

ISSUED FOR PERMIT - 'AS OF RIGHT'

FORBES STREET TOWNHOUSES

BOSTON, MA

08.19.15



Mangiacotti Design + Development

sheet list

architect

RODE Architects, Inc.

535 Albany Street | 405 Boston, Massachusetts 02118 617.422.0090 | T 617.422.0094 | F

73 Mount Calvary Road Boston, Massachusetts 02131

owner / developer

SURVEY
PLOT SUBDIVIDED PLAN OF LAND

ARCHITECTURAL

A000 COVER

A001 ZONING + SITE ANALYSIS

A100 BASEMENT PLAN
A101 STREET LEVEL PLAN

A102 SECOND LEVEL PLAN

A103 THIRD LEVEL PLAN A104 ROOF LEVEL PLAN

A201 FORBES STREET ELEVATION

A202 REAR ELEVATION
A203 SIDE ELEVATION

A204 SIDE ELEVATION

A301 CROSS SECTION @ STAIRS A302 CROSS SECTION @ LIVING

A303 LONGITUDINAL SECTION @ KITCHEN

A310 WALL SECTIONS

STRUCTURAL

GENERAL INFORMATION

S002 TYPICAL DETAILS S003 TYPICAL DETAILS

S100 FOUNDATION PLAN

S100 FOUNDATION FLAN
S101 STREET LEVEL FRAMING PLAN

S102 SECOND LEVEL FRAMING PLAN

103 THIRD LEVEL FRAMING PLAN104 ROOF FRAMING PLAN

S201 SECTIONS S202 SECTIONS

FIRE PROTECTION
FP-1 SPRINKLER PLANS

S) RIM = 92.30' INV = 83.50'BENCHMARK: INV MAG NAIL IN CONC. WALK ELEVATION = 92.99'9283 INV = 82.83'BK 6.6' / / PROPOSED PROPOSED > PROPOSED DWELLING DWELLING No. 42 FORBES STREET DWELLING ENNA E. & MARIO ROJAS No. 50 FORBES STREET BOOK 22453 ; PAGE 87 N/F FELICIANO & DOLORES GRAJEDA BOOK 30349 ; PAGE 29 85.44 N18°00'00"W ×85.90 LOT 2 11,029 ±/-LANDSCARE 7,762 ^{+/-}s.F. No. 41 WYMAN STREET RHONDA RIDER 3 STORY BOOK 39501 ; PAGE 68 No.29 WYMAN STREET 3 UNITS N/F MARCO V. QUINONES BOOK 22713 ; PAGE 167 POR. S18°00'00"E BENCHMARK: —MAG NAIL SET IN UTILITY POLE RIM = 84.18' RIM = 82.63'INV = 73.43'INV = 74.88' ELEVATION = 84.20' GAS GAS GAS WTR WTR SH 8 DICL 1975 GAS WTR PUBLIC - 40.0' WIDE) STREET

LEGEND:

BWSC HANDHOLE CATCH BASIN DRAIN MANHOLE ELECTRIC MANHOLE ELECTRIC HANDHOLE *GAS GATE* HYDRANT LIGHT POLE SEWER MANHOLE UTILITY POLE WATER GATE

RIM ELEVATION

INVERT ELEVATION

NOTES: PARCEL ID: **ZONING DISTRICT:** ZONING SUBDISTRICT:

1002551000 JAMAICA PLAIN NEIGHBORHOOD

THREE FAMILY RESIDENTIAL NEIGHBORHOOD DESIGN OVERLAYS: 9A-9C

MAP NO: ARTICLE:

REVIEWED BY: GCC DRAFTSMAN: JJH SITE PLAN 7-28-15 SCALE: 1 INCH = 20 FEET

REFERENCES:

DEED: BK 53904; PG 319 PLAN: BK 1950; PG 434 PLAN: BK 1683; PG 426 PLAN: BK 12016; PG END PLAN: BK 29805; PG 93 PLAN: BK 2129; PG END CITY LAYOUT PLAN L-2253 CITY LAYOUT PLAN L-2119

SUBDIVISON PLAN OF LAND

LOCATED AT 35 WYMAN STREET JAMAICA PLAIN, MA PREPARED FOR:

WYMAN REAL ESTATE, LLC. 73 MOUNT CALVARY RD. ROSLINDALE, MA. 02131



NOTES:

RECORDS

AS SHOWN HEREON.

I CERTIFY THAT THIS PLAN WAS MADE FROM AN INSTRUMENT SURVEY ON THE GROUND ON THE DATE OF JULY 27, 2015 AND ALL STRUCTURES ARE LOCATED

ABUTTERS' NAMES REFER TO CURRENT CITY OF BOSTON ASSESSOR'S

THE ELEVATIONS SHOWN ON THIS PLAN ARE RELATIVE TO THE CITY OF

PROVIDED BY THE CITY OF BOSTON WATER AND SEWER DEPARTMENT.

2) MAG NAIL IN CONC. WALK AT FORBES ST.; ELEVATION = 92.99'

ARE SHOWN ON THIS PLAN. THE DIG-SAFE CALL CENTER SHALL BE

MAG NAIL SET IN UTILITY POLE;

CONTACTED PRIOR TO ANY EXCAVATION.

HAVING AN EFFECTIVE DATE OF JULY 17, 2012.

ENGINEERING DIVISION.

GEORGE C. COLLINS P.L.S.

BOSTON VERTICAL DATUM AND WERE DETERMINED FROM A SEWER INVERT

UNDERGROUND UTILITIES ARE BASED UPON AN ACTUAL FIELD SURVEY AND

INFORMATION OF RECORD. IT IS NOT WARRANTED THAT THEY ARE EXACTLY

ALL LAND SHOWN LIES WITHIN ZONE "X" UNSHADED, AREAS DETERMINED TO

053E OF THE FLOOD INSURANCE RATE MAP BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF BOSTON, COMMUNITY No. 25021C,

BE OUTSIDE THE 0.2 % ANNUAL CHANCE FLOODPLAIN, AS INDICATED ON PANEL

THE LOT LINES SHOWN HEREON WERE DETERMINED FROM PLANS OF RECORD FILED AT THE SUFFOLK COUNTY REGISTRY OF DEEDS, AND OR THE RECORDS

SECTION OF THE CITY OF BOSTON DEPARTMENT OF PUBLIC WORKS

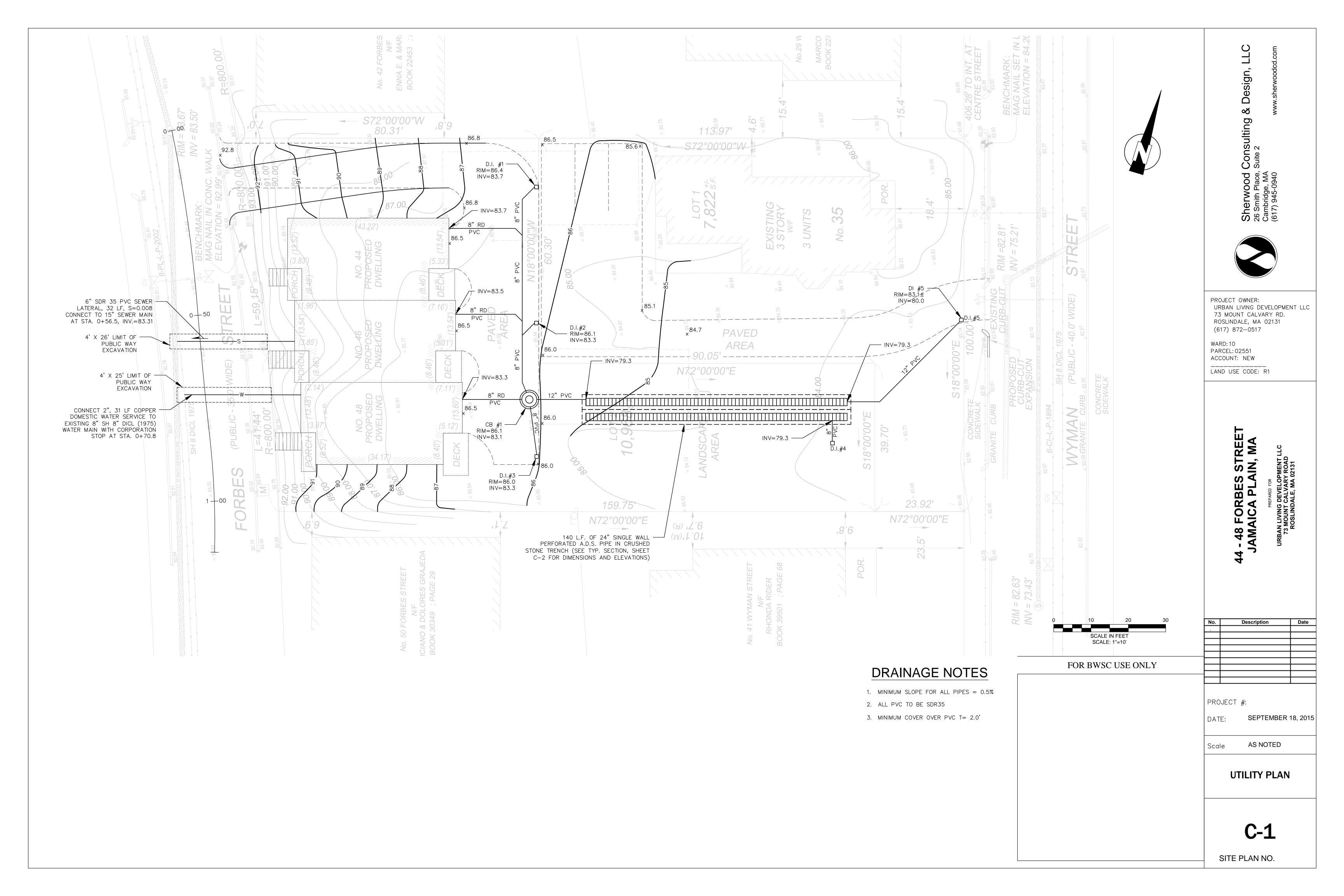
LOCATED, NOR THAT ALL UNDERGROUND CONDUITS OR OTHER STRUCTURES

ELEVATION = 84.20'

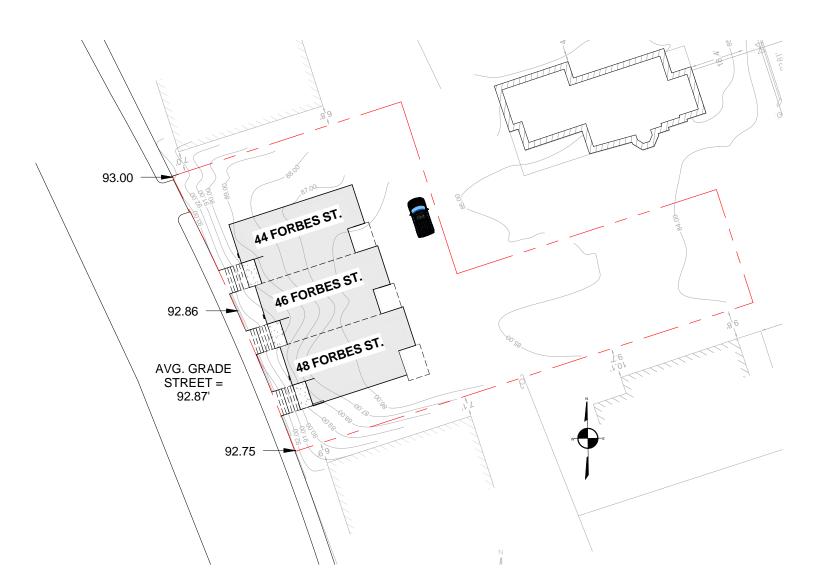
SURVEY, INC. UNIT C-4 SHIPWAYS PLACE CHARLESTOWN, MA. 02129 (617) 242-1313

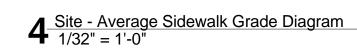
JOB # 14-00489

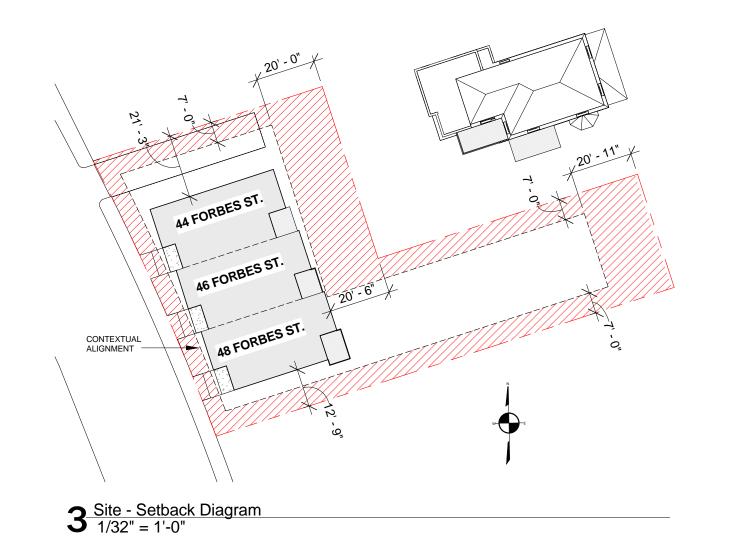
FILE # 14-00489 - 07/28/15











Site - Architectural Plan

ROOF LEVEL

34'-11"

SECOND LEVEL

13'-11"

SITREET LEVEL = 96.25'

AVE. GRADE = 92.87

O'

BASEMENT LEVEL = 86.75'
-6'-1"

ARTICLE #55 - JAMAICA PLAIN NEIGHBORHOOD DISTRICT - 3F-5000 (SEE'1')

ACTION	LOT AREA	MIN. LOT AREA PER DWELLING	MIN. LOT AREA PER ADD'L DWELLING	MIN. LOT WIDTH (sf)	MIN. FRONTAGE (sf)	BUILDING GSF	MAX. FLOOR AREA RATIO (F.A.R.)	MAX. BUILDING HEIGHT (ft)	MIN. FRONT YARD (ft)	MIN. REAR YARD (ft)	MIN. SIDE YARD (ft)	USABLE OPEN SPACE PER DWELLING	PARKING REQUIREMENT (TABLE - J)
REQUIRED		3,000 FOR THE 1ST UNIT	2,000 PER UNIT	25'-0"	25'-0"		0.6	3 STORIES 35'-0"	ALIGN WITH STREET (SEE '4')	20'-0"	7'-0" (SEE '5' + '6')	750 FOR 1ST 500 FOR EACH ADD'L UNIT (SEE '3')	RESIDENTIAL 1-3 UNITS = 1.0 SPACE PER
PROPOSED	11,029		3 UNITS = 7,000 (>11,029)	100'-0" (EXISTING)	66'-0"	6,580 GSF	0.59	3 STORIES 35'-0"	7'-0"	20'-7"	12'-9" 21'-3"	1,750 - REQUIRED 4,460 - PROVIDED	5 - PROVIDED (3 - REQUIRED)

FOOTNOTES FROM ARTICLE 55 TABLE 'E':

- 1. See Map 9A, Map 9B, Map 9C, and Section 55-7. In a 1F subdistrict, the maximum number of dwelling units allowed in a single structure shall be one (1). In a 2F subdistrict, the maximum number of dwelling units allowed in a single structure shall be two (2), provided that: (a) a third dwelling unit may be allowed as a conditional use in the 2F-4,000 and 2F-9,000 subdistricts, and (b) the maximum number of dwelling units allowed in a semi-attached dwelling shall be one (1). In a 3F subdistrict, the maximum number of dwelling units allowed in a single structure, or in any combination of semi-attached or attached structures (including Semi-Attached Dwellings, Town House Buildings), shall be three (3).
- 2. For the purpose of determining Building Height, the floor area of a dormer on a Dwelling shall not be included in the floor area calculation for a half story; provided that such dormer is not wider than eight (8) feet and the ridge line of the dormer does not exceed the ridge line of an existing Structure of which it is a part, or thirty-five (35) feet, whichever is less; and provided further that only the floor area of two such dormers shall not be included in the floor area calculation for a half story. However, the floor area of such dormers shall be included in Gross Floor Area of the Dwelling.
- 3. The minimum usable open space requirement is applicable only to Residential Uses and Dormitory/Fraternity Uses.
 For any lot that exceeds the minimum lot area specified in this Table E, the required number of square feet of usable open space per dwelling unit shall be calculated by adding: (a) the minimum usable open space per dwelling unit specified in this Table E, and (b) twenty-five percent (25%) of the lot area in excess of the required minimum lot area specified in this Table E for the lot.

All ground level open space used to satisfy the minimum usable open space requirements specified in this Table E must have an unobstructed length of not less than ten (10) feet and an unobstructed width of not less than ten (10) feet, except that, for yards used to meet the open space requirements of this Table E, shorter or narrower dimensions are allowed where specifically permitted by the provisions of Section 55-41 (Application of

In the 3F Subdistricts and the MFR Subdistricts, up to twenty-five percent (25%) of the usable open space requirement may be met by unenclosed porches (with or without roofs) or by suitably designed and accessible space on balconies of Main Buildings or on the roofs of Main Buildings or on the roofs of Accessory Buildings, provided that any such space on a porch, balcony, or roof has an unobstructed length of not less than six (6) feet and an unobstructed width of not less than six (6) feet.

- 4. See Section 55-41.1, Conformity with Existing Building Alignment. A bay window may protrude into a Front Yard.
- 5. Semi-attached Dwellings, Town House Buildings, and Row House Buildings are only required to have side yards on sides that are not attached to another Dwelling.
- 6. Seven (7) feet from a side lot line and ten (10) feet from an existing structure on an abutting lot, provided that: (a) the aggregate width of two side yards shall be not less than seventeen (17) feet, and (b) the width of any side yard in which there is a driveway providing access to off-street parking spaces or off-street loading facilities required by this Article shall be not less than ten (10) feet.

1 Zoning Analysis 1/8" = 1'-0"

PROJECT SUMMARY

PROJECT: 44 - 48 FORBES STREET BOSTON MA 02118

<u>DESCRIPTION:</u>
CONSTRUCTION OF 3 NEW TOWNHOUSE BUILDINGS
ON A CURRENTLY VACANT SITE

APPLICABLE CODES:
INTERNATIONAL RESIDENTIAL CODE 2009 (1+2 FAMILY DWELLINGS)
780 CMR - MA AMENDMENTS TO IRC
248 CMR - MA UNIFORM PLUMBING CODE
527 CMR - MA FIRE PREVENTION REGULATIONS

PROPOSED USE GROUP:

R-3 RESIDENTIAL LESS THAN 2 DWELLING UNITS PER BUILDING

NUMBER OF EXITS:

BASEMENT LEVEL = 1

FIRST LEVEL = 1

FIRE PROTECTION GENERAL REQUIREMENTS
THE FOLLOWING FIRE PROTECTION SYSTEMS ARE PROVIDED:

THE FOLLOWING FIRE PROTECTION SYSTEMS ARE PROVIDED:

1. AUTOMATIC SPRINKLER SYSTEM

2. FIRE ALARM SYSTEM

ISSUED FOR PERMIT - 'AS OF RIGHT'

RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL
Roome + Guarracino Structural Engineers
48 Grove Street
Somerville, MA 02144
617.628.1700 | T

FIRE PROTECTION
Rescom Fire Protection, Inc.
3 Mountain View Way, Burlington, MA
781.726.2505 | T

Contact: Carmine Guarracino, P.E.



44-46-48 FORBES ST

Boston, MA

owner / developer

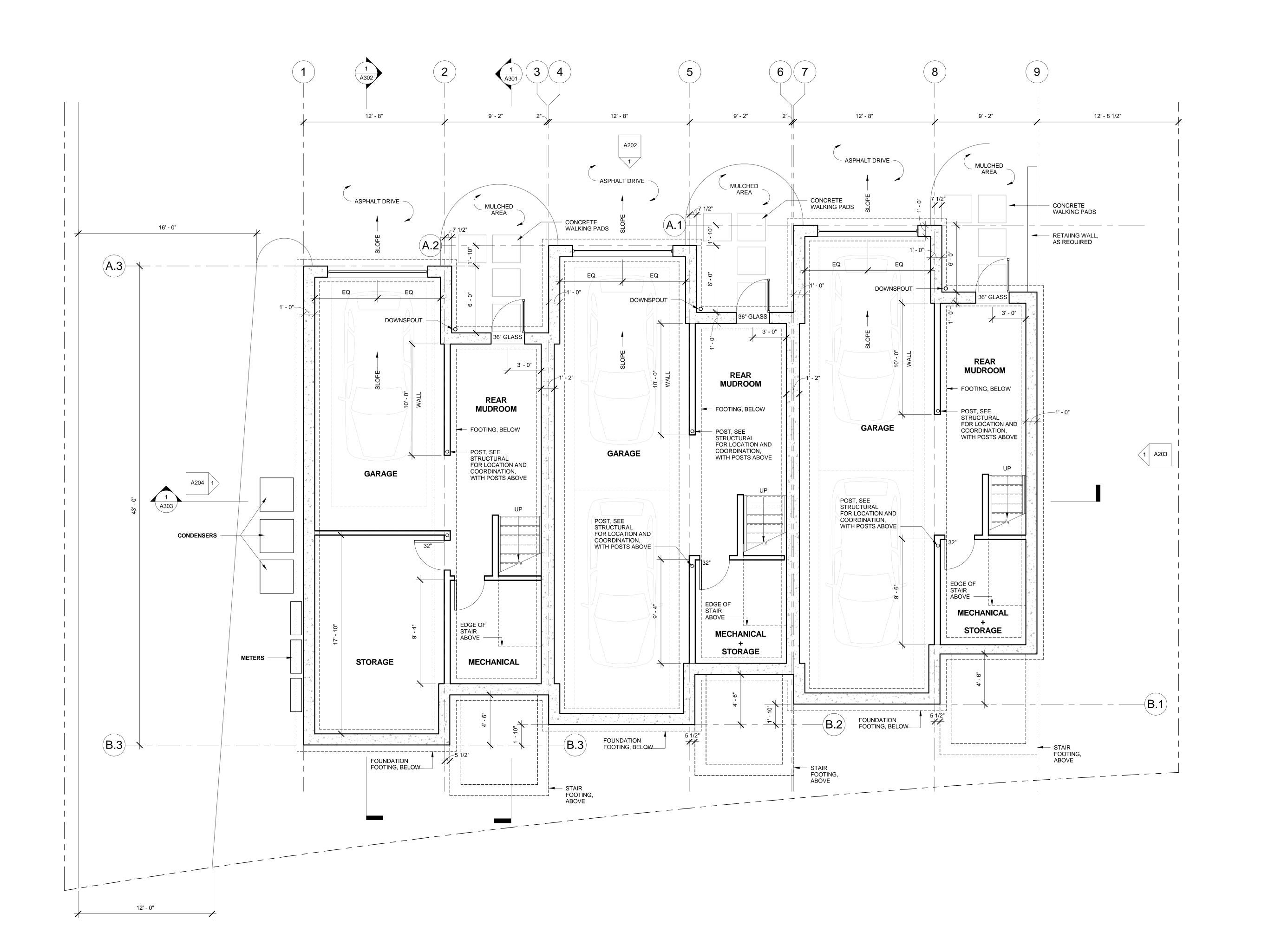
Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT: 1347

ATE: AUGUST 19, 2015

SCALE: As indicated

ZONING + SITE ANALYSIS



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL
Roome + Guarracino Structural Engineers
48 Grove Street
Somerville, MA 02144
617.628.1700 | T
Contact: Carmine Guarracino, P.E.

FIRE PROTECTION Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

PROJECT: 1347

No.	Description	

DATE: AUGUST 19, 2015

SCALE: 1/4" = 1'-0"

BASEMENT PLAN

A201

ISSUED FOR PERMIT-'AS OF RIGHT'

RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL
Roome + Guarracino Structural Engineers
48 Grove Street
Somerville, MA 02144
617.628.1700 | T
Contact: Carmine Guarracino, P.E.

FIRE PROTECTION
Rescom Fire Protection, Inc.
3 Mountain View Way, Burlington, MA
781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development

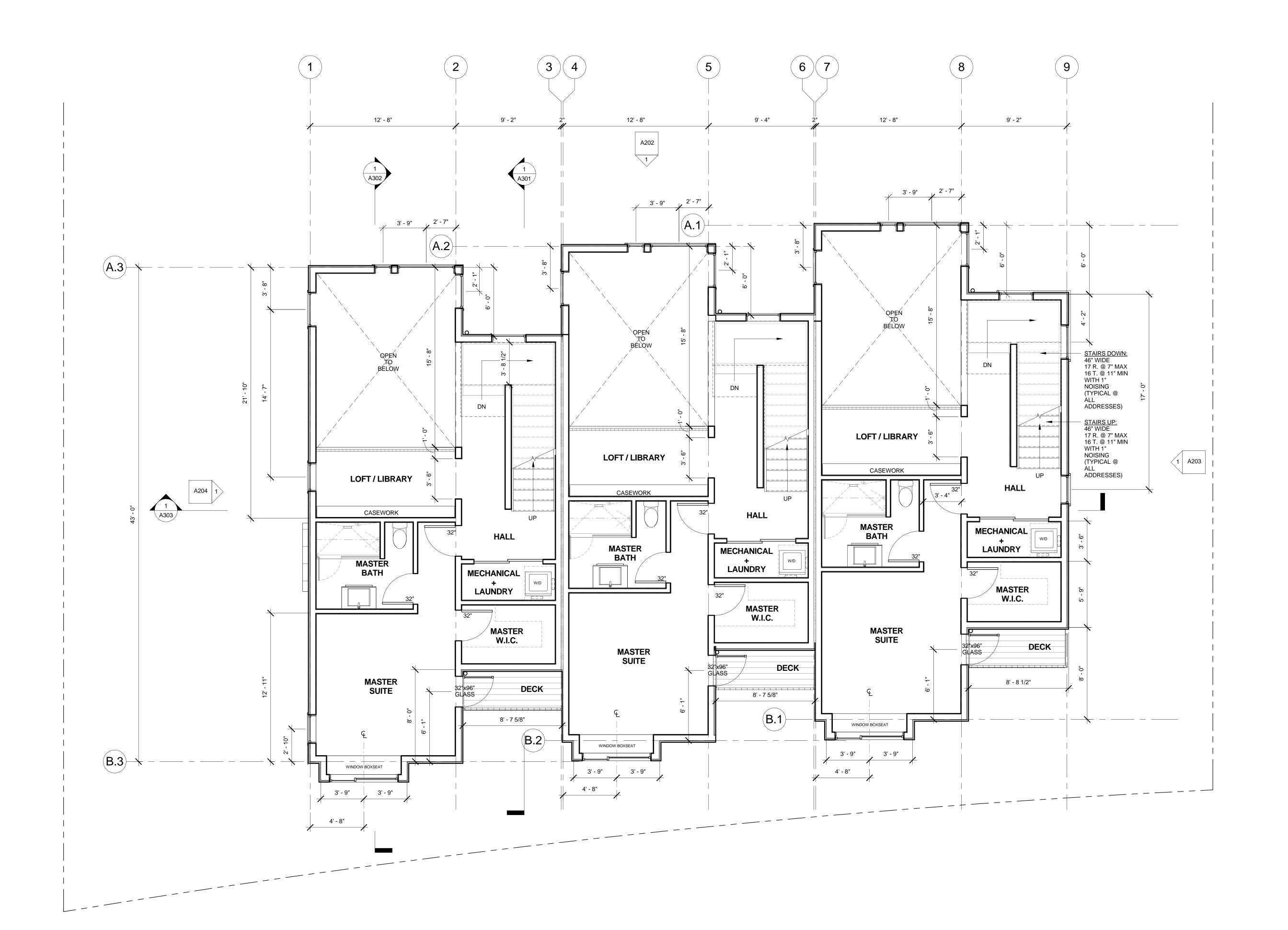
73 Mount Calvary Road Boston, Massachusetts 02131 PROJECT: 1347

No.	Description	
DATE.	ALICHET 10, 2015	

DATE: AUGUST 19, 2015

SCALE: 1/4" = 1'-0"

STREET LEVEL PLAN



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T

617.945.0940 | T
Contact: Joseph Oliveira

STRUCTURAL
Roome + Guarracino Structural Engineers

48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION
Rescom Fire Protection, Inc.
3 Mountain View Way, Burlington, MA
781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

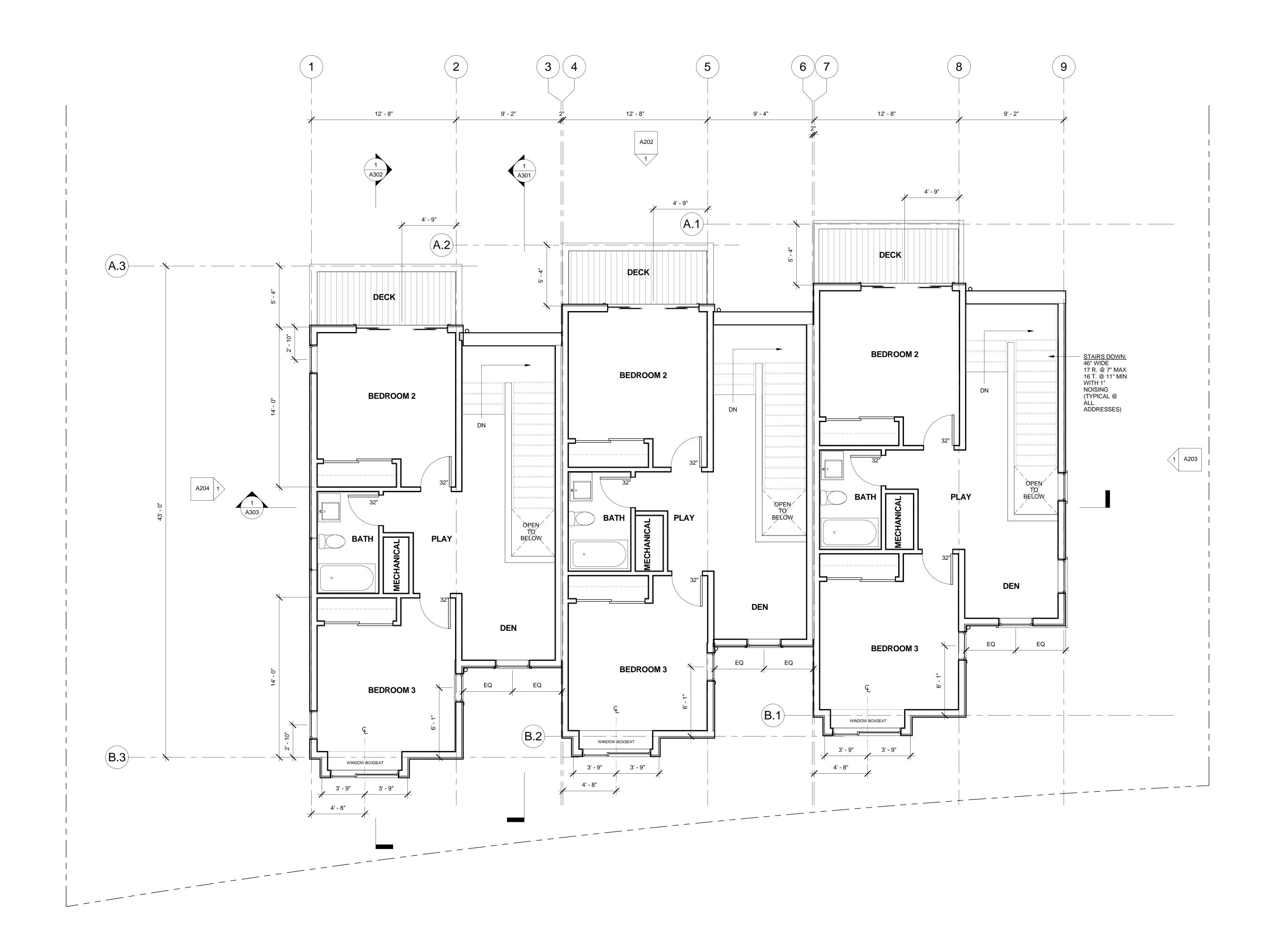
PROJECT: 1347

No.	Description	

DATE: AUGUST 19, 2015

SCALE: 1/4" = 1'-0"

SECOND LEVEL PLAN



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129

617.242.1313 | T Contact: George Collins

CIVIL
Sherwood Consulting & Design, LLC
26 Smith Place, Suite 2
Cambridge, MA 02138
617.945.0940 | T
Contact: Joseph Oliveira

STRUCTURAL

Roome + Guarracino Structural Engineers
48 Grove Street
Somerville, MA 02144
617.628.1700 | T
Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

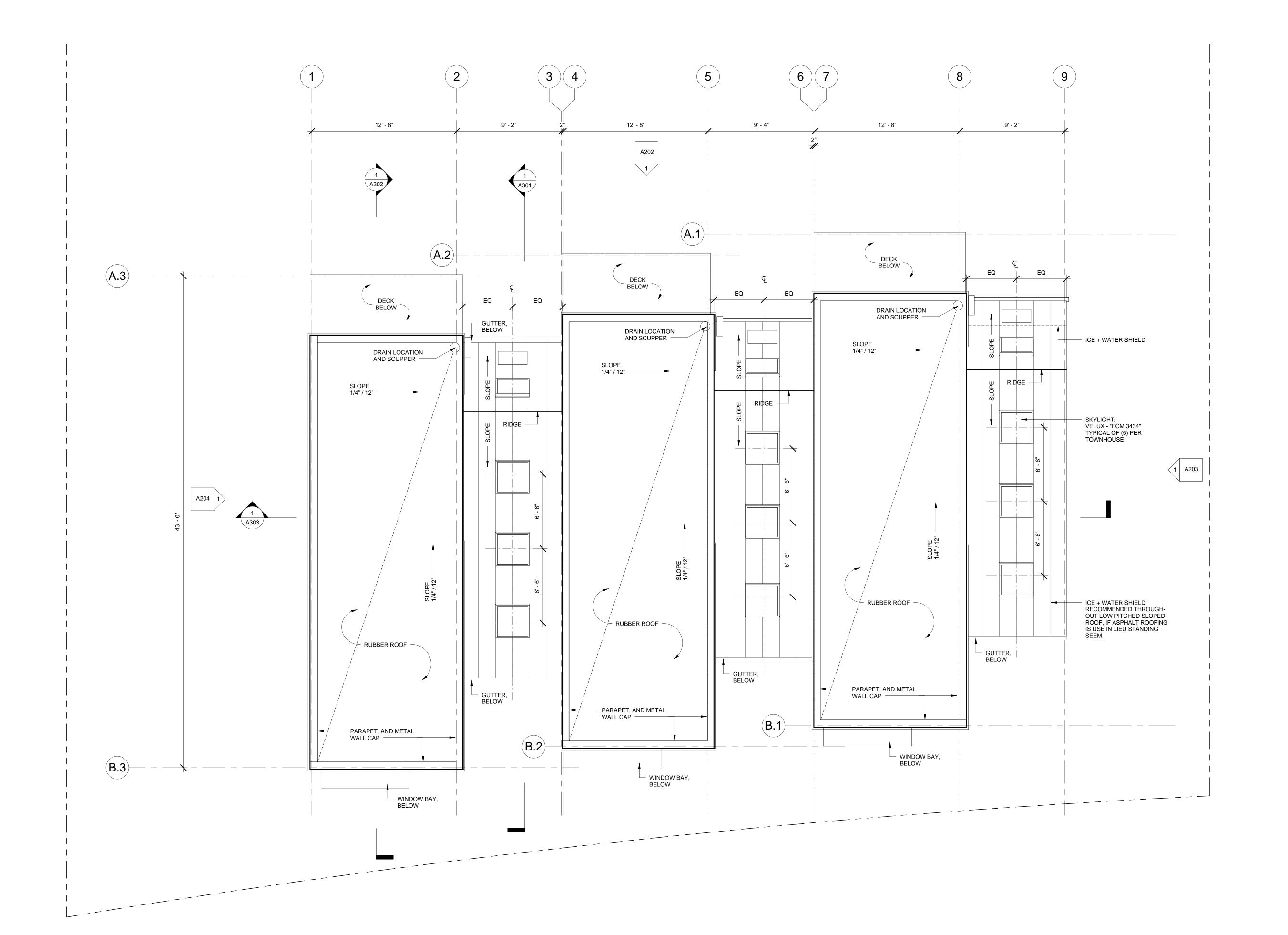
PROJECT: 1347

No.	Description	
DATE:	ALIGUST 10, 2015	

DATE: AUGUST 19, 2015

SCALE: 1/4" = 1'-0"

THIRD LEVEL PLAN



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY Boston Survey, Inc. Shipways Place, Unit 4C Charlestown, MA 02129 617.242.1313 | T Contact: George Collins

CIVIL
Sherwood Consulting & Design, LLC
26 Smith Place, Suite 2
Cambridge, MA 02138
617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL Roome + Guarracino Structural Engineers

48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

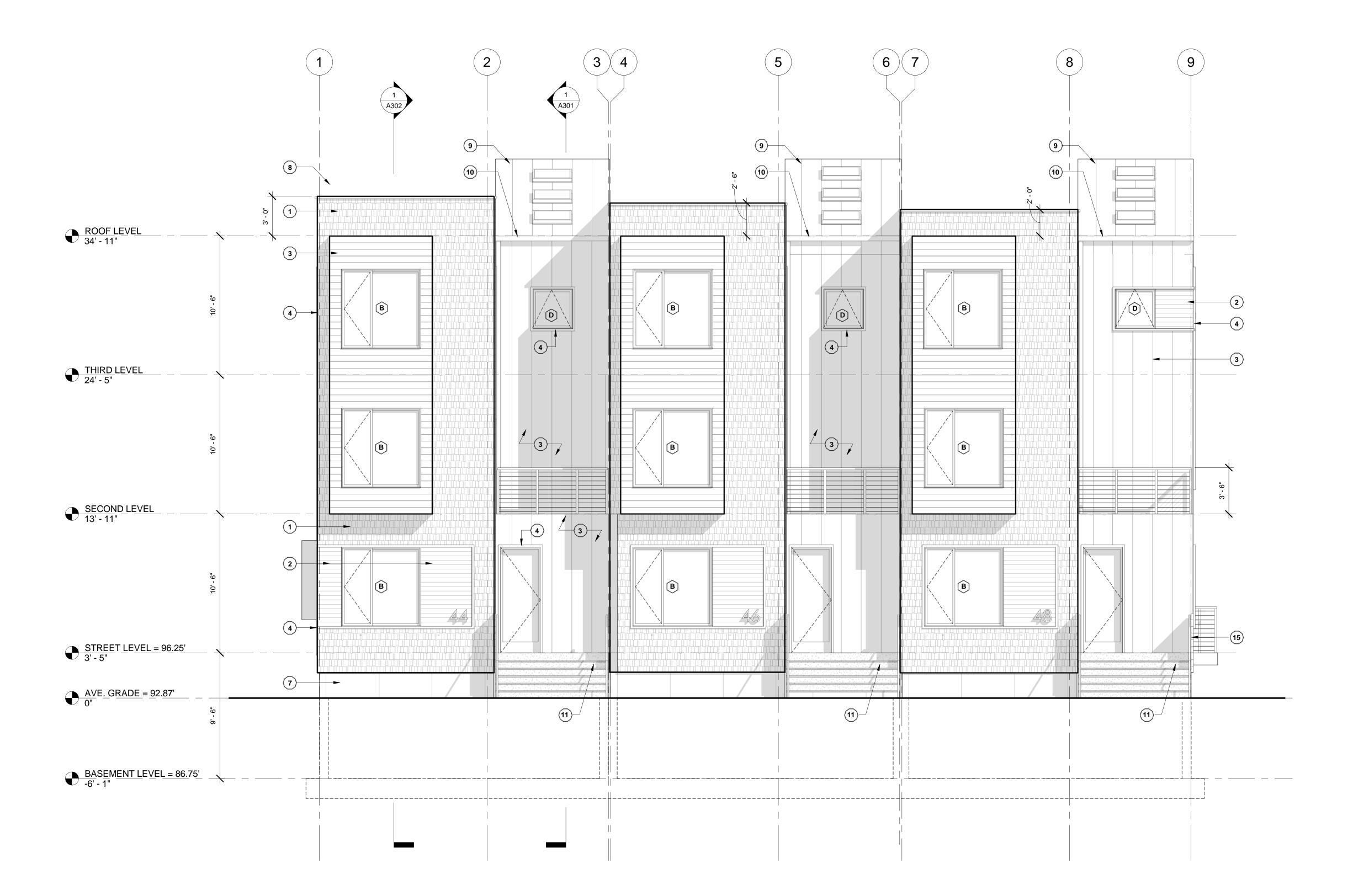
PROJECT: 1347

No.	Description	Da
	<u> </u>	

DATE: AUGUST 19, 2015

SCALE: 1/4" = 1'-0"

ROOF LEVEL PLAN



MATERIAL KEY NOTES:

- JAMES HARDIE STRAIGHT EDGE SHINGLE PANEL
 5" EXPOSURE
- COLOR 'ARCTIC WHITE'
- JAMES HARDIE LAP SIDING
 4" EXPOSURE
 SMOOTH TEXTURE
 COLOR 'AORTIC WHITE'
- JAMES HARDIE BATTEN + PANEL2 1/2" BATTENS 18" o.c.
- SMOOTH TEXTURE
 COLOR 'IRON GRAY'
 (METAL STANDING SEAM PANEL AS ALT.)
- 4. JAMES HARDIE BATTEN TRIM
 2 1/2" WIDE
- JAMES HARDIE BATTEN TRIM2 1/2" WIDE

COLOR - 'ARCTIC WHITE'

- COLOR 'IRON GRAY'
- 6. SEALED CEDAR SIDING4" EXPOSURE
- 7. EXPOSED CONCRETE FOUNDATION WALL
- 8. METAL WALL CAP
- 9. STANDING SEAM METAL ROOFING• 2" BATTENS• COLOR DARK GRAY
- 10. METAL GUTTER + DOWNSPOUTCOLOR DARK GRAY
- 11. JAMES HARDIE DECK FASCIA BOARD
 SMOOTH FINISH
 COLOR 'ARCTIC WHITE'
- 12. HORIZONTAL METAL RAILING
 42" TYPICAL
 PAINTED DARK GRAY
- SEALED WOOD CAP

 13. GARAGE DOOR
 9' WIDE x 7' TALL
- (4) FLAT PANELSFINISH COLOR BLACK14. SKYLIGHTS
- SEE ROOF PLAN15. CEDAR SCREEN + METAL RAILING
- SCREEN @ 36"
 HANDRAIL @ 34" 36"
- 16. GRANITE STAIRS
 CONCRETE BASE
- 17. METAL SPANDREL PANEL
 COLOR TO MATCH WINDOW CLADDING
 (PROVIDED BY WINDOW MANUFACTURE IF POSSIBLE)

RODE Architects Inc.
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
617.422.0094 | F
rodearchitects.com

Design Team

SURVEY Boston Survey, Inc.

Shipways Place, Unit 4C Charlestown, MA 02129 617.242.1313 | T Contact: George Collins

Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2

Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL

Roome + Guarracino Structural Engineers 48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T

WINDOW SCHEDULE KEY:

IOTES:

- ALL WINDOWS ARE "JELD-WEN" ALUMINUM CLAD WITH PRIMED WOOD INTERIOR. EXTERIOR CLADDING COLOR - BLACK

- ALL SIZES BELOW ARE UNIT SIZES, REFER TO MANUFACTURE FOR ROUGH OPENINGS

REFER TO PLANS FOR CENTERLINES OF R.O.'sREFER TO ELEVATIONS FOR OPERATION SIDE.

- **A.** 30" x 72" OPERABLE CASEMENT @ 24" A.F.F.
- B. 30" x 72" OPERABLE CASEMENT FACTORY MULLED TO 42" x 72" FIXED CASEMENT @ 24" A.F.F. TOTAL UNIT SIZE 72" x 72"
- **C.** 36" x 36" FIXED CASEMENT @ 42" A.F.F.
- **D.** 36" x 36" AWNING WINDOW @ 42" A.F.F.
- E. 48" x 48" FIXED CASEMENT @ 42" A.F.F.
- F. 24" x 72" FIXED CASEMENT @ 24" A.F.F.
- G. 60" x 96" FIXED CASEMENT @ 0" A.F.F.H. 18" x 96" FIXED CASEMENT @ 0" A.F.F.
- I. 60" x 96" FIXED CASEMENT FACTOR MULLED TO
- J. 18" x 96" FIXED CASEMENT FACTOR MULLED TO

60" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)

- 18" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- K. 36" x 96" FIXED CASEMENT FACTOR MULLED TO 36" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- **L.** 36" x 96" FIXED CASEMENT @ 0" A.F.F.



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT: 1347

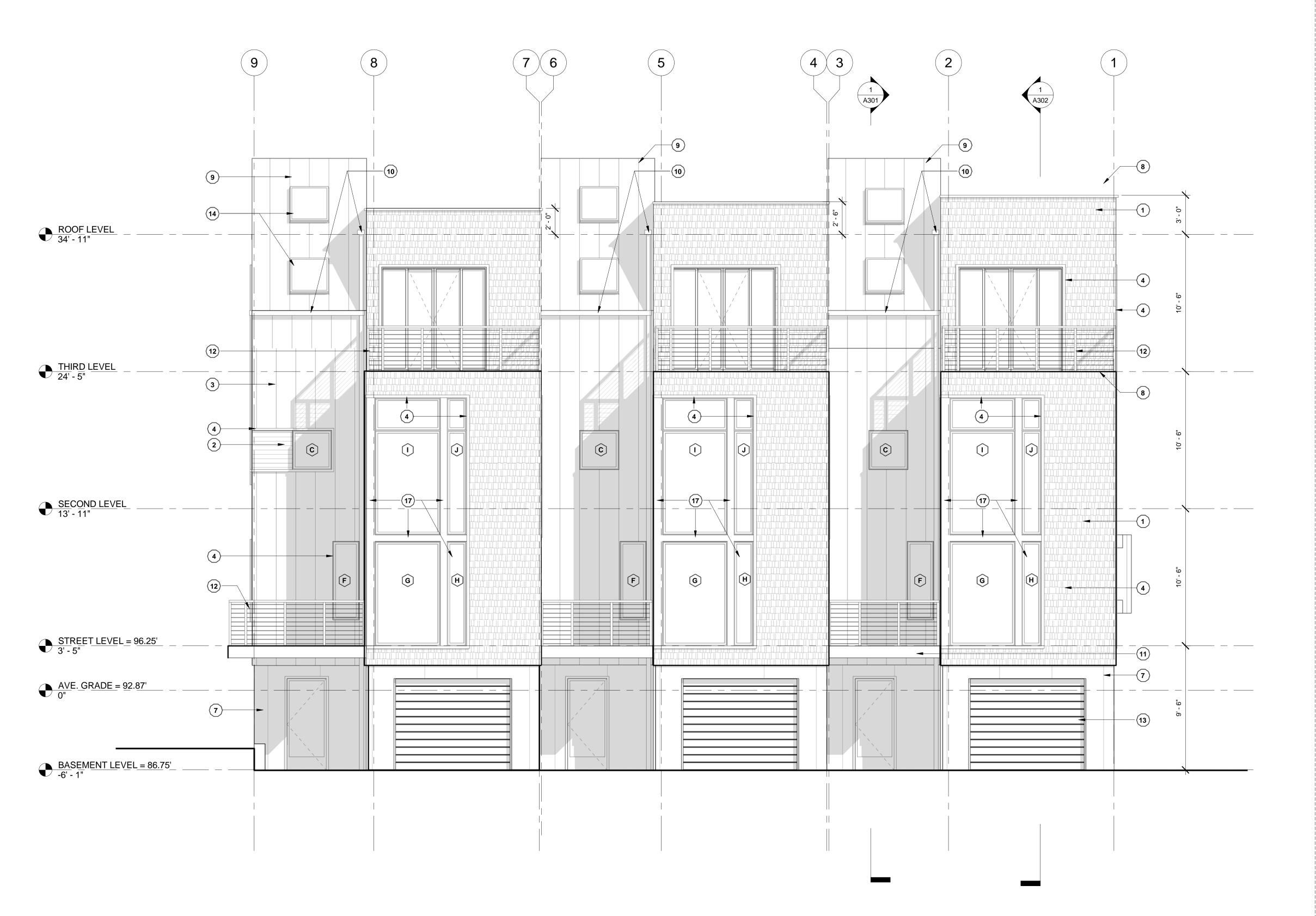
_	ATE ALIQUIOT 40, 0045	

Description

DATE: AUGUST 19, 2015

SCALE: As indicated

FORBES STREET ELEVATION



MATERIAL KEY NOTES:

- JAMES HARDIE STRAIGHT EDGE SHINGLE PANEL
 5" EXPOSURE
- COLOR 'ARCTIC WHITE'
- 2. JAMES HARDIE LAP SIDING
 4" EXPOSURE
 SMOOTH TEXTURE
 COLOR 'AORTIC WHITE'
- JAMES HARDIE BATTEN + PANEL2 1/2" BATTENS 18" o.c.
- SMOOTH TEXTURECOLOR 'IRON GRAY'(METAL STANDING SEAM PANEL AS ALT.)
- JAMES HARDIE BATTEN TRIM
 2 1/2" WIDE
 COLOR 'ARCTIC WHITE'
- JAMES HARDIE BATTEN TRIM2 1/2" WIDE
- COLOR 'IRON GRAY'
- 6. SEALED CEDAR SIDING4" EXPOSURE
- 7. EXPOSED CONCRETE FOUNDATION WALL
- 8. METAL WALL CAP
- 9. STANDING SEAM METAL ROOFING• 2" BATTENS• COLOR DARK GRAY
- 10. METAL GUTTER + DOWNSPOUTCOLOR DARK GRAY
- 11. JAMES HARDIE DECK FASCIA BOARD
 SMOOTH FINISH
 COLOR 'ARCTIC WHITE'
- 12. HORIZONTAL METAL RAILING42" TYPICALPAINTED DARK GRAY
- SEALED WOOD CAP13. GARAGE DOOR9' WIDE x 7' TALL
- (4) FLAT PANELSFINISH COLOR BLACK14. SKYLIGHTS
- SEE ROOF PLAN
 15. CEDAR SCREEN + METAL RAILING
 SCREEN @ 36"
 HANDRAIL @ 34" 36"
- 16. GRANITE STAIRSCONCRETE BASE
- 17. METAL SPANDREL PANEL
 COLOR TO MATCH WINDOW CLADDING
 (PROVIDED BY WINDOW MANUFACTURE IF POSSIBLE)

RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY Boston Survey, Inc. Shipways Place, Unit 4C Charlestown, MA 02129 617.242.1313 | T

CIVIL
Sherwood Consulting & Design, LLC

26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

Somerville, MA 02144

STRUCTURAL
Roome + Guarracino Structural Engineers
48 Grove Street

617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION
Rescom Fire Protection, Inc.
3 Mountain View Way, Burlington, MA
781.726.2505 | T

WINDOW SCHEDULE KEY:

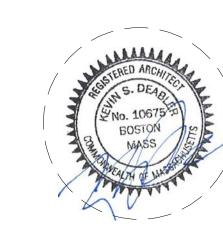
CLADDING COLOR - BLACK

NOTES:
- ALL WINDOWS ARE "JELD-WEN" ALUMINUM CLAD WITH PRIMED WOOD INTERIOR. EXTERIOR

- ALL SIZES BELOW ARE UNIT SIZES, REFER TO MANUFACTURE FOR ROUGH OPENINGS

REFER TO PLANS FOR CENTERLINES OF R.O.'sREFER TO ELEVATIONS FOR OPERATION SIDE.

- **A.** 30" x 72" OPERABLE CASEMENT @ 24" A.F.F.
- B. 30" x 72" OPERABLE CASEMENT FACTORY MULLED TO 42" x 72" FIXED CASEMENT @ 24" A.F.F. TOTAL UNIT SIZE 72" x 72"
- **C.** 36" x 36" FIXED CASEMENT @ 42" A.F.F.
- **D.** 36" x 36" AWNING WINDOW @ 42" A.F.F.
- E. 48" x 48" FIXED CASEMENT @ 42" A.F.F.
- F. 24" x 72" FIXED CASEMENT @ 24" A.F.F.G. 60" x 96" FIXED CASEMENT @ 0" A.F.F.
- H. 18" x 96" FIXED CASEMENT @ 0" A.F.F.
- I. 60" x 96" FIXED CASEMENT FACTOR MULLED TO 60" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- J. 18" x 96" FIXED CASEMENT FACTOR MULLED TO
- 18" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- K. 36" x 96" FIXED CASEMENT FACTOR MULLED TO 36" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- **L.** 36" x 96" FIXED CASEMENT @ 0" A.F.F.



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT: 1347

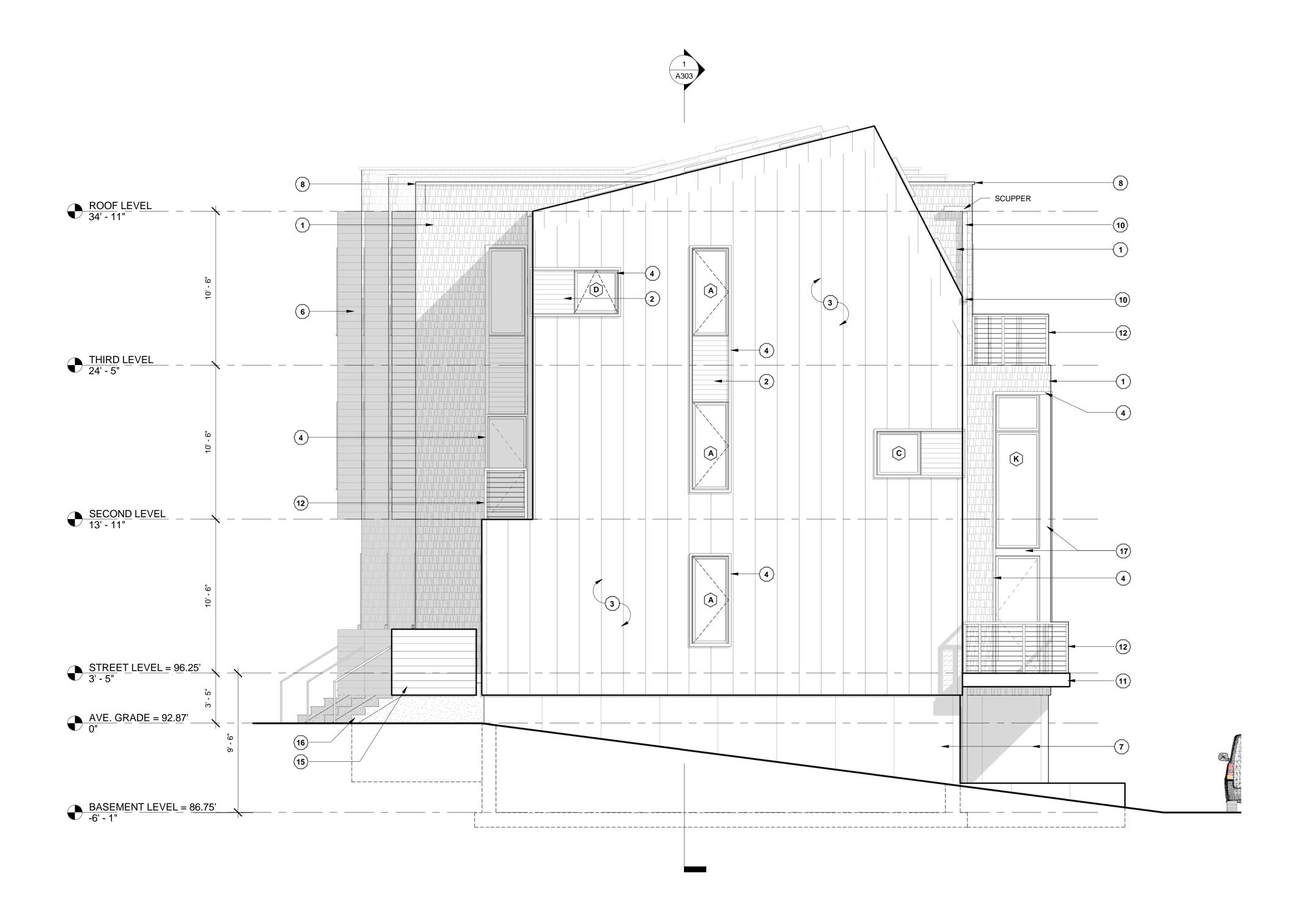
_	^ TC -	A L I C I	ICT 40	0045	

Description

DATE: AUGUST 19, 2015

SCALE: As indicated

REAR ELEVATION



MATERIAL KEY NOTES:

- JAMES HARDIE STRAIGHT EDGE SHINGLE PANEL
 5" EXPOSURE
 COLOR 'ARCTIC WHITE'
- JAMES HARDIE LAP SIDING4" EXPOSURESMOOTH TEXTURE
- COLOR 'AORTIC WHITE'
 JAMES HARDIE BATTEN + PANEL
 2 1/2" BATTENS 18" o.c.
- SMOOTH TEXTURECOLOR 'IRON GRAY'(METAL STANDING SEAM PANEL AS ALT.)
- JAMES HARDIE BATTEN TRIM2 1/2" WIDECOLOR 'ARCTIC WHITE'
- JAMES HARDIE BATTEN TRIM2 1/2" WIDECOLOR 'IRON GRAY'
- 6. SEALED CEDAR SIDING
 4" EXPOSURE
- 7. EXPOSED CONCRETE FOUNDATION WALL
- 7. EXPOSED CONCRETE8. METAL WALL CAP
- 9. STANDING SEAM METAL ROOFING• 2" BATTENS• COLOR DARK GRAY
- 10. METAL GUTTER + DOWNSPOUT
 COLOR DARK GRAY
- 11. JAMES HARDIE DECK FASCIA BOARD• SMOOTH FINISH• COLOR 'ARCTIC WHITE'
- 12. HORIZONTAL METAL RAILING
 42" TYPICAL
 PAINTED DARK GRAY
 SEALED WOOD CAP
- 13. GARAGE DOOR
 9' WIDE x 7' TALL
- (4) FLAT PANELSFINISH COLOR BLACK14. SKYLIGHTS
- SEE ROOF PLAN

 15. CEDAR SCREEN + METAL RAILIN
- 15. CEDAR SCREEN + METAL RAILING• SCREEN @ 36"• HANDRAIL @ 34" 36"
- 16. GRANITE STAIRSCONCRETE BASE
- 17. METAL SPANDREL PANEL
 COLOR TO MATCH WINDOW CLADDING
 (PROVIDED BY WINDOW MANUFACTURE IF POSSIBLE)

RODE Architects Inc.
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
617.422.0094 | F
rodearchitects.com

Design Team

SURVEY

Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL Sherwood Consulting & Design, LLC

26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL

Roome + Guarracino Structural Engineers 48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T

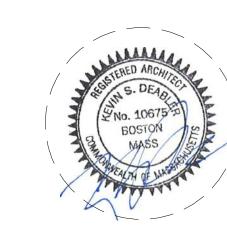
WINDOW SCHEDULE KEY:

NOTES:
- ALL WINDOWS ARE "JELD-WEN" ALUMINUM CLAD WITH PRIMED WOOD INTERIOR. EXTERIOR CLADDING COLOR - BLACK

- ALL SIZES BELOW ARE UNIT SIZES, REFER TO MANUFACTURE FOR ROUGH OPENINGS

REFER TO PLANS FOR CENTERLINES OF R.O.'sREFER TO ELEVATIONS FOR OPERATION SIDE.

- **A.** 30" x 72" OPERABLE CASEMENT @ 24" A.F.F.
- B. 30" x 72" OPERABLE CASEMENT FACTORY MULLED TO 42" x 72" FIXED CASEMENT @ 24" A.F.F. TOTAL UNIT SIZE 72" x 72"
- **C.** 36" x 36" FIXED CASEMENT @ 42" A.F.F.
- **D.** 36" x 36" AWNING WINDOW @ 42" A.F.F.
- E. 48" x 48" FIXED CASEMENT @ 42" A.F.F.
- F. 24" x 72" FIXED CASEMENT @ 24" A.F.F.G. 60" x 96" FIXED CASEMENT @ 0" A.F.F.
- H. 18" x 96" FIXED CASEMENT @ 0" A.F.F.
- I. 60" x 96" FIXED CASEMENT FACTOR MULLED TO 60" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- J. 18" x 96" FIXED CASEMENT FACTOR MULLED TO 18" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- 18" x 30" FIXED CASEMENT @ 8"-6" A.F.F. (V.I.F.)
- K. 36" x 96" FIXED CASEMENT FACTOR MULLED TO 36" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- L. 36" x 96" FIXED CASEMENT @ 0" A.F.F.



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT: 1347

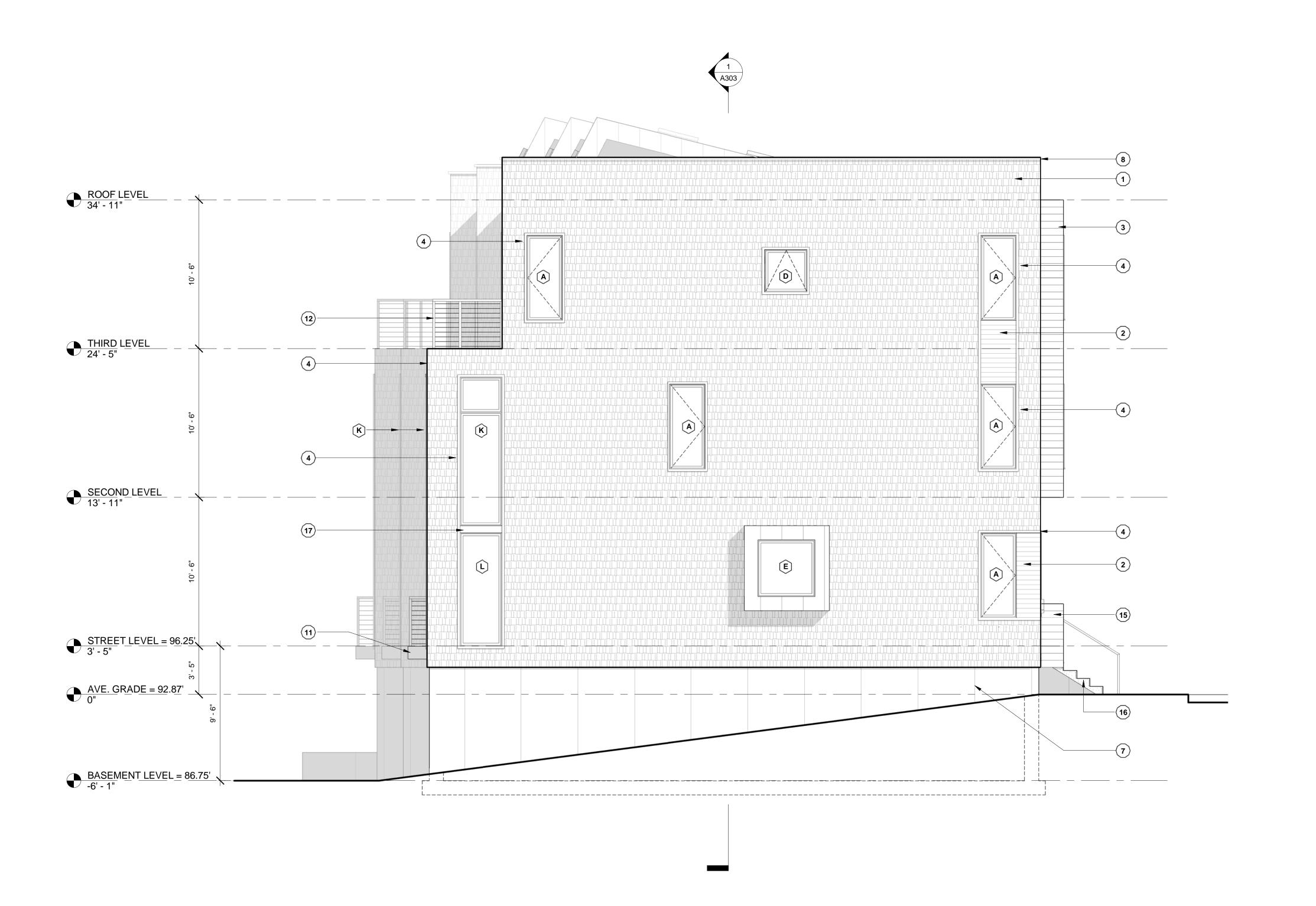
_	лтг.	ALICHET	10 2015	

Description

DATE: AUGUST 19, 2015

SCALE: As indicated

SIDE ELEVATION



MATERIAL KEY NOTES:

- JAMES HARDIE STRAIGHT EDGE SHINGLE PANEL
 5" EXPOSURE
 COLOR 'ARCTIC WHITE'
- JAMES HARDIE LAP SIDING4" EXPOSURE
- SMOOTH TEXTURECOLOR 'AORTIC WHITE'

3. JAMES HARDIE - BATTEN + PANEL

- 2 1/2" BATTENS 18" o.c.
 SMOOTH TEXTURE
 COLOR 'IRON GRAY'
 (METAL STANDING SEAM PANEL AS ALT.)
- 4. JAMES HARDIE BATTEN TRIM
 2 1/2" WIDE
 COLOR 'ARCTIC WHITE'
- 5. JAMES HARDIE BATTEN TRIM2 1/2" WIDECOLOR 'IRON GRAY'
- 6. SEALED CEDAR SIDING• 4" EXPOSURE
- 7. EXPOSED CONCRETE FOUNDATION WALL
- 8. METAL WALL CAP
- 9. STANDING SEAM METAL ROOFING• 2" BATTENS• COLOR DARK GRAY
- 10. METAL GUTTER + DOWNSPOUTCOLOR DARK GRAY
- 11. JAMES HARDIE DECK FASCIA BOARDSMOOTH FINISHCOLOR 'ARCTIC WHITE'
- 12. HORIZONTAL METAL RAILING
 42" TYPICAL
 PAINTED DARK GRAY
- SEALED WOOD CAP13. GARAGE DOOR9' WIDE x 7' TALL
- (4) FLAT PANELSFINISH COLOR BLACK14. SKYLIGHTS
- SEE ROOF PLAN15. CEDAR SCREEN + METAL RAILING
- 15. CEDAR SCREEN + METAL RAILING• SCREEN @ 36"• HANDRAIL @ 34" 36"
- 16. GRANITE STAIRSCONCRETE BASE
- 17. METAL SPANDREL PANEL
 COLOR TO MATCH WINDOW CLADDING
 (PROVIDED BY WINDOW MANUFACTURE IF POSSIBLE)

RODE Architects Inc.
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
617.422.0094 | F
rodearchitects.com

Design Team

SURVEY Boston Survey, Inc. Shipways Place, Unit 4C Charlestown, MA 02129

Charlestown, MA 02129 617.242.1313 | T Contact: George Collins

Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL

781.726.2505 | T

Roome + Guarracino Structural Engineers 48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc.

3 Mountain View Way, Burlington, MA

WINDOW SCHEDULE KEY:

NOTES:
- ALL WINDOWS ARE "JELD-WEN" ALUMINUM CLAD WITH PRIMED WOOD INTERIOR. EXTERIOR

CLADDING COLOR - BLACK

- ALL SIZES BELOW ARE UNIT SIZES, REFER TO MANUFACTURE FOR ROUGH OPENINGS
- REFER TO PLANS FOR CENTERLINES OF R.O.'sREFER TO ELEVATIONS FOR OPERATION SIDE.
- **A.** 30" x 72" OPERABLE CASEMENT @ 24" A.F.F.
- **B.** 30" x 72" OPERABLE CASEMENT FACTORY MULLED TO 42" x 72" FIXED CASEMENT @ 24" A.F.F. TOTAL UNIT SIZE 72" x 72"
- **C.** 36" x 36" FIXED CASEMENT @ 42" A.F.F.
- **D.** 36" x 36" AWNING WINDOW @ 42" A.F.F.
- E. 48" x 48" FIXED CASEMENT @ 42" A.F.F.
- F. 24" x 72" FIXED CASEMENT @ 24" A.F.F.G. 60" x 96" FIXED CASEMENT @ 0" A.F.F.
- H. 18" x 96" FIXED CASEMENT @ 0" A.F.F.
- I. 60" x 96" FIXED CASEMENT FACTOR MULLED TO 60" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- J. 18" x 96" FIXED CASEMENT FACTOR MULLED TO 18" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- 18" x 30" FIXED CASEMENT @ 8-6" A.F.F. (V.I.F.)

 K. 36" x 96" FIXED CASEMENT FACTOR MULLED TO
- 36" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- L. 36" x 96" FIXED CASEMENT @ 0" A.F.F.

SIERED ARCHITECTURE No. 10675 D BOSTON MASS MASS STREAM OF MASS

44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

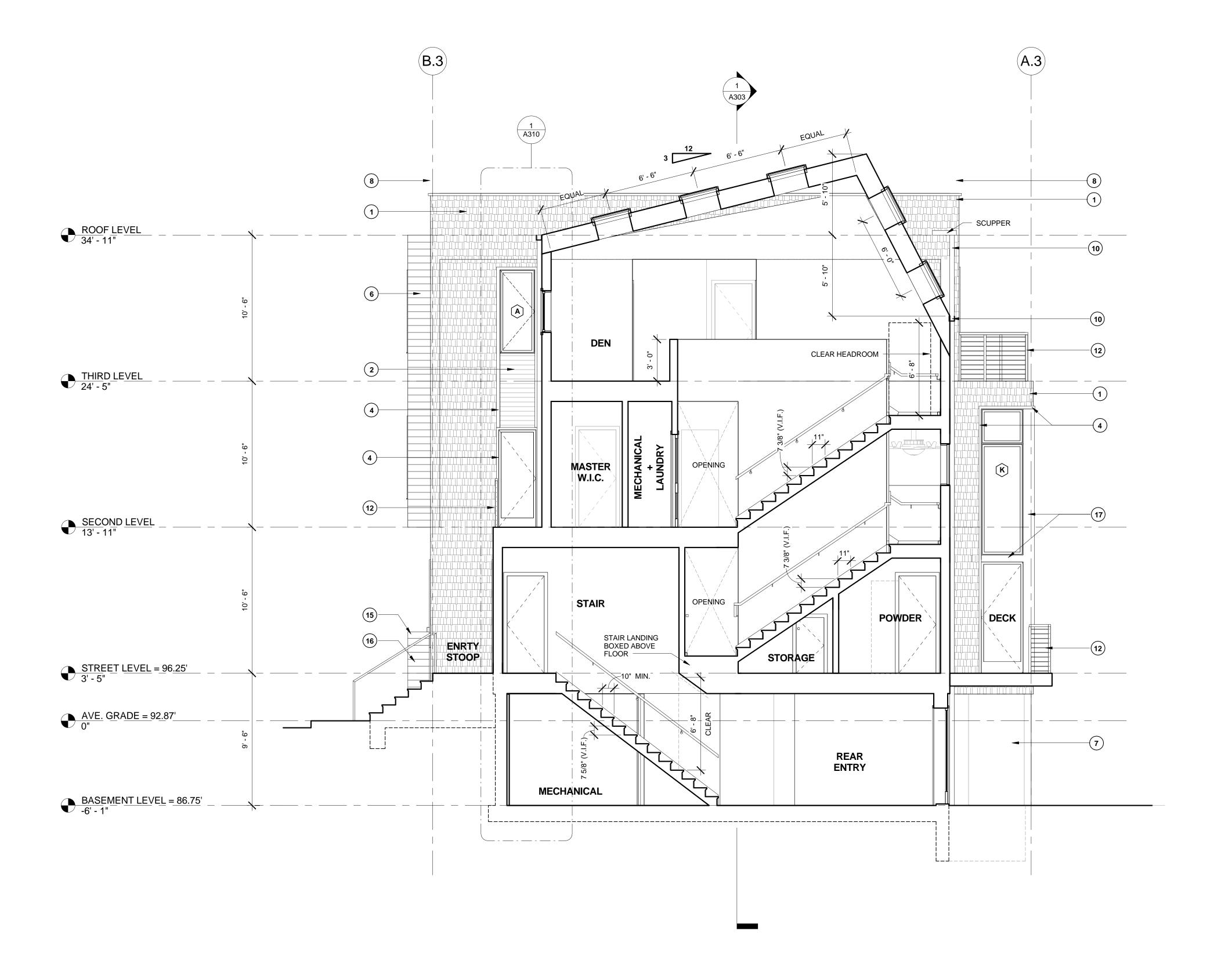
PROJECT: 1347

No.	Description	Date
· ·		

DATE: AUGUST 19, 2015

SCALE: As indicated

SIDE ELEVATION



MATERIAL KEY NOTES:

- 1. JAMES HARDIE STRAIGHT EDGE SHINGLE PANEL 5" EXPOSURE
- COLOR 'ARCTIC WHITE'
- 2. JAMES HARDIE LAP SIDING 4" EXPOSURE
- SMOOTH TEXTURE COLOR - 'AORTIC WHITE'
- 3. JAMES HARDIE BATTEN + PANEL 2 1/2" BATTENS 18" o.c.
- SMOOTH TEXTURE COLOR - 'IRON GRAY' (METAL STANDING SEAM PANEL AS ALT.)
- 4. JAMES HARDIE BATTEN TRIM 2 1/2" WIDE COLOR - 'ARCTIC WHITE'
- 5. JAMES HARDIE BATTEN TRIM 2 1/2" WIDE COLOR - 'IRON GRAY'
- 6. SEALED CEDAR SIDING 4" EXPOSURE
- 7. EXPOSED CONCRETE FOUNDATION WALL

8. METAL WALL CAP

- 9. STANDING SEAM METAL ROOFING 2" BATTENS COLOR - DARK GRAY
- 10. METAL GUTTER + DOWNSPOUT COLOR - DARK GRAY
- 11. JAMES HARDIE DECK FASCIA BOARD SMOOTH FINISH COLOR - 'ARCTIC WHITE'
- 12. HORIZONTAL METAL RAILING 42" TYPICAL PAINTED DARK GRAY SEALED WOOD CAP
- 13. GARAGE DOOR 9' WIDE x 7' TALL • (4) FLAT PANELS

FÍNISH COLOR - BLACK

- 14. SKYLIGHTS SEE ROOF PLAN
- 15. CEDAR SCREEN + METAL RAILING SCREEN @ 36" HANDRAIL @ 34" - 36"
- 16. GRANITE STAIRSCONCRETE BASE
- 17. METAL SPANDREL PANEL COLOR TO MATCH WINDOW CLADDING (PROVIDED BY WINDOW MANUFACTURE IF POSSIBLE)

RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY

Boston Survey, Inc. Shipways Place, Unit 4C Charlestown, MA 02129 617.242.1313 | T Contact: George Collins

26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

Sherwood Consulting & Design, LLC

STRUCTURAL Roome + Guarracino Structural Engineers

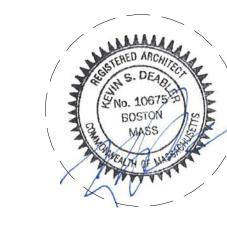
48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T

WINDOW SCHEDULE KEY:

- ALL WINDOWS ARE "JELD-WEN" ALUMINUM CLAD WITH PRIMED WOOD INTERIOR. EXTERIOR CLADDING COLOR - BLACK
- ALL SIZES BELOW ARE UNIT SIZES, REFER TO MANUFACTURE FOR ROUGH OPENINGS
- REFER TO PLANS FOR CENTERLINES OF R.O.'s
- REFER TO ELEVATIONS FOR OPERATION SIDE.
- A. 30" x 72" OPERABLE CASEMENT @ 24" A.F.F.
- B. 30" x 72" OPERABLE CASEMENT FACTORY MULLED TO 42" x 72" FIXED CASEMENT @ 24" A.F.F. TOTAL UNIT SIZE 72" x 72"
- **C.** 36" x 36" FIXED CASEMENT @ 42" A.F.F.
- **D.** 36" x 36" AWNING WINDOW @ 42" A.F.F.
- E. 48" x 48" FIXED CASEMENT @ 42" A.F.F.
- **F.** 24" x 72" FIXED CASEMENT @ 24" A.F.F.
- **G.** 60" x 96" FIXED CASEMENT @ 0" A.F.F. H. 18" x 96" FIXED CASEMENT @ 0" A.F.F.
- I. 60" x 96" FIXED CASEMENT FACTOR MULLED TO 60" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- J. 18" x 96" FIXED CASEMENT FACTOR MULLED TO
- 18" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- K. 36" x 96" FIXED CASEMENT FACTOR MULLED TO 36" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- L. 36" x 96" FIXED CASEMENT @ 0" A.F.F.



44-46-48 FORBES ST

Boston, MA

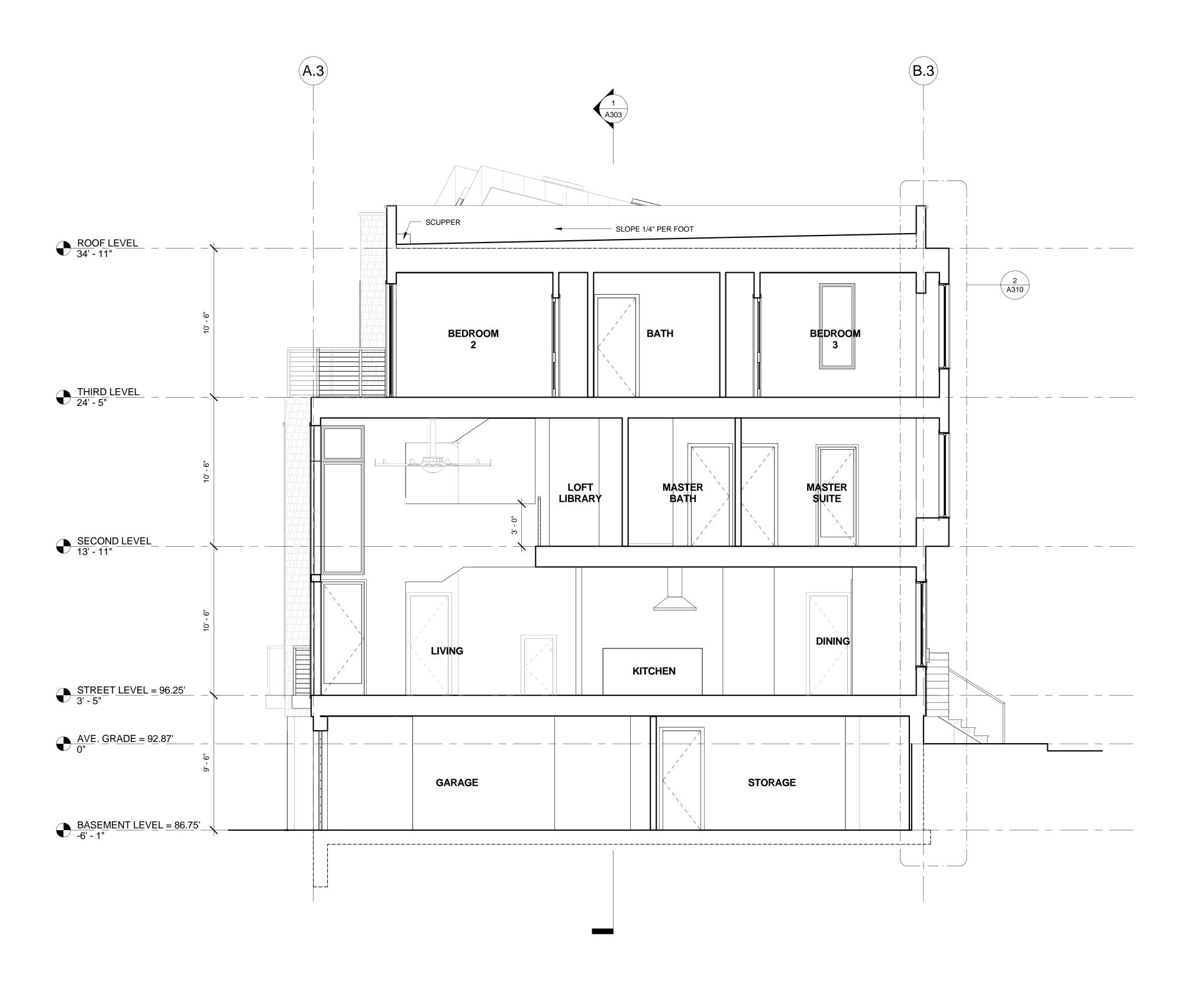
owner / developer Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

PROJECT: 1347

AUGUST 19, 2015

SCALE: As indicated

CROSS SECTION @ STAIRS



MATERIAL KEY NOTES:

- 1. JAMES HARDIE STRAIGHT EDGE SHINGLE PANEL 5" EXPOSURE
- COLOR 'ARCTIC WHITE'
- 2. JAMES HARDIE LAP SIDING 4" EXPOSURE SMOOTH TEXTURE
- COLOR 'AORTIC WHITE' 3. JAMES HARDIE - BATTEN + PANEL
- 2 1/2" BATTENS 18" o.c. SMOOTH TEXTURE COLOR - 'IRON GRAY'
- (METAL STANDING SEAM PANEL AS ALT.) 4. JAMES HARDIE - BATTEN TRIM
- COLOR 'ARCTIC WHITE' 5. JAMES HARDIE - BATTEN TRIM 2 1/2" WIDE
- 6. SEALED CEDAR SIDING 4" EXPOSURE

COLOR - 'IRON GRAY'

- 7. EXPOSED CONCRETE FOUNDATION WALL
- 8. METAL WALL CAP

2 1/2" WIDE

- 9. STANDING SEAM METAL ROOFING 2" BATTENS COLOR - DARK GRAY
- 10. METAL GUTTER + DOWNSPOUT COLOR - DARK GRAY
- 11. JAMES HARDIE DECK FASCIA BOARD SMOOTH FINISH COLOR - 'ARCTIC WHITE'
- 12. HORIZONTAL METAL RAILING 42" TYPICAL PAINTED DARK GRAY SEALED WOOD CAP
- 13. GARAGE DOOR 9' WIDE x 7' TALL(4) FLAT PANELS
- FINISH COLOR BLACK 14. SKYLIGHTS

SEE ROOF PLAN

- 15. CEDAR SCREEN + METAL RAILING SCREEN @ 36" • HANDRAIL @ 34" - 36"
- 16. GRANITE STAIRS CONCRETE BASE
- 17. METAL SPANDREL PANEL COLOR TO MATCH WINDOW CLADDING (PROVIDED BY WINDOW MANUFACTURE IF POSSIBLE)

RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY

Boston Survey, Inc. Shipways Place, Unit 4C Charlestown, MA 02129 617.242.1313 | T Contact: George Collins

Sherwood Consulting & Design, LLC

26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

STRUCTURAL

Roome + Guarracino Structural Engineers 48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

FIRE PROTECTION

Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T

WINDOW SCHEDULE KEY:

- ALL WINDOWS ARE "JELD-WEN" ALUMINUM CLAD WITH PRIMED WOOD INTERIOR. EXTERIOR CLADDING COLOR - BLACK

- ALL SIZES BELOW ARE UNIT SIZES, REFER TO MANUFACTURE FOR ROUGH OPENINGS

- REFER TO PLANS FOR CENTERLINES OF R.O.'s

- REFER TO ELEVATIONS FOR OPERATION SIDE.

- **A.** 30" x 72" OPERABLE CASEMENT @ 24" A.F.F.
- B. 30" x 72" OPERABLE CASEMENT FACTORY MULLED TO 42" x 72" FIXED CASEMENT @ 24" A.F.F. TOTAL UNIT SIZE 72" x 72"
- **C.** 36" x 36" FIXED CASEMENT @ 42" A.F.F.
- **D.** 36" x 36" AWNING WINDOW @ 42" A.F.F.
- **E.** 48" x 48" FIXED CASEMENT @ 42" A.F.F.
- F. 24" x 72" FIXED CASEMENT @ 24" A.F.F.
- **G.** 60" x 96" FIXED CASEMENT @ 0" A.F.F.
- H. 18" x 96" FIXED CASEMENT @ 0" A.F.F.
- I. 60" x 96" FIXED CASEMENT FACTOR MULLED TO 60" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.) J. 18" x 96" FIXED CASEMENT FACTOR MULLED TO
- 18" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)
- K. 36" x 96" FIXED CASEMENT FACTOR MULLED TO

36" x 30" FIXED CASEMENT @ 8'-6" A.F.F. (V.I.F.)

L. 36" x 96" FIXED CASEMENT @ 0" A.F.F.



44-46-48 FORBES ST

Boston, MA

owner / developer Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

PROJECT: 1347

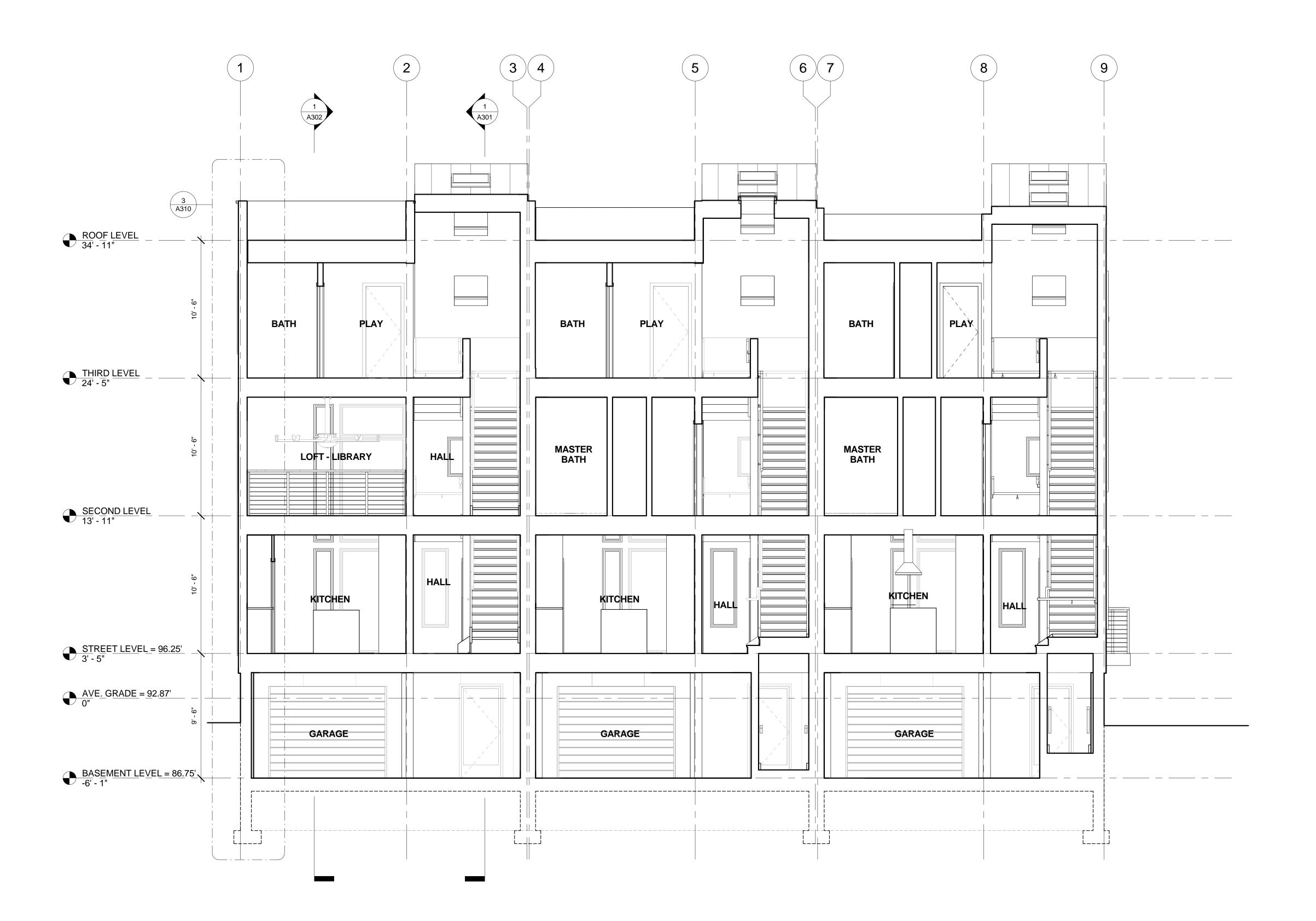
ח	ΔΤΕ·	Δ	וופוופ	T 10	2015	

Description

AUGUST 19, 2015

SCALE: As indicated

CROSS SECTION @ LIVING



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

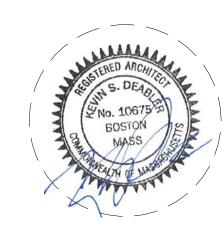
STRUCTURAL

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL Sherwood Consulting & Design, LLC 26 Smith Place, Suite 2 Cambridge, MA 02138 617.945.0940 | T Contact: Joseph Oliveira

Roome + Guarracino Structural Engineers
48 Grove Street
Somerville, MA 02144
617.628.1700 | T
Contact: Carmine Guarracino, P.E.

FIRE PROTECTION Rescom Fire Protection, Inc. 3 Mountain View Way, Burlington, MA 781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT: 1347

No.	Description	

DATE: AUGUST 19, 2015

SCALE: 1/4" = 1'-0"

LONGITUDINAL SECTION @ KITCHEN



REAR PERSPECTIVE VIEW



PERSPECTIVE VIEW FACING NORTH ON FORBES STREET



FRONT PERSPECTIVE VIEW



PERSPECTIVE VIEW FACING SOUTH ON FORBES STREET

RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL
Sherwood Consulting & Design, LLC
26 Smith Place, Suite 2
Cambridge, MA 02138
617.945.0940 | T
Contact: Joseph Oliveira

STRUCTURAL
Roome + Guarracino Structural Engineers
48 Grove Street
Somerville, MA 02144
617.628.1700 | T
Contact: Carmine Guarracino, P.E.

FIRE PROTECTION
Rescom Fire Protection, Inc.
3 Mountain View Way, Burlington, MA
781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

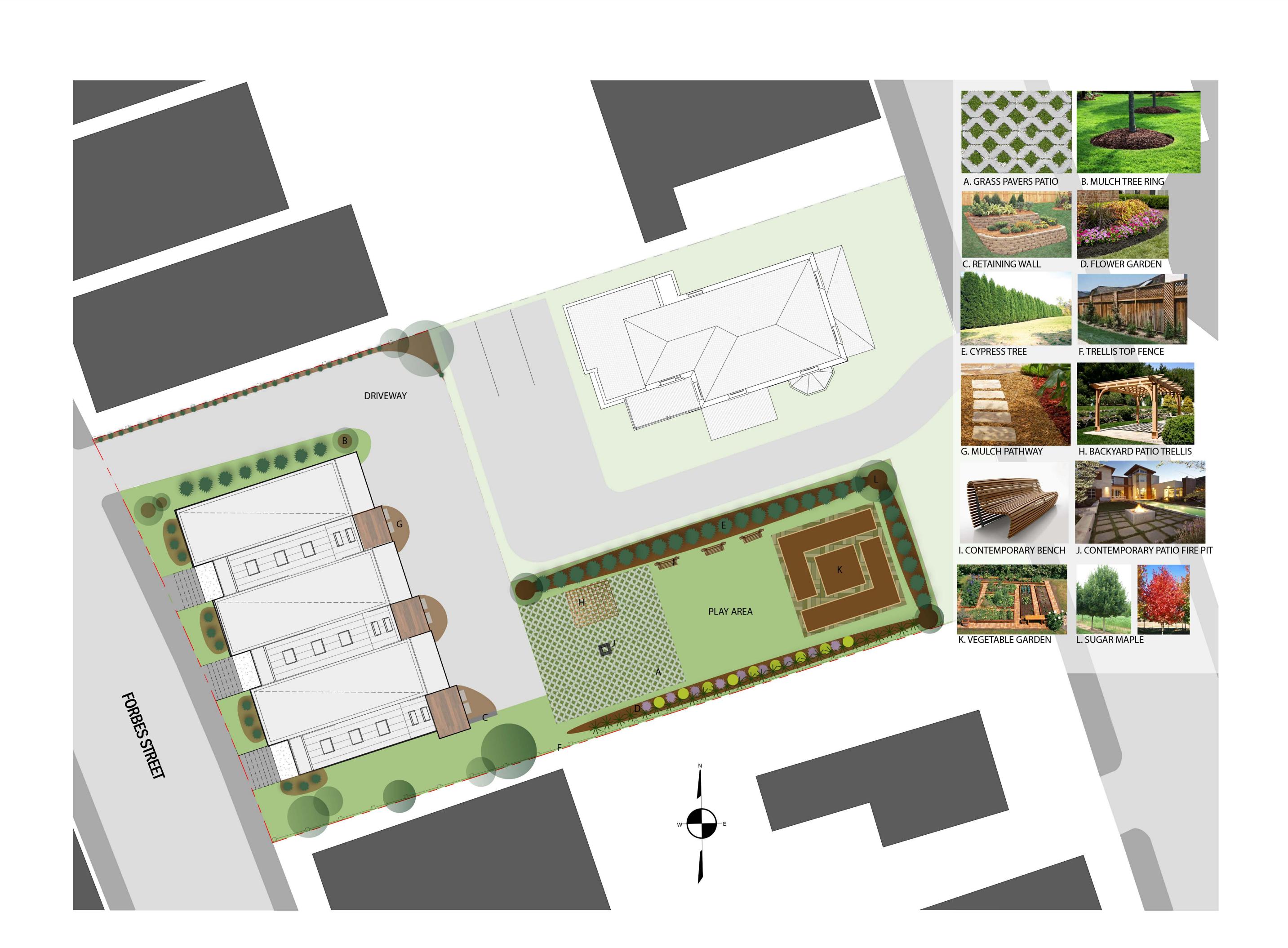
1 NOJECT. 10-

NO.	Description	Date

DATE: AUGUST 19, 2015

SCALE:

RENDERINGS



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com

Design Team

SURVEY
Boston Survey, Inc.
Shipways Place, Unit 4C
Charlestown, MA 02129
617.242.1313 | T
Contact: George Collins

CIVIL
Sherwood Consulting & Design, LLC
26 Smith Place, Suite 2
Cambridge, MA 02138
617.945.0940 | T
Contact: Joseph Oliveira

Roome + Guarracino Structural Engineers 48 Grove Street Somerville, MA 02144 617.628.1700 | T Contact: Carmine Guarracino, P.E.

STRUCTURAL

FIRE PROTECTION
Rescom Fire Protection, Inc.
3 Mountain View Way, Burlington, MA
781.726.2505 | T



44-46-48 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT: 1347

No.	Description	Date

DATE: AUGUST 19, 2015

SCALE:

SITE PLAN

GENERAL

- Structural work shall conform to the requirements of "the Commonwealth of Massachusetts State Building Code", 8th Edition
- 2. Examine architectural, mechanical, plumbing and electrical drawings for verification of location and dimensions of chases, inserts, openings, sleeves, washes, drips, reveals, depressions and other project requirements not shown on structural drawings.
- 3. Verify and coordinate dimensions related to this project
- 4. Openings in slabs and walls less than 12" maximum dimension are generally not shown on structural drawings shall not be revised without prior written approval of the architect.
- 5. Typical details and notes shown on structural drawings shall be applicable to all parts of the structural work except where specifically required otherwise by contract documents
- 6. Details not specifically shown shall be similar to those shown for the most nearly similar condition as determined by the architect.
- 7. The contractor shall submit complete shop drawings for all parts of the work, including description of demolition and construction methods and sequencing where applicable. No performance of the work including, but not limited to, demolition and construction methods and sequencing where applicable to, demolition of existing structure or fabrication or erection of new structural elements, shall commence without review of the shop drawings by the architect.

FOUNDATIONS

- . Foundations for this project consist of foundation walls on strip footings, spread footings and slab on grade. The Owner and Contractor shall verify the suitability of soil conditions for an assumed allowable bearing pressure of 2 tsf. The services of a geotechnical engineer shall be engaged to verify soil bearing
- 2. No responsibility is assumed by the architect for the validity of the subsurface conditions described on the drawings, specifications, test borings or test pits.
- 3. Foundation units shall be centered under supported structural members, unless noted otherwise on the drawings.
- 4. Exterior construction shall be carried down below finished exterior grade to a minimum depth of 4'-0", unless noted otherwise.
- 5. Provide temporary or permanent supports, whether shoring, sheeting or bracing so that no horizontal movement or vertical settlement occurs to existing structures, streets or utilities adjacent to the project site.
- 6. Carry out continuous control of surface and subsurface water during construction such that foundation work is done in dry and on undisturbed subgrade material, as applicable.
- 7. Bottom 3 inches of exactions for footings shall be finished by hand shovel.
- 8. Backfill under any portion of the structure shall be compacted in 6" lifts.
- 9. No foundation concrete shall be placed in water or on frozen subgrade material. 10. Protect in-place foundations and slabs from frost penetration until the project is
- 11. Do not backfill behind foundation walls until permanent lateral structural support system is in place and of full strength.
- 12. Sheeting, shoring and bracing for the lateral support of excavation shall remain in place until all permanent structural systems below ground level are complete.

CONCRETE

- Concrete work shall conform to "Building Code Requirements for Reinforced Concrete" (ACI 318-05), and "Specifications for Structural Concrete for Buildings" (ACI 301-05).
- 2. Concrete shall be controlled concrete, proportioned, mixed and placed in the presence of a representative of an approved testing agency.
- 3. Unless noted otherwise, concrete shall have a minimum 28 day compressive strength of 4,000 PSI and be normal weight concrete. 4. Concrete to be exposed to the weather in the finished project shall be air
- entrained.
- 5. Provide vapor barrier under interior slabs cast on grade.
- 6. Construction joints shown on drawings are mandatory. Omissions, additions or changes shall not be made except with the submittal of a written request together with drawings of the proposed joint locations for approval of the architect
- 7. Where construction joints are not shown or when alternate locations are proposed, new joints locations and concrete placing sequences shall be submitted to the architect for approval prior to preparation of the reinforcement shop drawings.
- 8. Minimum of 72 hours shall elapse between adjacent concrete placements.
- 9. Concrete shall be placed without horizontal construction joints except where shown or noted. Vertical construction joints and stops in concrete work shall be made at midspan or at points of minimum shear.
- 10. Concrete slabs shall be placed so that the slab thickness is at no point less than that indicated on the drawings.
- 11. Structural steel below grade shall be encased in concrete with a minimum cover

REINFORCEMENT

- 1. Reinforcement work of detailing, fabrication and erection shall conform to "Building Code Requirements for Reinforced Concrete" (ACI 318-05), "ACI Detailing Manual – 1994" (SP-66), "CRSI Manual of Standard Practice" (MSP 1-97), and "Structural Welding Code – Reinforcing Steel" (AWS D1.4-92).
- 2. Steel reinforcement, unless noted otherwise, shall conform to the following:

ASTM A615 Grade 60 (FY=60 KSI) (A) Bars, ties and stirrups (B) Welded wire fabric (WWF) ASTM A185

- 3. Provide and schedule on shop drawings the necessary accessories to hold reinforcement securely in position. Minimum requirements shall be: high chairs, 4'-0" O.C. with continuous #5 support bar; slab bolsters, continuous and 3'-6" O.C.; beam bolsters, 5'-0" O.C.
- 4. Minimum concrete protective covering for reinforcement, unless noted otherwise, shall be as follows:
- (A) Unformed surfaces cast against and permanently in contact with earth: 3.0"
- (B) Formed surfaces in contact with earth or exposed to weather:

#6 through #18 bars 2.0" #5 bars, 5/8" wire and smaller 1.5"

(C) Surfaces not in contact with earth or exposed to weather - walls, slabs, joists:

#14 and #18 bars 1.5" 1.0" #11 bars and smaller

Beams, girders and columns – principal reinforcement, ties, stirrups or spirals: 1.5"

- 5. Where continuous reinforcement is called for, it shall be extended continuously around corners and lapped at necessary splices or hooked at discontinuous ends. Laps shall be Class B tension lap splices, unless noted otherwise.
- 6. Where reinforcement is not shown on drawings, provide reinforcement in accordance with applicable details as determined by the architect. In no case shall reinforcement be less than the minimum reinforcement permitted by the applicable codes.
- 7. Where reinforcement is required in section, reinforcement is considered typical wherever the section applies.
- 8. Reinforcement shall be continuous through construction joints.
- 9. Dowels shall match bar size and number, unless noted otherwise.
- 10. Welded wire fabric shall lap 8" or 1-1/2" spaces, whichever is larger and shall be wired together.

STRUCTURAL TIMBER CONSTRUCTION

- 1. Timber construction shall conform to Part II "Design" as published in the "Timber Construction Manual" (AITC 4th Edition) and to "National Design" Specification for Wood Construction" (NF.PA, 2004 Edition).
- 2. New timber for structural use shall have a moisture content as specified in the "National Design Specification for Wood Construction (NF.PA, 2004 Edition).
- 3. Timber construction shall conform to Article 23, of the Commonwealth of Massachusetts State Building Code.
- 4. Material properties for timber shall conform to the following:
 - (A) For members with nominal 2" thickness. S-P-F #1/#2 or better (15% max Allowable bending stress:

Fb = 875 PSI (single member use) Fb = 1000 PSI(multiple member use) Allowable shear stress Fv = 135 PSI

Compression parallel to grain = 1100 PSI Compression perpendicular to grain = 425 PSI Modulus of elasticity = 1,400,000 PSI

(B) For members with nominal 4" thickness and greater southern pine #1 or better (19% max MC).

Allowable bending stress: Fb = 1300 PSI

Allowable shear stress Fv = 85 PSICompression parallel to grain = 925 PSI

Compression perpendicular to grain = 625 PSIModulus of elasticity – 1, 600,000 PSI

(C) For pressure-treated members with nominal 2" thickness, southern pine #1 or better (19% max MC).

Allowable bending stress Fb = 1300 PSIAllowable shear stress Fv = 90 PSICompression parallel to grain = 1550 PSI Compression perpendicular to grain = 565 PSI

Modulus of elasticity = 1,500,000 PSI (D) For pressure-treated members with nominal 4" thickness and greater, southern pine #2 pressure-treated (19% max MC).

Allowable bending stress Fb = 1250 PSIAllowable shear stress Fv = 95 PSICompression parallel to grain – 725 PSI Compression perpendicular to grain = 440 PSI Modulus of elasticity = 1,400,000 PSI

- 5. "PT" indicates pressure-treated lumber (to be used when in contact with concrete, masonry or weather).
- 6. '11-7/8" BCI 90's' etc. indicates engineered wood I-Joist with laminated veneer lumber flanges and OSB webs by the Boise Cascade Co. or equal
- 7. '3-1/2" x 14" LVL' etc. indicates laminated veneer lumber-2.0 E beam or post by the Boise Cascade Co. or equal.
- 8. Joist support by nailing is forbidden unless used with an approved hanger. Unless noted otherwise on plans, all flush framed joists and beams shall be framed with Simpson hangers as follows (or approved equals):

Type 'U26' (A) 2x6; 2x8Type 'U26 - 2' (B) 2-2x6; 2-2x8 (C) 3-2x6; 3-2x8 Type 'U26-3' (D) 2x10; 2x12Type 'U210' Type 'U210-2' (E) 2-2x10; 2-2x12 (F) 3-2x10; 3-2x12 Type 'U210-3' Type 'ITT2.06/11.88' (G) 11-7/8" BCI 5000's (H) 11-7/8" BCI 6000's Type 'ITT3511.88' (I) 11-7/8" BCI 6500's Type 'ITT311.88' (J) 11-7/8" BCI 60's Type 'ITT3511.88' (K) 11-7/8" BCI 90's Type 'ITT411.88' (L) 3-1/2" x 9-1/2" L.V.L. Type 'HGLTV3.59' (M) 5-1/4" x 9-1/2" L.V.L. Type 'HGLTV5.59' (N) 3-1/2" x 11-7/8" L.V.L. Type 'HGLTV3.511' (O) 5-1/4" x 11-7/8" L.V.L. Type 'HGLTV5.511' (P) 3-1/2" x 14" L.V.L. Type 'HGLTV3.514' Type 'HGLTV5.514' (Q) 5-1/4" x 14" L.V.L

(It is the contractor's responsibility to determine correct hangers for all sloped and/or skewed conditions.)

- 9. Minimum bearing for all joists and rafters shall be 4".
- 10. Use double joists under all partitions.
- 11. Partition and outside stud walls shall be bridges once in their story height or at least every 4'-6".
- 12. Anchor bolts and bolts for structural timber shall be ASTM A 307. Standard cut washers shall be provided between wood and bolt head, and between wood and bolt nut unless steel plates or plate washers are used.
- 13. Exterior walls shall be framed with 2x6's at 16" C/C with 7/16" APA rated SHEATHING, EXP. 1, span rating 24/16. Sheathing shall be installed with the long dimension perpendicular to the framing, and shall be to be nailed to studs with 8D ring shank nails at 4" on center at panel edges and at 12" on center at intermediate supports.
- 14. Interior shear walls indicated as SW-1 or SW-2 on plans shall be framed with 2x4's or 2x6's at 16" C/C with $32/16 - \frac{1}{2}$ " exterior plywood sheathing. Plywood to be nailed to studs with 10D galvanized nails at 4" on center at panel edges and at 12" on center at intermediate supports.
- 15. Roof construction shall be as shown on the plans with 19/32" APA rated SHEATHING, EXP. 1, span rating 32/16. Roof sheathing shall be installed perpendicular to the framing and shall be nailed with 8D ring shank nails spaced at 6" along panel edges and at 12" along intermediate framing members.
- 16. Floor construction shall be as shown on the plans with 23/32" APA rated STURD-I-FLOOR, EXP.1, span rating 32/16. Floor sheathing shall be installed perpendicular to the framing, and shall be glued and nailed to the joists and beams with 8D ring shank nails spaced at 6" along panel edges and at 12" along intermediate framing members.

STRUCTURAL TIMBER CONSTRUCTION (Continued)

- 17. Interior door and window headers shall be a minimum of 2-2x8's unless noted otherwise on the plans.
- 18. Exterior door and window headers shall be a minimum of 3-2x10s unless otherwise noted on the plans.
- 19. No joist shall be noted or drilled with holes without the specific approval of the architect
- 20. No joist shall be repaired or reinforced in any way without the specific approval of the architect.
- 21. Beams built up of timbers shall be firmly nailed or bolted together.
- 22. Plywood shall be laid with face grain parallel to span; stagger all joints.
- 23. Sills shall be 2-2x6 and shall be anchored with 5/8" diameter anchor bolts not more than 32" o.c. and at 8 " from each corner.
- 24. Temporary erection bracing shall be provided to hold structural timber securely in position as described on the drawings. It shall not be removed until permanent bracing has been installed.
- 25. Timber shall be generally knot-free, with only small tight knots permitted and generally straight-grained.
- 26. Structural timber shall be identified by the grade mark of or certificate of inspection issued by a grading or inspection bureau or agency recognized as being competent.
- 27. Structural timber shall be visually stress-graded lumber in accordance with the provisions of ASTM designation D245-74, "Methods for Establishing Structural Grades and Related Allowable Properties for Visually Graded Lumber".
- 28. Timber shall be so handled and covered as to prevent marring and moisture absorption from snow or rain.

STRUCTURAL DESIGN LOADS

. Dead loads

(A) Weight of building components

2. Live loads

(A) Typical residential floor – 40 PSF

(B) Stairs, public areas, etc – 100 PSF (C) Exterior decks/balconies – 60 PSF

(D) Roof snow load – 32 PSF plus drift Pg =45psf; Is=1.0;Ce=1.0;Ct=1.0;

3. Wind loads – Per Mass. Code and ASCE7-05; Wind Speed 105 mph, Exposure B Importance Factor = 1.0

End Zone Wall pressure= 19.6 PSF; End Zone Roof Pressure= 13.5 PSF Int. Zone Wall pressure = 15.7 PSF; Int. Zone Roof Pressure = 10.8 PSF Adjustment Factor Int. Wall (Psf) End Zone Wall (Psf) 15.7 19.6 0'-15' 1.00 15'-20' 1.00 15.7 19.6 20'-25' 15.7 19.6 1.00 25'-30' 1.00 15.7 19.6 1.05 30'-35' 16.5 20.6 1.09 21.3 35'-40'

(20 psf used for Design of Main Wind Force Resisting Systems) 4. Earthquake loads- Per Mass. Building Code and ASCE7-05:

Analysis procedure used

Occupancy Category "II"; Importance Factor I=1.0; Site Class "D" Seismic Performance Category 'B'

Equivalent Lateral Force Procedure; V=CsW Basic seismic-force resisting system – Light framed wood shear walls

Seismic response coefficient $C_{\rm s} = .048$ Response modification factor R = 6.5

Equivalent Lateral Force Procedure



PERMIT SET

Roome & Guarracino LLC STRUCTURAL ENGINEERS 48 Grove Street Somerville, MA 02144 T: 617-628-1700 F: 781-883-1081

RODE Architects Inc.

535 Albany Street | 405

Boston, MA 02118

617.422.0090 | T

617.422.0094 | F

rodearchitects.com

44 FORBES ST

Boston, MA

owner / developer Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

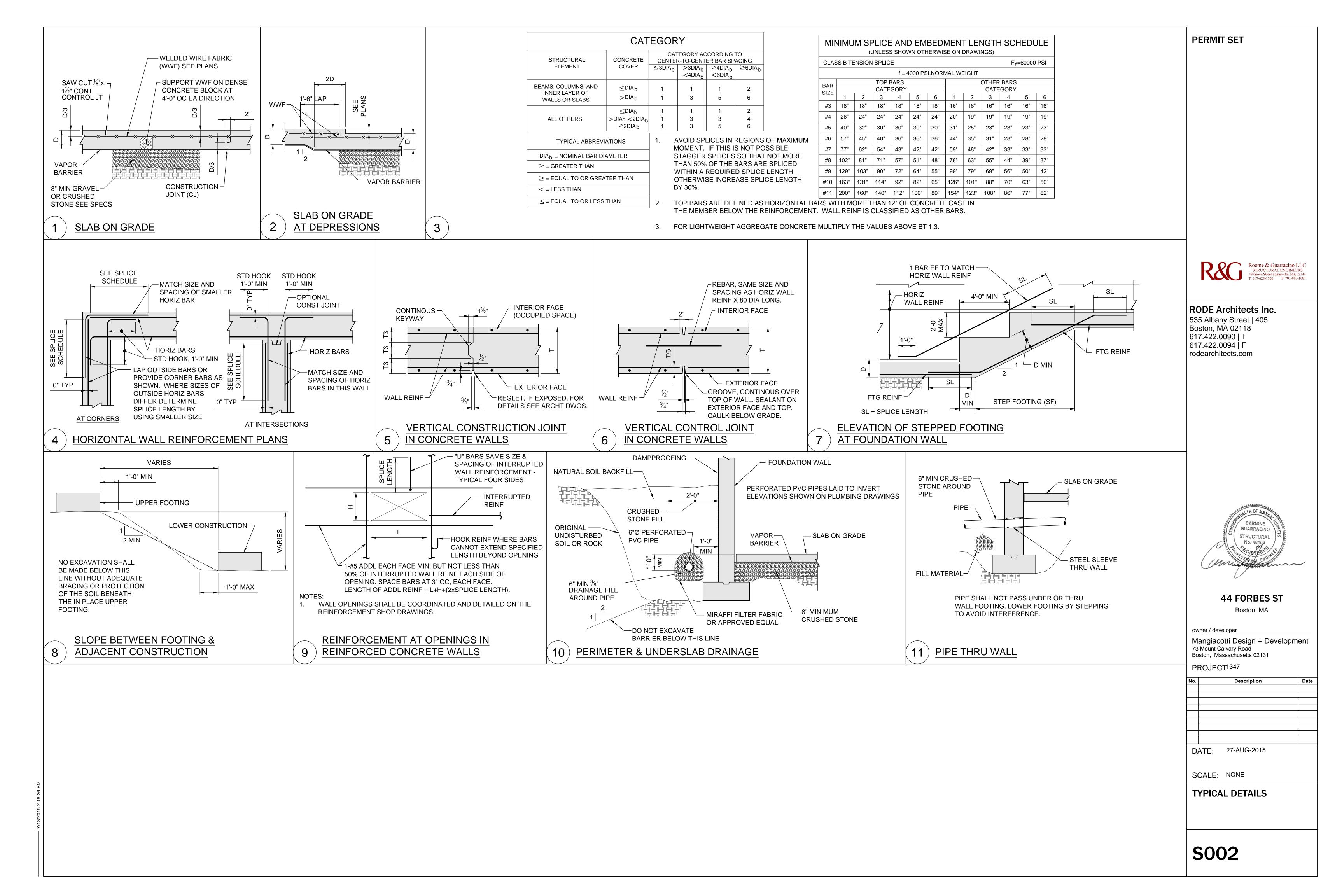
PROJECT!347

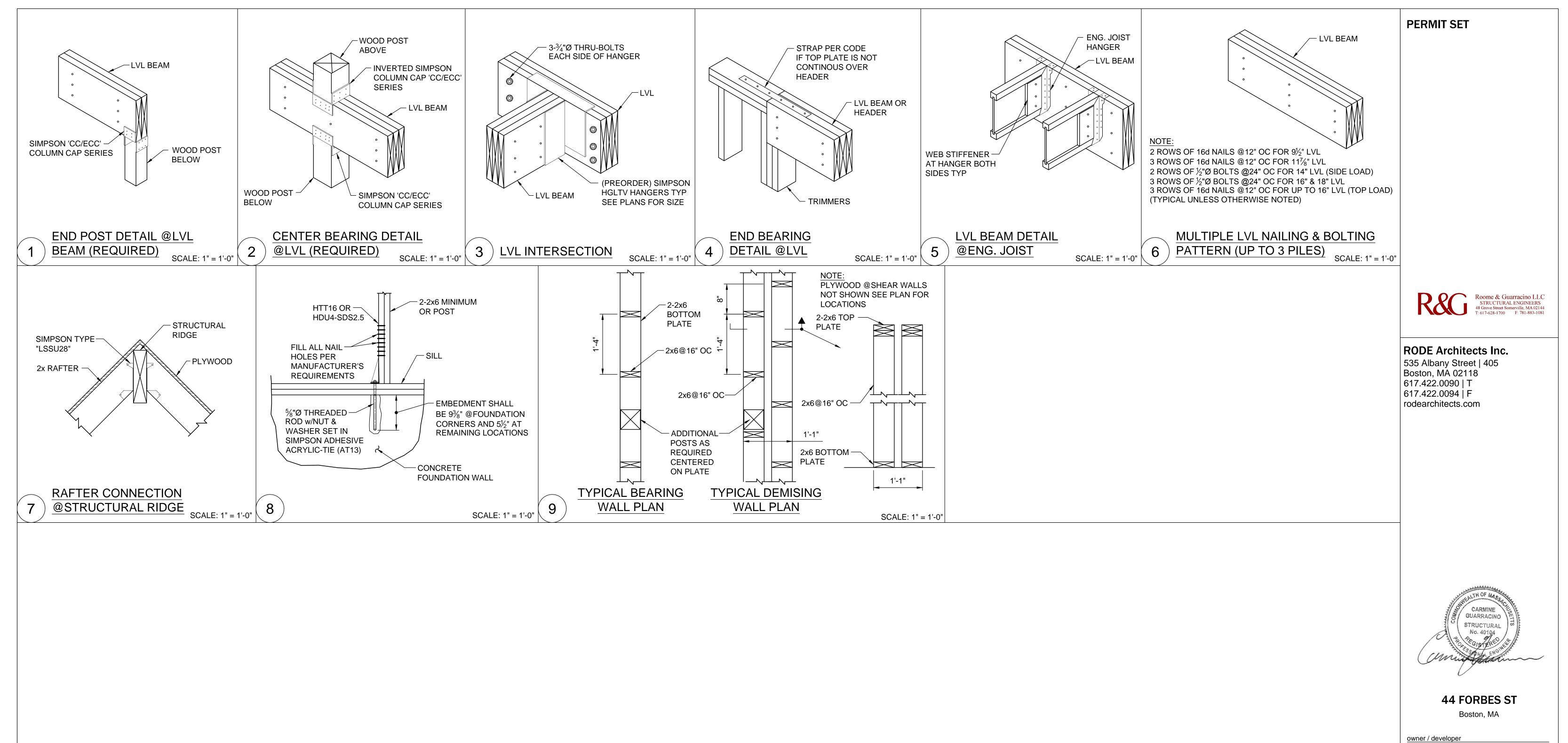
Description

DATE: 27-AUG-2015

SCALE: NONE

GENERAL NOTES





Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

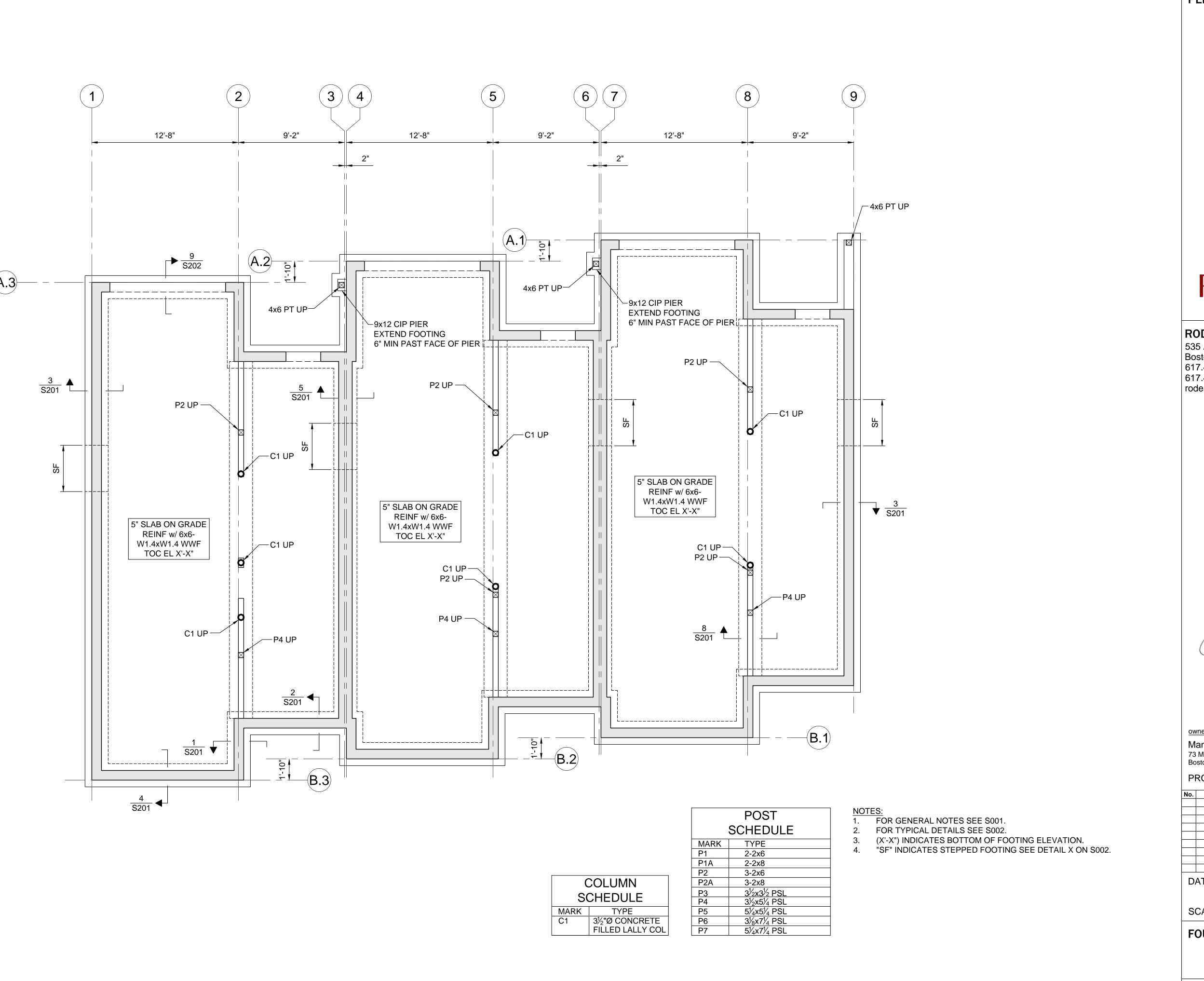
PROJECT!347

No. Description Date

DATE: 27-AUG-2015

SCALE: AS NOTED

TYPICAL DETAILS



PERMIT SET



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com



44 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

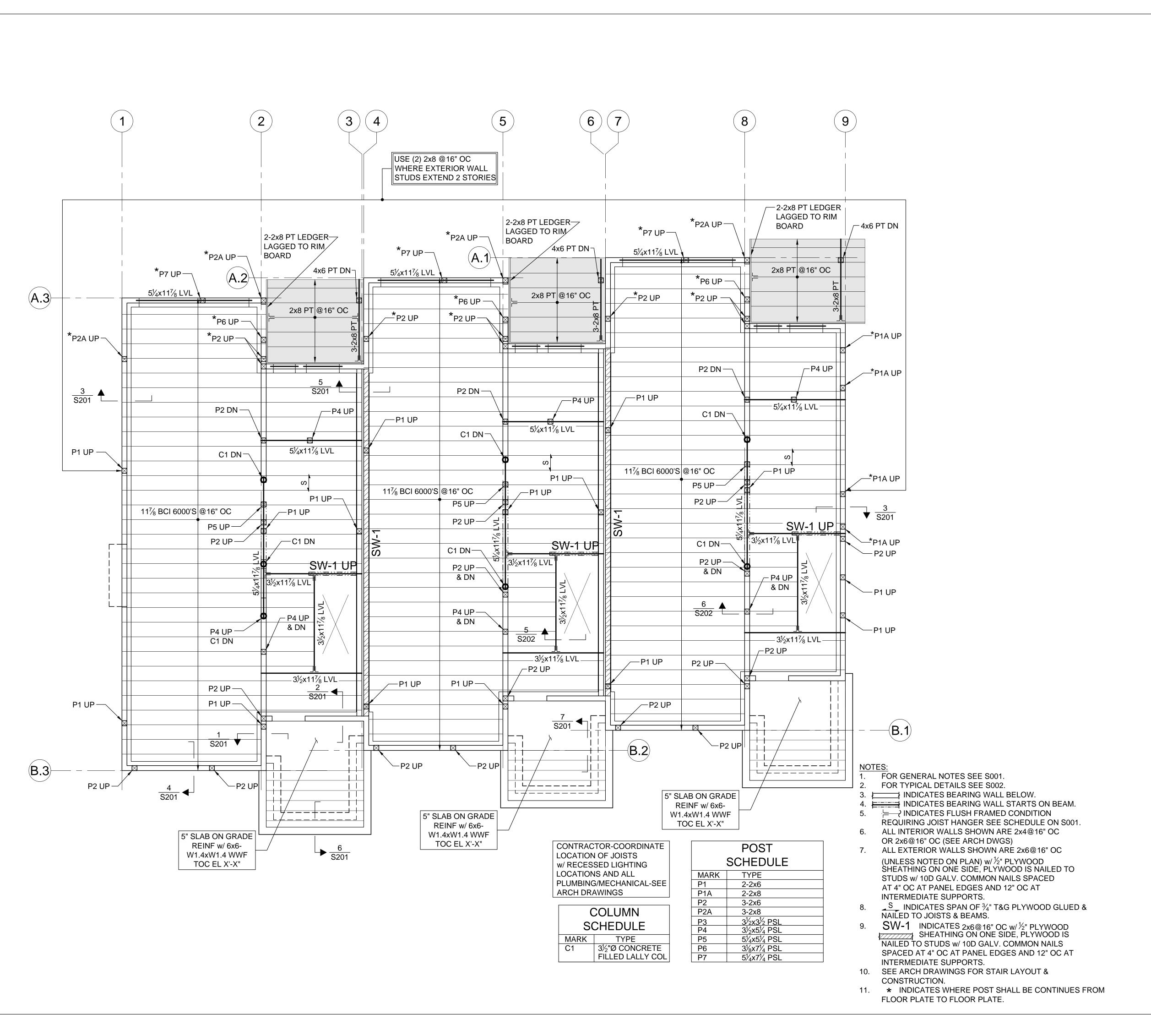
PROJECT!347

Description

DATE: 27-AUG-2015

SCALE: 1/4" = 1'-0"

FOUNDATION PLAN



PERMIT SET



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com



44 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT!347

No. Description Date

DATE: 27-AUG-2015

SCALE: 1/4" = 1'-0"

STREET LEVEL FRAMING PLAN





Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

Date

SECOND FLOOR FRAMING PLAN

NAILED TO STUDS w/ 10D GALV. COMMON NAILS SPACED AT 4" OC AT PANEL EDGES AND 12" OC AT

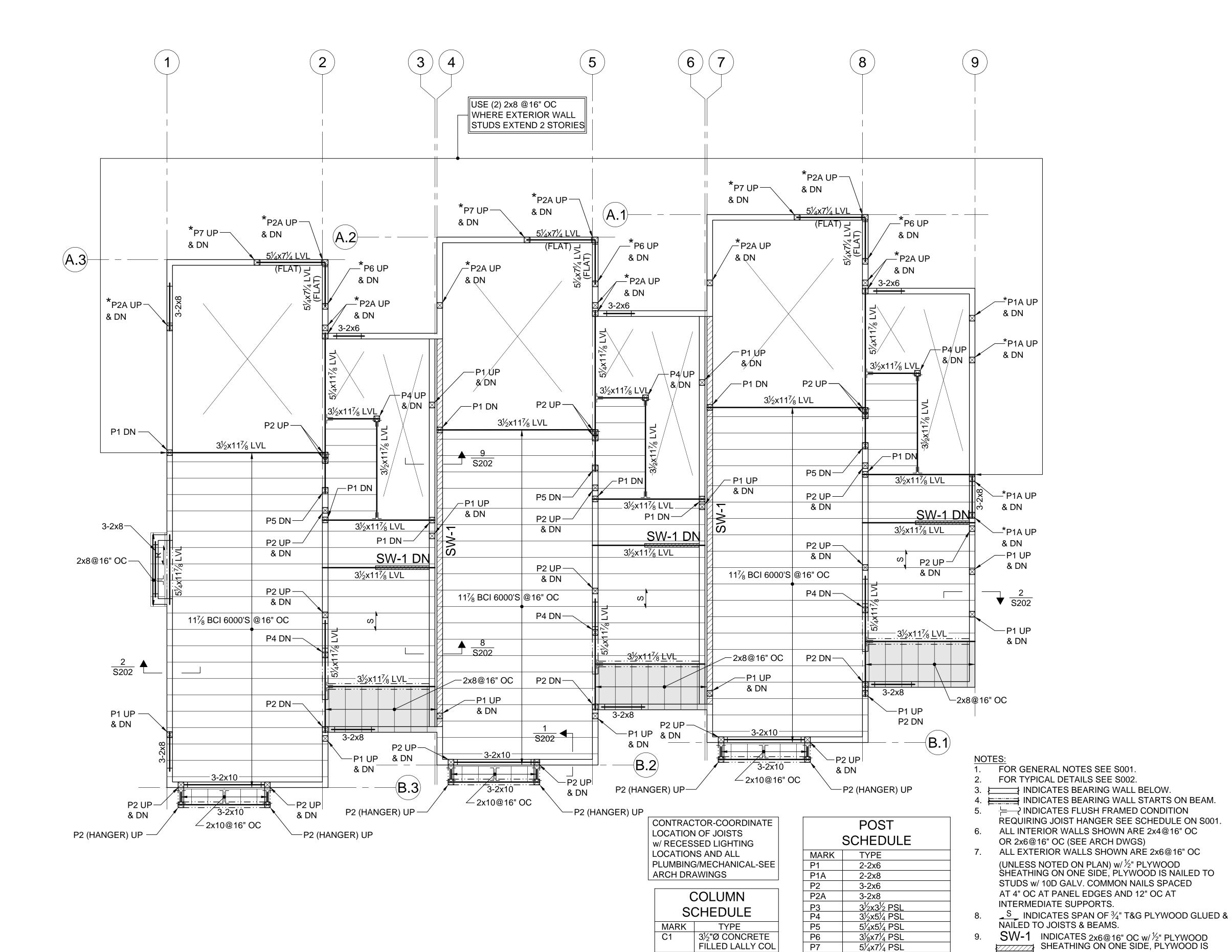
11. * INDICATES WHERE POST SHALL BE CONTINUES FROM

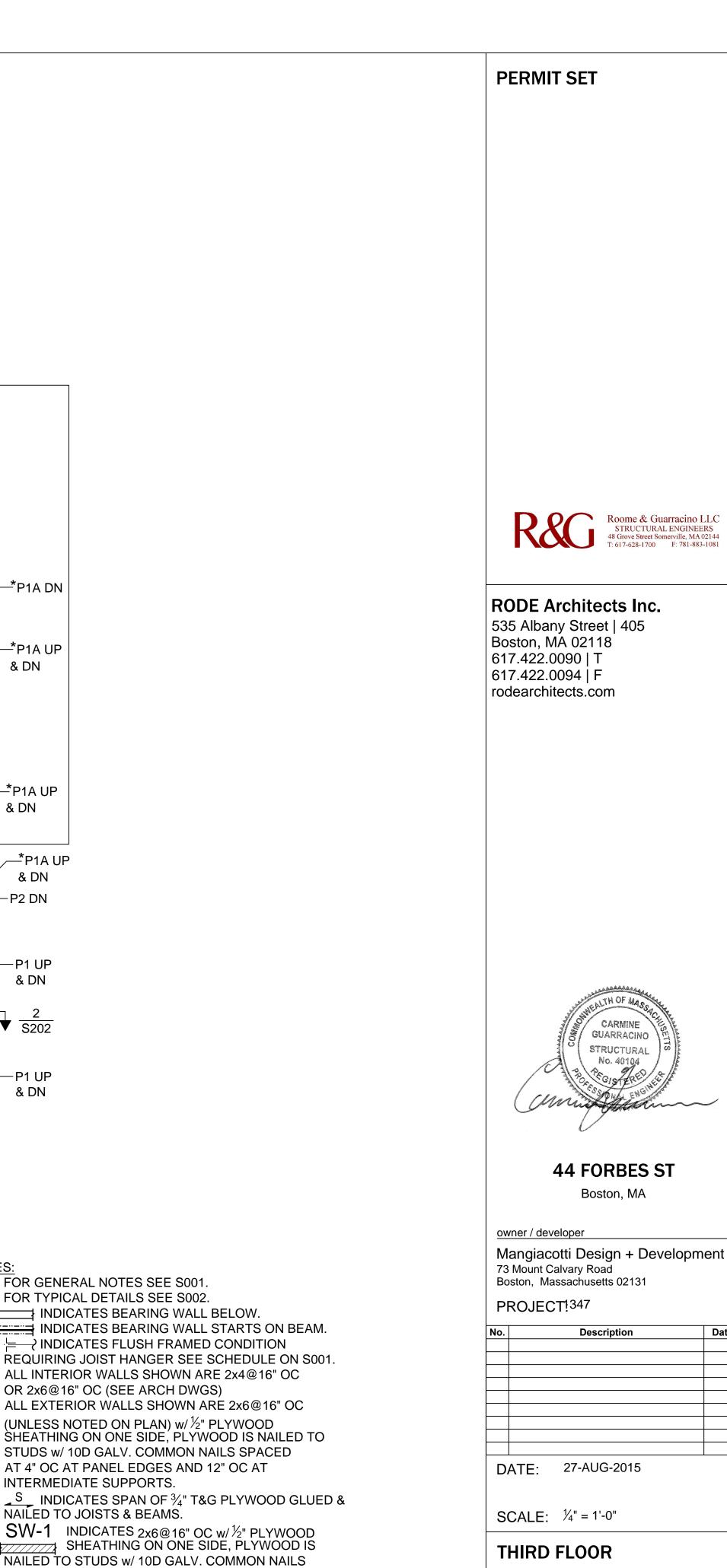
SEE ARCH DRAWINGS FOR STAIR LAYOUT &

INTERMEDIATE SUPPORTS.

FLOOR PLATE TO FLOOR PLATE.

CONSTRUCTION.







CARMINE GUARRACINO STRUCTURAL

owner / developer Mangiacotti Design + Development 73 Mount Calvary Road Boston, Massachusetts 02131

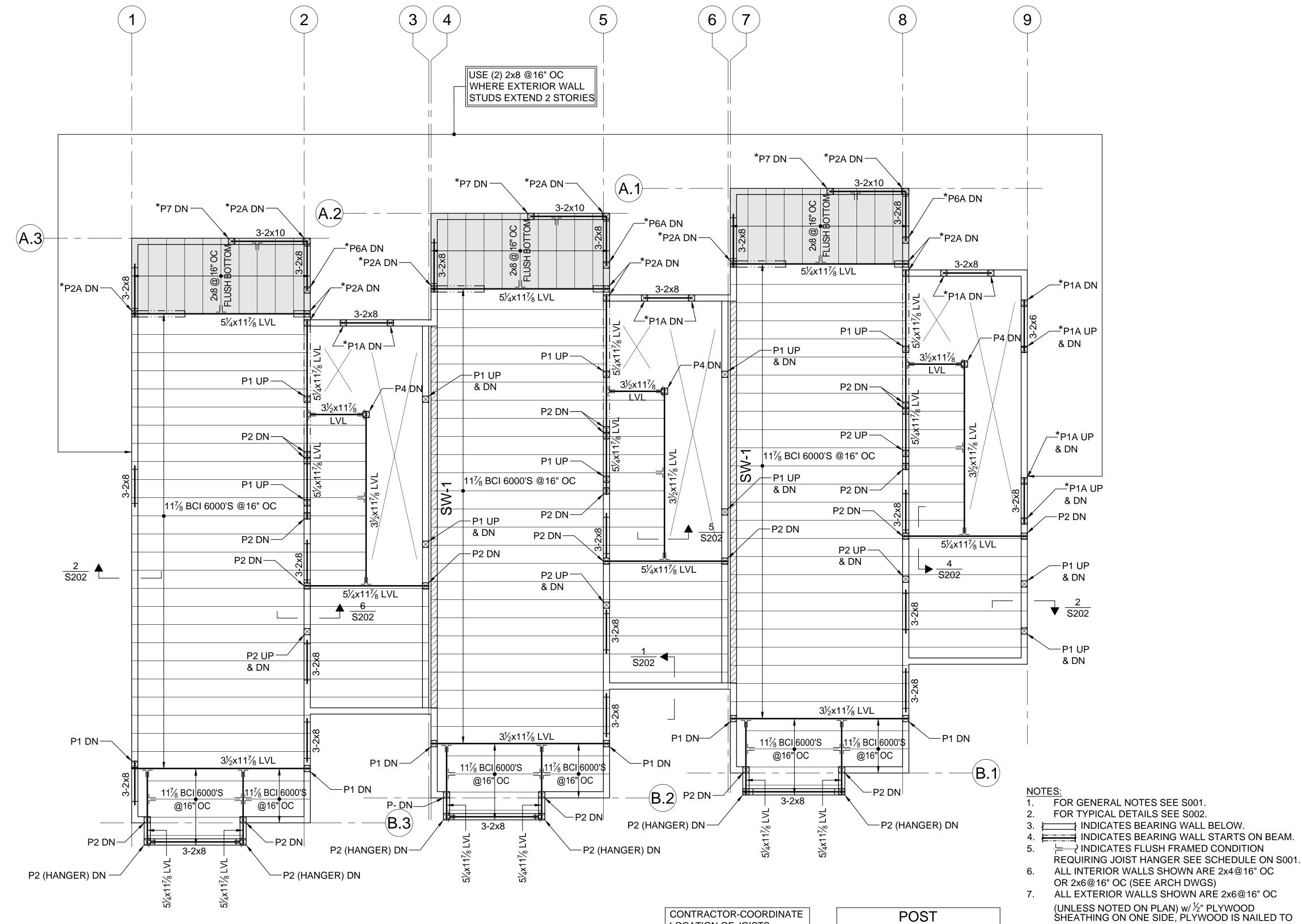
Date

DATE: 27-AUG-2015

SCALE: $\frac{1}{4}$ " = 1'-0"

THIRD FLOOR FRAMING PLAN

S103



LOCATION OF JOISTS w/ RECESSED LIGHTING LOCATIONS AND ALL PLUMBING/MECHANICAL-SEE ARCH DRAWINGS

COLUMN **SCHEDULE** MARK TYPE 3½"Ø CONCRETE FILLED LALLY COL

MARK TYPE P1 2-2x6 P1A 2-2x8 P2 3-2x6 P2A 3-2x8 3½x3½ PSL 3½x5¼ PSL 5¼x5¼ PSL P3 P4 P5 31/₈x71/₄ PSL 51/₄x71/₄ PSL

SCHEDULE

NAILED TO JOISTS & BEAMS. SW-1 INDICATES 2x6@16" OC w/½" PLYWOOD SHEATHING ON ONE SIDE, PLYWOOD IS NAILED TO STUDS w/ 10D GALV. COMMON NAILS SPACED AT 4" OC AT PANEL EDGES AND 12" OC AT

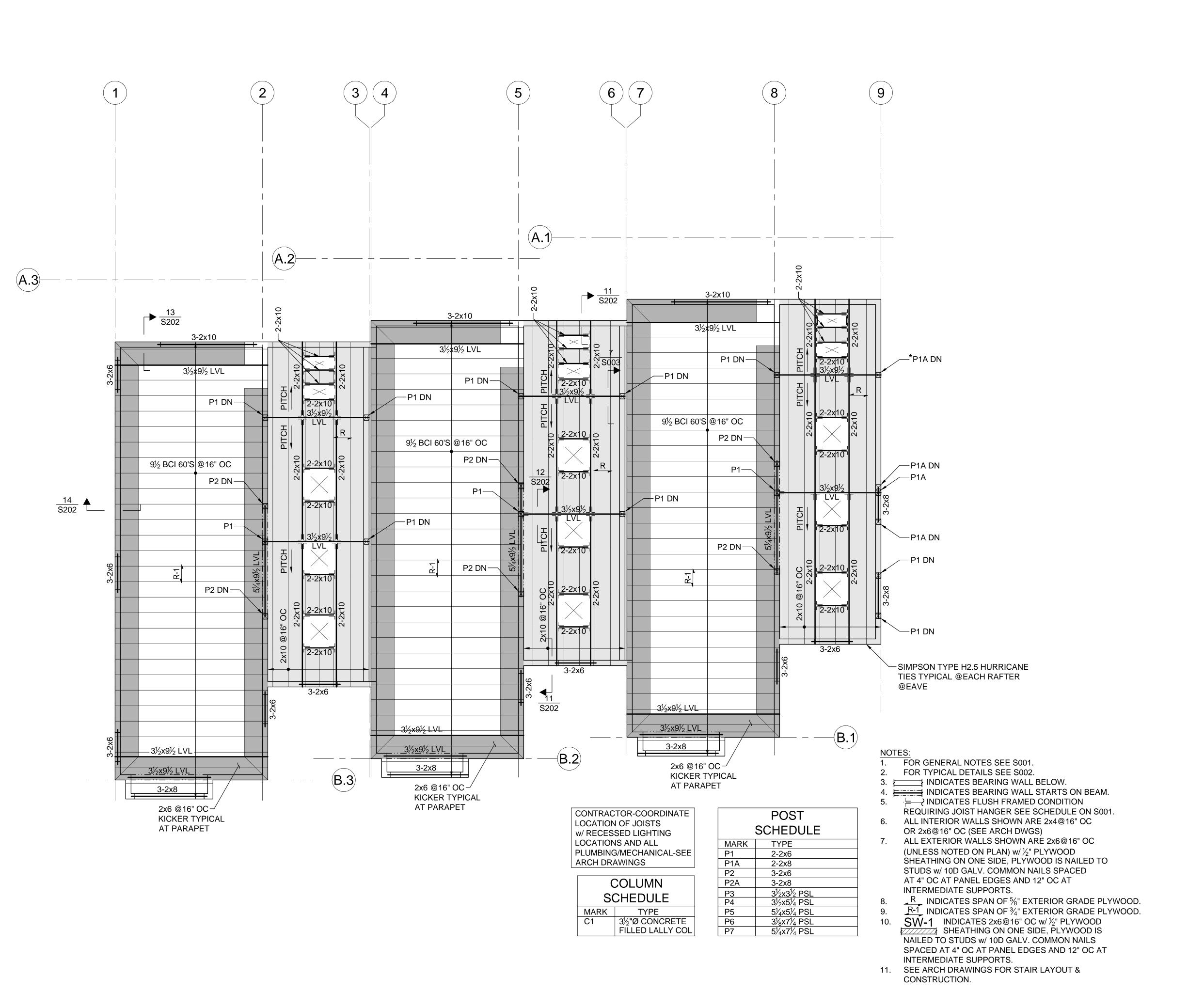
INTERMEDIATE SUPPORTS.

STUDS w/ 10D GALV. COMMON NAILS SPACED

AT 4" OC AT PANEL EDGES AND 12" OC AT

INTERMEDIATE SUPPORTS. SEE ARCH DRAWINGS FOR STAIR LAYOUT & CONSTRUCTION.

11. * INDICATES WHERE POST SHALL BE CONTINUES FROM FLOOR PLATE TO FLOOR PLATE.



PERMIT SET



RODE Architects Inc.

535 Albany Street | 405 Boston, MA 02118 617.422.0090 | T 617.422.0094 | F rodearchitects.com



44 FORBES ST

Boston, MA

owner / developer

Mangiacotti Design + Development
73 Mount Calvary Road
Boston, Massachusetts 02131

PROJECT!347

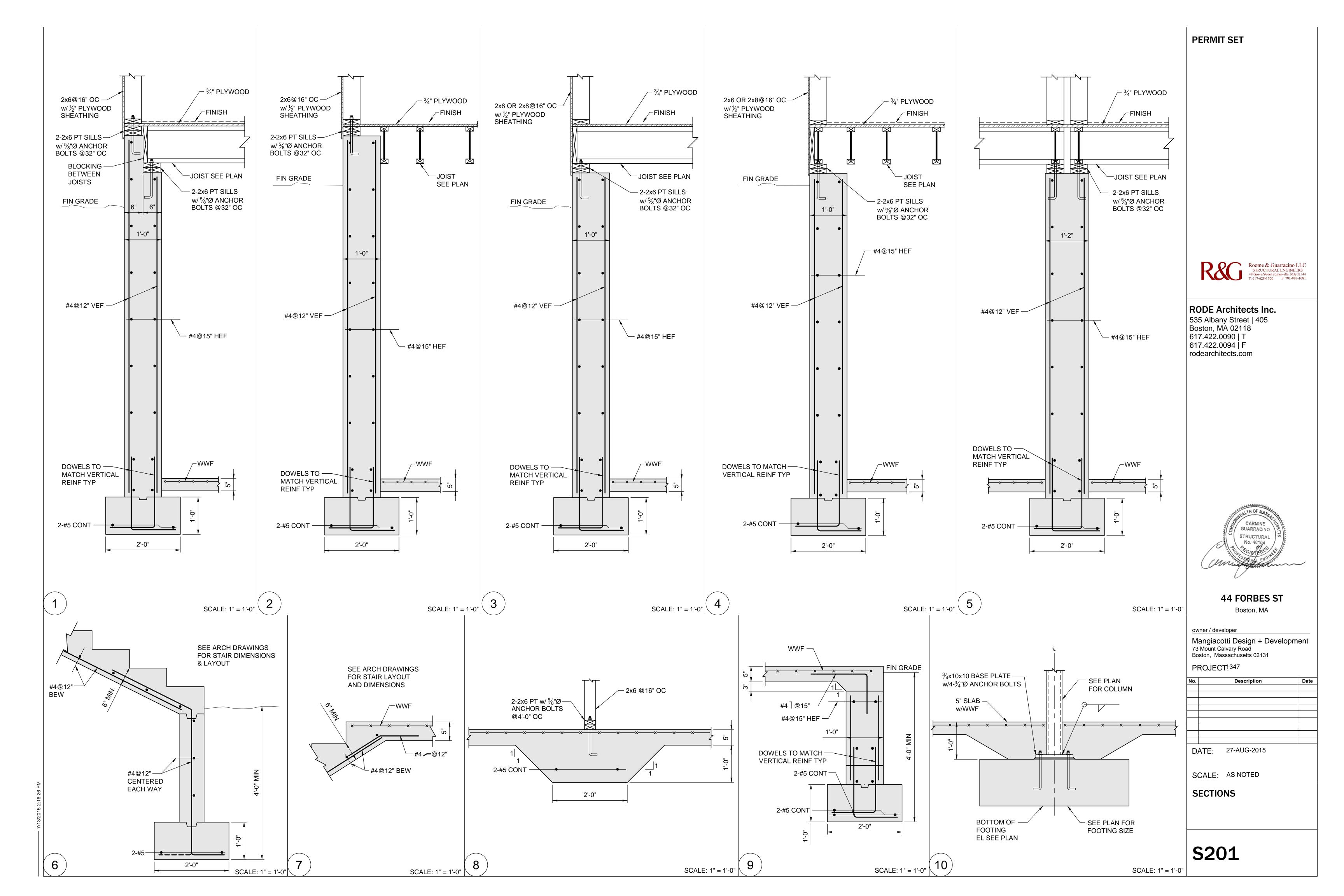
Description

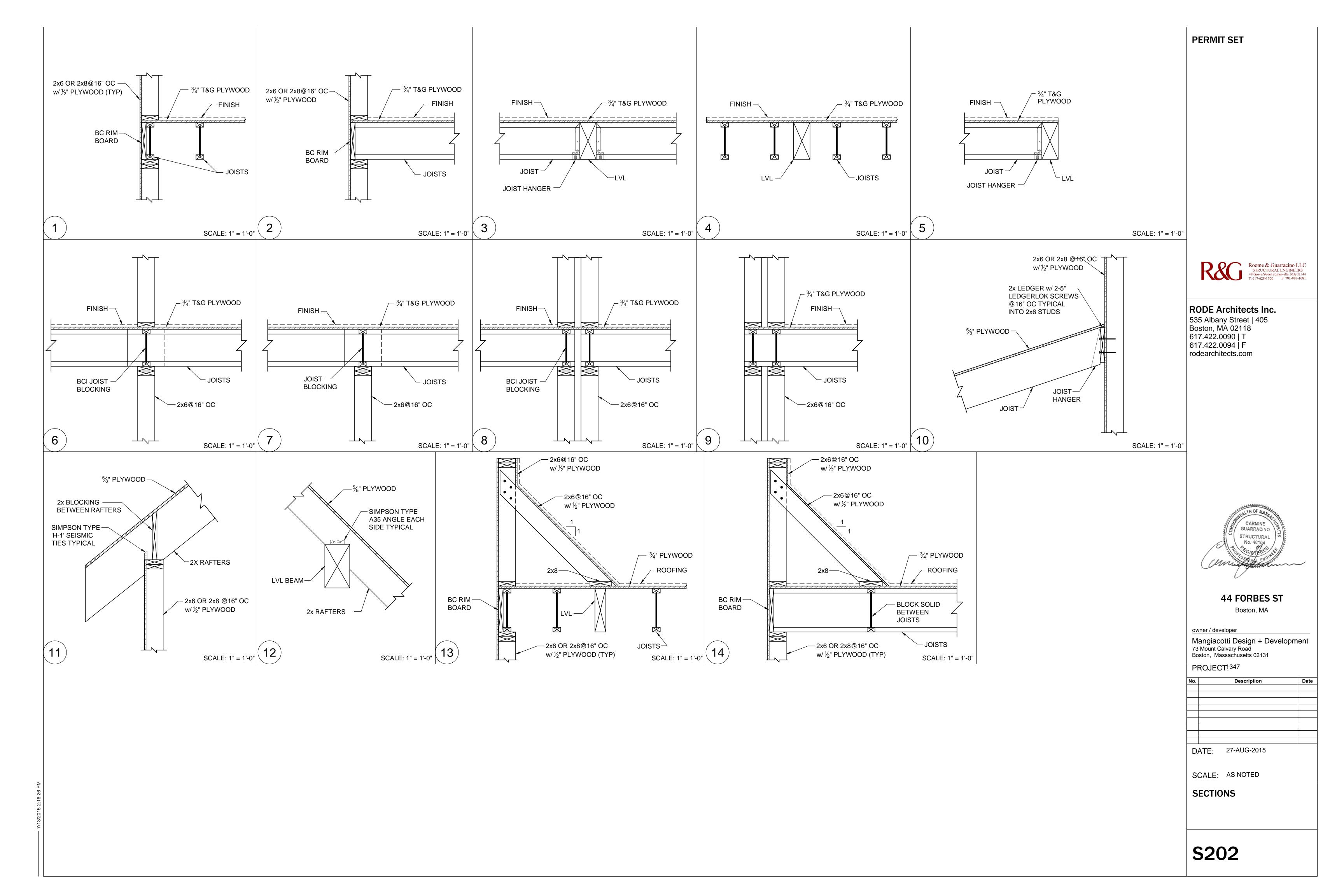
Date

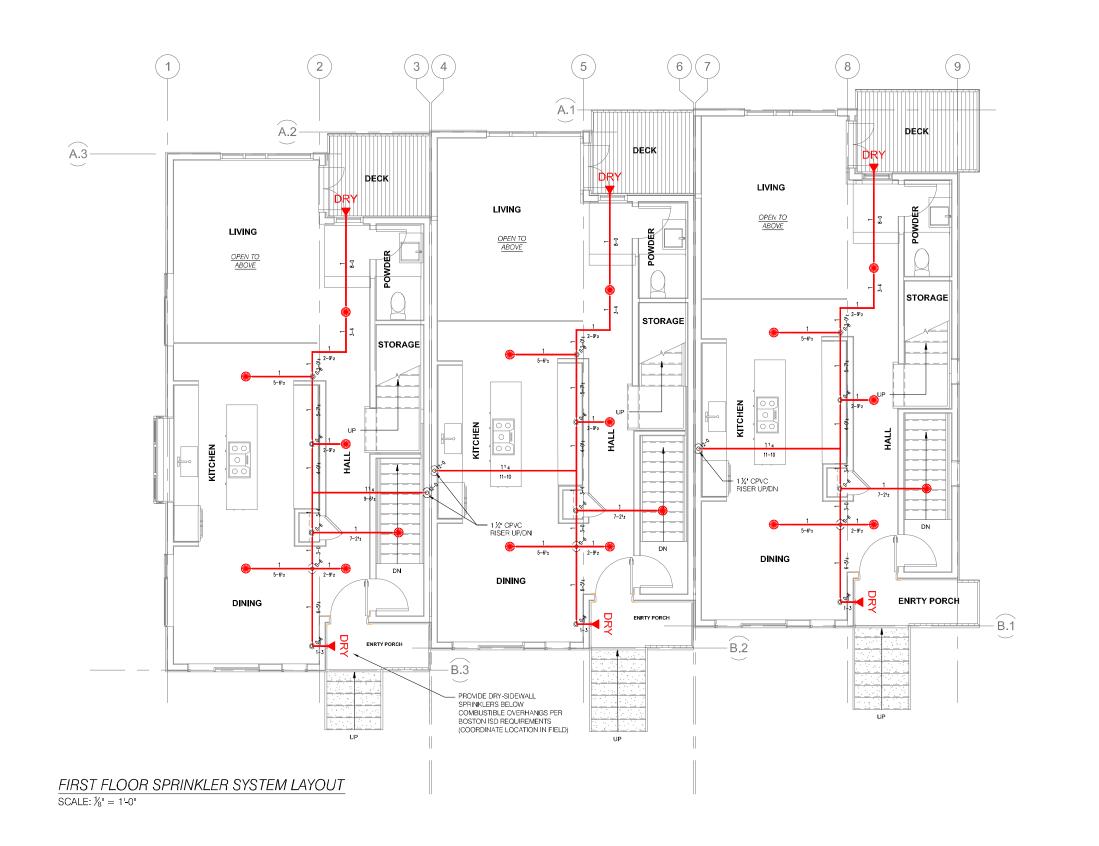
DATE: 27-AUG-2015

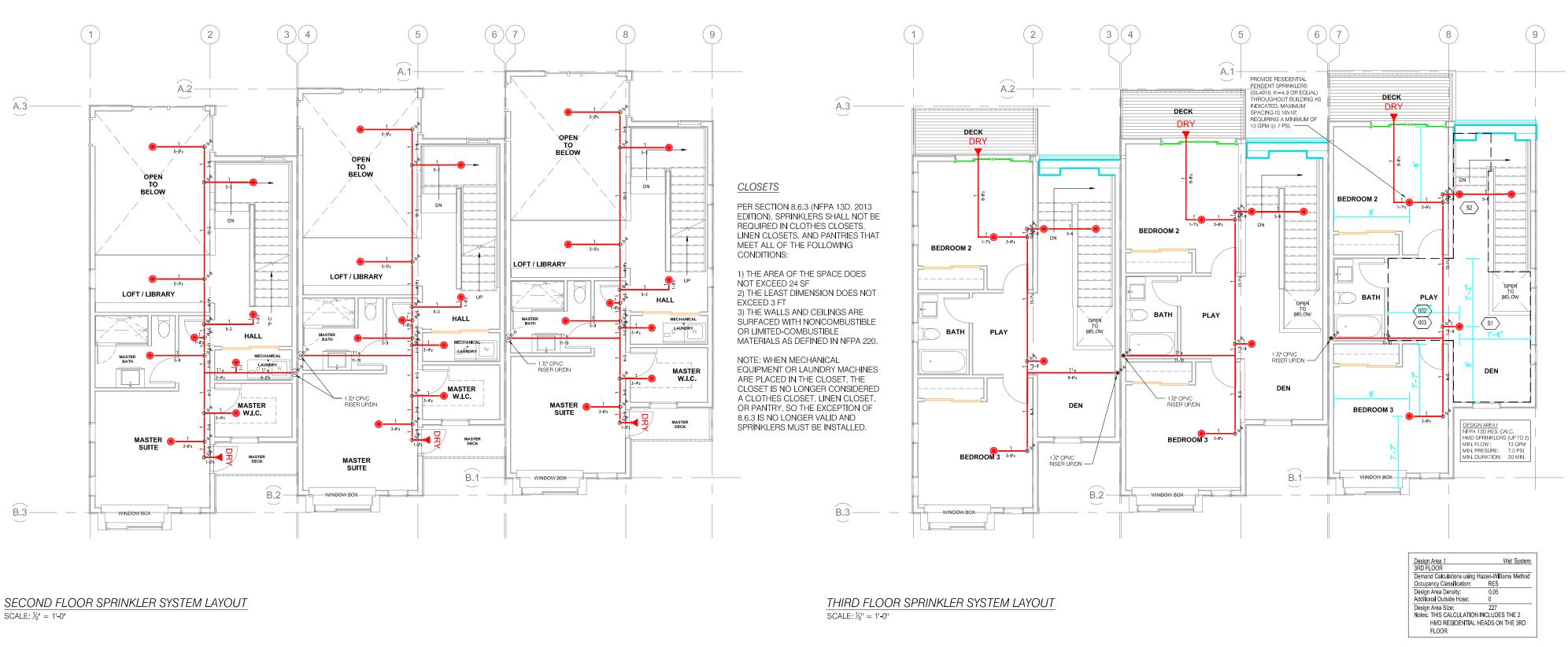
SCALE: 1/4" = 1'-0"

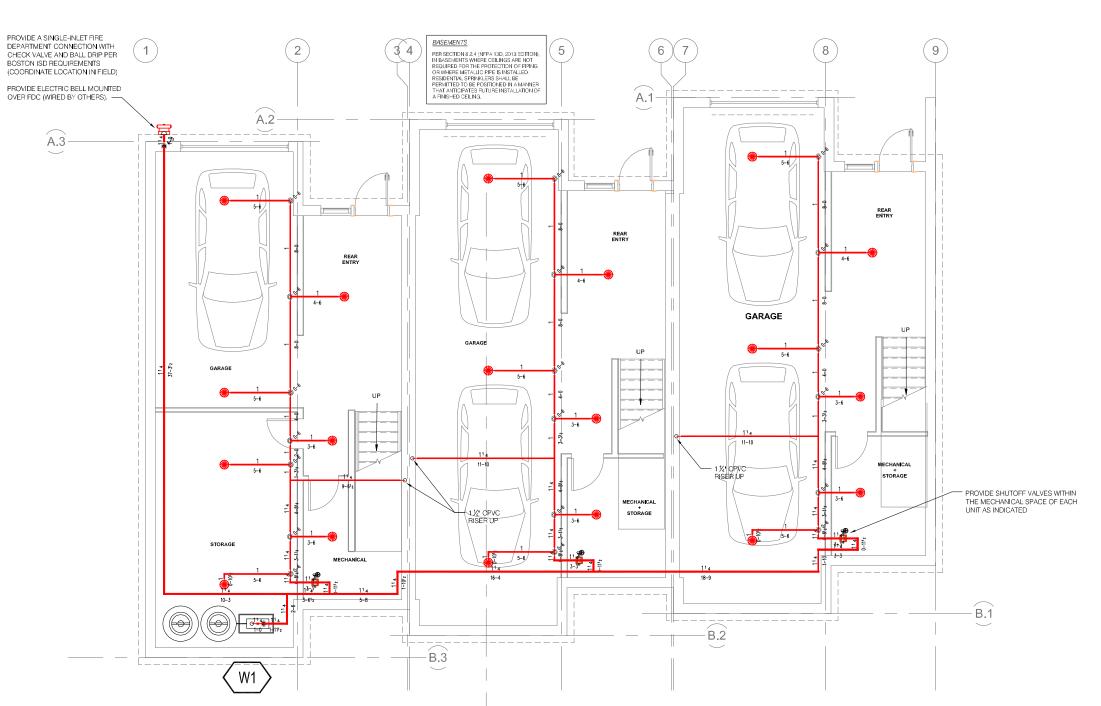
ROOF FRAMING PLAN











Source Information

Location of flow test data: PUMP DISCHARGE

Source of flow test data:

1 HP RES PUMP

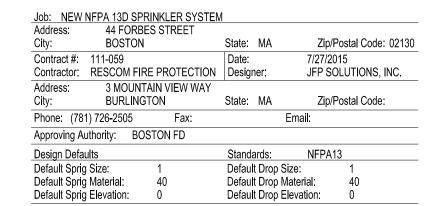
51.09 0.00

43.30 27.00 34.60 40.00

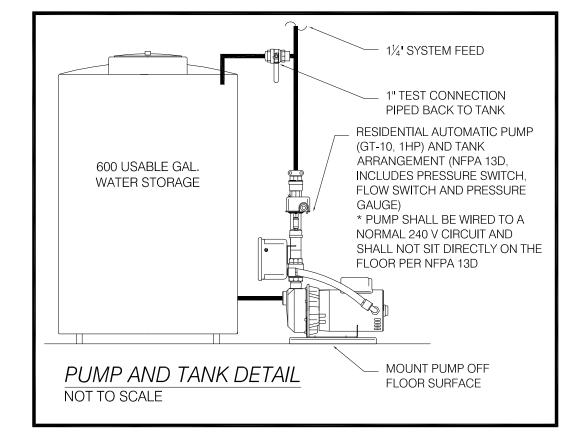
Date of Flow Test / Info: 7/27/2015

Source Data Points Pump Data Points

Pressure | Flow | Pressure | Flow



Calculation results for Design Area <u>1 </u>		- <u>3RD FLOOR</u> N company	print no		dated 7/27/201
for NEW NFPA 13D SPRINKLER SYS			Print 110 _		_ dated <u>//2//20</u>
		ge at a rate of 0.05	gpm/ft² (l	_/min/m²) of	floor area over
a maximum area of 227 ft² when su					
Hose stream allowance of	is included in the	e above.			
Occupancy classification: RES			Numbe	r of heads flo	owing: 2
Commodity classification:			System		Wet
Maximum storage height:			Maximu	ım velocity:	8.88 ft/s
Storage arrangement:				_	
Flow from In-Rack sprinklers:	0 gpm	Pressure Required a	t Source:	33.9 psi	
Flow from Overhead sprinklers:	26.4 gpm	Pressure Available a		43.6 psi	
Flow from Inside Hoses:	0 gpm	Surplus Pressure at	Source:	9.8 psi	
Flow from Outside Hoses:	0 gpm				
Other fixed flows:	0 gpm				
Total flow in system piping:	26.4 gpm				
Additional flow at/beyond source:	0 gpm				
Total of all flows:	26.4 gpm				



FIRE PROTECTION NOTES:

INSTALLATION NOTES:

BUILDING CODE AND BOSTON FIRE DEPARTMENT REQUIREMENTS.

THIS SPRINKLER DRAWING AND ASSOCIATED HYDRAULIC CALCULATIONS ARE FOR THE DESIGN AND INSTALLATION OF A NEW RESIDENTIAL SPRINKLER SYSTEM FOR THE PROPOSED 3-UNIT TOWNHOUSE BUILDING LOCATED AT 44 FORBES STREET IN BOSTON, MASSACHUSETTS.

THE SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13D AND THE MASSACHUSETTS STATE BUILDING CODE (8TH EDITION) FOR A 3-FAMILY RESIDENTIAL BUILDING. THE SPRINKLER CONTRACTOR SHALL FOLLOW THE LATEST REQUIREMENTS OF NFPA 13D (2013 EDITION), MASSACHUSETTS STATE

THIS SYSTEM WILL BE SUPPLIED BY A RESIDENTIAL PUMP AND TANK SYSTEM WITH A CAPACITY OF 600 MINIMUM USABLE GALLONS FOR A 20 MINUTE DURATION AS REQUIRED BY NFPA 13D (2013 EDITION). THE PUMP SELECTED IS A GOULDS PUMPS MODEL GT10. 1-HP PUMP.

THE SYSTEM HAS BEEN HYDRAULICALLY CALCULATED IN ACCORDANCE WITH THE REQUIREMENTS OF NEPA 13D. INCLUDING THE TWO HYDRAULICALLY MOST DEMANDING HEADS IN A SINGLE COMPARTMENT BASED ON THE REQUIREMENTS OF THE SPECIFIC SPRINKLER HEAD AND THE SPACING USED IN THIS DESIGN (16'x16' REQUIRING A MINIMUM OF 13 GPM @ 7.0 PSI). THE DEMAND AT THE DISCHARGE SIDE OF THE PUMP IS 26.4 GPM @ 33.9 PSI.

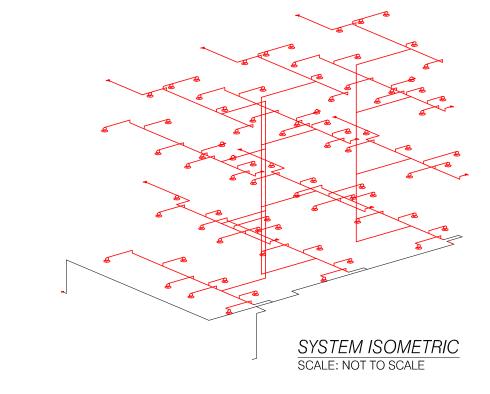
ALL WORK SHALL BE PERFORMED BY A MASSACHUSETTS LICENSED SPRINKLER CONTRACTOR. THE SPRINKLER CONTRACTOR SHALL FOLLOW THE LATEST REQUIREMENTS OF NFPA 13 AND NFPA 13D (2013 EDITION), MASSACHUSETTS STATE BUILDING CODE (8TH EDITION) AND LOCAL FIRE DEPT REQUIREMENTS.

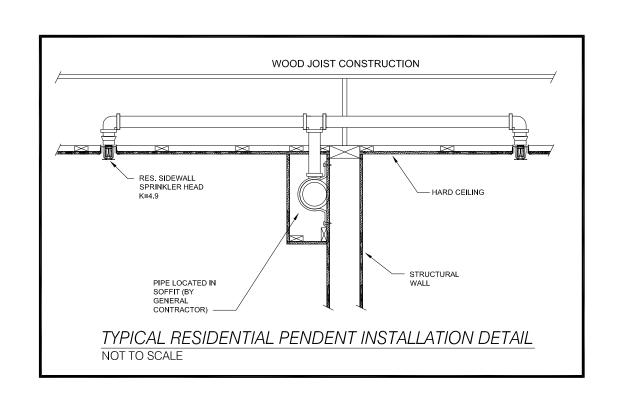
THE ARCHITECTURAL BACKGROUND OF BUILDING MAY DIFFER SLIGHTLY FROM ACTUAL LAYOUT. DRAWINGS ARE NOT INTENDED TO SHOW ALL OFFSETS AND PIPING ELEVATION CHANGES. CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS PRIOR TO FABRICATION.

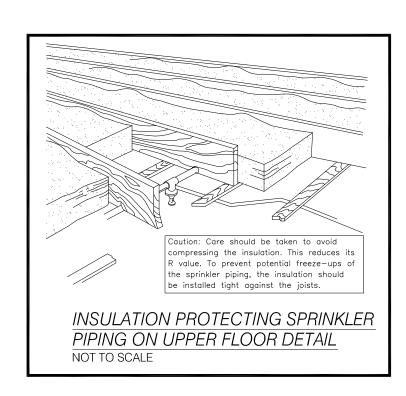
CONTRACTOR SHALL HYDROSTATICALLY TEST ALL SPRINKLER PIPING AT 200 PSI FOR 2 HOURS AND IS RESPONSIBLE FOR THE COMPLETION OF ALL ABOVE GROUND TEST CERTIFICATES, SUPPLIED TO THE OWNER.

ALL PIPING SHALL BE UL LISTED CPVC SPRINKLER PIPING. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13 (2013 EDITION) AND ALL MANUFACTURERS INSTALLATION RECOMMENDATIONS. ALL PIPING SHALL BE PITCHED TO DRAIN WITH LOW-POINT DRAINS AT SECTIONS OF PIPING SUBJECT TO WATER TRAPPING. SPRINKLER CONTRACTOR SHALL PROVIDE PROTECTIVE PLATES WHERE CPVC PIPING IS RUN THROUGH STUDS TO PREVENT

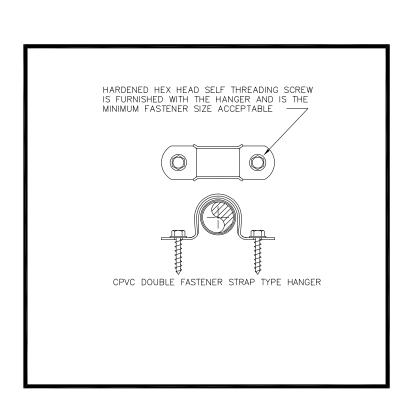
PUNCTURING OF THE SPRINKLER PIPING DURING DRYWALL INSTALLATION AS REQUIRED BY NFPA STANDARDS. THE BUILDING OWNER IS RESPONSIBLE FOR PROVIDING HEAT IN ALL AREAS CONTAINING SPRINKLER PIPING AND HEADS TO PREVENT PIPE FROM FREEZING. ANY AREAS THAT RAISE CONCERN WITH REGARD TO FREEZING POTENTIAL DURING INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BEING INSTALLED. SYSTEM SHALL BE MONITORED IN ACCORDANCE WITH BOSTON FIRE DEPARTMENT AND BOSTON ISD REQUIREMENTS (BY







NEW NFPA



N	
W	I

GROUND LEVEL SPRINKLER SYSTEM LAYOUT

DESIGNED BY:		REVISIONS					HEAD	BLOC	K			
	DATE	DESCRIPTION	BY									
JFP SOLUTIONS, INC. FIRE PROTECTION CONSULTING SERVICES				SYM	CNT	POSITION	FINISH	TEMP	K	NPT	MFG.	MODEL#
				₩	79	PEND	WHITE	155	4.90	1/2"	GLOBE	GL4910
P.O. Box 1234				DRY ▼	12	SIDE	CHROME	155	5.60	1/2"	GLOBE	GL5642
Lynnfield, Massachusetts 01940 Telephone: (781) 389-7999 E-Mail: TDJFP1@Yahoo.com www.JFPSolutions.com				FOR TH	HIS APPLIC	ER CONTRACTO CATION PROVID HIS DESIGN ARI	DED THE SAM					



SPRINKLER CONTRACTOR

RESCOM FIRE PROTECTION 3 MOUNTAINVIEW WAY

BURLINGTON, MA (781) 726-2505

PROJECT ADDRESS

	SPRINK	KLER PLAN
13D SPRINKLER SYSTEM	PERMIT NO.	
	CONTRACT NO.	111-062
RBES STREET	APPROVAL	BOSTON FD
	DRAWN BY	T. JENKINS
STON, MA 02130	SCALE	1/8"=1'-0"
	DATE	7/27/2015
	REVISED	FP 1 of 1
	PLOTTED	11 1011

