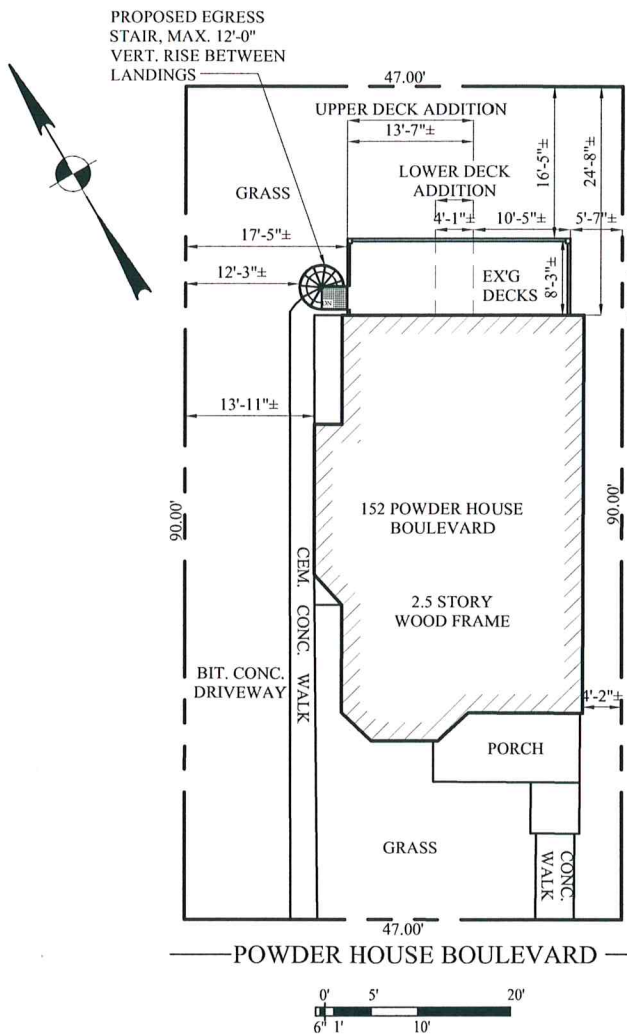


PROPOSED RENOVATION
152 POWDER HOUSE BOULEVARD
SOMERVILLE, MASSACHUSETTS

TWO FAMILY RENOVATION
152 POWDER HOUSE BOULEVARD
SOMERVILLE, MA

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



NOTE: SECTION 8.5 NOTE 14
DECKS MAY PROJECT INTO A
REQUIRED REAR YARD UP TO 1/4 OF
THE REQUIRED SETBACK, MIN. 10'-0"
OR REAR LOT LINE
17'-6"/4 = 4'-4 1/2"
17'-6" - 4'-4 1/2" = 13'-1 1/2"
16'-5" > 13'-1 1/2" = OKAY



Table with 2 columns: Description and Area. Rows include 1st, 2nd, and 3rd floor gross and net floor areas, and existing total net floor area.

Table with 2 columns: Description and Area. Rows include proposed basement gross living area, 1st, 2nd, and 3rd floor gross and net floor areas, and existing total net floor area.

- KEY
- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- 1 HOUR WALL (SEE W.T.1/A-3.1)
- FAN
- 45 MIN. DOOR
- WINDOW TYPE
- 1 HOUR CLG. ABOVE (SEE C.T.1/A-3.1)
- FIRE EXTINGUISHER
- NEW WALL
- EX'G WALL TO REMAIN
- WALL TO BE REMOVED

ZONING SUMMARY
RA

Table with 11 columns: Residential, Minimum Lot Size, Lot Area Min, Maximum Ground Coverage, Landscaped Area, Floor Area Ratio Max, Max. Height of Building, Front Yard Min. Depth, Side Yard Min. Depth, Rear Yard Min. Depth, Minimum Frontage, Pervious Area. Rows include Required by Zoning, Existing Conditions, and Proposed Project.

CODE SUMMARY
EX'G TYPE 5B CONSTRUCTION
EX'G 3 STORIES & BASEMENT
EX'G R-3 USE GROUP (2 FAMILY)
ZONE RA

COVER SHEETS

Sheet No. A-0

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN CONFORMANCE TO THE LATEST EDITION OF THE MASSACHUSETTS STATE BUILDING CODE AND ALL OTHER APPLICABLE CODES AND LAWS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS REQUIRED FOR THIS PROJECT.
3. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCING, SCHEDULING AND SAFETY FOR THIS PROJECT.
4. THE CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY AQUATINTED WITH THE PROJECT PRIOR TO SUBMITTING A PRICE. ADDITIONAL MONEY WILL NOT BE GRANTED FOR WORK NOT CLARIFIED PRIOR TO BIDDING.
5. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN DRAWINGS SPECIFICATIONS OR FIELD CONDITIONS TO THE ARCHITECT IMMEDIATELY.
6. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY WORK DAMAGED BY HIS FORCES WHILE PERFORMING THIS CONTRACT.
7. THE CONTRACTOR SHALL GIVE A WARRANTY FOR HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION.

MASONRY NOTES:
CEMENT

- A. CEMENT SHALL BE AN AMERICAN PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE II OR TYPE III FOR COLD WEATHER CONSTRUCTION (GRAY OR WHITE AS APPROPRIATE).

MIX

- A. THE MORTAR USED TO TUCK POINT THE JOINTS SHALL CONSIST OF ONE PART PORTLAND CEMENT, ONE PART TYPE S HYDRATED LIME, AND SIX PARTS SAND, PROPORTIONED BY VOLUME.

SAMPLE PANEL

- A. A SECTION OF WALL SHALL BE POINTED FOR THE PURPOSE OF CHOOSING A DESIRED MORTAR COLOR, WHICH MATCHES THE EXISTING COLOR AND TO DEMONSTRATE THE SPECIFIED WORKMANSHIP, DEPTH, AND TOOLING OF THE JOINTS REQUIRED FOR USE ON THE JOB. CONTRACTOR SHALL CUT JOINTS AND LEAVE SECTION UNPOINTED UNTIL THE AUTHORITY CAN CHECK DEPTH OF CUT.
- B. TWO OR MORE SAMPLE AREAS MAY BE REQUIRED BEFORE ONE IS APPROVED. AFTER APPROVAL OF ONE, THE OTHERS SHALL BE BROUGHT UP TO COLOR CONFORMANCE BY BRUSH GROUTING.

PREPARATION

- A. CARBON AND DIRT SHALL BE REMOVED WITH DETERGENT AND STIFF BRUSHES, MOSS OR FUNGUS SHALL BE REMOVED WITH A SOLUTION OF BLEACH AND WATER.
- B. ALL MORTAR THAT IS LOOSENED BY HAND TOOLS IS REQUIRED TO BE REMOVED.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL BRICKS MISSING, BROKEN, OR CRACKED AS PART OF THE CONTRACT WORK ON ALL BUILDING FACES DESIGNATED FOR POINTING. BRICKS REPLACED SHALL BE HARD-BURNED OF A TYPE AND SIZE TO MATCH EXISTING AS CLOSELY AS POSSIBLE.
- D. THE JOINTS SHALL BE THOROUGHLY VACUUMED, BLOWN CLEAN, OR BRUSHED TO REMOVE ALL LOOSE MATERIALS, AND CLEANED WITH A HIGH PRESSURE HOSE STREAM. IF THE OPEN JOINTS CANNOT RECEIVE MORTAR FOR ANY REASON WITHIN A TWELVE (12) HOUR PERIOD AFTER REMOVAL OF EXISTING MORTAR, OR INCLEMENT WEATHER IS FORECAST WHICH MAY CAUSE A DELAY IN COMPLETING THE REPOINTING IN ANY ONE OR SEVERAL AREAS, THE CONTRACTOR SHALL COVER THE OPEN JOINTS WITH POLYETHYLENE COVERING OR OTHER SUITABLE MATERIAL IN ORDER TO AVOID WATER PENETRATION INTO THE BUILDING AND POSSIBLE WATER DAMAGE. THE CONTRACTOR SHALL SECURE THE PROTECTIVE COVERING WITH TAPE OR OTHER ACCEPTABLE METHODS, AND MAINTAIN THE COVERING UNTIL THE WORK CAN CONTINUE UNDER FAVORABLE WEATHER CONDITIONS. CUT OUT MORTAR JOINTS SHALL REMAIN OPEN UNTIL INSPECTED BY THE ARCHITECT. EXISTING MORTAR NOT REMOVED THOROUGHLY AS REQUIRED SHALL BE REASON FOR REJECTION BY THE ARCHITECT.

INSTALLATION

- A. TO AVOID SHRINKAGE AND IMPROVE WORKABILITY, POINTING MORTAR SHALL BE PRE-HYDRATED.. THOROUGHLY MIX ALL MORTAR INGREDIENTS DRY. WHEN READY FOR USE, MIX INGREDIENTS AGAIN AND ADD ONLY ENOUGH WATER TO PRODUCE A DAMP WORKABLE MIX WHICH WILL RETAIN ITS FORM WHEN PRESSED INTO A BALL. THE MORTAR SHALL BE KEPT IN THIS MOIST CONDITION FOR ONE TO TWO HOURS, AND THEN SUFFICIENT WATER ADDED TO BRING IT TO THE PROPER CONSISTENCY; THAT IS, SOMEWHAT DRIER THAN CONVENTIONAL MASONRY MORTAR.
- B. TO INSURE A GOOD BOND TO THE EXISTING MORTAR, BRICK AND STONework, WET THE EXISTING JOINTS THOROUGHLY BEFORE APPLYING FRESH MORTAR. THE JOINTS SHALL NOT RECEIVE MORTAR IF THERE IS EVIDENCE OF FREESTANDING WATER. IN SUCH CASES, ALLOW WATER TO SOAK INTO THE WALL. THE NEW MORTAR SHALL BE PACKED TIGHTLY IN 1/4" LAYERS UNTIL THE JOINT IS FILLED, THEN TOOLED TO A SMOOTH, CONCAVE SURFACE. NOTE CAREFULLY: FLUSH JOINTS WILL NOT BE ACCEPTABLE.
- C. THE CONTRACTOR SHALL PROTECT EXISTING ROOFING, WINDOWS, DOORS, STONework, FLASHING, CAULKING, TRIM AND OTHER MATERIALS DURING THE COURSE OF OPERATIONS. ALL DAMAGES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THEIR EXPENSE AND TO THE COMPLETE SATISFACTION OF THE ARCHITECT.
- D. AFTER NEW MORTAR IS THOROUGHLY SET AND CURED, REMOVE LARGE PARTICLES OF MORTAR WITH WOOD PADDLES AND SCRAPERS PRIOR TO WETTING THE WALL. USE CHISELS OR WIRE BRUSHES AS NECESSARY WITH CARE TO PREVENT INJURY TO EXISTING BRICK AND STONework. THE WALL AREAS WHERE POINTING HAS TAKE PLACE SHALL BE CLEANED WITH WATER TO FLUSH OFF ALL LOOSE MORTAR AND DIRT. THESE AREAS SHALL THEN BE SCRUBBED DOWN WITH A SOLUTION OF ONE HALF CUP TRISODIUM PHOSPHATE AND ONE HALF CUP OF HOUSEHOLD DETERGENT DISSOLVED IN ONE GALLON OF CLEAN WATER.

WARRANTY

- A. THE CONTRACTOR SHALL GIVE A WARRANTY FOR HIS WORK, LABOR, AND MATERIALS IN WRITING FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE BASE BID CONTRACT. SHOULD THE POINTED JOINTS EXECUTED UNDER THIS CONTRACT FAIL WITHIN THE GUARANTEED PERIOD AS DETERMINED BY THE ARCHITECT, THE CONTRACTOR SHALL MAKE SUITABLE REPAIRS INCLUDING AN ADDITIONAL APPLICATION OF THE LIQUID REPELLENT COATING AT HIS OWN EXPENSE.

CLEANUP

- A. AT COMPLETION, REMOVE ALL EXCESS MATERIAL, DEBRIS, AND RUBBISH RESULTING FROM THE WORK OF THIS SECTION FROM THE JOB SITE. THE GROUNDS SHALL BE LEFT CLEAN.

FOUNDATION NOTES:

1. ALL FOUNDATION FOOTINGS SHALL BE CARRIED DOWN TO A MINIMUM OF 4'-0" BELOW FINISH GRADE, OR DEEPER, IF NECESSARY, TO OBTAIN A SAFE SOIL BEARING PRESSURE OF 2 TONS PER SQUARE FOOT, FOUNDATION DESIGN IS BASED ON ASSUMED SOIL BEARING CAPACITY OF 2 TONS PER SQUARE FOOT.
2. ALL FOOTINGS SHALL BE PLACED ON UNDISTURBED SOIL; OR, ON ENGINEERED BANK RUN GRAVEL FILL MATERIAL WITH A MINIMUM DRY DENSITY OF 95%.
3. ALL FOOTING SHALL BE POURED IN THE DRY ONLY. WATER SHALL NOT BE ALLOWED TO FLOW THROUGH THE DEPOSITED CONCRETE.
4. NO FOOTING SHALL BE POURED ON FROZEN GROUND. FOUNDATIONS NEED TO BE PROTECTED FROM FREEZING FOR A MIN OF 5 DAYS AFTER THEY WERE POURED.
5. THE MINIMUM REINFORCING FOR ALL FOUNDATION WALLS SHALL BE 2-#6 BARS AT THE TOP AND BOTTOM, CONTINUOUS; OR, AS SHOWN ON DRAWINGS.
6. LAP ALL BARS 40 DIAMETERS AND PROVIDE CORNER BARS.
7. ALL REINFORCEMENT: ASTM A615-60, WWF A185.

CONCRETE NOTES:

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

REINFORCING NOTES:

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

EPOXY ANCHORS:

1. EXPANSION BOLTS USED IN CONCRETE SHALL BE SIMPSON STRONG BOLT 2 OR EQUAL. BOLTS NEED TO BE INSTALLED IN ACCORDANCE WITH ICC-REPORT ESR-3037.
2. EPOXY ANCHORS AND DOWELS INSTALLED INTO CONCRETE SHALL BE A THREADED ROD OR REINFORCING BAR DOWEL WITH THE HILTI "RE-500SD" ADHESIVE SYSTEM AND BE INSTALLED ACCORDING TO ICC-REPORT ESR-2322.
3. CONTRACTOR MAY SUBSTITUTE EXPANSION BOLTS OR EPOXY ADHESIVES OF EQUAL VALUE IN THE SPECIFIED MATERIAL WITH A CURRENT ICC-REPORT FOR REVIEW. EXPANSION BOLTS SHALL NOT BE USED IN MASONRY.

WOOD NOTES:

1. ALL LUMBER SHALL HAVE A MOISTURE CONTENT OF NOT MORE THAN 19%.
2. ALL FRAMING LUMBER SHALL BE #2 HEM-FIR, OR BETTER, HAVING A MINIMUM:
- FB=1,200 PSI, FV=70 PSI, E=1,300,000 PSI.
3. ALL L.V.L. LUMBER DENOTED ON PLANS SHALL HAVE A MINIMUM:
- FB=2,650 PSI, FV=285 PSI, E=1,900,000 PSI - FOR STUDS COLUMNS
- FB-3100 PSI, FV=285 PSI, E=2,000,000 PSI - FOR BEAMS
4. ALL JOIST SPANS SHALL HAVE ONE ROW OF 1" X 3: CROSS BRIDGING AT MID SPAN AND NOT MORE THAN 8'-0" O.C.
5. ALL STUD BEARING WALLS SHALL HAVE ONE ROW OF 2X HORIZONTAL BLOCKING AT 1/2 STUD HEIGHT, AND NOT MORE THAN 6'-0" O.C. MAXIMUM.
6. PROVIDE AND INSTALL ALL NECESSARY TIMBER CONNECTORS WITH ADEQUATE STRENGTH.
7. PROVIDE DOUBLE JOIST BELOW PARTITIONS PARALLEL TO JOIST FRAMING.
8. PROVIDE SOLID BRIDGING BELOW PARTITIONS PERPENDICULAR TO JOIST FRAMING.
9. PROVIDE SOLID BRIDGING BETWEEN JOIST FRAMING MEMBERS WHEN BEARING ON STUD PARTITIONS OR BEAMS.
10. PROVIDE A CONTINUOUS BAND JOIST AT EXTERIOR STUD WALLS.
11. PROVIDE DIAGONAL METAL STRAP BRACING AT ALL CORNERS AND WALL INTERSECTIONS, AT THE INSIDE FACE OF STUDS, FROM TOP PLATE TO FLOOR PLATE AT A 45 DEGREE ANGLE WITH A SIMPSON TYPE "RCWB" STRAP, OR EQUAL.
12. ALL BUILT-UP BEAMS SHALL BE BOLTED WITH 1/2" Ø THRU BOLTS, MEETING A307 STANDARDS, OR, AS NOTED ON DRAWINGS.

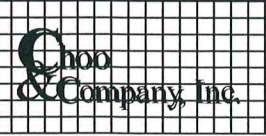
WOOD LINTEL SCHEDULE:

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

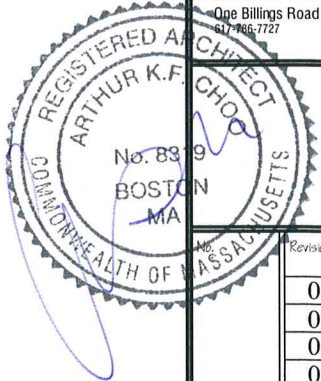
Span of opening:	Size: 2x6 studs	Size: 2x4 studs
less than 4'-0"	3 - 2x4	2 - 2x4
up to 6'-0"	3 - 2x6	2 - 2x6
up to 8'-0"	3 - 2x8	2 - 2x8
up to 10'-0"	3 - 2x10	2 - 2x10

Location

TWO FAMILY RENOVATION
152 POWDER HOUSE
BOULEVARD
SOMERVILLE, MA



One Billings Road Quincy, MA 02171
617-886-7727 fax 617-786-7715



Revision Date

06-14-16
06-22-16
09-29-16
01-11-17

Project No: 16104
Scale: AS NOTED
Date: 05-06-16
Drawn By: ST

Drawing Name

NOTES

Sheet No.

A-1.0

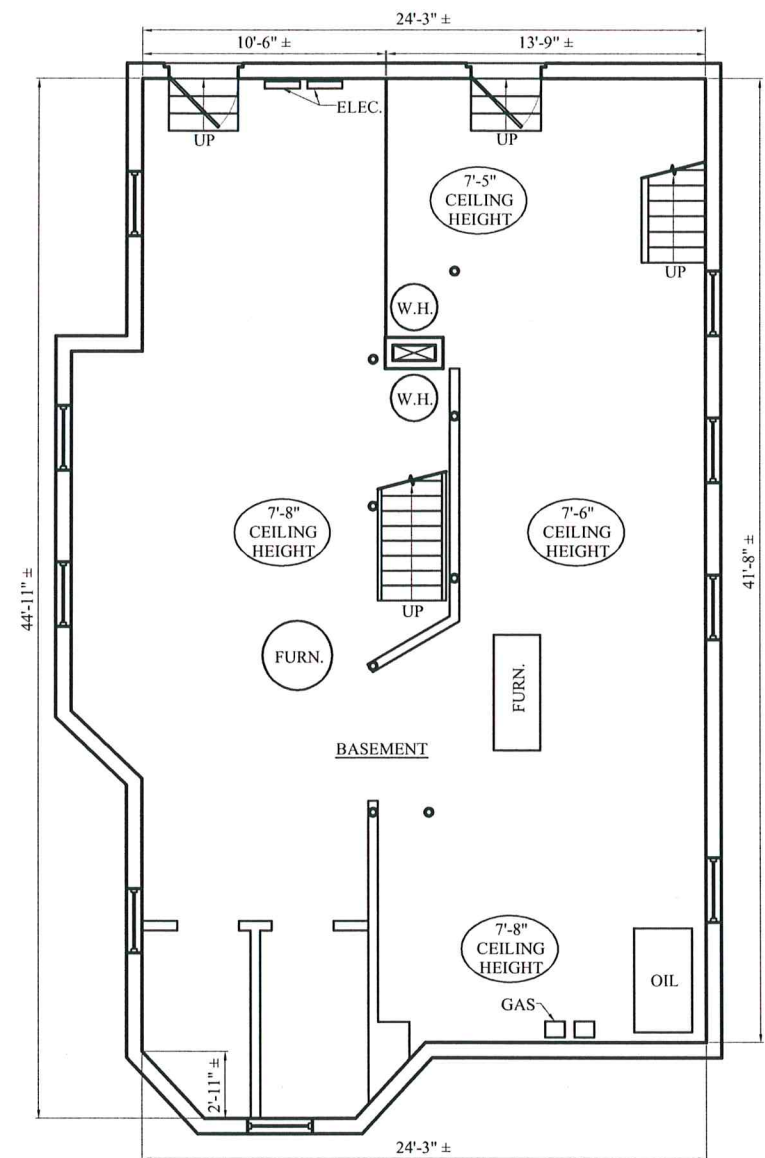
GENERAL NOTES:

1. PROVIDE R-30 INSULATION IN ALL EXPOSED FLOOR JOIST CAVITIES.
2. PROVIDE R-21 INSULATION IN ALL EXPOSED EXTERIOR STUD WALL CAVITIES.
3. PROVIDE R-49 INSULATION IN ALL EXPOSED ROOF JOIST CAVITIES, TYPICAL.
4. PROVIDE R-19 INSULATION IN ALL EXPOSED BASEMENT STUD WALL CAVITIES. INSULATION MUST BE NON-WATER SENSITIVE.
5. REFER TO THE FRAMING PLANS PRIOR TO DEMOLITION. CONTACT THE ARCHITECT IMMEDIATELY IF THERE ARE CONFLICTS OR OMISSIONS.

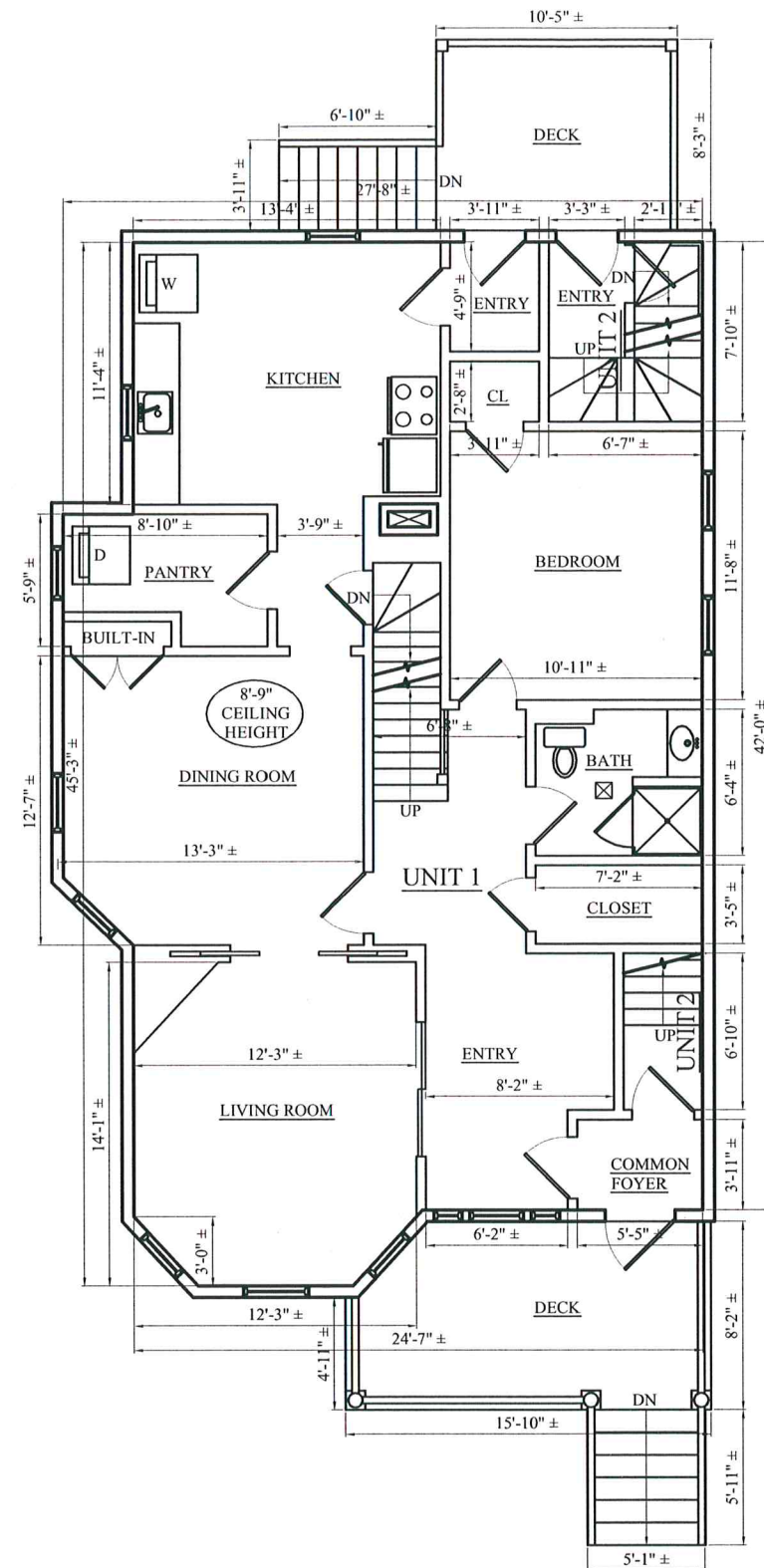
NOTE:ENERGY CODE COMPLIANCE

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

NOTE: THERE HAS BEEN NO SOIL TESTING PROVIDED TO THIS OFFICE FOR THIS PROJECT. THE DESIGNING ARCHITECT OR STRUCTURAL ENGINEER ACCEPTS NO RESPONSIBILITY FOR EXISTING SOIL CONDITIONS. ANY SOIL BEARING CAPACITY OF THIS FOUNDATION SYSTEM IS DESIGNED BASED ON A 2 TON MINIMUM SOIL BEARING CAPACITY. IT SHALL BE THE CONTRACTORS OR OWNERS' RESPONSIBILITY TO DETERMINE SUITABLE SOIL CONDITIONS AND VERIFY THE BEARING PRESSURE. IF A SUITABLE SOIL THAT CAN WITHSTAND A 2 TON BEARING CAPACITY IS NOT AVAILABLE, THIS OFFICE SHOULD BE CONTACTED BY THE CONTRACTOR OR OWNER FOR A FOUNDATION REDESIGN.



EXISTING BASEMENT FLOOR PLAN
1/4" = 1'-0"



2 EXISTING FIRST FLOOR PLAN
1/4" = 1'-0"

Location

TWO FAMILY RENOVATION
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BOULEVARD
SOMERVILLE, MA



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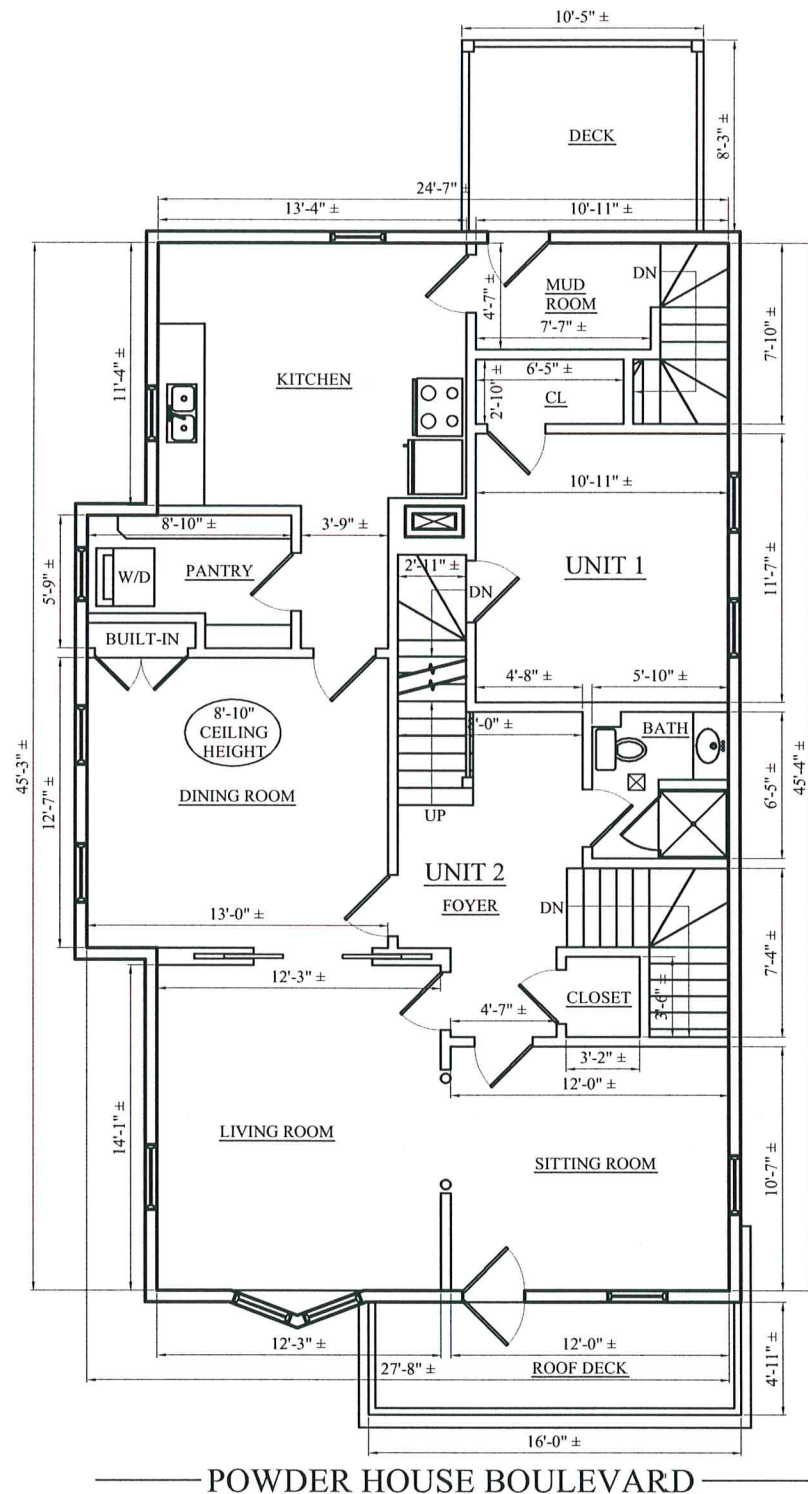
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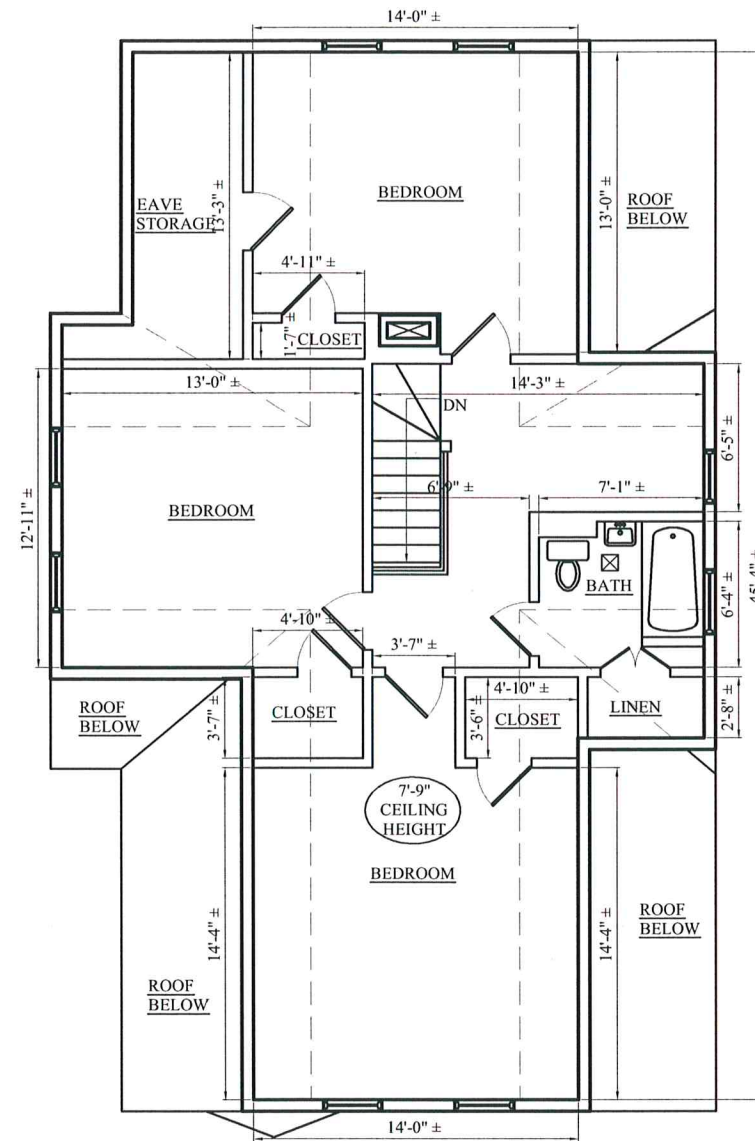
EXISTING FLOOR PLANS

Sheet No.

D-111



1 EXISTING SECOND FLOOR PLAN
1/4" = 1'-0"



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

TWO FAMILY RENOVATION
152 POWDER HOUSE
BOULEVARD
SOMERVILLE, MA

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& Company, Inc.

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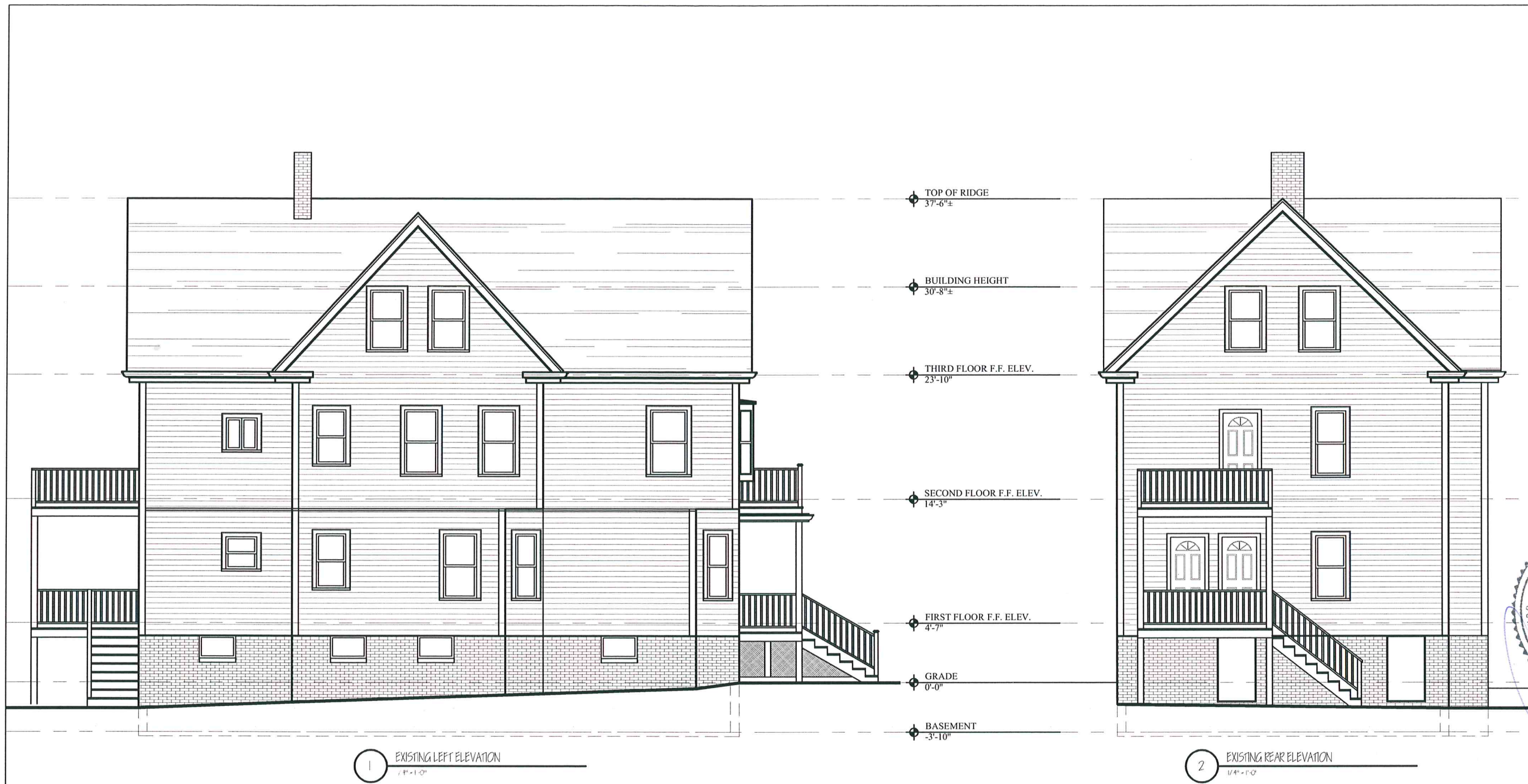


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06-22-16	
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Scale: AS NOTED
Date: 05-06-16
Drawn By: ST

Drawing Name:
EXISTING
FLOOR PLANS

Sheet No.
D-1.2



Location

**TWO FAMILY RENOVATION
152 POWDER HOUSE
BOULEVARD
SOMERVILLE, MA**

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
978-766-2787 Tel: 617-766-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
Reason Date
06-14-16
06-22-16
09-29-16
01-11-17

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Drawing Name
**EXISTING
ELEVATIONS**

Sheet No.
D-2.1



1 EXISTING RIGHT ELEVATION
1/4" = 1'-0"

TOP OF RIDGE
37'-6" \pm

BUILDING HEIGHT
30'-8" \pm

THIRD FLOOR F.F. ELEV.
23'-10"

SECOND FLOOR F.F. ELEV.
14'-3"

FIRST FLOOR F.F. ELEV.
4'-7"

GRADE
0'-0"

BASEMENT
-3'-10"

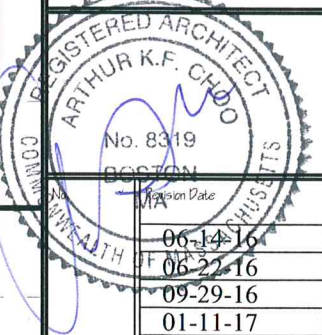


2 EXISTING FRONT ELEVATION
1/4" = 1'-0"

TWO FAMILY RENOVATION
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Drawing Name
EXISTING
ELEVATIONS

Sheet No.
D-2.2

BASEMENT HABITABLE AREA NATURAL LIGHT & VENTILATION CALCULATIONS

OFFICE
OFFICE TOTAL AREA = 222 ± SQ.FT.

(R303.1) REQUIRED 8% NATURAL LIGHT = 17.76± SQ.FT.

EX'G WINDOWS=
(2)2'-10" X 1'-9" = 9.90± SQ.FT.

TOTAL GLASS = 9.90± SQ.FT
9.90± SQ.FT.<17.76± SQ.FT. = NOT OK

(R303) OFFICE TO BE PROVIDED WITH ARTIFICIAL LIGHT

(R303.1) REQUIRED 4% NATURAL VENTILATION = 8.88± SQ.FT.

EX'G WINDOWS=
(2)2'-10" X 1'-9" = 9.90± SQ.FT.

TOTAL GLASS = 9.90± SQ.FT
9.90± SQ.FT.>8.8± SQ.FT. = OK

FAMILY ROOM
FAMILY ROOM TOTAL AREA = 532 ± SQ.FT.

(R303.1) REQUIRED 8% NATURAL LIGHT = 42.56± SQ.FT.

EX'G WINDOWS=
(5)2'-10" X 1'-9" = 24.75± SQ.FT.

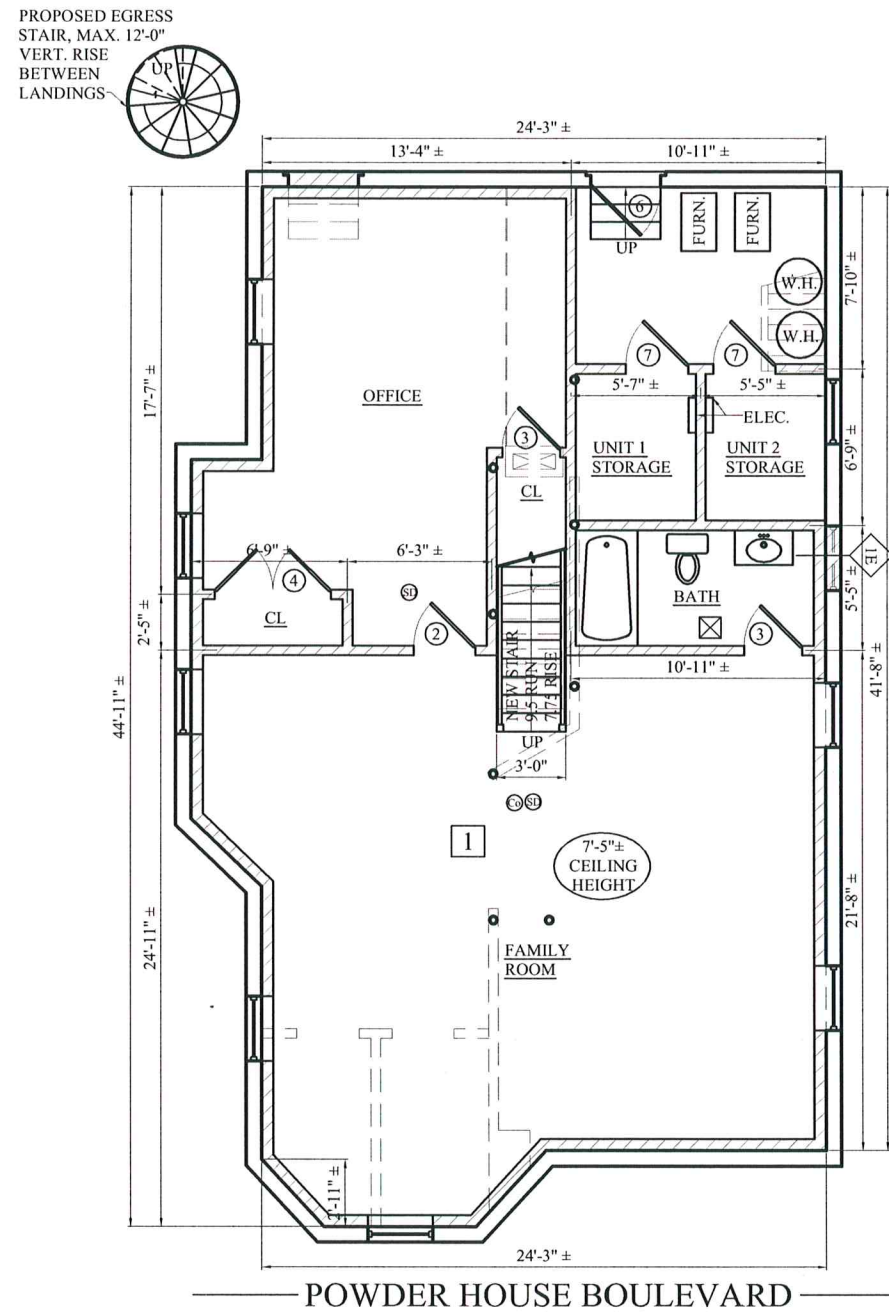
TOTAL GLASS = 24.75± SQ.FT
24.75± SQ.FT.<42.56± SQ.FT. = NOT OK

(R303.1) REQUIRED 4% NATURAL VENTILATION = 21.28± SQ.FT.

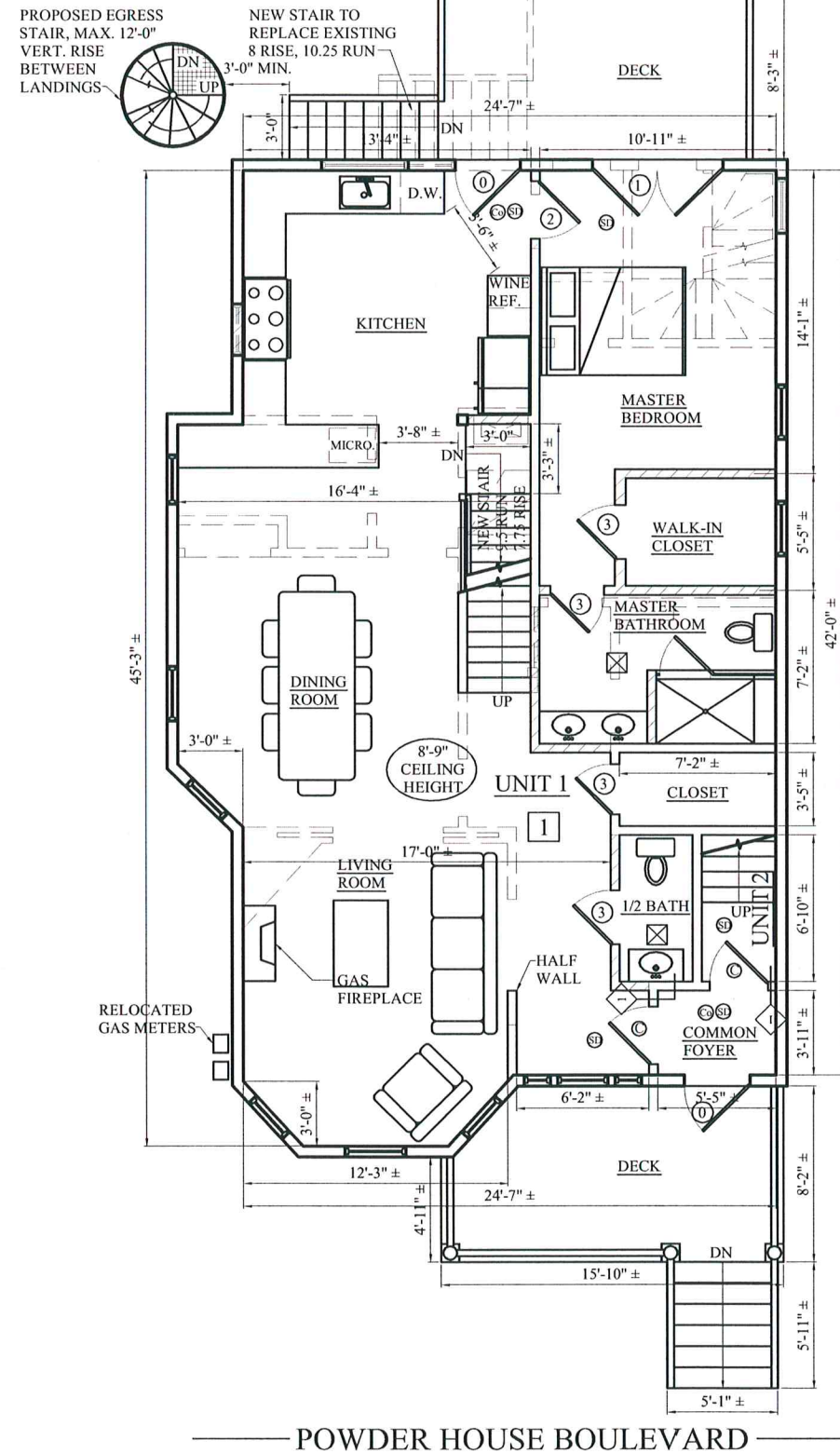
EX'G WINDOWS=
(5)2'-10" X 1'-9" = 24.75± SQ.FT.

TOTAL GLASS = 24.75± SQ.FT
24.75± SQ.FT.>21.28± SQ.FT. = OK

(R303) MEDIA ROOM TO BE PROVIDED WITH ARTIFICIAL LIGHT



1 PROPOSED BASEMENT FLOOR PLAN
1/4" = 1'-0"

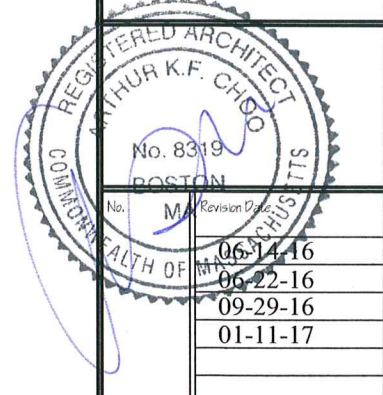


2 PROPOSED FIRST FLOOR PLAN
1/4" = 1'-0"

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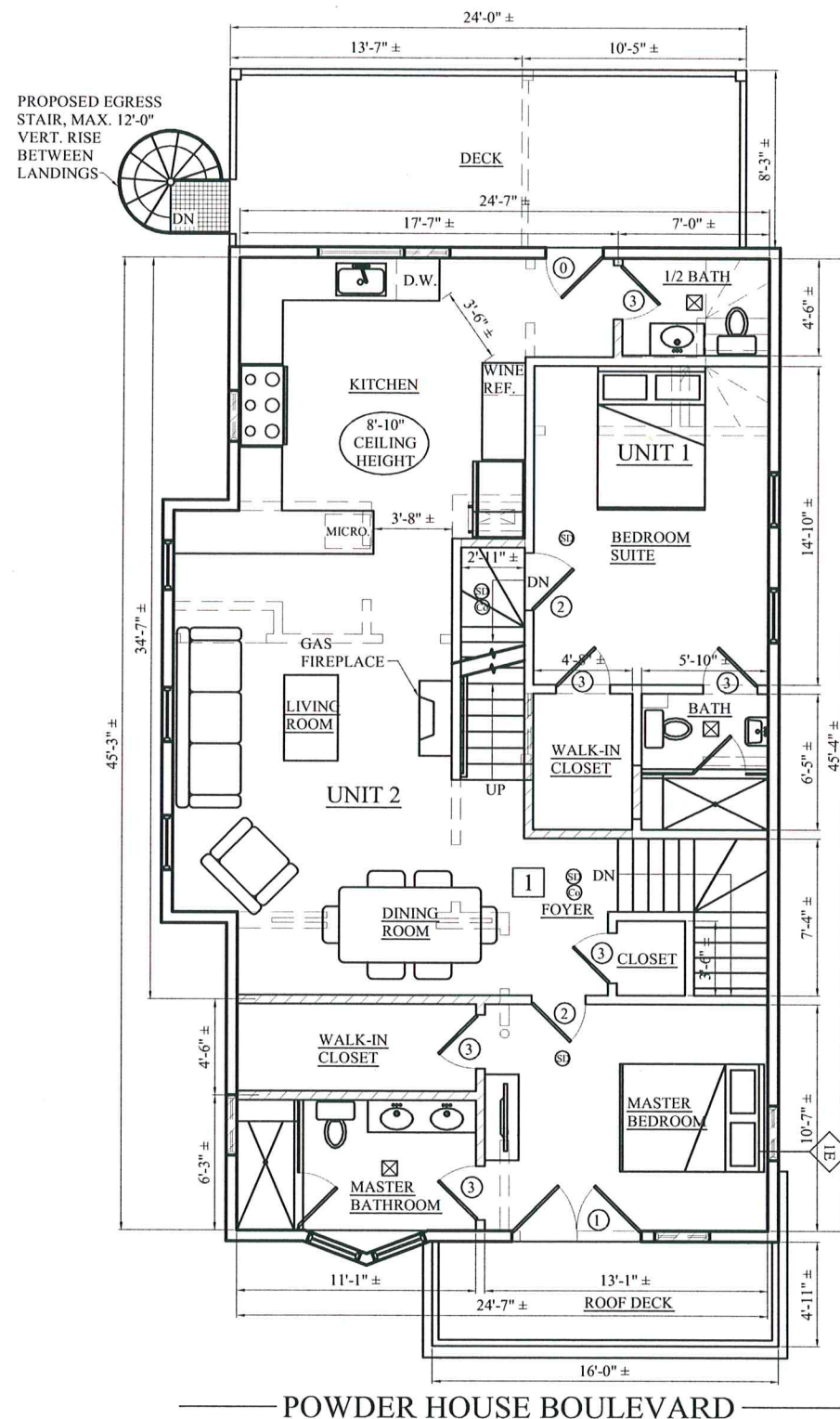


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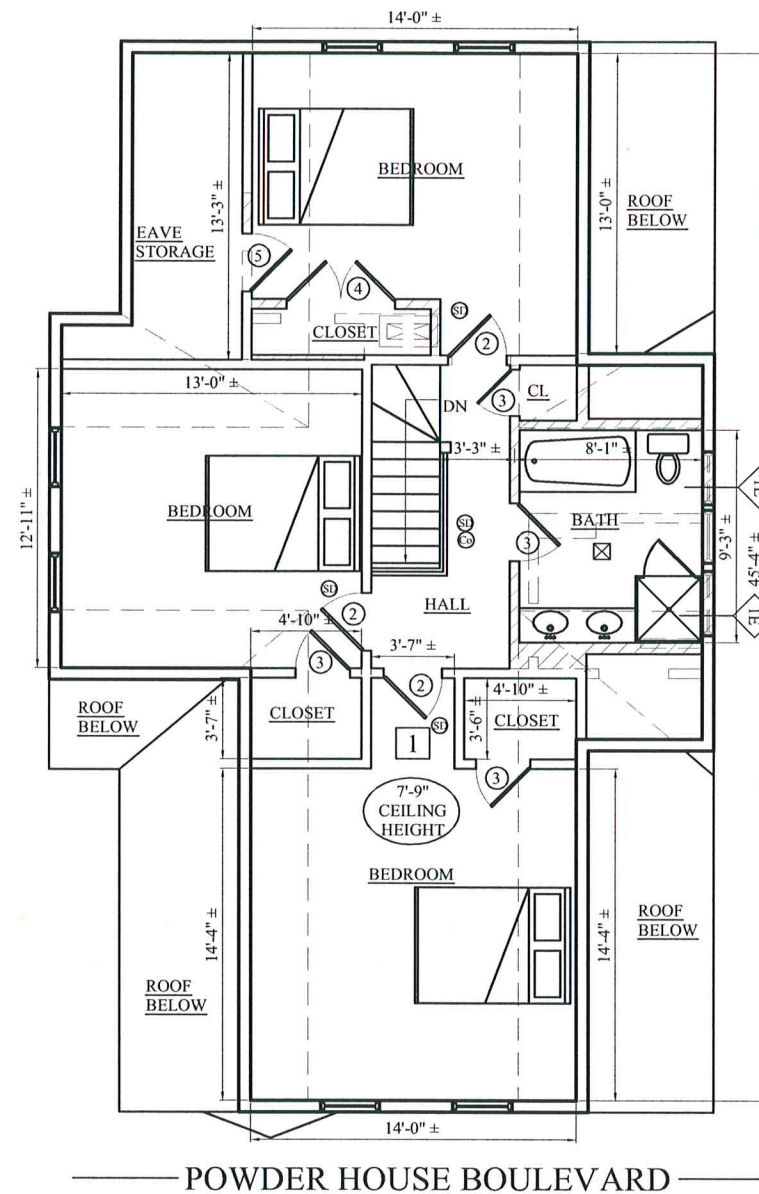
Drawing Name
PROPOSED FLOOR PLANS

Sheet No.

A-1.1



1 PROPOSED SECOND FLOOR PLAN
1/4" = 1'-0"



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

TWO FAMILY RENOVATION 152 POWDER HOUSE BOULEVARD SOMERVILLE, MA

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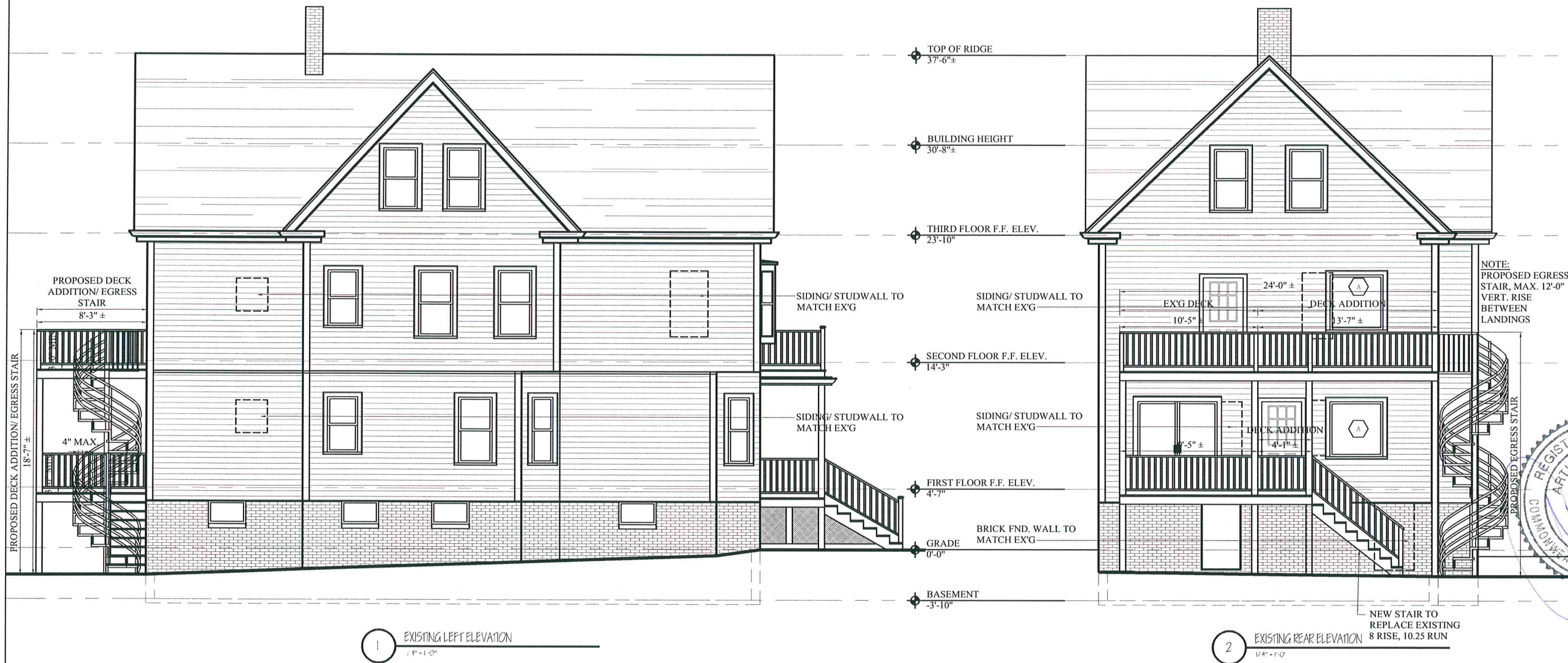


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Drawing Name
PROPOSED
FLOOR PLANS

Sheet No.
A-1.2



Location

TWO FAMILY RENOVATION
152 POWDER HOUSE
BOULEVARD
SOMERVILLE, MA

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
917-289-7127 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
Revision Date

06-14-16
06-22-16
09-29-16
01-11-17

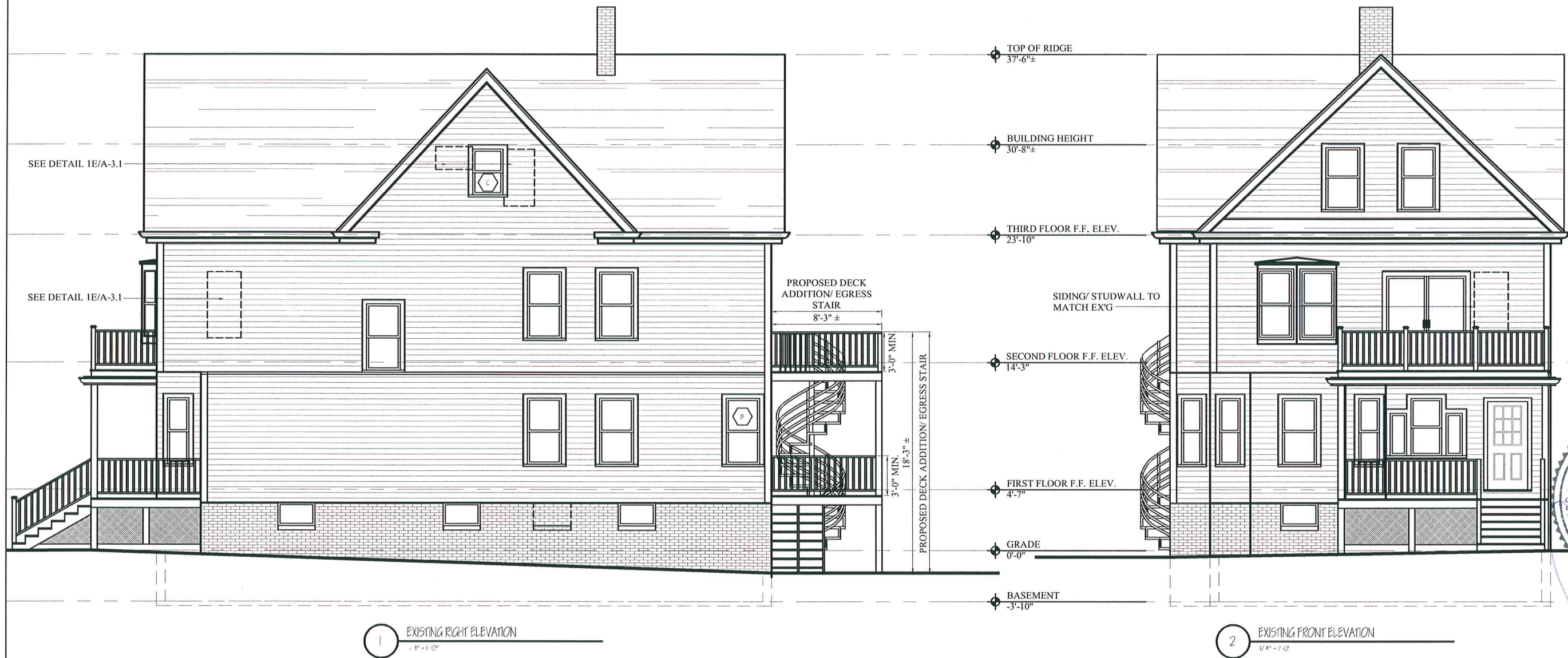
Project No: 16104
Scale: AS NOTED
Date: 05-06-16
Drawn By: ST

Drawing Name

PROPOSED ELEVATIONS

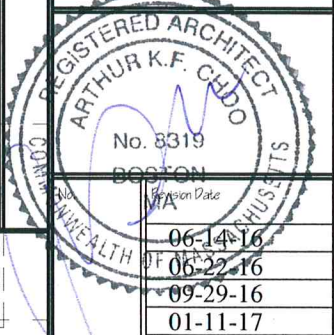
Sheet No.

A-2.1



TWO FAMILY RENOVATION
152 POWDER HOUSE
BOULEVARD
SOMERVILLE, MA

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



Project No: 16104
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Drawing Name
PROPOSED
ELEVATIONS

Sheet No.
A-2.2

WINDOW SCHEDULE							
NO.	MANUFACTURER		MODEL	# NEEDED	R.O.	UNOBSTRUCTED GLASS	REMARKS
A	ANDERSON (OR EQUAL)		P4040	2	4'-1/2" X 4'-1/2"	43-3/16" X 43-3/16"	
B	ANDERSON (OR EQUAL)		TW24410	1	2-6 1/8" X 5'-1 1/4"	23" X 25-15/16"	
C	ANDERSON (OR EQUAL)		TW2032	1	2-2 1/8" X 3'-5 1/4"	19" X 15-15/16"	
DOOR SCHEDULE							
NOTE: GC TO CONFIRM SIZES & QUANTITIES PRIOR TO ORDERING							
NO.	SIZE	MATERIAL	RATING	FRAME	TYPE	HARDWARE	REMARKS
0	3'-0" x 6'-8" x 1 3/4"	FBGLS & GLASS	-	WOOD	1	ENTRANCE	ENTRY PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER, PROVIDE DEADBOLT
1	(2) 3'-0" x 6'-8" x 1 3/4"	FBGLS & GLASS	-	WOOD	1	ENTRANCE	ENTRY PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
2	2'-8" x 6'-8" x 1 3/8"	COMP. OR WOOD	-	WOOD	1	BED	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
3	2'-6" x 6'-8" x 1 3/8"	COMP. OR WOOD	-	WOOD	1	BATH/ CLOSET	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
4	(2) 2'-6" x 6'-8" x 1 3/8"	COMP. OR WOOD	-	WOOD	1	BATH/ CLOSET	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
5	CUSTOM	COMP. OR WOOD	-	WOOD	1	STORAGE	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER, INSULATED
6	CUSTOM	FBGLS & GLASS	-	WOOD	1	ENTRANCE	ENTRY PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER, PROVIDE DEADBOLT
7	3'-0" x 6'-8" x 1 3/4"	COMP. OR WOOD	-	WOOD	1	ENTRANCE	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
C	3'-0" x 6'-8" x 1 3/4"	FBGLS	1 HR	WOOD	1 HR	ENTRANCE	UNIT ENTRY DOOR, PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER, PROVIDE DEADBOLT

NOTE: DOOR STYLE, COLOR & HARDWARE FINISH TO BE SELECTED BY OWNER, ALL HARDWARE TO MATCH

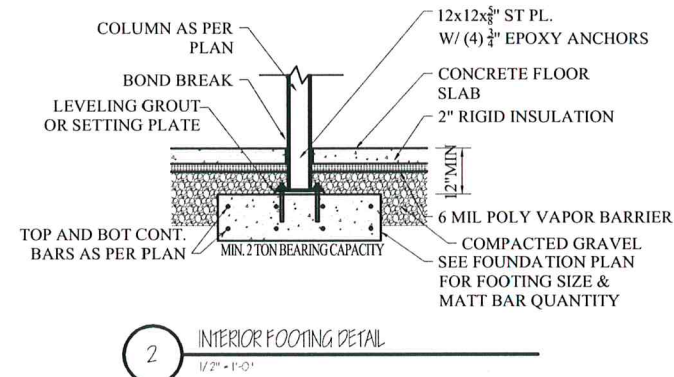
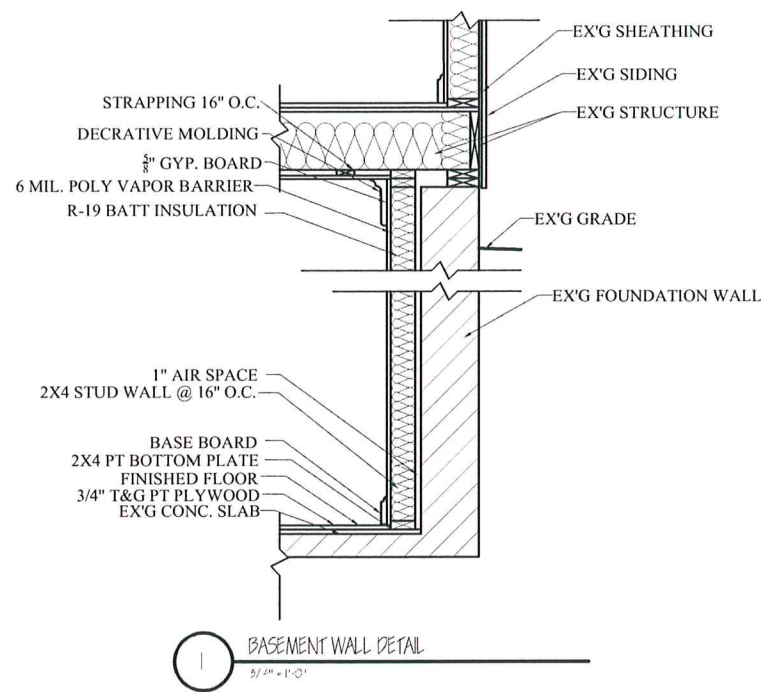
NOTE: GC TO CONFIRM SIZES & QUANTITIES PRIOR TO ORDERING

1	1 HOUR CLG TYPE (#LS14) STC 50 IIC 46 SCALE: 1"=1'-0"
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1E	EXTERIOR BEARING WALL RATING 1 HOUR # U344 SCALE: 3"=1'-0"
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1	1 HOUR PARTITION - WOOD STUD BEARING WALL - UL DESIGN # UB05 (STC RATING=56) SCALE: 5"=1'-0"
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0	TYPICAL PARTITION - WOOD STUD SCALE: 5"=1'-0"
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TWO FAMILY RENOVATION
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SOMERVILLE, MA

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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
Revision Date
06-22-16
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Sheet No: A-3.1

RECOMMENDED FASTENING SCHEDULE		
BUILDING ELEMENT	NAIL SIZE AND TYPE	NUMBER AND LOCATION
STUD TO SOLE PLATE	8D COMMON 16D COMMON	4 TOE-NAIL OR 2 DIRECT-NAIL
STUD TO CAP PLATE	16D COMMON	2 TOE-NAIL OR 2 DIRECT-NAIL
DOUBLE STUDS	10D COMMON	12" O.C. DIRECT
CORNER STUDS	16D COMMON	24" O.C. DIRECT
SOLE PLATE TO JOIST OR BLOCKING	16D COMMON	16" O.C.
DOUBLE CAP PLATE	10D COMMON	16" O.C. DIRECT
CAP PLATE LAPS	10D COMMON	2 DIRECT-NAIL
RIBBON STRIP, 6" OR LESS	10D COMMON	2 EACH DIRECT BEARING
RIBBON STRIP, 6" OR MORE	10D COMMON	3 EACH DIRECT BEARING
ROOF RAFTER TO PLATE	8D COMMON	3 TOE-NAIL
JACK RAFTER TO RIDGE	16D COMMON	2 TOE-NAIL OR DIRECT-NAIL
JACK RAFTER TO HIP	10D COMMON 16D COMMON	3 TOE-NAIL OR 2 DIRECT-NAIL
FLOOR JOISTS TO STUDS (NO CEILING JOISTS)	10D COMMON 10D COMMON	5 DIRECT OR 3 DIRECT
FLOOR JOISTS TO STUDS (WITH CEILING JOISTS)	10D COMMON	2 DIRECT
FLOOR JOISTS TO SILL OR GIRDER	3D COMMON	3 TOE-NAIL
LEDGER STRIP	16D COMMON	3 EACH DIRECT
CEILING JOISTS TO PLATE	16D COMMON	3 TOE-NAIL
CEILING JOISTS (LAPS OVER PARTITION)	10D COMMON	3 DIRECT-NAIL
CEILING JOISTS (PARALLEL TO RAFTER)	10D COMMON	3 DIRECT
COLLAR BEAM	10D COMMON	3 DIRECT
BRIDGING TO JOISTS	8D COMMON	2 EACH DIRECT END
DIAGONAL BRACE (TO STUD AND PLATE)	8D COMMON	2 EACH DIRECT BEARING
TAIL BEAMS TO HEADERS (WHEN NAILING PERMITTED)	20D COMMON	1 EACH END 4 SQ. FT. FLOOR AREA
HEADER BEAMS TO TRIMMERS	20D COMMON	1 EACH END 8 SQ. FT. FLOOR AREA
1" ROOF DECKING (OVER 6" IN WIDTH)	8D COMMON 8D COMMON	2 EACH DIRECT RAFTER 3 EACH DIRECT RAFTER
1" SUBFLOORING (6" OR LESS)	8D COMMON	2 EACH DIRECT JOIST
1" SUBFLOORING (8" OR MORE)	8D COMMON	3 EACH DIRECT JOIST
2" SUBFLOORING	16D COMMON	2 EACH DIRECT JOIST
1" WALL SHEATHING (8" OR LESS IN WIDTH)	8D COMMON	2 EACH DIRECT STUD
1" WALL SHEATHING (OVER 8" IN WIDTH)	8D COMMON	3 EACH DIRECT STUD
PLYWOOD ROOF & WALL SHEATHING (1/2" OR LESS) (5/8" OR GREATER) (5/16", 3/8", OR 1/2") (OVER 6" IN WIDTH)	6D COMMON 8D COMMON 16 GAUGE GALVANIZED WIRE STAPLES, 3/8" MINIMUM CROWN; LENGTH OF 1" PLUS PLYWOOD THICKNESS SAME AS IMMEDIATELY ABOVE	6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 4" O.C. EDGES & 8" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 5" O.C. INTERMEDIATE
PLYWOOD SUBFLOORING (1/2") (3/8", 3/4") (1", 1 1/8") (1/2") (3/8")	6D COMMON OR 5D ANNULAR OR SPIRAL THREAD 8D COMMON OR 5D ANNULAR OR SPIRAL THREAD 10D COMMON OR 8D RING SHANK OR 8D ANNULAR OR SPIRAL THREAD 16D GALVANIZED WIRE STAPLES 3/8" MINIMUM CROWN; 1 3/8" LENGTH	6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 6" O.C. INTERMEDIATE 4" O.C. EDGES & 7" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 4" O.C. INTERMEDIATE
BUILT-UP GIRDERS AND BEAMS	20D COMMON	32" O.C. DIRECT
CONTINUOUS HEADER TO STUD	8D COMMON	4 TOE-NAIL
CONTINUOUS HEADER, TWO PIECES	16D COMMON	16" O.C. DIRECT
1/2" FIBER BOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
25/32" FIBER BOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL OR 8D COMMON NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
GYPSUM SHEATHING	12 GAUGE 1 3/4" LARGE HEAD CORROSION-RESISTANT	4" O.C. EDGE 8" O.C. INTERMEDIATE
PARTICLE BOARD UNDERLAYMENT (1/4"-3/4")	6D ANNULAR THREADED	6" O.C. DIRECT EDGES 10" O.C. INTERMEDIATE
PARTICLE BOARD ROOF AND WALL SHEATHING 1/2" OR LESS	6D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
5/8" OR GREATER	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
PARTICLE BOARD SUBFLOORING (5/8" OR GREATER)	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
SHINGLES, WOOD*	NO. 14 B&S GAGE CORROSION RESISTIVE	2 EACH BEARING
WEATHER BOARDING	8D CORROSION	2 EACH BEARING

NOTE *: SHINGLE NAILS SHALL PENETRATE NOT LESS THAN 3/4" INTO NAILING STRIPS, SHEATHING OR SUPPORTING CONSTRUCTION EXCEPT AS OTHERWISE PROVIDED IN 780 CMR 1255.4.4.

2x6 BEARING WALL HEADER DETAIL
N/S

INSULATED WALL DETAILS
1'-1"-0"

INSULATED WALL DETAILS
1'-1"-0"

2x4 PARTITION WALL HEADER DETAIL
N/S

WOOD JOISTS SUPPORTED ON WOOD GIRDERS
1'-1"-0"

WINDOW OPENING DETAIL
1'-1"-0"

DOOR OPENING DETAIL
1'-1"-0"

TOP PLATE FRAMING DETAIL
N/S

SILL FOR PLATFORM FRAMING DETAIL
1'-1"-0"

TYPICAL DOUBLE TOP PLATE SPLICE DETAIL
N/S

STAIR DETAIL
N/S

STAIR DETAIL
N/S

STAIR DETAIL
N/S

PLATFORMS IN FIRE RATED STAIR SHAFTS
15\"/>

Location

TWO FAMILY RENOVATION
152 POWDER HOUSE
BOULEVARD
SOMERVILLE, MA

Choo & Company, Inc.

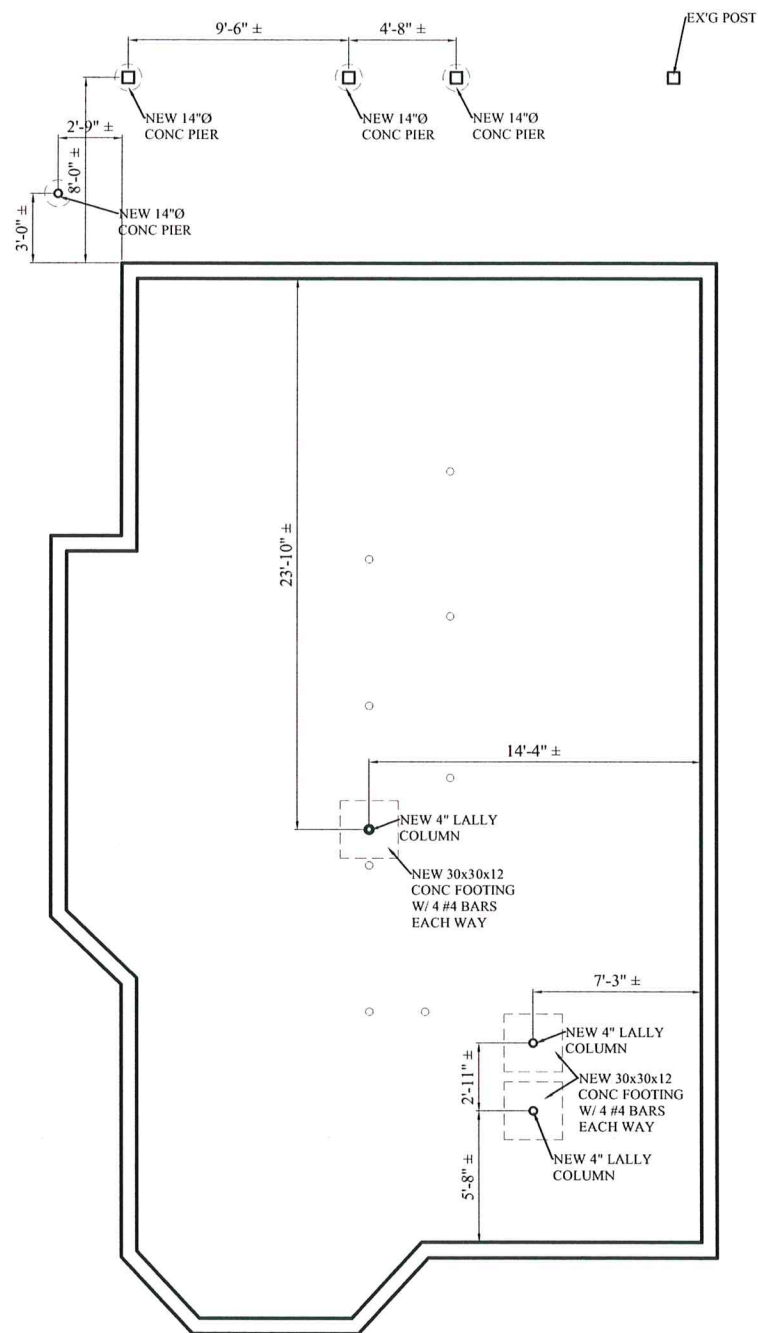
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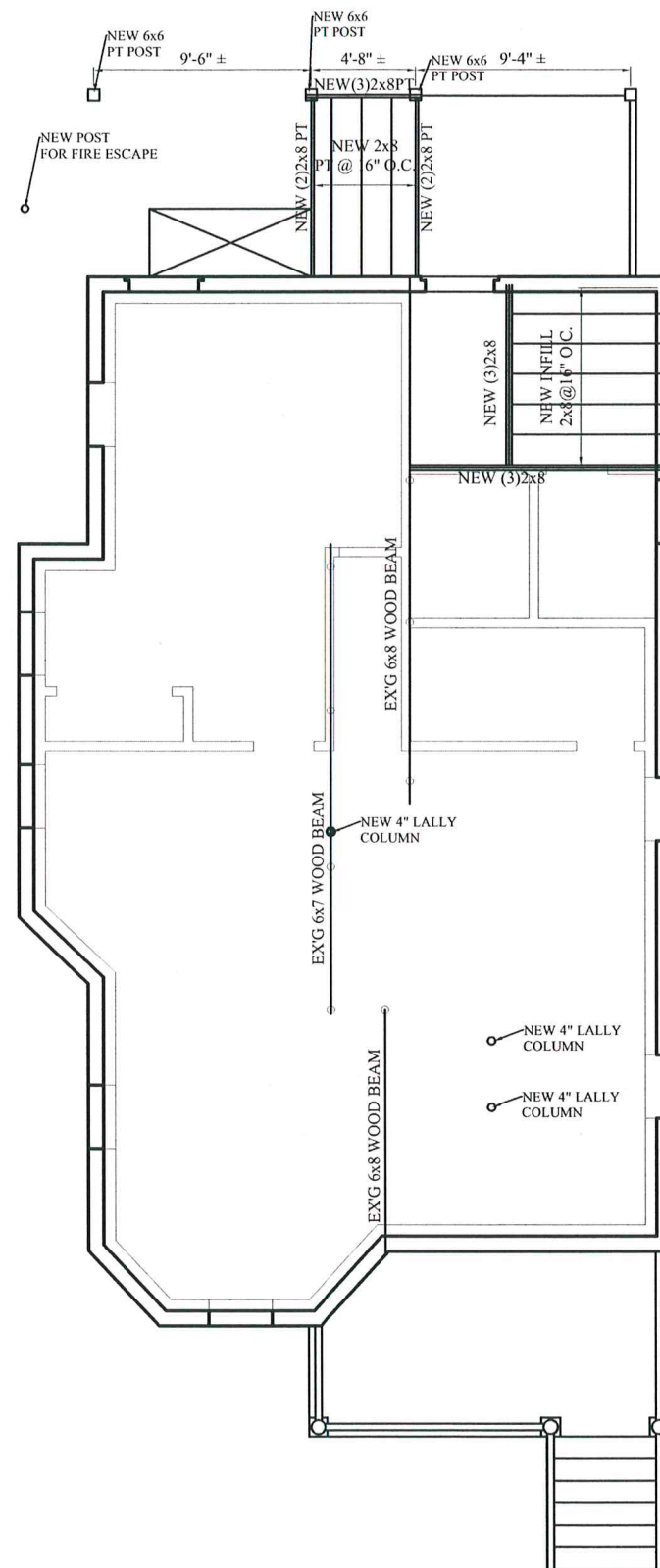
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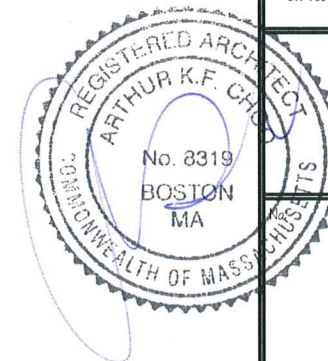
POWDER HOUSE BOULEVARD

1 FOUNDATION PLAN
1/4" = 1'-0"



POWDER HOUSE BOULEVARD

2 FIRST FLOOR FRAMING PLAN
1/4" = 1'-0"



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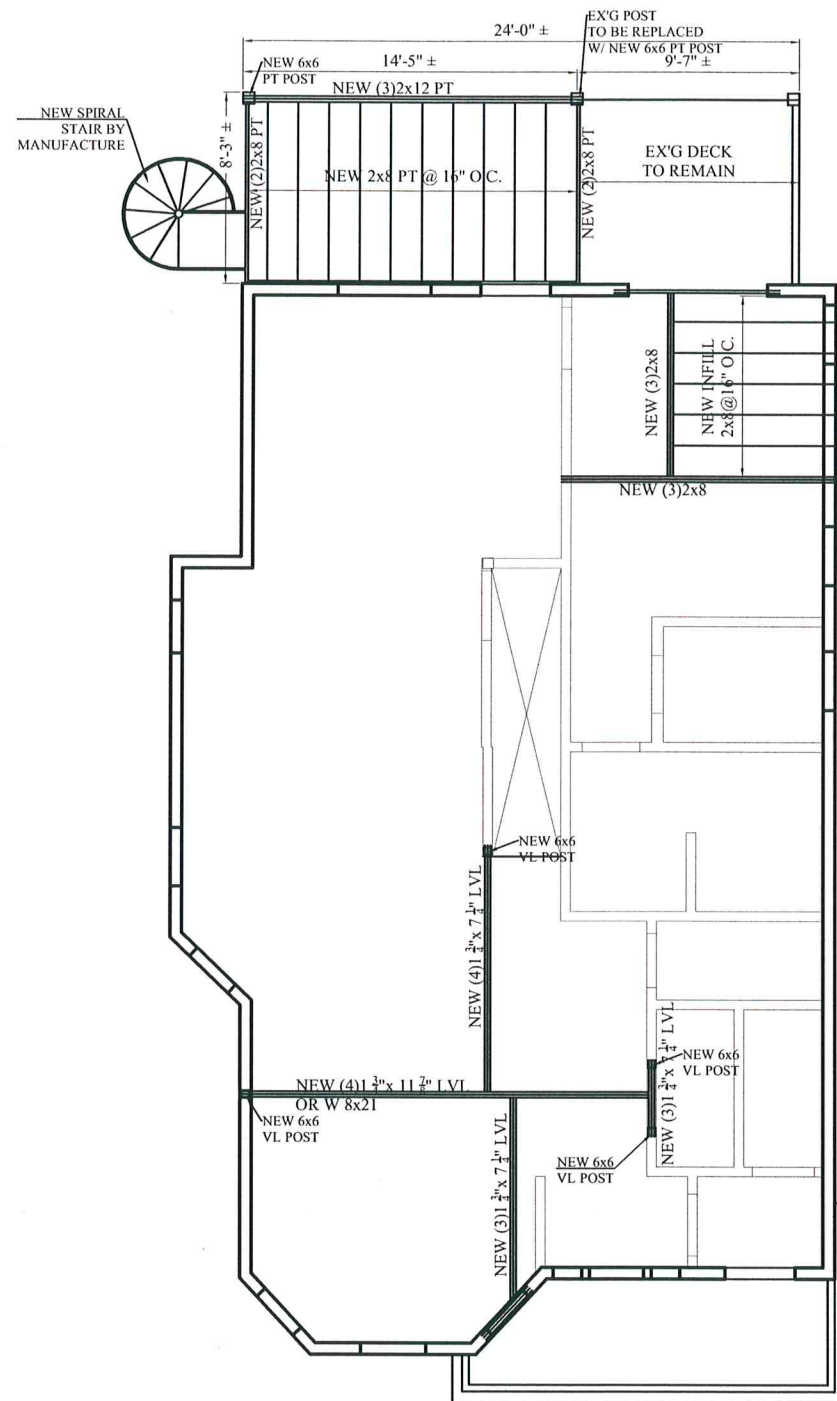
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FRAMING
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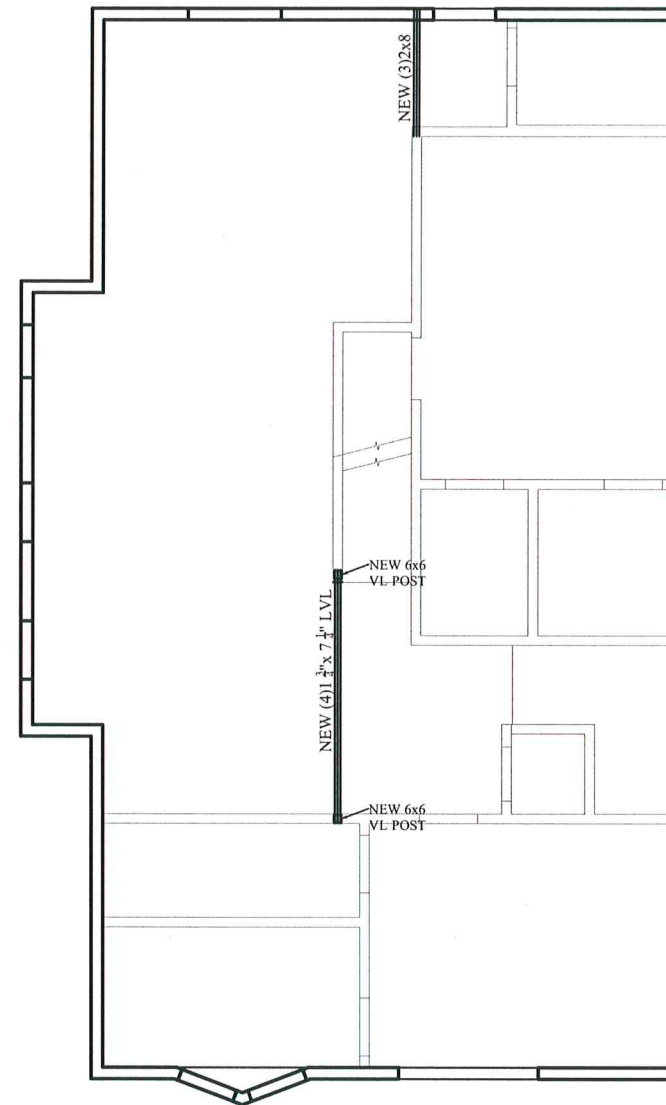
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POWDER HOUSE BOULEVARD

1 SECOND FLOOR FRAMING PLAN
1/4" = 1'-0"



POWDER HOUSE BOULEVARD

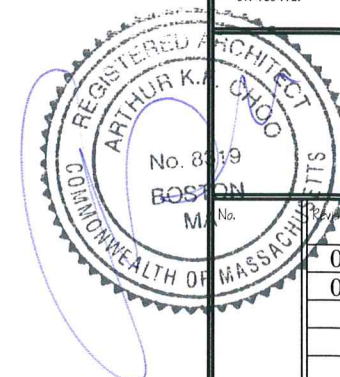
2 THIRD FLOOR FRAMING PLAN
1/4" = 1'-0"

Location

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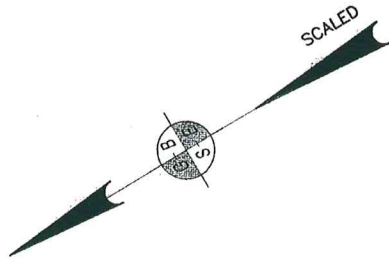
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FRAMING
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Sheet No.

S-1.2



POWDER HOUSE BOULEVARD

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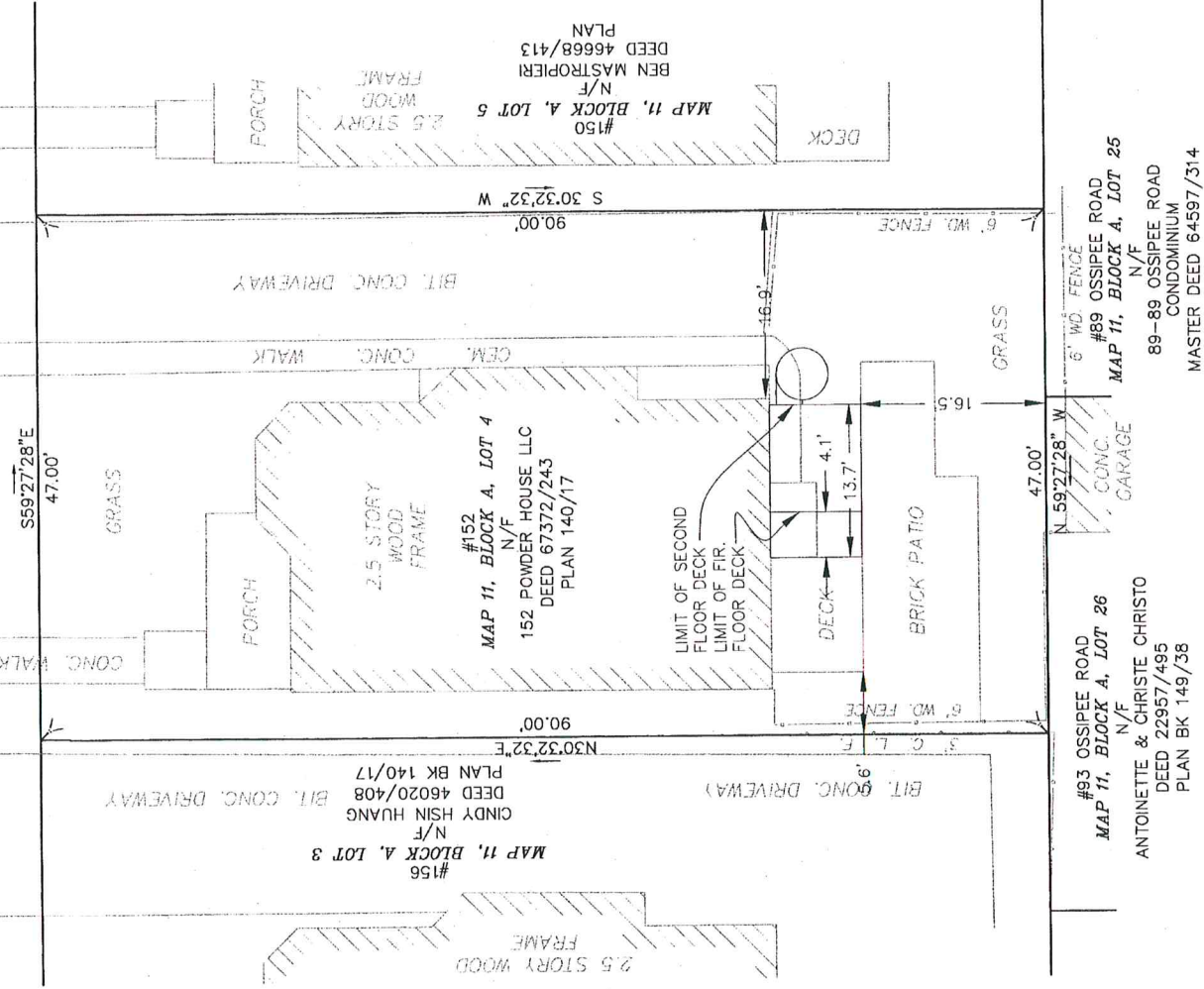
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PLAN OF PROPOSED CONSTRUCTION
152 POWDER HOUSE BOULEVARD
SOMERVILLE, MASSACHUSETTS
(MIDDLESEX SOUTH REGISTRY OF DEEDS)



PREPARED FOR
152 POWDER HOUSE BOULEVARD LLC
103 HEMMENWAY STREET
BOSTON, MA 02115
617-421-9900

GREATER BOSTON SURVEYING AND ENGINEERING
19 FREDITH ROAD
WEYMOUTH, MA 02188
(781) 331-6128

CALC BY: PJT DATE: JUNE 5, 2016 SCALE: 1"=10'