceiling Mount**

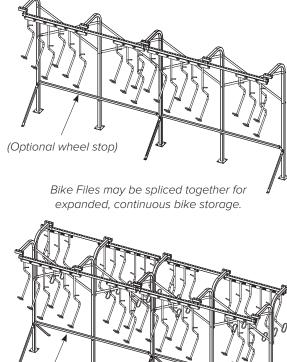
The Bike File is available in a ceiling-mounted configuration.

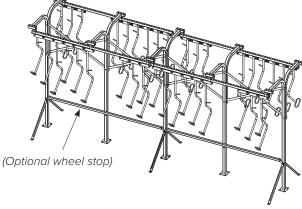
#### Floor Mount

The Bike File is also available in a floor-mounted option.



Trolleys allow you to push neighboring bikes apart when hanging or removing a bike



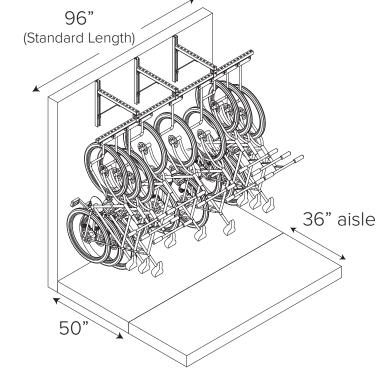


A double-sided option is available



www.dero.com  1-888-337-6729

### **BIKE FILE** Setbacks



Bike Files may be lined up end to end to fill the available space. A 36" aisle should be left between the ends of bikes in racks facing one another.

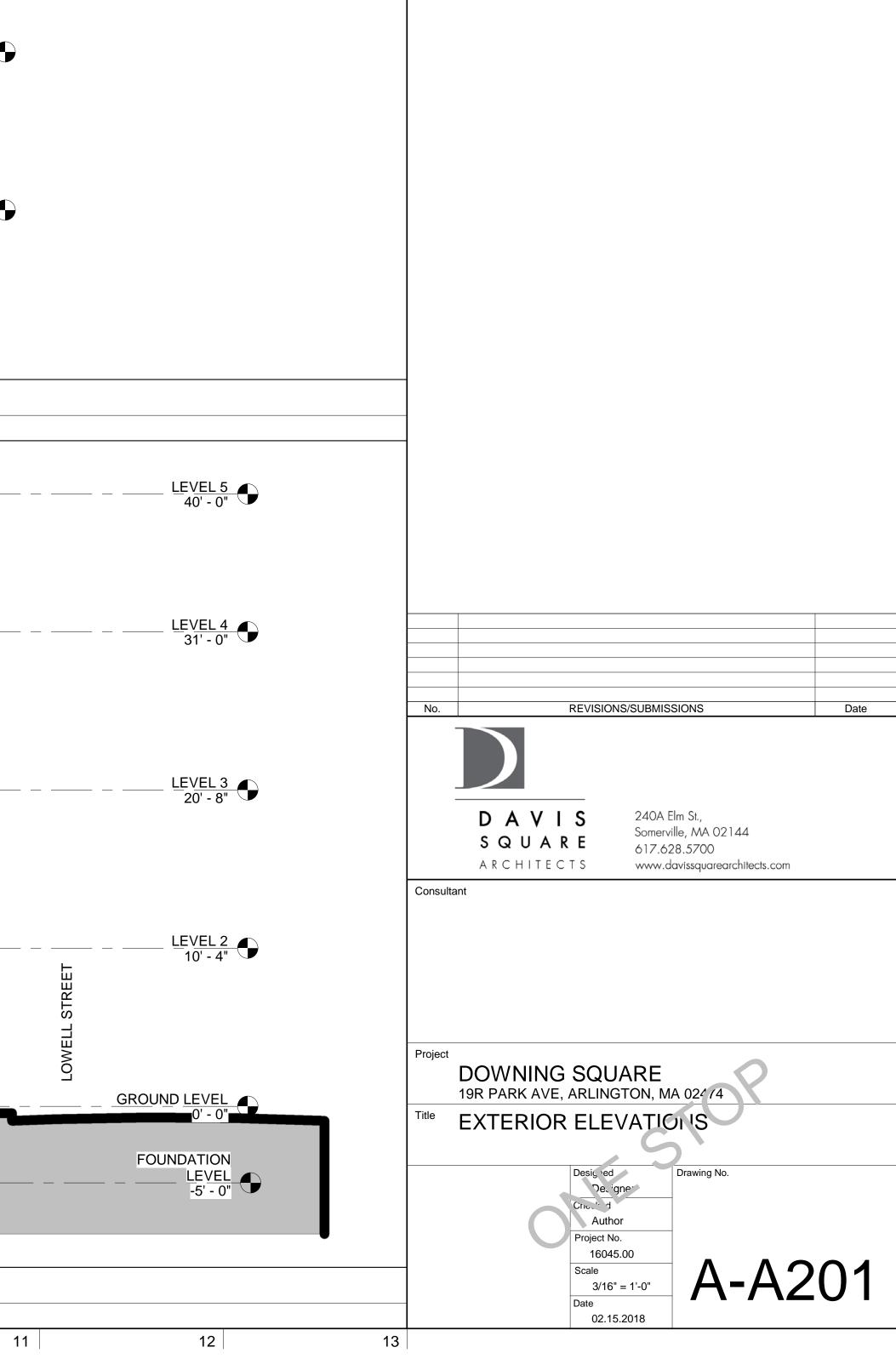




6	7	8	9	10	11
					L <u>EVEL 5</u> 40' - 0"
					L <u>EVEL 4</u> 31' - 0"
					L <u>EVEL 3</u> 20' - 8"
					L <u>EVEL 2</u> 10' - 4"
					GROUND <u>LEVEL</u>

## NOTES

## DO NOT SCALE DRAWINGS.





8	9	

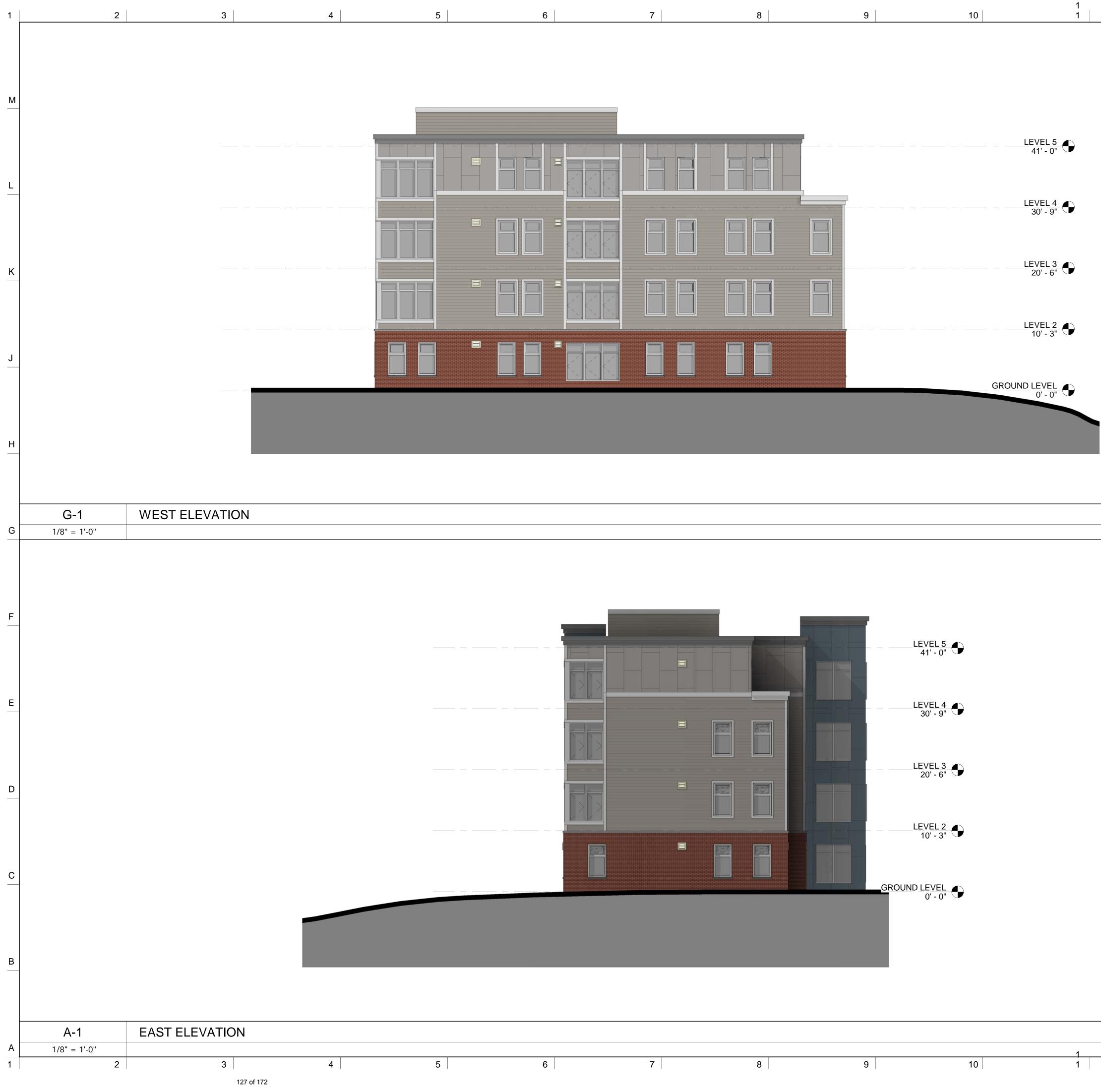
12

## NOTES DO NOT SCALE DRAWINGS.

<u>LEVEL 5</u> 40' - 0"	
LEVEL 4 31' - 0"	No. REVISIONS/SUBMISSIONS Date
<u>LEVEL 3</u> 20' - 8"	DAVIS SQUARE ARCHITECTS 240A Elm St., Somerville, MA 02144 617.628.5700 www.davissquarearchitects.com
<u>LEVEL 2</u> 10' - 4"	Consultant
DUND LEVEL	Project DOWNING SQUARE 19R PARK AVE, ARLINGTON, MA 024/4 Title EXTERIOR ELEVATION'S Desig ted Desig ted Desig ted Dec igner Cric.' d Author Drawing No.
12 13	Project No. 16045.00 Scale 3/16" = 1'-0" Date 02.15.2018



	S
	DO NOT SCALE DRAWINGS.
ALUMINUM WINDOW WITH OPERABLE AWNING & EXTRUDED METAL SURROUND	
ALUMINUM STOREFRONT SYSTEM W/ INTEGRAL SUNSHADES	
LEVEL 5 41' - 0"	
LEVEL 4 30' - 9"	
LEVEL 3 20' - 6"	
LEVEL 2 10' - 3"	
<u>GROUND LEVEL</u> 0' - 0"	
	-
MECHANICAL SCREEN	
FIBER CEMENT PANEL SYSTEM & TRIM	
L <u>EVEL 5</u> 41' - 0"	
	No.         REVISIONS/SUBMISSIONS         Date
LEVEL 4 30' - 9"	DAVIS 240A Elm St.,
L <u>EVEL 3</u> 20' - 6"	DAVISSomerville, MA 02144SQUARE617.628.5700ARCHITECTSwww.davissquarearchitects.com
	Consultant
L <u>EVEL 2</u> 10' - 3"	
<u>GROUND LEVEL</u> 0' - 0"	DOWNING SQUARE: BUILDING B 19R PARK AVE, ARLINGTON, MA 02474 Title EXTERIOR ELEVATIONS
	Designed Drawing No. Designer
	Checked Author Project No. 16045
	Scale 1/8" = 1'-0" Date <b>B-A200</b>
12 13	08.29.2019





# 13 NOTE

S

DO NOT SCALE DRAWINGS.

	No. REVISIONS/SUBMISSIONS	Date
		Date
	DAVIS 240A Elm St.,	
	DAVIS SQUARE240A Elm St., Somerville, MA 02144 617.628.5700ARCHITECTSwww.davissquarearchitects.com	
	Consultant	
	Project DOWNING SQUARE: BUILDING B	
	19R PARK AVE, ARLINGTON, MA 02474 Title EXTERIOR ELEVATIONS	
	Designed Drawing No. Designer Checked	
	Author Project No. 16045	
	Scale 1/8" = 1'-0" Date 00.00.0010 B-A2	01
13	08.29.2019	



#### Town of Arlington, Massachusetts

#### Meeting Minutes (8/12)

#### Summary:

8:30 p.m. 8:40 p.m.
8:40 p.m.

#### ATTACHMENTS:

	Туре	File Name	Description
۵	Reference Material	Agenda_Item_2 _08122019_ARB_Draft_Minutes.pdf	08122019 Draft ARB Minutes

#### Arlington Redevelopment Board Monday, August 12, 2019, 7:30 p.m. Town Hall Annex, Second Floor Conference Room Meeting Minutes

This meeting was recorded by ACMi.

PRESENT: Andrew Bunnell (Chair), David Watson, Kin Lau, Rachel Zsembery
ABSENT: Eugene Benson
STAFF: Jennifer Raitt, Director, Planning and Community Development and Erin Zwirko, Assistant Director

The Chair called the meeting to order and notified all attending that the meeting is being recorded by ACMI.

The Chair introduced the first agenda item, Environmental Design Review, Docket #3348 Public Hearing for signs for CVS at 833 Mass Ave. The Chair introduced applicant Gary McCoy who presented the request.

Mr. McCoy, representing the sign company, would like to replace two existing internally lit CVS logo signs with signs with the new logo and repaint the façade of the building.

The Chair explained that a board member is missing so in order to get approval there would have to be a unanimous vote from the board members present. The Chair said that Mr. McCoy could ask for a continuance if he chooses.

Ms. Raitt explained that the request will increase the number of signs; the do not enter sign is new. Mr. McCoy said he would remove the do not enter sign from the package if necessary. Ms. Zsembery asked about painting the façade and asked if the signs are internally lit and are individual letters. Mr. Lau asked about the previous agreement that the special permit approval would be contingent upon receiving the plans for the neighboring abandoned building from the owner. The project was approved 10 years ago and Mr. Lau said he feels that his only choice is to ask for a continuance until the board hears from the property owner. Mr. McCoy asked what the owner was obligated to do. The Chair explained that there was an agreement that the owner would maintain the neighboring property. Mr. McCoy requested a continuance to the next meeting September 9, 2019.

The Chair said the board would take public comments even though this case is being continued.

Chris Loretti asked Mr. McCoy if the new signs will be LED and if they would be on 24 hours per day. Mr. McCoy said the new signs will be LED and will be on until one hour after store closing. Mr. Loretti also asked the board to review the original landscaping agreement with CVS. Mr. Loretti said he feels that the landscaping has fallen by the wayside over time.

The Chair entertained a motion to continue the meeting until September 9, 2019. Mr. Lau motioned to continue the meeting, Mr. Watson seconded, all voted in favor 4-0.

The Chair said that the board would move on with other business and wait to start the hearing for Food Link at 8:00 p.m. as scheduled. The Chair introduced the third agenda item, Request for Public Hearing Continuance and Waiver of Special Permit Filing Fee. The Chair said he would like to be able to continue this hearing to a future meeting pending questions about the board's authority to waive fees and have all members of the board are present. Mr. Lau asked for the total amount of fees that the board would be waiving. Ms. Raitt explained that the fees for the special permit filings are outlined in her brief filed with the ARB meeting.

The Chair moved to continue the Request for Public Hearing Continuance and Waiver of Special Permit Filing Fee to September 9, 2019 or to October 21, 2019, as requested in a letter from the proponent. Mr. Lau motioned to continue this hearing on October 21, 2019. Mr. Watson seconded, all voted in favor 4-0.

The Chair moved to continue the 1211-1207 Mass Ave Special Permit hearing until October 21, 2019. Mr. Lau motioned to approve, Ms. Zsembery seconded, all voted in favor 4-0.

The Chair introduced the second agenda item, Environmental Design Review, Docket # 3604 Public Hearing for Food Link at 108 Summer St. Docket # 3604. The Chair confirmed that all presents for the Food Link Public Hearing were present and invited them to set up for their hearing. The Chair opened the hearing for Food Link. Food Link Co-Founder Julianna Kremer introduced herself, DeAnne Dupont Co-founder, and Carl Solander, Peter Zambelletti, architects. Ms. Kremer gave an overview of Food Link's history and the local organizations that Food Link partners with. Food Link has a staff of four and works with volunteers from Arlington. Carl Solander reviewed the current structure and plot plan. Mr. Solander said they plan to gut the interior of the building and make selective improvements to the exterior, including a ramp to make the building fully accessible. Mr. Solander also said they plan to enclose the loading dock, create offices, a food sorting area, a cold storage area, and conference room. The exterior canopy design will incorporate shelter for an existing bus stop. The exterior plan will include a new retaining wall, more permeable pavers in the parking area, and two dry wells to capture water from the asphalt. There will be a new bike storage facility with six spaces for long term bike storage and four short term bike parking spaces next to the building. There will be eight parking spaces on site. Food Link requested parking relief. They conducted a parking study to see how many vehicles are parked on the property per hour, which is currently up to five on the weekend. Food Link asked a neighboring property to allow for weekend volunteer overflow parking. The current stucco façade will be painted.

The Chair notified the applicant that since the board is missing a member they can ask for a continuance if they choose. The Chair said he would like to see a transportation management plan to encourage people to use alternative methods of transportation. The Chair asked about the plans for tenant spaces. Ms. Dupont said they do not currently have any tenants interested in the space. Ms. Dupont said that they would like to secure tenants with a similar community service focus.

Mr. Lau asked about the height of trees in the back, and whether they would interfere with the solar array on the building. Ms. Dupont said that after speaking with the Town's Tree Warden she understood she would be able to trim the neighboring trees to allow for a flat solar array. Mr. Lau asked if the larger windows at the back of the building will allow for egress to the bike path. Ms. Dupont said at this time the large basement windows will not provide egress, the MBTA will not allow access to the bike path at that location at this time. Mr. Lau asked about moving the wood design element from the loading dock to the front door area. Ms. Zsembery asked if visitors will be using the front door or if Food Link will be asking visitors to use the accessible Summer Street entrance. Ms. Dupont said that they are looking for a facade that is easy to maintain to keep the operation costs for the building low. Mr. Lau said that the current design the front door does not look like the front door. Mr. Watson said he sees why the loading dock would be the focal point. Ms. Zsembery asked Food Link to take another look at the allocation of materials to think about the street view. Mr. Solander said that Food Link is entertaining the prospect of having murals on the facade of the building. Mr. Watson said he likes the project but is disappointed that the T will not allow a connection to the bike path. Mr. Watson suggested that part of Food Link's TBM plan should include information for visitors with the safest bike routes to the new facility. Mr. Watson said that if FoodLink is intending to include off-site parking spaces he would like to see a legally binding agreement put in place. Ms. Dupont said that FoodLink did not include the overflow parking numbers in their parking relief request. Ms. Raitt said that Food Link noted in their request for a parking reduction FoodLink would include a letter of agreement for the off-site parking. The Chair said that the four parking spaces should meet the requirements of the parking reduction. Ms. Zsembery asked if there was a handicapped parking space by the accessible ramp entrance. Ms. Zsembery asked if FoodLink would consider changing a visitor's parking spot to a handicapped space. Ms. Zsembery asked about free standing lighting for the parking. Mr. Solander said that they considered solar lighting in the parking lot. Mr. Lau asked if permitting would allow an easement from the MBTA to complete the retaining wall. Ms. Dupont said that they consider the easement request part of the construction manager's responsibilities.

The Chair opened the floor for public comments.

Guy Morello asked if the bus stop should be moved westbound on Summer St. He said he is concerned about tractor trailers stopping and blocking traffic. Food Link could then use the current bus stop space as a handicapped parking space. Ms. Dupont said that deliveries will be made by box trucks, not larger trucks.

James Cutler said he is happy to have Food Link as a new neighbor. Mr. Cuttler suggested a new crosswalk that will connect the two bus stops on Summer Street. Ms. Raitt said the Town Manager is working with the Transportation Planner and the Transportation Advisory Committee to consider the bus stop and pedestrian activity in that area. Ms. Raitt said that they are also intending to pursue access to the bike path at the rear of the building.

The Chair moved to continue the meeting until September 9, 2019 to present any design and transportation management changes the board requested.

Mr. Lau said the board would like to see the following improvements to the plan:

- 1) Updates to entry area design;
- 2) Traffic demand management plan;
- 3) Parking space dimensions; and
- 4) Include a more detailed landscape design.

Ms. Dupont asked about the 21 day permitting timeline if the hearing is continued to September 9, 2019. Food Link has six months left on their current lease.

Mr. Watson asked how often the box trucks will be making deliveries. Ms. Dupont said that the deliveries are very fast. The deliveries are typically made on Thursdays at 11:00 a.m. Mr. Watson asked if traffic will be blocked when the deliveries are made. Mr. Solander said that there are two curb cuts to allow the trucks to pull in so they will not have to back in and block traffic on Summer Street. Ms. Raitt said that designing a new entry could have significant cost implications for Food Link. The extent of what Food Link can do to the façade is the canopy and the wood band. Ms. Raitt said the DPCD staff can work with the applicant to design a more prominent front door design. The Chair said that conditions of the special permit can include that Food Link continues to work with DPCD regarding the front entry design. The DPCD staff will also work with Food Link on their lighting and landscaping design and parking and transportation plan. The Chair motioned to approve the EDR special permit #3604 with special conditions as outlined by the Director. Mr. Lau moved to approve, Mr. Watson seconded, all voted in favor 4-0.

The Chair opened the floor to the public for the Open Forum portion of the meeting.

Guy Morello asked about the presentation, he asked if it was a power point presentation. Ms. Zwiko explained that the presentation was a downloaded PDF document.

The Chair moved to close the meeting. Mr. Lau motioned to adjourn, Ms. Zsembery seconded, all voted in favor 4-0.

Meeting adjourned.



#### Town of Arlington, Massachusetts

#### Correspondence received

#### Summary:

Correspondence received: Email and Attachments from Don Seltzer 091619 Correspondence received from Chris Loreti 092319 regarding 117 Broadway Special Permit Absence of Open Space

#### ATTACHMENTS:

Туре	File	Name

- D Reference Correspondence\_Received\_-\_Email\_from\_Don\_Seltzer\_091619.pdf
- Reference ARB\_data\_letter[1].pdf Material
- Reference Arlington\_Density\_Comparison-MAPC\_Inner\_Core[1].pdf
- Reference Arlington\_Density\_Comparison-Metro\_Mayors\_Coalition\_taxes[1].pdf
- Reference Material Arlington\_Housing\_Status[1].pdf
- Reference Doing\_Our\_Share\_\_inner\_core\_map[1].pdf Material
- Reference Mass\_Density\_and\_Tax\_Levy\_Comparison[1].pdf Material
- Reference Mayor\_Walsh\_Plans\_To\_Increase\_Housing\_As\_Boston\_Population\_Grows[1].pdf

#### Reference

□ Material Metro Boston Mayors set goal of 185 000 new housing units by 2030[1].pdf

Reference tax\_levy\_by\_class\_\$100M[1].pdf

 Reference Material
 Correspondence\_received\_from\_Chris\_Loreti\_092319\_regarding\_117\_Broadway\_Special\_Permit\_Absence\_of\_Open\_Space.pdf regarding 117 Broadway Special Permit

Special Permit Absence of Open Space

Description Correspondence

- email from Don Seltzer 091619

Attachment 1 -ARB data letter Attachment 2 -Arlington

Density Comparison -MAPC Inner Core Attachment 3 -Arlington

Density Comparison-Metro Mayors Coalition Taxes Attachment 4 -

Arlington Housing Status Attachment 5 -

Doing Our Share inner core map Attachment 6 -Mass Density

and Tax Levy Comparison Attachment 7 -Mayor Walsh Plans to

Increase Housing As Boston Population Grows Attachment 8 -Metro Boston

Mayors set goal of 185.000 new

housing units by 2030 Attachment 9-

tax levy by class \$100M

Correspondence received from Chris Loreti

From:	Don Seltzer <timoneer@gmail.com></timoneer@gmail.com>	
To:	Erin Zwirko <ezwirko@town.arlington.ma.us></ezwirko@town.arlington.ma.us>	
Cc:	Jenny Raitt <jraitt@town.arlington.ma.us>, Andrew Bunnell <abunnell@town.arlington.ma.us>, gbenson@town.arlington.ma.us, DWatson@town.arlington.ma.us, KLau@town.arlington.ma.us, rzsembery@town.arlington.ma.us</abunnell@town.arlington.ma.us></jraitt@town.arlington.ma.us>	
Date:	09/16/2019 11:19 AM	
Subject: Requested data on housing in Arlington - ARB correspondence		

Per your request I am enclosing the background research that I had hoped to summarize during the Open Forum portion of the Sept 9 ARB meeting. I believe that you will find it useful, and I am available to answer any questions at your next meeting.

The comments that I had been prepared to make at the last meeting were prompted by the Town Manager's presentation on housing to the Select Board on July 22 in which he declared a goal of seeking public engagement in the process. It is my understanding that he intends to give the same presentation to the ARB.

The attached documents address some aspects of the Town Manager's presentation, in particular digging deeper into what the numbers mean for Arlington.

One of the key numbers at the center of the housing crisis is the claim that the Boston metropolitan area needs 185,000 additional housing units by 2030. That was the number announced almost a year ago by the Metropolitan Mayors Coalition (MMC). There are reasons to dispute the assumptions behind this number which have been raised by others, but I will accept this estimate as valid and show what it means for Arlington.

The very same week that MMC pledged its 15 members, Arlington included, to meet this goal, Mayor Walsh announced that Boston's share would be 69,000 units. In the year since, town

officials have been asked what is Arlington's quota, but no answer has been given. In fact, very few of the MMC communities have responded, perhaps because the answer is mind-boggling.

The math however is very straightforward. After Boston's declared share, the other 14 communities are left with 116,000 units to allocate among themselves. This is a 34% increase in the current total housing for these 14 communities.

For Arlington, a 34% increase in housing is nearly 6,800 new units. Presumably these would go into the R4-R8 high density districts (which represent just 5% of Arlington's area) and some into our business zones. These same districts have 5,000 housing units today. To more than double their density is almost unimaginable. I will leave it to you to speculate on what that would do our infrastructure and particularly the burden on schools.

133 of 172

In the enclosed attachments you will find spreadsheet tables that relate to population and housing density. Most of the data is taken directly from the US Census Bureau website and reflects the official Bureau estimates as of 2017. I have sorted the tables by housing density. I have also added some additional columns which I will explain shortly.

Of the 13 cities and 2 towns in the MMC, Arlington is in the middle third by density. There are five other cities within the MMC that have significantly less density than Arlington. This brings up an interesting question: What If these other five cities were to build out to the same density that Arlington has already achieved?

The answer is given in the 6th column. If Medford, Quincy, Melrose, Newton, and Braintree to increase their density to Arlington's standard, the metropolitan area would have nearly 111,000 more housing units, going a long way to meeting the MMC pledge.

Along this same line of thinking, what about the MAPC Inner Core? Arlington has been lumped into this grouping by the Metropolitan Area Planning Council in their master plans rather than as a Mature Suburb such as our neighbors Winchester and Lexington. What if the other Inner Core cities were asked to meet Arlington's density? That would mean that Lynn, Medford, Quincy, Melrose, Belmont, Waltham, Newton, Saugus, Needham, and Milton would have to build 218,633 more housing units, far surpassing the stated need of MMC.

I have also added some additional columns to these tables showing the property tax burden of these communities. The numbers are eye-opening. For the MMC communities collectively, nearly half (47%) of the property tax burden is non-residential. In Arlington, however, only 5.6% of the property tax burden is non-residential. This one number demonstrates that Arlington is unique, and the folly of trying to lump our town into the same pigeonhole as the MMC 15. It should also be prominent in any discussions of changes that threaten what little commercial base we have remaining.

Returning to the question of housing, it is widely believed in the community that Arlington's real need is not more market rate housing but specifically more affordable housing. In looking for solutions toward achieving that goal it is instructive to see just

who creates affordable housing in Arlington. Of the 1100 or so officially affordable units on the state's SHI list,

62% have been created by the Town through the Arlington Housing Authority. This includes 519 units in the Senior Housing developments and 176 in Menotomy Manor.

21% have been created to date by non-profits, notably 103 by the Housing Corp of Arlington and 137 by other non-profit groups.

18% have been created by private developers. Of these, the lion's share are the 146 units of subsidized (Sect 8) housing at Millbrook Sq. These units were built more than 30 years

134 of 172

ago. We have had another 53 units added under the requirements of the 15% Inclusionary zoning bylaw in the last 15 years, mostly at the Symmes and Brigham Sq developments. One more will be added shortly by the Summer St mixed use development. But no private developer has voluntarily built an affordable unit in the last 30 years.

This is my contribution to the Town Manager's call for more public engagement. I hope that you will consider these viewpoints in the conversations ahead.

Don Seltzer Irving St

#### Attachments:

File: <u>ARB data letter.pdf</u>	Size: 39k	Content Type: application/pdf
File: Arlington Housing Status.pdf	Size: 205k	Content Type: application/pdf
File: <u>Arlington Density Comparison-MAPC</u> <u>Inner Core.pdf</u>	Size: 39k	Content Type: application/pdf
File: <u>Mayor Walsh Plans To Increase</u> <u>Housing As Boston Population Grows.pdf</u>	Size: 443k	Content Type: application/pdf
File: Doing Our Share inner core map.pdf	Size: 311k	Content Type: application/pdf
File: Metro Boston Mayors set goal of 185,000 new housing units by 2030.pdf	Size: 217k	Content Type: application/pdf
File: <u>tax levy by class \$100M.pdf</u>	Size: 108k	Content Type: application/pdf
File: <u>Arlington Density Comparison-Metro</u> <u>Mayors Coalition taxes.pdf</u>	Size: 64k	Content Type: application/pdf
File: <u>Mass Density</u> and <u>Tax Levy</u> <u>Comparison.pdf</u>	Size: 236k	Content Type: application/pdf

135 of 172

15 Sept 2019

To: Arlington Redevelopment Board From: Don Seltzer

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Don Seltzer Irving St

Geographic area	Population	Housing	Area in	Area in	Area in	Density per	Density per	Additional	CIP Tax levy	Total Levy	CIP Levy
	Population	units	square miles - Total area	square miles - Water area	square miles - Land area	square mile of land area - Population	square mile of land area - Housing units	Units at Arlington Density	%	iotai Levy	CIP Levy
Somerville city, Middlesex County	75754	33720	4.22	0.1	4.12	18403.9	8192.1		24%	155,031,240	37,207,498
Cambridge city, Middlesex County	105162	47291	7.11	0.72	6.39	16469.1	7406.1		65%	409,809,861	266,376,410
Chelsea city, Suffolk County	35177	12621	2.46	0.25	2.21	15901.6	5705.3		46%	57,889,033	26,628,955
Boston city, Suffolk County	617594	272481	89.64	41.36	48.28	12792.7	5644.1		60%	2,349,909,105	1,409,945,463
Malden city, Middlesex County	59450	25161	5.08	0.04	5.04	11788.2	4989.1		20%	90,248,198	18,049,640
Everett city, Middlesex County	41667	16715	3.67	0.24	3.43	12164.9	4880		67%	132,567,523	88,820,240
Winthrop Town city, Suffolk County	17497	8320	8.32	6.34	1.97	8860.4	4213.2		6%	33,217,990	1,993,079
Brookline town, Norfolk County	58732(r45077)	26448	6.81	0.06	6.75	8701	3918.2		18%	224,490,478	40,408,286
Watertown city, Middlesex County	31915	15584	4.12	0.12	3.99	7992.2	3902.5		35%	109,457,123	38,309,993
Revere city, Suffolk County	51755	22100	10.11	4.42	5.69	9095.6	3883.9		21%	86,350,245	18,133,551
Arlington town, Middlesex County	42844	19974	5.49	0.35	5.15	8325.7	3881.5		6%	124,010,976	7,440,659
Lynn city, Essex County	90329	35776	13.52	2.78	10.74	8409.5	3330.7	5911	19%	131,221,639	24,932,111
Medford city, Middlesex County	56173(r45122)	24046	8.66	0.56	8.1	6934	2968.2	7394	18%	113,770,130	20,478,623
Quincy city, Norfolk County	92271	42838	26.91	10.33	16.57	5568	2585	21478	25%	229,392,430	57,348,108
Melrose city, Middlesex County	26983	11751	4.76	0.08	4.68	5767.2	2511.6	6414	8%	59,375,238	4,750,019
Belmont town, Middlesex County	24729	10184	4.72	0.07	4.65	5317	2189.7	7865	6%	92,737,733	5,564,264
Waltham city, Middlesex County	60632	24926		1.02	12.73	4763.4	1958.2	24485	60%	184,954,321	110,972,593
Newton city, Middlesex County	85146	32648	18.16	0.33	17.84	4773.5	1830.3	36598	18%	346,936,565	62,448,582
Saugus town, Essex County	26628	10775		1.01	10.79	2467	998.3	31106	33%	69,462,880	22,922,750
Needham town, Norfolk County Milton town, Norfolk	28886	11122	12.72	0.43	12.29	2351.1	905.2	36582	23%	141,893,985	32,635,617
Milton town, Norfolk County	27003	9700	13.3	0.3	13.01	2076.3	745.8	40798 <b>218,633</b>	6%	82,348,069	4,940,884 <b>2,300,307,32</b> 5

Geographic area	Population	Housing units	Land Area in square miles	Density per square mile of Housing units	Additional Units at Arlington Density	CIP Tax levy %	Total Levy	CIP Levy
Somerville city, Middlesex County	75,754	33,720	4.12	8192		24%	155,031,240	37,207,498
Cambridge city, Middlesex County	105,162	47,291	6.39	7406		65%	409,809,861	266,376,410
Chelsea city, Suffolk County	35,177	12,621	2.21	5705		46%	57,889,033	26,628,955
Boston city, Suffolk County	617,594	272,481	48.28	5644		60%	2,349,909,105	1,409,945,463
Malden city, Middlesex County	59,450	25,161	5.04	4989		20%	90,248,198	18,049,640
Everett city, Middlesex County	41,667	16,715	3.43	4880		67%	132,567,523	88,820,240
Winthrop city, Suffolk County	17,497	8,320	1.97	4213		6%	33,217,990	1,993,079
Brookline town, Norfolk County	58,732	26,448	6.75	3918		18%	224,490,478	40,408,286
Revere city, Suffolk County	51,755	22,100	5.69	3884		21%	86,350,245	18,133,551
Arlington town, Middlesex County	42,844	19,974	5.15	3882		6%	124,010,976	7,440,659
Medford city, Middlesex County	56,173	24,046	8.1	2968	7,394	18%	113,770,130	20,478,623
Quincy city, Norfolk County	92,271	42,838	16.57	2585	21,478	25%	229,392,430	57,348,108
Melrose city, Middlesex County	26,983	11,751	4.68	2512	6,414	8%	59,375,238	4,750,019
Newton city, Middlesex County	85,146	32,648	17.84	1830	36,598	18%	346,936,565	62,448,582
Braintree city, Norfolk County	35,744	14,302	13.75	1040	39,069	37%	91,061,619	33,692,799
		610,416			110,954	47%	4,412,999,012	2,060,029,11

#### Metro Mayors Coalition



# 185,000

Last October, the Metro Mayors Coalition set a goal of 185,000 new housing units by 2030 for its 15 member communities

Boston declared that its share would be 69,000

That leaves 116,000 for the remaining 14 communities, requiring them to increase their housing by 34%.

Arlington's share would be an increase of about 6,800 units, presumably in the R4-R8 and business zones. These districts currently have about 5,000 housing units.



# What If Other Communities Matched Arlington's Density

Geographic area	Population	Housing units	Land Area in square miles	Density per square mile of Housing units	Additional Units at Arlington Density	CIP Tax levy %	Total Levy	CIP Levy
Somerville city, Middlesex County	75,754	33,720	4.12	8192		24%	155,031,240	37,207,498
Cambridge city, Middlesex County	105,162	47,291	6.39	7406		65%	409,809,861	266,376,410
Chelsea city, Suffolk County	35,177	12,621	2.21	5705		46%	57,889,033	26,628,955
Boston city, Suffolk County	617,594	272,481	48.28	5644		60%	2,349,909,105	1,409,945,463
Malden city, Middlesex County	59,450	25,161	5.04	4989		20%	90,248,198	18,049,640
Everett city, Middlesex County	41,667	16,715	3.43	4880		67%	132,567,523	88,820,240
Winthrop city, Suffolk County	17,497	8,320	1.97	4213		6%	33,217,990	1,993,079
Brookline town, Norfolk County	58,732	26,448	6.75	3918		18%	224,490,478	40,408,286
Revere city, Suffolk County	51,755	22,100	5.69	3884		21%	86,350,245	18,133,551
Arlington town, Middlesex County	42,844	19,974	5.15	3882		6%	124,010,976	7,440,659
Medford city, Middlesex County	56,173	24,046	8.1	2968	7,394	18%	113,770,130	20,478,623
Quincy city, Norfolk County	92,271	42,838	16.57	2585	21,478	25%	229,392,430	57,348,108
Melrose city, Middlesex County	26,983	11,751	4.68	2512	6,414	8%	59,375,238	4,750,019
Newton city, Middlesex County	85,146	32,648	17.84	1830	36,598	18%	346,936,565	62,448,582
Braintree city, Norfolk County	35,744	14,302	13.75	1040	39,069	37%	91,061,619	33,692,799
		610,416			110,954	47%	4,412,999,012	2,060,029,113

#### **Metro Mayors Coalition**

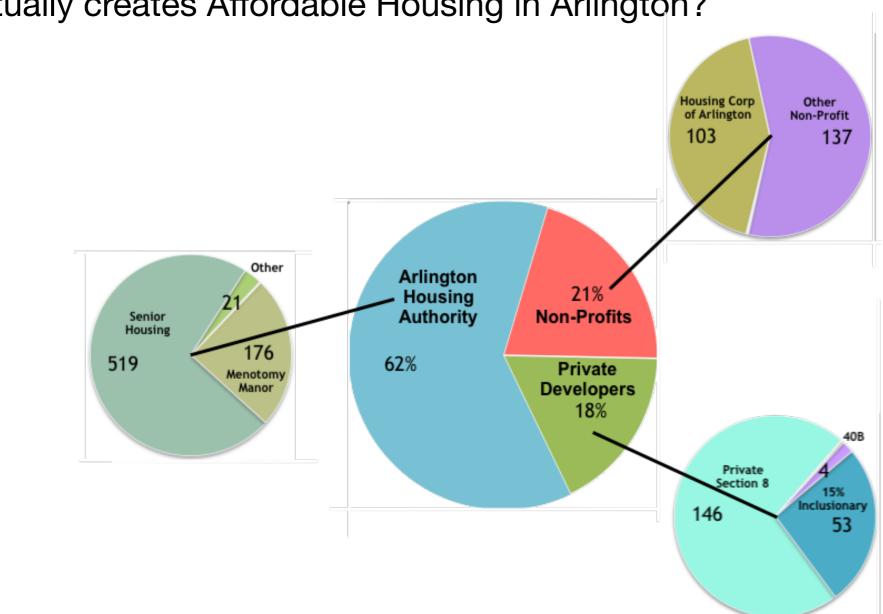
Within the Metro Mayors Coalition, if Medford, Quincy, Melrose, Newton, and Braintree were to build out to Arlington's density, they would create 110,954 more housing units in the Greater Boston area.

Within the MAPC Inner Core, if Lynn, Medford, Quincy, Melrose, Belmont, Waltham, Newton, Saugus, Needham, and Milton were to build out to Arlington's density, they would creater 218,633 more housing units in the Greater Boston area.

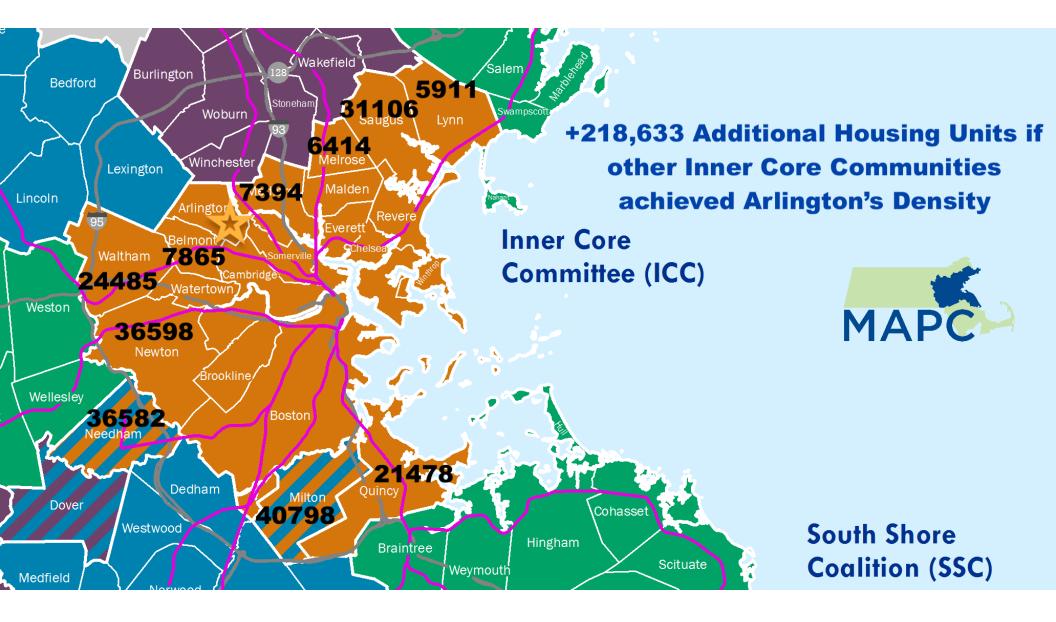


## Arlington is already doing its share

What Arlington needs is not more luxury apartments but more Affordable Housing



Who actually creates Affordable Housing in Arlington?



Rank	Geographic area	Population	Housing	Area in	Area in	Area in	Density per	Density per	Additional	non-
ianik		ropulation	units	square miles - Total area	square miles	square miles - Land area		square mile of land area - Housing units	Units at Arlington Density	Residential Tax Levy
	Massachusetts	6547629	2808254	10554.39	2754.33	7800.06	839.4	360		
1	Somerville city, Middlesex County	75754	33720	4.22	0.1	4.12	18403.9	8192.1		2
2	Cambridge city, Middlesex County	105162	47291	7.11	0.72	6.39	16469.1	7406.1		6
3	Chelsea city, Suffolk County	35177	12621	2.46	0.25	2.21	15901.6	5705.3		4
4	Boston city, Suffolk County	617594	272481	89.64	41.36	48.28	12792.7	5644.1		(
5	Malden city, Middlesex County	59450	25161	5.08	0.04	5.04	11788.2	4989.1		2
6	Everett city, Middlesex County	41667	16715	3.67	0.24	3.43	12164.9	4880		e
7	Winthrop Town city, Suffolk County	17497	8320	8.32	6.34	1.97	8860.4	4213.2		
8	Lawrence city, Essex County	76377	27137	7.41	0.48	6.93	11028	3918.3		:
9	Brookline town, Norfolk County	58732(r45077)	26448	6.81	0.06	6.75	8701	3918.2		1
10	Watertown city, Middlesex County	31915	15584	4.12	0.12	3.99	7992.2	3902.5		;
11	Revere city, Suffolk County	51755	22100	10.11	4.42	5.69	9095.6	3883.9		2
12	Arlington town, Middlesex County	42844	19974	5.49	0.35	5.15	8325.7	3881.5		
13	Lynn city, Essex County	90329	35776	13.52	2.78	10.74	8409.5	3330.7	5911	1
14	Lowell city, Middlesex County	106519	41431	14.53	0.94	13.58	7842.1	3050.2	11280	:
15	Medford city, Middlesex County	56173(r45122)	24046	8.66	0.56	8.1	6934	2968.2	7394	
16	Quincy city, Norfolk County	92271	42838	26.91	10.33	16.57	5568	2585	21478	:
17	Melrose city, Middlesex County	26983	11751	4.76	0.08	4.68	5767.2	2511.6	6414	
18	Clinton CDP, Worcester County	7389	3607	1.49	0	1.49	4951.6	2417.2	2176	:
19	Provincetown CDP, Barnstable County	2642	4263	5.23	3.45	1.79	1478.5	2385.7	2685	
20	Salem city, Essex County	41340	19130	18.29	10.01	8.28	4992.9	2310.4	13009	:
21	Belmont town, Middlesex County	24729	10184	4.72	0.07	4.65	5317	2189.7	7865	
22	New Bedford city, Bristol County	95072	42933	24.13	4.13	20	4754.4	2147	34697	
23	Hull town, Plymouth County	10293	5762	26.86	24.06	2.8	3676.5	2058.1	5106	
24	Popponesset CDP, Barnstable County	220	623	0.32	0.01	0.31	719.7	2038.2	580	
25	Marblehead town, Essex County	19808	8838	19.59	15.2	4.39	4515.5	2014.7	8202	
27	Worcester city, Worcester County	181045	74645	38.46	1.09	37.37	4844.5	1997.4	70407	4

28	Ocean Grove CDP, Bristol County	2811	1310	0.81	0.15	0.66	4253.3	1982.1	1252	
29	Waltham city, Middlesex County	60632	24926	13.75	1.02	12.73	4763.4	1958.2	24485	60
30	Swampscott town, Essex County	13787	5888	6.71	3.69	3.02	4560.1	1947.5	5834	1:
32	Springfield city, Hampden County	153060	61706	33.07	1.21	31.87	4803.4	1936.5	61997	4:
33	Newton city, Middlesex County	85146	32648	18.16	0.33	17.84	4773.5	1830.3	36598	1
34	Webster CDP, Worcester County	11412	5479	3.04	0.05	3	3806.9	1827.7	6166	
35	Dennis Port CDP, Barnstable County	3162	5085	3.28	0.25	3.03	1043.9	1678.7	6676	
36	Brockton city, Plymouth County	93810	35552	21.52	0.2	21.33	4398.4	1666.9	47240	
37	Plymouth CDP,	7494	3622	3.88	1.64	2.24	3348	1618.2	5073	
38	Plymouth County Nahant town, Essex	3410	1677	15.47	14.43	1.05	3260.3	1603.4	2399	
40	County Falmouth CDP,	3799	3279	2.25	0.17	2.08	1826.9	1576.8	4795	
41	Barnstable County Stoneham town,	21437(r45052)	9458	6.65	0.63	6.02	3561.5	1571.3	13909	1
43	Middlesex County Teaticket CDP,	1692	1645	1.35	0.3	1.05	1606.1	1561.5	2431	
44	Barnstable County Wakefield town,	24932(r45056)	10500	7.96	0.6	7.36	3389.5	1427.5	18068	2:
46	Middlesex County Weymouth Town city,	53743	23480	21.6	4.81	16.79	3200.4	1398.3	41690	
47	Norfolk County Peabody city, Essex	51251	22220	16.79	0.58	16.21	3161.4	1370.6	40699	3
48	County Wareham Center CDP,	2896	1974	1.89	0.44	1.45	1995.6	1360.3	3654	
	Plymouth County									
49	North Plymouth CDP, Plymouth County	3600	1675	3.48	2.23	1.25	2885.1	1342.4	3177	
50	Spencer CDP, Worcester County	5700	2798	2.17	0.06	2.11	2702.3	1326.5	5392	
51	Winchester town, Middlesex County	21374	7986	6.34	0.32	6.03	3545.6	1324.7	15419	
53	Ocean Bluff-Brant Rock CDP, Plymouth County	4970	2880	4.39	2.21	2.17	2285.4	1324.4	5543	
54	Adams CDP, Berkshire County	5515	2974	2.29	0.03	2.26	2443.7	1317.8	5798	
55	Woburn city, Middlesex County	38120	16309	12.95	0.31	12.64	3017	1290.8	32753	5
56	Fall River city, Bristol County	88857	42750	40.25	7.11	33.13	2681.9	1290.3	85844	
57	Vineyard Haven CDP, Dukes County	2114	1577	1.57	0.33	1.23	1712.7	1277.7	3197	
58	Seconsett Island CDP, Barnstable County	100	131	0.11	0	0.1	971.9	1273.2	257	
59	Randolph town, Norfolk County	32112	12008	10.42	0.59	9.83	3266.3	1221.4	26147	

60	Randolph CDP, Norfolk County	32112	12008	10.42	0.59	9.83	3266.3	1221.4	26147	
61	Bliss Corner CDP, Bristol County	5280	2408	2	0	2	2644.2	1205.9	5355	
62	Ipswich CDP, Essex County	4222	1979	1.74	0.1	1.64	2570.5	1204.9	4387	
63	Norwood town, Norfolk County	28602	12479	10.53	0.16	10.37	2758.6	1203.6	27772	
64	Norwood CDP, Norfolk County	28602	12479	10.53	0.16	10.37	2758.6	1203.6	27772	
65	Mansfield Center CDP, Bristol County	7360	3300	2.82	0.06	2.76	2671.2	1197.7	7413	
66	Onset CDP, Plymouth County	1573	1259	1.29	0.22	1.08	1458.8	1167.6	2933	
67	South Yarmouth CDP, Barnstable County	11092	8056	7.81	0.85	6.96	1594.7	1158.2	18959	
68	Ayer CDP, Middlesex County	2868	1523	1.39	0.06	1.33	2162.7	1148.4	3639	
69	Bridgewater CDP, Plymouth County	7841	2596	2.3	0.02	2.28	3444.5	1140.4	6254	
70	Turners Falls CDP, Franklin County	4470	2173	2.3	0.39	1.91	2343.7	1139.4	5241	
71	Clinton town, Worcester County	13606	6397	7.27	1.61	5.65	2406.1	1131.2	15533	
72	Nantucket CDP, Nantucket County	7446	6554	6.82	1.01	5.81	1281.7	1128.1	15998	
73	Hudson CDP, Middlesex County	14907	6381	5.92	0.18	5.74	2598.2	1112.2	15899	
74	Beverly city, Essex County	39502	16641	22.59	7.5	15.09	2617.2	1102.5	41931	
75	Chicopee city, Hampden County	55298	25140	23.87	1.04	22.83	2422.1	1101.2	63475	
	Framingham town, Middlesex County	68318	27529	26.5	1.46	25.04	2728.6	1099.5	69664	
77	Framingham CDP, Middlesex County	68318	27529	26.5	1.46	25.04	2728.6	1099.5	69664	
78	Braintree Town city, Norfolk County	35744	14302	14.56	0.81	13.75	2599.8	1040.2	39069	37
79	Milford CDP, Worcester County	25055	10337	10.4	0.24	10.16	2466.1	1017.4	29099	
80	Saugus town, Essex County	26628	10775	11.8	1.01	10.79	2467	998.3	31106	
81	Saugus CDP, Essex County	26628	10775	11.8	1.01	10.79	2467	998.3	31106	
82	Dedham town, Norfolk County	24729	10191	10.65	0.4	10.25	2413.3	994.5	29594	
83	Dedham CDP, Norfolk County	24729	10191	10.65	0.4	10.25	2413.3	994.5	29594	
84	Newburyport city, Essex County	17416	8264	10.66	2.31	8.35	2086.2	989.9	24147	
85	Popponesset Island CDP, Barnstable County	26	71	0.38	0.31	0.07	361.3	986.5	201	
86	Westborough CDP, Worcester County	4045	1842	1.9	0.02	1.89	2142.4	975.6	5494	
87	Reading town, Middlesex County	24747	9617	9.97	0.02	9.95	2486.2	966.2	29004	

88	Reading CDP, Middlesex County	24747	9617	9.97	0.02	9.95	2486.2	966.2	29004	
89	Foxborough CDP, Norfolk County	5625	2726	2.92	0.04	2.88	1954.4	947.1	8453	
90	Andover CDP, Essex County	8762	3483	3.77	0.08	3.69	2376.6	944.7	10840	
91	Natick town, Middlesex County	33006	14121	15.96	1.01	14.95	2207.3	944.4	43907	
92	Somerset town, Bristol County	18165	7394	11.89	3.99	7.9	2299.4	936	23270	
93	Somerset CDP, Bristol County	18165	7394	11.89	3.99	7.9	2299.4	936	23270	
94	Acushnet Center CDP, Bristol County	3073	1318	1.43	0.02	1.42	2171.7	931.4	4194	
95	Walpole CDP, Norfolk County	5918	2587	2.92	0.11	2.81	2108.8	921.9	8320	
96	Harwich Port CDP, Barnstable County	1644	2424	3.47	0.84	2.63	624.7	921.2	7784	
97	Wellesley town, Norfolk County	27982	9189	10.52	0.5	10.02	2793.4	917.3	29704	
98	Wellesley CDP, Norfolk County	27982	9189	10.52	0.5	10.02	2793.4	917.3	29704	
99	Great Barrington CDP, Berkshire County	2231	1240	1.41	0.05	1.36	1636.7	909.7	4039	
100	North Amherst CDP, Hampshire County	6819	1935	2.13	0	2.13	3202.2	908.7	6333	
101	Needham town, Norfolk County	28886	11122	12.72	0.43	12.29	2351.1	905.2	36582	
102	Needham CDP, Norfolk County	28886	11122	12.72	0.43	12.29	2351.1	905.2	36582	
103	West Dennis CDP, Barnstable County	2242	2947	4.21	0.95	3.26	687.1	903.1	9707	
104	Hopedale CDP, Worcester County	3753	1543	1.73	0	1.73	2169.9	892.1	5172	
	Buzzards Bay CDP, Barnstable County	3859	1659	2.93	1.02	1.91	2015.7	866.5	5755	
106	East Falmouth CDP, Barnstable County	6038	4678	6.3	0.85	5.44	1109.4	859.5	16437	
107	Maynard town, Middlesex County	10106	4447	5.37	0.16	5.21	1938.5	853	15776	
	Maynard CDP, Middlesex County	10106	4447	5.37	0.16	5.21	1938.5	853	15776	
109	Danvers town, Essex County	26493	11135	14.18	0.91	13.28	1995.6	838.8	40411	
110	Danvers CDP, Essex County	26493	11135	14.18	0.91	13.28	1995.6	838.8	40411	
	North Eastham CDP, Barnstable County	1806	2836	11.94	8.51	3.43	525.8	825.6	10478	
112	Methuen Town city, Essex County	47255	18340	23.04	0.79	22.25	2124	824.3	68023	
113	White Island Shores CDP, Plymouth County	2106	930	1.27	0.15	1.13	1866.4	824.2	3456	
114	Burlington town, Middlesex County	24498	9668	11.86	0.13	11.73	2087.8	823.9	35862	
	Burlington CDP, Middlesex County	24498	9668	11.86	0.13	11.73	2087.8	823.9	35862	

116	Weweantic CDP,	2105	1011	1.75	0.48	1.27	1659.1	796.8	3919	
117	Plymouth County Whitman town,	14489	5522	6.96	0.02	6.94	2087.8	795.7	21416	
118	Plymouth County Winchendon CDP,	4213	1799	2.44	0.17	2.27	1859.9	794.2	7012	
	Worcester County	1 404	0004	0.40			500.7			
	Chatham CDP, Barnstable County	1421	2094	3.49	0.85	2.64	538.7	793.9	8153	
120	Rockport CDP, Essex County	4966	3163	4.09	0.11	3.98	1246.4	793.8	12285	
121	West Yarmouth CDP, Barnstable County	6012	5261	9.09	2.41	6.68	899.9	787.5	20667	
122	Marlborough city, Middlesex County	38499	16416	22.1	1.24	20.87	1845.1	786.8	64591	
123	Haverhill city, Essex County	60879	25657	35.63	2.66	32.97	1846.5	778.2	102316	
124	Milford town, Worcester County	27999	11412	15.03	0.27	14.75	1898.1	773.7	45840	
125	Holyoke city, Hampden County	39880	16384	22.84	1.55	21.28	1874	769.9	66214	
126	Middleborough Center CDP, Plymouth County	7319	3004	4.03	0.1	3.93	1863.5	764.9	12250	
127	Dennis town, Barnstable County	14207	15586	22.26	1.75	20.51	692.7	759.9	64024	
128	West Springfield Town city, Hampden County	28391	12697	17.52	0.81	16.71	1698.7	759.7	52163	
129	Seabrook CDP, Barnstable County	455	261	0.35	0	0.35	1301	746.3	1098	
130	Milton town, Norfolk County	27003	9700	13.3	0.3	13.01	2076.3	745.8	40798	
131	Milton CDP, Norfolk County	27003	9700	13.3	0.3	13.01	2076.3	745.8	40798	
132	Lee CDP, Berkshire County	2051	984	1.36	0.04	1.32	1548.3	742.8	4140	
133	Northborough CDP, Worcester County	6167	2427	3.31	0.03	3.29	1877.1	738.7	10343	
134	North Brookfield CDP, Worcester County	2265	1089	1.48	0	1.48	1535.1	738.1	4656	
135	North Seekonk CDP, Bristol County	2643	1030	1.42	0.02	1.4	1891.2	737	4404	
136	Lexington town, Middlesex County	31394	12019	16.64	0.21	16.43	1910.3	731.4	51754	
	Lexington CDP, Middlesex County	31394	12019	16.64	0.21	16.43	1910.3	731.4	51754	
138	New Seabury CDP, Barnstable County	717	1739	2.55	0.17	2.38	301	730.1	7499	
139	Green Harbor-Cedar Crest CDP, Plymouth County	2609	1309	1.96	0.16	1.79	1454	729.5	5639	
140	Yarmouth town, Barnstable County	23793	17464	28.21	4.06	24.15	985.3	723.2	76274	
141	Whitinsville CDP, Worcester County	6704	2613	4.03	0.39	3.64	1840.1	717.2	11516	
142	Sharon CDP, Norfolk County	5658	2145	3.03	0.04	2.99	1891	716.9	9461	

143	Oxford CDP, Worcester County	6103	2454	3.69	0.22	3.46	1761.5	708.3	10976	
	Hudson town, Middlesex County	19063	7998	11.87	0.34	11.52	1654.5	694.2	36717	
	Rockland town, Plymouth County	17489	7051	10.41	0.08	10.32	1694	682.9	33006	
	Hingham CDP, Plymouth County	5650	2114	3.16	0.06	3.1	1824.9	682.8	9919	
147	Shrewsbury town, Worcester County	35608	13987	21.75	1.02	20.73	1717.9	674.8	66476	
	Cochituate CDP, Middlesex County	6569	2563	4.16	0.35	3.81	1724	672.6	12226	
	Attleboro city, Bristol County	43593	18022	27.81	1	26.81	1626	672.2	86041	
	Hopkinton CDP, Middlesex County	2550	1028	1.54	0	1.53	1664.1	670.9	4911	
	Stoughton town, Norfolk County	26962	10787	16.46	0.37	16.09	1675.7	670.4	51666	
152	Cheshire CDP, Berkshire County	514	257	0.38	0	0.38	1340.1	670	1218	
	West Concord CDP, Middlesex County	6028	2240	3.59	0.21	3.37	1788.4	664.6	10841	
154	Amherst Center CDP, Hampshire County	19065	3281	4.96	0.02	4.94	3858.9	664.1	15894	
155	North Falmouth CDP, Barnstable County	3084	2588	6.62	2.71	3.91	789.2	662.3	12589	
156	Abington CDP, Plymouth County	15985	6377	9.89	0.24	9.65	1656.2	660.7	31079	
157	Abington town, Plymouth County	15985	6377	9.89	0.24	9.65	1656.2	660.7	31079	
158	Longmeadow town, Hampden County	15784	5948	9.63	0.51	9.12	1730.8	652.2	29451	
	Longmeadow CDP, Hampden County	15784	5948	9.63	0.51	9.12	1730.8	652.2	29451	
	Pinehurst CDP, Middlesex County	7152	2429	3.77	0.04	3.73	1918	651.4	12049	
	Webster town, Worcester County	16767	8011	14.61	2.23	12.37	1355	647.4	40003	
162	Pocasset CDP, Barnstable County	2851	2377	9.78	6.11	3.68	775.4	646.5	11907	
163	Housatonic CDP, Berkshire County	1109	571	0.97	0.09	0.89	1251.8	644.5	2884	
164	West Chatham CDP, Barnstable County	1410	1856	3.28	0.4	2.88	489	643.7	9323	
	Monomoscoy Island CDP, Barnstable County	147	144	0.23	0	0.23	635	622	749	
	Leominster city, Worcester County	40759	17873	29.68	0.86	28.81	1414.5	620.3	93953	
	Lenox CDP, Berkshire County	1675	1120	1.82	0.01	1.81	926.5	619.5	5906	
	Chelmsford town, Middlesex County	33802	13807	23.08	0.71	22.37	1511	617.2	73022	
	Fitchburg city, Worcester County	40318	17117	28.12	0.29	27.83	1448.8	615.1	90905	
	North Attleborough town, Bristol County	28712	11596	19.4	0.53	18.87	1521.3	614.4	61648	

171	Fairhaven town, Bristol County	15873	7475	14.09	1.75	12.33	1286.8	606	40384	
172	East Pepperell CDP, Middlesex County	2059	856	1.45	0.04	1.42	1454.2	604.5	4656	
173	Rockport town, Essex County	6952	4223	17.54	10.55	6.99	994.4	604.1	22909	
174	South Dennis CDP, Barnstable County	3643	2742	4.75	0.2	4.55	800.9	602.8	14919	
175	Monument Beach CDP, Barnstable County	2790	1545	3.46	0.89	2.57	1084.9	600.8	8430	
176	Marion Center CDP, Plymouth County	1111	606	1.12	0.1	1.02	1090.2	594.7	3353	
177	Oak Bluffs town, Dukes County	4527	4346	25.92	18.61	7.31	619.5	594.7	24028	
178	Holbrook CDP, Norfolk County	10791	4274	7.36	0.11	7.25	1488.2	589.4	23867	
179	Holbrook town, Norfolk County	10791	4274	7.36	0.11	7.25	1488.2	589.4	23867	
180	South Lancaster CDP, Worcester County	1894	776	1.33	0.01	1.32	1435.2	588	4348	
181	Millis-Clicquot CDP, Norfolk County	4403	1840	3.17	0.04	3.13	1406.3	587.7	10309	
182	Amesbury Town city, Essex County	16283	7110	13.72	1.46	12.26	1327.8	579.8	40477	
183	Orleans CDP, Barnstable County	1621	1322	2.4	0.11	2.29	708.7	578	7567	
184	Bourne CDP, Barnstable County	1418	963	2.96	1.28	1.68	843.1	572.5	5558	
185	Easthampton Town city, Hampshire County	16053	7615	13.6	0.27	13.33	1204.3	571.3	44125	
186	Millers Falls CDP, Franklin County	1139	518	0.96	0.05	0.91	1246.7	567	3014	
187	Billerica town, Middlesex County	40243	14481	26.31	0.75	25.57	1574.1	566.4	84769	
188	Brewster CDP, Barnstable County	2000	2156	3.93	0.06	3.87	516.4	556.7	12865	
189	Gloucester city, Essex County	28789	14557	41.5	15.31	26.2	1099	555.7	87138	
190	Yarmouth Port CDP, Barnstable County	5320	3343	6.46	0.44	6.02	883.7	555.3	20024	
191	West Brookfield CDP, Worcester County	1413	700	1.77	0.51	1.26	1118.3	554	4191	
192	Dracut town, Middlesex County	29457	11351	21.39	0.75	20.63	1427.6	550.1	68724	
193	Scituate CDP, Plymouth County	5245	2338	4.91	0.62	4.3	1221.1	544.3	14352	
194	Harwich Center CDP, Barnstable County	1798	1221	2.29	0.04	2.25	799.3	542.8	7512	
195	Salisbury CDP, Essex County	4869	3235	7.49	1.5	5.99	812.9	540.1	20015	
196	Shirley CDP, Middlesex County	1441	709	1.33	0.02	1.31	1097.5	540	4376	
197	Ashland town, Middlesex County	16593	6609	12.87	0.54	12.33	1345.8	536	41250	
198	Sagamore CDP, Barnstable County	3623	1775	3.5	0.18	3.32	1089.8	533.9	11112	

199	Pittsfield city, Berkshire County	44737	21487	42.47	2	40.47	1105.5	530.9	135597	
200	Tewksbury town, Middlesex County	28961	10848	21.13	0.43	20.7	1399.1	524.1	69499	
201	North Scituate CDP, Plymouth County	5077	1962	3.81	0.06	3.75	1355.6	523.9	12594	
202	Agawam Town city, Hampden County	28438	12139	24.35	1.04	23.31	1220	520.8	78339	
203	Kingston CDP, Plymouth County	5591	2496	6.27	1.47	4.8	1163.8	519.6	16135	
204	Dennis CDP, Barnstable County	2407	2533	5.08	0.21	4.88	493.4	519.2	16409	
205	Taunton city, Bristol County	55874	23896	48.41	1.71	46.7	1196.4	511.7	157370	
206	Warren CDP, Worcester County	1405	652	1.29	0.01	1.27	1102.6	511.7	4278	
207	Upton CDP, Worcester County	3013	1261	2.55	0.08	2.47	1220.1	510.6	8326	
208	Medfield CDP, Norfolk County	6483	2506	5.03	0.09	4.95	1310.2	506.5	16707	
209	The Pinehills CDP, Plymouth County	955	557	1.1	0	1.1	867.6	506	3713	
210	Sandwich CDP, Barnstable County	2962	1829	3.81	0.19	3.62	818.6	505.4	12222	
211	Pepperell CDP, Middlesex County	2504	1036	2.13	0.07	2.06	1216.7	503.4	6960	
212	Westwood town, Norfolk County	14618	5431	11.17	0.29	10.88	1343.4	499.1	36800	
213	Falmouth town, Barnstable County	31531	21970	54.43	10.36	44.07	715.5	498.5	149088	
214	Harwich town, Barnstable County	12243	10284	33.13	12.25	20.88	586.2	492.4	70762	
215	Cordaville CDP, Worcester County	2650	889	1.82	0	1.82	1457.9	489.1	6175	
216	Ware CDP, Hampshire County	6170	3011	6.32	0.14	6.18	998.1	487.1	20977	
217	Mashpee Neck CDP, Barnstable County	1000	614	1.45	0.19	1.27	789.8	484.9	4316	
218	East Dennis CDP, Barnstable County	2753	2279	4.94	0.15	4.79	574.6	475.7	16313	
219	Tisbury town, Dukes County	3949	3094	19.1	12.57	6.54	604.1	473.3	22291	
220	East Longmeadow town, Hampden County	15720	6106	13.08	0.07	13.01	1208.6	469.5	44392	
221	Canton town, Norfolk County	21561	8762	19.61	0.82	18.8	1147.1	466.1	64210	
222	Athol CDP, Worcester County	8265	3811	8.46	0.28	8.18	1010.1	465.8	27940	
223	West Falmouth CDP, Barnstable County	1738	1431	4.35	1.28	3.08	564.9	465.1	10524	
224	Provincetown town, Barnstable County	2942	4494	17.48	7.81	9.67	304.2	464.7	33040	
225	Wilmington CDP, Middlesex County	22325	7808	17.16	0.18	16.98	1315	459.9	58100	
226	Wilmington town, Middlesex County	22325	7808	17.16	0.18	16.98	1315	459.9	58100	

227	Williamstown CDP, Berkshire County	4325	1550	3.43	0.03	3.39	1274.2	456.7	11608	
228	Scituate town, Plymouth County	18133	8035	31.83	14.2	17.63	1028.5	455.7	60396	
229	Chatham town, Barnstable County	6125	7343	24.39	8.26	16.13	379.7	455.2	55266	
230	South Duxbury CDP, Plymouth County	3360	1342	4.41	1.46	2.95	1139.5	455.1	10108	
231	Walpole town, Norfolk County	24070	9040	21.05	0.62	20.44	1177.8	442.4	70298	
232	Auburn town, Worcester County	16188	6840	16.41	0.94	15.48	1046	442	53246	
233	Hopedale town, Worcester County	5911	2285	5.34	0.17	5.17	1143.1	441.9	17782	
234	Lynnfield town, Essex County	11596	4354	10.47	0.58	9.88	1173.4	440.6	33995	
235	Lynnfield CDP, Essex County	11596	4354	10.47	0.58	9.88	1173.4	440.6	33995	
236	Barnstable Town city, Barnstable County	45193	26343	76.34	16.54	59.8	755.7	440.5	205771	
237	Siasconset CDP, Nantucket County	205	927	2.44	0.32	2.12	96.8	437.8	7302	
238	Woods Hole CDP, Barnstable County	781	932	3.9	1.76	2.13	366.1	436.9	7336	
239	Mansfield town, Bristol County	23184	8746	20.42	0.33	20.09	1153.8	435.3	69233	
240	Smith Mills CDP, Bristol County	4760	2000	4.73	0.07	4.66	1022.3	429.5	16088	
241	Acton town, Middlesex County	21924	8530	20.3	0.43	19.87	1103.6	429.4	68595	
242	Northwest Harwich CDP, Barnstable County	3929	3425	9.56	1.57	7.98	492.1	429	27549	
243	North Reading town, Middlesex County	14892	5633	13.5	0.36	13.14	1133.3	428.7	45370	
244	Franklin Town city, Norfolk County	31635	11394	27.03	0.4	26.63	1188.1	427.9	91970	
245	Eastham town, Barnstable County	4956	5960	25.7	11.74	13.96	355.1	427	48226	
246	Mashpee town, Barnstable County	14006	9882	27.23	3.84	23.39	598.7	422.4	80906	
247	North Andover town, Essex County	28352	10964	27.74	1.44	26.31	1077.8	416.8	91158	
248	Gardner city, Worcester County	20228	9126	23.03	0.94	22.08	916	413.3	76578	
249	Avon town, Norfolk County	4356	1769	4.54	0.25	4.29	1015.3	412.3	14883	
250	South Hadley town, Hampshire County	17514	7156	18.4	0.68	17.71	988.7	404	61585	
251	Hingham town, Plymouth County	22157	8953	26.31	4.1	22.21	997.5	403.1	77255	
252	Forestdale CDP, Barnstable County	4099	1530	4.16	0.36	3.8	1079.6	403	13220	
253	Andover town, Essex County	33201	12423	32.17	1.32	30.85	1076.3	402.7	107321	
254	East Harwich CDP, Barnstable County	4872	3214	8.77	0.75	8.02	607.5	400.7	27916	

255	Medway town, Norfolk County	12752	4613	11.67	0.13	11.54	1104.8	399.6	40180	
256	Bedford town, Middlesex County	13320	5368	13.84	0.18	13.66	975.2	393	47653	
257	Greenfield Town city, Franklin County	17456	8377	21.88	0.46	21.43	814.7	390.9	74804	
258	Hanson CDP, Plymouth County	2118	719	2.09	0.24	1.85	1144.6	388.6	6462	
259	Ayer town, Middlesex County	7427	3462	9.48	0.56	8.92	832.2	387.9	31161	
260	North Westport CDP, Bristol County	4571	1993	6.13	0.98	5.16	886.1	386.3	18036	
261	Marshfield town, Plymouth County	25132	10940	31.76	3.14	28.62	878.1	382.2	100149	
262	Orleans town, Barnstable County	5890	5344	22.65	8.51	14.13	416.8	378.1	49502	
263	Topsfield CDP, Essex County	2717	1022	2.75	0.04	2.72	1000.7	376.4	9536	
264	South Amherst CDP, Hampshire County	4994	1571	4.25	0.02	4.22	1182.3	371.9	14809	
265	Northampton city, Hampshire County	28549	12728	35.75	1.51	34.24	833.7	371.7	120175	
266	Southbridge Town city, Worcester County	16719	7527	20.9	0.63	20.28	824.6	371.2	71190	
267	Bellingham CDP, Norfolk County	4854	1989	5.47	0.1	5.38	902.5	369.8	18893	
268	Raynham Center CDP, Bristol County	4100	1551	4.36	0.13	4.23	968.8	366.5	14868	
269	Marshfield CDP, Plymouth County	4335	1856	5.14	0.08	5.07	855.5	366.3	17823	
270	Mattapoisett Center CDP, Plymouth County	2915	1655	4.54	0	4.54	642.4	364.7	15967	
271	East Brookfield CDP, Worcester County	1323	580	1.76	0.16	1.6	829.4	363.6	5630	
272	Holland CDP, Hampden County	1464	957	3.27	0.61	2.65	551.8	360.7	9329	
273	Fiskdale CDP, Worcester County	2583	1126	3.25	0.12	3.13	826.1	360.1	11023	
274	Millbury town, Worcester County	13261	5627	16.44	0.73	15.71	844.2	358.2	55351	
275	Northbridge town, Worcester County	15707	6172	18.06	0.79	17.26	909.8	357.5	60823	
276	Westborough town, Worcester County	18272	7350	21.44	0.86	20.58	888	357.2	72531	
277	Shelburne Falls CDP, Franklin County	1731	902	2.62	0.08	2.54	682.5	355.6	8957	
278	Rowley CDP, Essex County	1416	607	1.74	0.03	1.72	825.6	353.9	6069	
279	Amherst town, Hampshire County	37819	9711	27.74	0.13	27.6	1370	351.8	97418	
280	Foxborough town, Norfolk County	16865	6895	20.85	1	19.85	849.7	347.4	70153	
281	Brewster town, Barnstable County	9820	7948	25.44	2.56	22.88	429.1	347.3	80861	

	Littleton Common CDP, Middlesex County	2789	1229	3.7	0.16	3.54	787.7	347.1	12512	
	Westfield city, Hampden County	41094	16075	47.38	1.06	46.32	887.2	347	163716	
284	Bellingham town, Norfolk County	16332	6365	18.9	0.55	18.35	890.1	346.9	64861	
285	Madaket CDP, Nantucket County	236	684	2.37	0.39	1.98	119.1	345.2	7001	
286	Wareham town, Plymouth County	21822	12256	46.29	10.43	35.86	608.5	341.8	126935	
	Duxbury CDP, Plymouth County	1802	737	2.66	0.45	2.21	816.2	333.8	7841	
288	Wayland town, Middlesex County	12994	5021	15.84	0.8	15.05	863.7	333.7	53396	
289	North Adams city, Berkshire County	13708	6752	20.61	0.27	20.34	673.8	331.9	72198	
290	Blackstone town, Worcester County	9026	3628	11.39	0.32	11.08	815	327.6	39379	
291	Baldwinville CDP, Worcester County	2028	818	2.65	0.08	2.57	790.4	318.8	9157	
292	Plainville town, Norfolk County	8264	3482	11.52	0.52	11	751.5	316.6	39215	
293	Grafton town, Worcester County	17765	7177	23.32	0.5	22.81	778.7	314.6	81360	
294	Essex CDP, Essex County	1471	645	2.23	0.17	2.06	715.1	313.5	7351	
	Hanover town, Plymouth County	13879	4852	15.69	0.08	15.61	889.2	310.8	55738	
	Townsend CDP, Middlesex County	1128	526	1.73	0.03	1.69	666.5	310.8	6034	
297	Rutland CDP, Worcester County	2111	910	3.19	0.24	2.95	715.4	308.4	10540	
298	Ludlow town, Hampden County	21103	8383	28.3	1.1	27.2	775.7	308.1	97194	
299	Brookfield CDP, Worcester County	833	355	1.15	0	1.15	722.9	308.1	4109	
300	Barre CDP, Worcester County	1009	485	1.58	0	1.58	637.8	306.6	5648	
301	East Douglas CDP, Worcester County	2557	1072	3.63	0.12	3.51	729	305.6	12552	
	Bridgewater town, Plymouth County	26563	8336	28.41	1.09	27.32	972.4	305.2	97707	
	Cohasset town, Norfolk County	7542	2980	31.44	21.65	9.79	770.4	304.4	35020	
	Merrimac town, Essex County	6338	2555	8.86	0.4	8.46	749.3	302.1	30282	
	Groton CDP, Middlesex County	1124	505	1.67	0	1.67	672.3	302.1	5977	
	Pembroke town, Plymouth County	17837	6552	23.48	1.7	21.78	819	300.9	77987	
	Salisbury town, Essex County	8283	4550	17.76	2.33	15.43	536.9	294.9	55342	
	Medfield town, Norfolk County	12024	4237	14.64	0.23	14.4	834.9	294.2	51657	
	Seekonk town, Bristol County	13722	5297	18.62	0.25	18.37	746.9	288.3	66006	

310	Northborough town, Worcester County	14155	5314	18.75	0.27	18.48	766.1	287.6	66416	
311	East Sandwich CDP, Barnstable County	3940	2124	7.57	0.13	7.44	529.6	285.5	26754	
312	East Bridgewater town, Plymouth County	13794	4906	17.53	0.33	17.21	801.6	285.1	61895	
313	South Deerfield CDP, Franklin County	1880	897	3.26	0.11	3.15	596.5	284.6	11330	
314	Easton town, Bristol County	23112	8155	29.23	0.48	28.75	803.8	283.6	103438	
315	Concord town, Middlesex County	17668	6947	25.84	1.33	24.52	720.7	283.4	88227	
316	North Pembroke CDP, Plymouth County	3292	1241	4.43	0	4.43	742.7	280	15954	
317	Orange CDP, Franklin County	4018	1677	6.06	0.07	5.99	670.5	279.9	21573	
318	Swansea town, Bristol County	15865	6343	25.29	2.59	22.69	699.1	279.5	81728	
319	West Wareham CDP, Plymouth County	2064	1043	3.8	0.07	3.73	553.2	279.5	13435	
320	Monson Center CDP, Hampden County	2107	935	3.37	0.01	3.35	628.1	278.7	12068	
321	Norton Center CDP, Bristol County	2671(r45123)	469	1.8	0.11	1.7	1575.2	276.6	6130	
322	Sharon town, Norfolk County	17612	6456	24.39	0.96	23.44	751.4	275.5	84526	
323	Groveland town, Essex County	6459	2439	9.4	0.51	8.88	727.1	274.5	32029	
324	Holliston town, Middlesex County	13547	5087	19.06	0.41	18.64	726.6	272.8	67264	
325	Hatfield CDP, Hampshire County	1318	627	2.41	0.09	2.33	566.3	269.4	8417	
326	Wilbraham CDP, Hampden County	3915	1502	5.65	0.06	5.59	700.1	268.6	20196	
327	Kingston town, Plymouth County	12629	5010	20.51	1.85	18.66	676.9	268.5	67419	
328	Bourne town, Barnstable County	19754	10805	52.86	12.21	40.64	486	265.8	146939	
329	Millis town, Norfolk County	7891	3158	12.25	0.23	12.02	656.4	262.7	43498	
330	Westford town, Middlesex County	21951	7876	31.37	1.1	30.27	725.2	260.2	109617	
331	Manchester-by-the- Sea town, Essex County	5136	2394	18.26	9.03	9.23	556.5	259.4	33432	
332	Nantucket town, Nantucket County	10172	11618	105.27	60.3	44.97	226.2	258.4	162933	
333	Plymouth town, Plymouth County	56468	24800	133.96	37.5	96.46	585.4	257.1	349609	
334	Tyngsborough town, Middlesex County	11292	4206	18.09	1.31	16.77	673.2	250.7	60887	
335	Wilbraham town, Hampden County	14219	5497	22.39	0.22	22.16	641.5	248	80517	
336	Duxbury town, Plymouth County	15059	5875	37.6	13.87	23.74	634.4	247.5	86272	
337	Raynham town, Bristol County	13383	5066	20.79	0.3	20.49	653.2	247.3	74466	

338	Belchertown CDP, Hampshire County	2899	1243	5.03	0	5.03	576.2	247.1	18281	
339	Southborough town, Worcester County	9767	3460	15.54	1.51	14.02	696.5	246.8	50959	
340	Sudbury town, Middlesex County	17659	5951	24.75	0.48	24.27	727.6	245.2	88253	
341	Norton town, Bristol County	19031	6741	29.31	1.5	27.81	684.3	242.4	101204	
342	Hanson town, Plymouth County	10209	3589	15.75	0.7	15.05	678.2	238.4	54828	
343	Weston town, Middlesex County	11261	4008	17.33	0.51	16.82	669.3	238.2	61279	
344	Millville town, Worcester County	3190	1162	4.96	0.06	4.91	650.2	236.9	17896	
345	Georgetown town, Essex County	8183	3044	13.15	0.29	12.86	636.3	236.7	46872	
346	Middleton town, Essex County	8987	3045	14.48	1.03	13.46	667.9	226.3	49200	
347	Acushnet town, Bristol County	10303	4118	18.95	0.52	18.43	559.2	223.5	67418	
348	Sandwich town, Barnstable County	20675	9476	44.21	1.47	42.74	483.7	221.7	156419	
349	North Lakeville CDP, Plymouth County	2630	1098	5.16	0.13	5.03	522.6	218.2	18426	
350	Wellfleet town, Barnstable County	2750	4305	35.41	15.62	19.79	138.9	217.5	72510	
351	West Boylston town, Worcester County	7669	2746	13.86	0.91	12.95	592.4	212.1	47519	
352	Dudley town, Worcester County	11390	4403	21.87	1.05	20.82	547.1	211.5	76410	
353	Littleton town, Middlesex County	8924	3477	17.52	1	16.52	540.1	210.4	60645	
354	Norfolk town, Norfolk County	11227	3121	15.4	0.5	14.9	753.3	209.4	54713	
355	Oxford town, Worcester County	13709	5541	27.44	0.91	26.53	516.8	208.9	97435	
356	Chester CDP, Hampden County	627	285	1.43	0.03	1.39	449.6	204.3	5110	
357	Dartmouth town, Bristol County	34032	12435	97.53	36.61	60.92	558.6	204.1	224026	
358	Hamilton town, Essex County	7764	2880	14.91	0.73	14.18	547.4	203	52160	
359	Boxborough town, Middlesex County	4996	2073	10.41	0.12	10.29	485.7	201.5	37868	
360	Marshfield Hills CDP, Plymouth County	2356	904	4.94	0.36	4.58	514.9	197.6	16873	
361	Hopkinton town, Middlesex County	14925	5128	27.89	1.63	26.26	568.3	195.3	96800	
362	Edgartown town, Dukes County	4067	5220	122.8	95.99	26.81	151.7	194.7	98843	
363	Pepperell town, Middlesex County	11497	4348	23.2	0.6	22.6	508.7	192.4	83374	
364	Adams town, Berkshire County	8485	4371	22.96	0.08	22.89	370.7	191	84477	
365	Dover CDP, Norfolk County	2265	807	4.37	0.11	4.26	532	189.5	15728	
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367	Halifax town, Plymouth County	7518	3014	17.4	1.39	16	469.8	188.3	59090	
368	Mattapoisett town, Plymouth County	6045	3262	24.17	6.81	17.36	348.3	187.9	64121	
369	Ipswich town, Essex County	13175	6007	42.51	10.4	32.11	410.3	187.1	118628	
370	Wenham town, Essex County	4875	1430	8.14	0.48	7.66	636.4	186.7	28302	
371	Lunenburg CDP, Worcester County	1760	700	3.8	0	3.8	463.5	184.3	14050	
372	Lincoln town, Middlesex County	6362	2617	14.98	0.75	14.23	447.2	184	52617	
373	Leicester town, Worcester County	10970	4270	24.63	1.38	23.25	471.8	183.6	85975	
374	Topsfield town, Essex County	6085	2175	12.82	0.9	11.92	510.4	182.4	44092	
375	Uxbridge town, Worcester County	13457	5302	30.26	0.68	29.59	454.8	179.2	109552	
376	Wrentham town, Norfolk County	10955	3869	22.61	0.91	21.71	504.7	178.2	80398	
377	Norwell town, Plymouth County	10506	3675	21.24	0.32	20.93	502	175.6	77565	
378	Palmer Town city, Hampden County	12140	5534	31.97	0.39	31.58	384.4	175.2	117044	
379	Marion town, Plymouth County	4907	2445	26.13	12.14	13.99	350.7	174.7	51857	
	West Bridgewater town, Plymouth County	6916	2669	15.67	0.35	15.32	451.4	174.2	56796	
381	Sturbridge CDP, Worcester County	2253	899	5.58	0.08	5.5	409.4	163.4	20449	
382	Granby CDP, Hampshire County	1368	568	3.48	0	3.48	393.6	163.4	12940	
383	Athol town, Worcester County	11584	5231	33.35	1.06	32.29	358.7	162	120103	
384	Spencer town, Worcester County	11688	5295	34.01	1.17	32.83	356	161.3	122135	
385	Lunenburg town, Worcester County	10086	4133	27.74	1.26	26.48	380.9	156.1	98649	
386	Shirley town, Middlesex County	7211	2427	15.93	0.08	15.86	454.8	153.1	59134	
387	Blandford CDP, Hampden County	393	174	1.15	0	1.15	341.7	151.3	4290	
388	Boxford CDP, Essex County	2339	802	5.47	0.11	5.36	436	149.5	20003	
389	Truro town, Barnstable County	2003	3077	26.24	5.28	20.96	95.6	146.8	78279	
390	Stow town, Middlesex County	6590	2526	17.98	0.67	17.31	380.6	145.9	64663	
391	Westport town, Bristol County	15532	7193	64.62	14.78	49.84	311.7	144.3	186261	
	Lenox town, Berkshire County	5025	3044	21.67	0.45	21.22	236.8	143.5	79321	
	Russell CDP, Hampden County	786	328	2.32	0.01	2.31	340.5	142.1	8638	
394	Lakeville town, Plymouth County	10602	4177	36.12	6.56	29.56	358.7	141.3	110560	

395	South Ashburnham CDP, Worcester County	1062	415	3	0.01	2.99	355.7	139	11191	
396	Northfield CDP, Franklin County	1089	600	4.48	0.02	4.46	244.1	134.5	16711	
397	Dalton town, Berkshire County	6756	2920	21.88	0.1	21.78	310.2	134.1	81619	
398	Ware town, Hampshire County	9872	4590	39.95	5.6	34.36	287.3	133.6	128778	
399	Berkley town, Bristol County	6411	2187	17.43	0.91	16.51	388.2	132.4	61897	
400	Upton town, Worcester County	7542	2832	21.8	0.23	21.57	349.7	131.3	80892	
401	Montague town, Franklin County	8437	3958	31.46	1.3	30.16	279.8	131.2	113108	
402	Middleborough town, Plymouth County	23116	9023	72.16	3.08	69.07	334.7	130.6	259072	
403	Dover town, Norfolk County	5589	1969	15.43	0.32	15.12	369.7	130.2	56719	
404	Southwick town, Hampden County	9502	3916	31.65	0.83	30.82	308.3	127.1	115712	
405	Newbury town, Essex County	6666	2936	26.29	2.94	23.35	285.4	125.7	87697	
406	Rowley town, Essex County	5856	2253	20.36	2.15	18.21	321.6	123.7	68429	
407	Carver town, Plymouth County	11509	4600	39.73	2.33	37.4	307.7	123	140568	
408	Groton town, Middlesex County	10646	3989	33.76	0.99	32.76	324.9	121.8	123169	
409	Sunderland town, Franklin County	3684	1729	14.75	0.52	14.23	258.9	121.5	53505	
410	Mendon town, Worcester County	5839	2091	17.99	0.21	17.77	328.5	117.6	66883	
411	Dighton town, Bristol County	7086	2591	22.6	0.58	22.03	321.7	117.6	82918	
412	West Newbury town, Essex County	4235	1580	14.73	1.27	13.45	314.8	117.5	50626	
413	Boxford town, Essex County	7965	2757	24.4	0.84	23.56	338.1	117	88691	
414	Lee town, Berkshire County	5943	3056	27.02	0.87	26.15	227.3	116.9	98445	
415	Charlton town, Worcester County	12981	4885	43.8	1.61	42.18	307.7	115.8	158837	
416	Carlisle town, Middlesex County	4852	1758	15.51	0.25	15.26	317.9	115.2	57474	
417	Essex town, Essex County	3504	1600	15.95	1.98	13.97	250.8	114.5	52625	
418	Holland town, Hampden County	2481	1365	13.06	0.77	12.29	201.8	111	46339	
419	Belchertown town, Hampshire County	14649	5839	55.32	2.68	52.64	278.3	110.9	198483	
420	Boylston town, Worcester County	4355	1778	19.75	3.69	16.06	271.1	110.7	60559	
421	Paxton town, Worcester County	4806	1599	15.46	0.77	14.69	327.1	108.8	55420	
422	Sturbridge town, Worcester County	9268	3989	38.96	1.73	37.22	249	107.2	140480	

423	Sutton town, Worcester County	8963	3394	34.03	1.62	32.41	276.6	104.7	122405	
424	Townsend town, Middlesex County	8926	3385	33.06	0.26	32.8	272.1	103.2	123928	
425	Orange town, Franklin County	7839	3593	36.02	0.93	35.09	223.4	102.4	132609	
426	Petersham CDP, Worcester County	243	126	1.23	0	1.23	197	102.1	4648	
427	Hampden town, Hampden County	5139	1949	19.68	0.04	19.63	261.7	99.3	74245	
428	Templeton town, Worcester County	8013	3139	32.38	0.5	31.88	251.3	98.5	120603	
429	Hatfield town, Hampshire County	3279	1563	16.84	0.93	15.91	206.1	98.3	60192	
430	Winchendon town, Worcester County	10300	4199	44.08	1.06	43.02	239.4	97.6	162783	
431	Sterling town, Worcester County	7808	2965	31.7	1.07	30.63	254.9	96.8	115925	
432	North Brookfield town, Worcester County	4680	2058	21.95	0.68	21.27	220	96.8	80502	
433	Hadley town, Hampshire County	5250	2230	24.61	1.52	23.09	227.4	96.6	87394	
434	Freetown town, Bristol County	8870	3317	36.4	1.93	34.47	257.3	96.2	130478	
435	Brookfield town, Worcester County	3390	1493	16.6	1.05	15.55	218	96	58864	
436	Lancaster town, Worcester County	8055	2614	27.97	0.5	27.47	293.3	95.2	104011	
437	Sherborn town, Middlesex County	4119	1495	16.19	0.37	15.82	260.4	94.5	59910	
438	East Brookfield town, Worcester County	2183	931	10.4	0.55	9.85	221.6	94.5	37302	
439	Aquinnah town, Dukes County	311	503	40.78	35.44	5.33	58.3	94.3	20185	
440	Deerfield CDP, Franklin County	643	173	1.87	0.03	1.84	350.1	94.2	6969	
	Huntington CDP, Hampshire County	936	431	4.74	0.11	4.63	202.1	93.1	17540	
442	Berlin town, Worcester County	2866	1189	13.17	0.2	12.97	220.9	91.7	49154	
443	Rehoboth town, Bristol County	11608	4280	47.48	0.54	46.94	247.3	91.2	177918	
444	Douglas town, Worcester County	8471	3293	37.89	1.49	36.4	232.7	90.5	137994	
445	Granby town, Hampshire County	6240	2460	28.09	0.26	27.83	224.2	88.4	105562	
446	West Tisbury town, Dukes County	2740	2204	41.77	16.73	25.03	109.5	88	94950	
447	Bolton town, Worcester County	4897	1738	20.09	0.13	19.95	245.4	87.1	75698	
	Rutland town, Worcester County	7973	2990	36.25	1.15	35.1	227.1	85.2	133251	
449	Chilmark town, Dukes County	866	1606	100.43	81.39	19.04	45.5	84.3	72298	
450	Westminster town, Worcester County	7277	2960	37.25	1.82	35.43	205.4	83.5	134562	

451	Southampton town, Hampshire County	5792	2337	28.95	0.8	28.15	205.7	83	106927	
452	West Brookfield town, Worcester County	3701	1699	21.12	0.63	20.49	180.7	82.9	77833	
453	Warren town, Worcester County	5135	2211	27.65	0.1	27.55	186.4	80.3	104724	
454	Monson town, Hampden County	8560	3438	44.79	0.65	44.14	193.9	77.9	167891	
455	Harvard town, Worcester County	6520	2047	27.17	0.73	26.44	246.6	77.4	100580	
456	Great Barrington town, Berkshire County	7104	3466	45.78	0.95	44.82	158.5	77.3	170503	
457	Stockbridge town, Berkshire County	1947	1692	23.68	0.94	22.74	85.6	74.4	86573	
458	Plympton town, Plymouth County	2820	1043	15.1	0.43	14.67	192.2	71.1	55899	
459	Ashburnham town, Worcester County	6081	2599	40.97	2.6	38.37	158.5	67.7	146334	
460	Deerfield town, Franklin County	5125	2181	33.45	1.06	32.39	158.2	67.3	123541	
461	Dunstable town, Middlesex County	3179	1098	16.76	0.3	16.46	193.2	66.7	62791	
462	Williamstown town, Berkshire County	7754	3074	46.89	0.13	46.76	165.8	65.7	178425	
463	Erving town, Franklin County	1800	807	14.39	0.58	13.82	130.3	58.4	52835	
464	Cheshire town, Berkshire County	3235	1529	27.51	0.71	26.81	120.7	57	102534	
465	Clarksburg town, Berkshire County	1702	715	12.79	0.1	12.69	134.1	56.3	48541	
466	Rochester town, Plymouth County	5232	1885	36.04	2.46	33.58	155.8	56.1	128456	
467	Wales town, Hampden County	1838	882	15.96	0.23	15.73	116.9	56.1	60174	
468	Hinsdale town, Berkshire County	2032	1133	21.7	0.97	20.73	98	54.6	79330	
469	Lanesborough town, Berkshire County	3091	1478	29.58	0.74	28.84	107.2	51.2	110464	
470	Ashby town, Middlesex County	3074	1191	24.09	0.39	23.7	129.7	50.2	90801	
471	Egremont town, Berkshire County	1225	921	18.92	0.24	18.68	65.6	49.3	71585	
472	Barre town, Worcester County	5398	2176	44.61	0.28	44.33	121.8	49.1	169891	
473	Richmond town, Berkshire County	1475	902	19.01	0.32	18.69	78.9	48.3	71643	
474	Otis town, Berkshire County	1612	1701	38.03	2.49	35.54	45.4	47.9	136248	
475	West Stockbridge town, Berkshire County	1306	856	18.68	0.23	18.45	70.8	46.4	70758	
476	Williamsburg town, Hampshire County	2482	1183	25.7	0.14	25.56	97.1	46.3	98028	
477	Brimfield town, Hampden County	3609	1598	35.29	0.55	34.74	103.9	46	133245	
478	Buckland town, Franklin County	1902	888	19.88	0.21	19.67	96.7	45.2	75461	

479	Gill town, Franklin County	1500	608	14.79	1.03	13.76	109	44.2	52801	
480	Northfield town, Franklin County	3032	1391	35.37	1.09	34.28	88.4	40.6	131667	
481	Hubbardston town, Worcester County	4382	1662	42	0.93	41.07	106.7	40.5	157751	
482	Bernardston town, Franklin County	2129	948	23.41	0.02	23.39	91	40.5	89840	
483	Russell town, Hampden County	1775	699	17.75	0.42	17.32	102.5	40.4	66529	
484	Shelburne town, Franklin County	1893	931	23.38	0.22	23.16	81.7	40.2	88965	
485	Huntington town, Hampshire County	2180	1014	26.79	0.48	26.32	82.8	38.5	101147	
486	Princeton town, Worcester County	3413	1339	35.81	0.4	35.41	96.4	37.8	136105	
487	Becket town, Berkshire County	1779	1728	47.79	1.73	46.06	38.6	37.5	177054	
488	Sheffield town, Berkshire County	3257	1751	48.57	1.13	47.44	68.7	36.9	182387	
489	Leverett town, Franklin County	1851	811	22.97	0.16	22.81	81.2	35.6	87726	
490	Monterey town, Berkshire County	961	928	27.4	0.97	26.43	36.4	35.1	101660	
491	Goshen town, Hampshire County	1054	598	17.7	0.4	17.3	60.9	34.6	66552	
492	Oakham town, Worcester County	1902	711	21.22	0.39	20.83	91.3	34.1	80141	
493	Phillipston town, Worcester County	1682	802	24.64	0.39	24.25	69.4	33.1	93324	
494	Whately town, Franklin County	1496	661	20.64	0.51	20.13	74.3	32.8	77474	
495	Shutesbury town, Franklin County	1771	866	27.12	0.6	26.52	66.8	32.7	102071	
496	Hardwick town, Worcester County	2990	1218	40.84	2.26	38.59	77.5	31.6	148569	
497	Alford town, Berkshire County	494	342	11.54	0.04	11.5	43	29.7	44295	
498	Heath town, Franklin County	706	670	24.92	0.04	24.89	28.4	26.9	95941	
499	Charlemont town, Franklin County	1266	681	26.36	0.41	25.95	48.8	26.2	100044	
500	Westhampton town, Hampshire County	1607	696	27.36	0.18	27.17	59.1	25.6	104764	
501	Middlesex County (part)	383	69	2.9	0.02	2.88	133	24	11110	
502	Montgomery town, Hampden County	838	343	15.24	0.12	15.12	55.4	22.7	58345	
503	Pelham town, Hampshire County	1321	570	26.55	1.44	25.11	52.6	22.7	96894	
504	Devens CDP	1840	151	6.85	0.09	6.76	272.4	22.4	26088	
505	New Marlborough town, Berkshire County	1509	1039	47.91	1.02	46.89	32.2	22.2	180965	
506	Conway town, Franklin County	1897	830	37.87	0.18	37.69	50.3	22	145464	
507	Ashfield town, Franklin	1737	877	40.25	0.25	40	43.4	21.9	154383	

508	Worcester County (part)	1457	82	3.94	0.07	3.88	375.8	21.2	14978	
509	Cummington town, Hampshire County	872	485	23.03	0.13	22.9	38.1	21.2	88401	
510	Worthington town, Hampshire County	1156	629	32.09	0.15	31.95	36.2	19.7	123385	
511	Chesterfield town, Hampshire County	1222	591	31.25	0.4	30.86	39.6	19.2	119192	
512	New Braintree town, Worcester County	999	390	20.95	0.16	20.79	48.1	18.8	80306	
513	Colrain town, Franklin County	1671	797	43.39	0.25	43.13	38.7	18.5	166612	
514	Leyden town, Franklin County	711	325	18.02	0.12	17.9	39.7	18.2	69154	
	Chester town, Hampden County	1337	645	37.19	0.58	36.61	36.5	17.6	141457	
	Gosnold town, Dukes County	75	215	140.17	126.99	13.19	5.7	16.3	50982	
	Tolland town, Hampden County	485	510	32.79	1.24	31.56	15.4	16.2	121990	
	Peru town, Berkshire County	847	413	26.03	0.11	25.92	32.7	15.9	100195	
	Plainfield town, Hampshire County	648	329	21.33	0.23	21.1	30.7	15.6	81571	
	Granville town, Hampden County	1566	647	43	0.8	42.2	37.1	15.3	163152	
	Hancock town, Berkshire County	717	534	35.73	0.07	35.67	20.1	15	137919	
	Tyringham town, Berkshire County	327	280	18.88	0.23	18.65	17.5	15	72110	
	Florida town, Berkshire County	752	356	24.59	0.23	24.36	30.9	14.6	94197	
	Windsor town, Berkshire County	899	491	35.17	0.17	34.99	25.7	14		
	Royalston town, Worcester County	1258	574	42.5	0.71	41.79	30.1	13.7	161634	
	Wendell town, Franklin County	848	436	32.21	0.37	31.84	26.6	13.7	123151	
	Sandisfield town, Berkshire County	915	671	52.98	1.18	51.81	17.7	13		
	Middlefield town, Hampshire County	521	279	24.14	0.02	24.12	21.6	11.6	93343	
	Warwick town, Franklin County	780	426	37.65	0.31	37.34	20.9	11.4		
	Blandford town, Hampden County	1233	574	53.43	1.86	51.57	23.9	11.1	199595	
	New Salem town, Franklin County	990	465	58.67	13.9	44.77	22.1	10.4	173310	
	Petersham town, Worcester County	1234	546	68.27	14.03	54.24	22.8	10.1	209987	
	Savoy town, Berkshire County	692	357	36.02	0.17	35.85	19.3	10		
	Rowe town, Franklin County	393	227	24.03	0.58	23.45	16.8	9.7	90794	
	New Ashford town, Berkshire County	228	112	13.48	0.01	13.47	16.9	8.3		
536	Monroe town, Franklin County	121	77	10.78	0.1	10.69	11.3	7.2	41416	

537	Washington town, Berkshire County	538	261	38.8	0.82	37.98	14.2	6.9	147158	
538	Mount Washington town, Berkshire County	167	148	22.37	0.15	22.22	7.5	6.7	86099	
539	Hawley town, Franklin County	337	198	30.88	0.05	30.83	10.9	6.4	119469	
	Southfield CDP, Plymouth County	0	0	1.24	0	1.24	0	0		

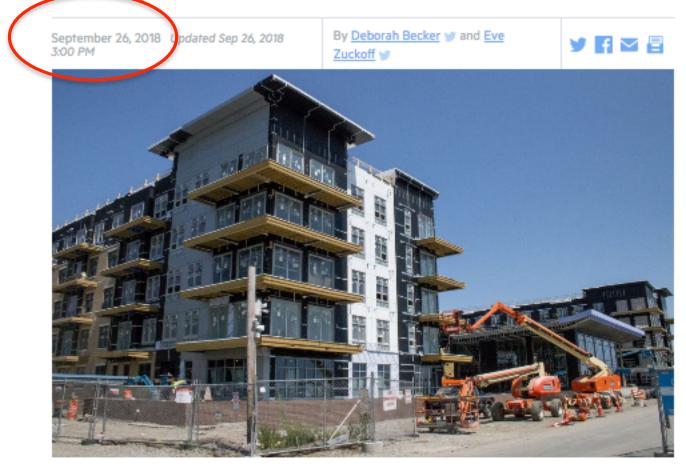
					ro Mayors					
Rank	Geographic area	Population	Housing units	Area in square miles - Total area	Area in square miles - Water area	Area in square miles - Land area	Density per square mile of land area - Population	Density per square mile of land area - Housing units	Additional Units at Arlington Density	CIP Tax levy
1	Somerville city, Middlesex County	75754	33720	4.22	0.1	4.12	18403.9	8192.1		2
2	Cambridge city, Middlesex County	105162	47291	7.11	0.72	6.39	16469.1	7406.1		6
3	Chelsea city, Suffolk County	35177	12621	2.46	0.25	2.21	15901.6	5705.3		4
4	Boston city, Suffolk County	617594	272481	89.64	41.36	48.28	12792.7	5644.1		6
5	Malden city, Middlesex County	59450	25161	5.08	0.04	5.04	11788.2	4989.1		2
6	Everett city, Middlesex County	41667	16715	3.67	0.24	3.43	12164.9	4880		6
7	Winthrop Town city, Suffolk County	17497	8320	8.32	6.34	1.97	8860.4	4213.2		
9	Brookline town, Norfolk County	58732(r45077)	26448	6.81	0.06	6.75	8701	3918.2		1
11	Revere city, Suffolk County	51755	22100	10.11	4.42	5.69	9095.6	3883.9		2
12	Arlington town, Middlesex County	42844	19974	5.49	0.35	5.15	8325.7	3881.5		
15	Medford city, Middlesex County	56173(r45122)	24046	8.66	0.56	8.1	6934	2968.2	7394	1
16	Quincy city, Norfolk County	92271	42838	26.91	10.33	16.57	5568	2585	21478	2
17	Melrose city, Middlesex County	26983	11751	4.76	0.08	4.68	5767.2	2511.6	6414	
33	Newton city, Middlesex County	85146	32648	18.16	0.33	17.84	4773.5	1830.3	36598	1
78	Braintree Town city, Norfolk County	35744	14302	14.56	0.81	13.75	2599.8	1040.2	39069	3
			610,416						110954	2

Geographic area	Population	Housing	Area in	Area in	Area in	Density per	Density per	Additional	<b>CIP Tax levy</b>	Total Levy	CIP Levy
	ropulation	units	square miles - Total area	square miles - Water area	square miles - Land area	square mile of land area - Population	square mile of land area - Housing units	Units at Arlington Density	%	lotal Lovy	
Somerville city, Middlesex County	75754	33720	4.22	0.1	4.12	18403.9	8192.1		24%	155,031,240	37,207,498
Cambridge city, Middlesex County	105162	47291	7.11	0.72	6.39	16469.1	7406.1		65%	409,809,861	266,376,410
Chelsea city, Suffolk County	35177	12621	2.46	0.25	2.21	15901.6	5705.3		46%	57,889,033	26,628,955
Boston city, Suffolk County	617594	272481	89.64	41.36	48.28	12792.7	5644.1		60%	2,349,909,105	1,409,945,463
Malden city, Middlesex County	59450	25161	5.08	0.04	5.04	11788.2	4989.1		20%	90,248,198	18,049,640
Everett city, Middlesex County	41667	16715	3.67	0.24	3.43	12164.9	4880		67%	132,567,523	88,820,240
Winthrop Town city, Suffolk County	17497	8320	8.32	6.34	1.97	8860.4	4213.2		6%	33,217,990	1,993,079
Brookline town, Norfolk County	58732(r45077)	26448	6.81	0.06	6.75	8701	3918.2		18%	224,490,478	40,408,286
Watertown city, Middlesex County	31915	15584	4.12	0.12	3.99	7992.2	3902.5		35%	109,457,123	38,309,993
Revere city, Suffolk County	51755	22100	10.11	4.42	5.69	9095.6	3883.9		21%	86,350,245	18,133,551
Arlington town, Middlesex County	42844	19974	5.49	0.35	5.15	8325.7	3881.5		6%	124,010,976	7,440,659
Lynn city, Essex	90329	35776	13.52	2.78	10.74	8409.5	3330.7	5911	19%	131,221,639	24,932,111
Countv Medford city, Middlesex County	56173(r45122)	24046	8.66	0.56	8.1	6934	2968.2	7394	18%	113,770,130	20,478,623
Quincy city, Norfolk County	92271	42838	26.91	10.33	16.57	5568	2585	21478	25%	229,392,430	57,348,108
Melrose city, Middlesex County	26983	11751	4.76	0.08	4.68	5767.2	2511.6	6414	8%	59,375,238	4,750,019
Belmont town, Middlesex County	24729	10184	4.72	0.07	4.65	5317	2189.7	7865	6%	92,737,733	5,564,264
Waltham city, Middlesex County	60632	24926	13.75	1.02	12.73	4763.4	1958.2	24485	60%	184,954,321	110,972,593
Newton city, Middlesex County	85146	32648	18.16	0.33	17.84	4773.5	1830.3	36598	18%	346,936,565	62,448,582
Saugus town, Essex County	26628	10775		1.01	10.79	2467	998.3	31106	33%	69,462,880	22,922,750
Needham town, Norfolk County	28886	11122			12.29	2351.1	905.2	36582	23%	141,893,985	32,635,617
Milton town, Norfolk County	27003	9700	13.3	0.3	13.01	2076.3	745.8	40798 <b>218,633</b>	6%	82,348,069	4,940,884 <b>2,300,307,325</b>

Geographic area	Population	Housing units	Land Area in square miles	Density per square mile of Housing units	Additional Units at Arlington Density	CIP Tax levy %	Total Levy	CIP Levy
Somerville city, Middlesex County	75,754	33,720	4.12	8192		24%	155,031,240	37,207,498
Cambridge city, Middlesex County	105,162	47,291	6.39	7406		65%	409,809,861	266,376,410
Chelsea city, Suffolk County	35,177	12,621	2.21	5705		46%	57,889,033	26,628,955
Boston city, Suffolk County	617,594	272,481	48.28	5644		60%	2,349,909,105	1,409,945,463
Malden city, Middlesex County	59,450	25,161	5.04	4989		20%	90,248,198	18,049,640
Everett city, Middlesex County	41,667	16,715	3.43	4880		67%	132,567,523	88,820,240
Winthrop city, Suffolk County	17,497	8,320	1.97	4213		6%	33,217,990	1,993,079
Brookline town, Norfolk County	58,732	26,448	6.75	3918		18%	224,490,478	40,408,286
Revere city, Suffolk County	51,755	22,100	5.69	3884		21%	86,350,245	18,133,551
Arlington town, Middlesex County	42,844	19,974	5.15	3882		6%	124,010,976	7,440,659
Medford city, Middlesex County	56,173	24,046	8.1	2968	7,394	18%	113,770,130	20,478,623
Quincy city, Norfolk County	92,271	42,838	16.57	2585	21,478	25%	229,392,430	57,348,108
Melrose city, Middlesex County	26,983	11,751	4.68	2512	6,414	8%	59,375,238	4,750,019
Newton city, Middlesex County	85,146	32,648	17.84	1830	36,598	18%	346,936,565	62,448,582
Braintree city, Norfolk County	35,744	14,302	13.75	1040	39,069	37%	91,061,619	33,692,799
		610,416			110,954	47%	4,412,999,012	2,060,029,11

## Metro Mayors Coalition

## Mayor Walsh Plans To Increase Housing As Boston Population Grows



A new housing development being built on Lewis Street along the Boston Harbor. (Kathleen Dubos for WBUR)

The city of Boston is growing much faster than expected.

The latest estimates have the city's population jumping to 760,000 by the year 2030. That's 50,000 more people than previous estimates.

In response, Boston Mayor Martin Walsh released a new plan to <u>increase</u> <u>housing in Boston</u> on Wednesday. The goal: Develop 69,000 units by the year 2030, up 16,000 units from his 2014 housing plan. Around 15,000 of those would be reserved as income restricted.



CITY of BOSTON

## METRO BOSTON MAYORS SET GOAL OF 185,000 NEW HOUSING UNITS BY 2030

New partnership will set goals to prevent displacement, preserve neighborhoods, reduce evictions and homelessness, promote mixed-use development, and build a diversity of housing types for all income levels





## Tax Levy by Class All Cities and Towns with Revenue > \$100,000,000

Municipality	Residential Levy	Open Space Levy	Commercial Levy	Industrial Levy	Personal Property Levy	Total Levy	Residential and Open Space Levy as a % of Total	CIP as a % of Total
Arlington	117,005,977	0	5,403,938	267,250	1,333,811	124,010,976	94.35	5.65
Falmouth	94,763,879	29,246	5,535,760	788,682	2,034,734	103,152,301	91.9	8.1
Barnstable	108,158,664	0	11,573,910	699,238	2,324,112	122,755,924	88.11	11.89
Wellesley	123,269,302	0	16,269,584	99,421	1,411,992	141,050,299	87.39	12.61
Newton	286,009,449	0	47,746,058	4,025,619	9,155,439	346,936,565	82.44	17.56
Brookline	183,532,892	0	36,847,877	305,450	3,804,259	224,490,478	81.76	18.24
Medford	92,747,888	0	15,819,274	2,063,559	3,139,409	113,770,130	81.52	18.48
Plymouth	141,466,445	0	15,413,365	11,913,654	5,964,030	174,757,494	80.95	19.05
Lynn	105,777,317	0	14,877,789	4,014,607	6,551,926	131,221,639	80.61	19.39
Lexington	149,257,420	0	19,876,155	11,680,032	5,387,447	186,201,054	80.16	19.84
Natick	88,804,620	0	20,099,083	555,554	1,922,619	111,381,876	79.73	20.27
Weymouth	83,984,473	0	13,680,747	5,933,298	3,120,138	106,718,656	78.7	21.3
Haverhill	80,007,276	0	11,521,358	6,429,122	5,512,351	103,470,107	77.32	22.68
Chelmsford	78,620,994	0	10,112,657	9,114,917	3,911,888	101,760,456	77.26	22.74
Needham	109,613,423	0	23,605,217	3,138,700	5,536,645	141,893,985	77.25	22.75
Beverly	79,919,733	9,466	15,328,327	4,399,872	3,917,824	103,575,222	77.17	22.83
Somerville	117,750,319	0	26,061,429	6,137,149	5,082,343	155,031,240	75.95	24.05
Quincy	170,914,643	0	46,393,236	2,432,088	9,652,463	229,392,430	74.51	25.49
Lowell	96,788,003	0	17,320,994	10,478,984	9,197,827	133,785,808	72.35	27.65
Andover	104,124,983	107,376	16,654,368	17,584,532	6,899,024	145,370,283	71.7	28.3
Brockton	100,957,972	0	29,611,893	5,112,914	7,929,725	143,612,504	70.3	29.7
New Bedford	83,100,499	0	22,732,113	11,010,666	8,442,880	125,286,158	66.33	33.67
Peabody	70,108,826	0	28,672,697	6,437,947	2,890,873	108,110,343	64.85	35.15
Watertown	70,749,526	0	24,381,495	10,729,435	3,596,667	109,457,123	64.64	35.36
Taunton	65,010,514	0	23,795,473	6,818,304	6,670,153	102,294,444	63.55	36.45
Fall River	63,850,072	0	22,153,190	10,203,029	5,859,843	102,066,134	62.56	37.44
Framingham	116,209,834	0	54,072,838	10,499,589	10,442,077	191,224,338	60.77	39.23
Worcester	179,987,536	0	76,886,106	18,248,043	27,940,957	303,062,642	59.39	40.61
Springfield	117,830,550	0	49,159,537	9,118,830	29,176,793	205,285,710	57.4	42.6
Billerica	70,503,378	0	12,651,985	33,238,051	8,633,912	125,027,326	56.39	43.61
Marlborough	57,826,867	0	26,599,716	12,680,432	6,905,852	104,012,867	55.6	44.4
Woburn	53,911,733	0	25,075,567	20,208,313	8,398,899	107,594,512	50.11	49.89
Waltham	73,795,133	0	81,588,920	14,580,159	14,990,109	184,954,321	39.9	60.1
Boston	927,771,044	0	1,225,882,533	30,158,526	166,097,002	2,349,909,105	39.48	60.52
Burlington	42,490,973	0	59,663,310	4,909,407	5,064,425	112,128,115	37.9	62.1
Cambridge	141,666,216	0	137,794,194	108,478,066	21,871,385	409,809,861	34.57	65.43
Everett	44,204,534	0	45,424,136	27,979,933	14,958,920	132,567,523	33.34	66.66

171 of 172

 From:
 Chris Loreti <cloreti@verizon.net>

 To:
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 MByrne@town.arlington.ma.us>

 Date:
 09/23/2019 11:08 AM

 Subject:
 117 Broadway Special Permit: Absence of Open Space

Dear ARB Members.

I noticed that the special permit for 117 Broadway is on your agenda this evening for final plan review and approval. It is not clear form your agenda whether you will be accepting public comment at the meeting. Thus I am submitting these comments in writing and ask that they be made part of the official docket for this special permit. Please read the following at the meeting:

From the drawings that have been made publicly available, it does not appear that the development proposed for 117 Broadway contains any usable open space as defined in Arlington's Zoning Bylaw and it likely does not comply with the landscaped open space requirement either. I therefore wish to raise my strong objection to the ARB's approval of the plans for this development until and unless the applicant demonstrates compliance with both the usable and landscaped open space standards of the bylaw.

As you are aware, the ARB has no authority to waive these open space requirements. It is incumbent on all of you do ensure that the town's Zoning Bylaw be enforced with integrity for all applicants, and I expect you to do so for this application.

Sincerely,

Christopher Loreti 56 Adams St.

p.s. to Marie Krepelka: Please distribute this to all Select Board Members as it is also their responsibility to ensure that the town's bylaws are enforced as written and equally for everyone.

172 of 172