PROPOSED THREE-FAMILY

49 WOODCLIFF STREET, DORCHESTER, MASSACHUSETTS

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS REQUIRED FOR THIS PROJECT.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES,SEQUENCING, SCHEDULING AND SAFETY FOR THIS PROJECT.
3. ALL WORK SHALL BE PERFORMED IN CONFORMANCE TO THE MASSACHUSETTS STATE BUILDING CODE AND ALL OTHER APPLICABLE CODES AND LAWS.
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 WARRANTEE HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION.

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 ½" Ø THRU BOLTS, MEETING A307 STANDARDS, OR, AS NOTED ON DRAWINGS.

WOOD LINTEL SCHEDULE:

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

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

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:

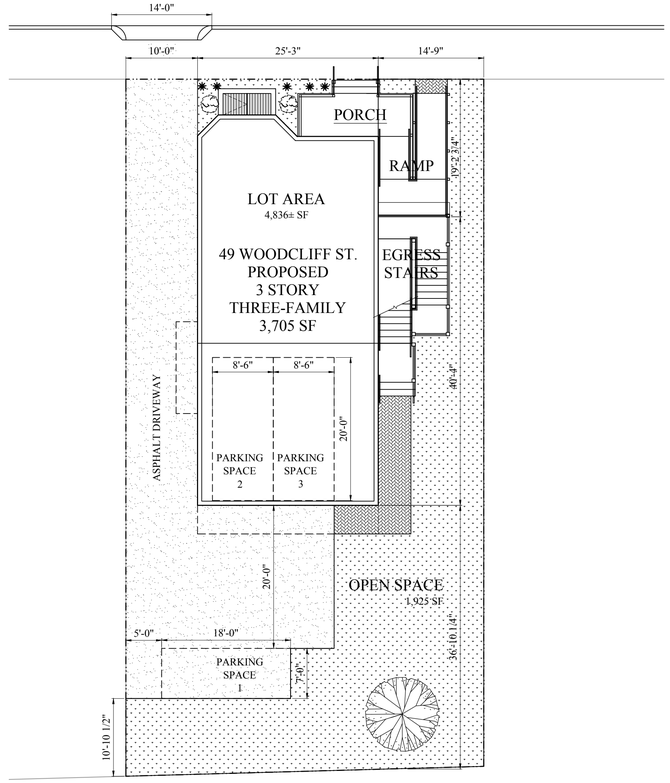
1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF:
   - **3000 PSI** FOR BASEMENT SLABS, FOUNDATION WALL, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE SURFACES EXPOSED TO THE WEATHER
   - **3500 PSI** FOR DRIVEWAYS, CURBS, WALKS, PATIOS, PORCHES, CARPORT SLAB, STEPS AND OTHER FLATWORK EXPOSED TO WEATHER AND GARAGE FLOOR SLABS
2. MAXIMUM SLUMP SHALL NOT EXCEED 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.



1 PROPOSED LANDSCAPE PLAN
1" = 10'-0"

NOTE: THIS PLAN HAS BEEN PROVIDED BY CEC LAND SURVEY.

ZONING SUMMARY

ROXBURY ARTICLE 50
3F-4000 SUBDISTRICT

OTHER DWELLING	MIN. LOT SIZE	ADDL' LOT AREA	TOTAL LOT SIZE	LOT WIDTH/ FRONTAGE	FAR	BLDG. HEIGHT	USABLE OPEN SPACE	SETBACK FRONT	SETBACK SIDE	SETBACK REAR	MAX USE REAR YARD
REQUIRED BY ZONING	2 UNITS 4000 SF	2000 SF	50-44.1 6000 SF x 3/4 4500 SF	45'	.8	3 STORIES 35'	650 SF / UNIT	8' / MODAL	5' /10'	30'	25%
EXISTING PROJECT	-	-	4836 SF	50'	-	-	-	-	-	-	-
PROPOSED PROJECT	NA	NA	4836 SF	50'	3759 / 4836 .78	3 STORIES 32'	1663 + 288 SF = 1951 SF 650 SF / UNIT	8'	10' / 14.8'	32.9'	0 %

PARKING REQUIREMENT
RESIDENTIAL USE (1-3 UNITS): 1 SPACE PER UNIT
REQUIRED PARKING SPACES = 3
PROPOSED PARKING SPACES = 3

KEY

- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- 1 HOUR WALL
- 2 HOUR WALL
- FAN
- 45 MIN. DOOR
- 1-1/2 HOUR DOOR
- WINDOW TYPE
- 1 HOUR CLG. ABOVE (SEE C.T.1/A-3.1)
- 2 HOUR CLG. WALL(SEE C.T.2/A-3.1)
- FIRE EXTINGUISHER
- EX'G WALL TO REMAIN
- NEW WALL
- WALL TO BE REMOVED

CODE SUMMARY

PROPOSED TYPE 5 CONSTRUCTION
PROPOSED R-2 USE GROUP (THREE-FAMILY)
PROPOSED 3 STORIES
PROPOSED SPRINKLERED & ALARMED
ZONE: 3F-4000

SOIL TESTING

NOTE: THERE HAS BEEN NO SOIL TESTING PROVIDED TO THIS OFFICE FOR THIS PROJECT. THE SOIL BEARING CAPACITY OF THIS FOUNDATION SYSTEM AS DESIGNED IS BASED ON A 2 TON MINIMUM SOIL BEARING CAPACITY. SOIL BORINGS SHOULD BE PERFORMED TO VERIFY THAT THE MINIMUM DESIGN BEARING CAPACITIES ARE ACHIEVABLE. IF A SUITABLE SOIL THAT CAN NOT WITHSTAND A 2 TON BEARING CAPACITY IS NOT AVAILABLE, THAN THIS OFFICE SHOULD BE CONTACTED BY THE CONTRACTOR OR OWNER FOR A FOUNDATION REDESIGN.

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: DF

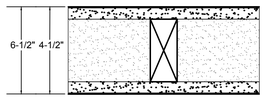
Drawing Name

COVER SHEET

Sheet No.

A-0

WALL ASSEMBLIES

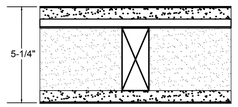


System Description
Wood Stud Partition

- 1/2" Gypsum Plaster Base
- 2x4 wood stud 16" o.c. OR
- 2x6 wood stud 16" o.c.
- 3.5" Cellulose Blow In
- 1/2" Gypsum Plaster Base
- 1/16" veneer plaster finish both sides

0 TYPICAL PARTITON - WOOD STUD

SCALE: 3"=1'-0"



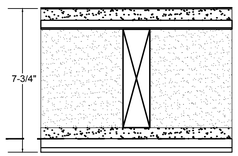
System Description
Wood Stud Partition (Loadbearing)

- 5/8" FIRECODE C Core Gypsum Plaster Base
- RC-1 resilient channel one side spaced 24" o.c
- 2x4 wood stud 16" o.c. cross-braced mid height
- 3.5" Cellulose Blow In
- 5/8" FIRECODE C Core Gypsum Plaster Base
- 1/16" veneer plaster finish both sides

System Performance
1 HR Fire
UL Design No. U311
52 STC Sound
SA-830702

1 1 HR PARTITION -WOOD LOAD BEARING

SCALE: 3"=1'-0"



System Description
Wood Stud Partition (Loadbearing)

- 1/16" veneer plaster finish
- 5/8" FIRECODE C Core Gypsum Plaster Base
- RC-1 resilient channel one side spaced 24" o.c.
- 2x6 wood stud 16" o.c.
- 5.5" Cellulose Blow In
- 5/8" FIRECODE C Core Gypsum Moisture Resistant
- 1/4" Cement Board
- ¾" Ceramic Tile

GYP BOARD TO EXTEND CONTINUOUSLY BEHIND ALL BATH FIXTURES

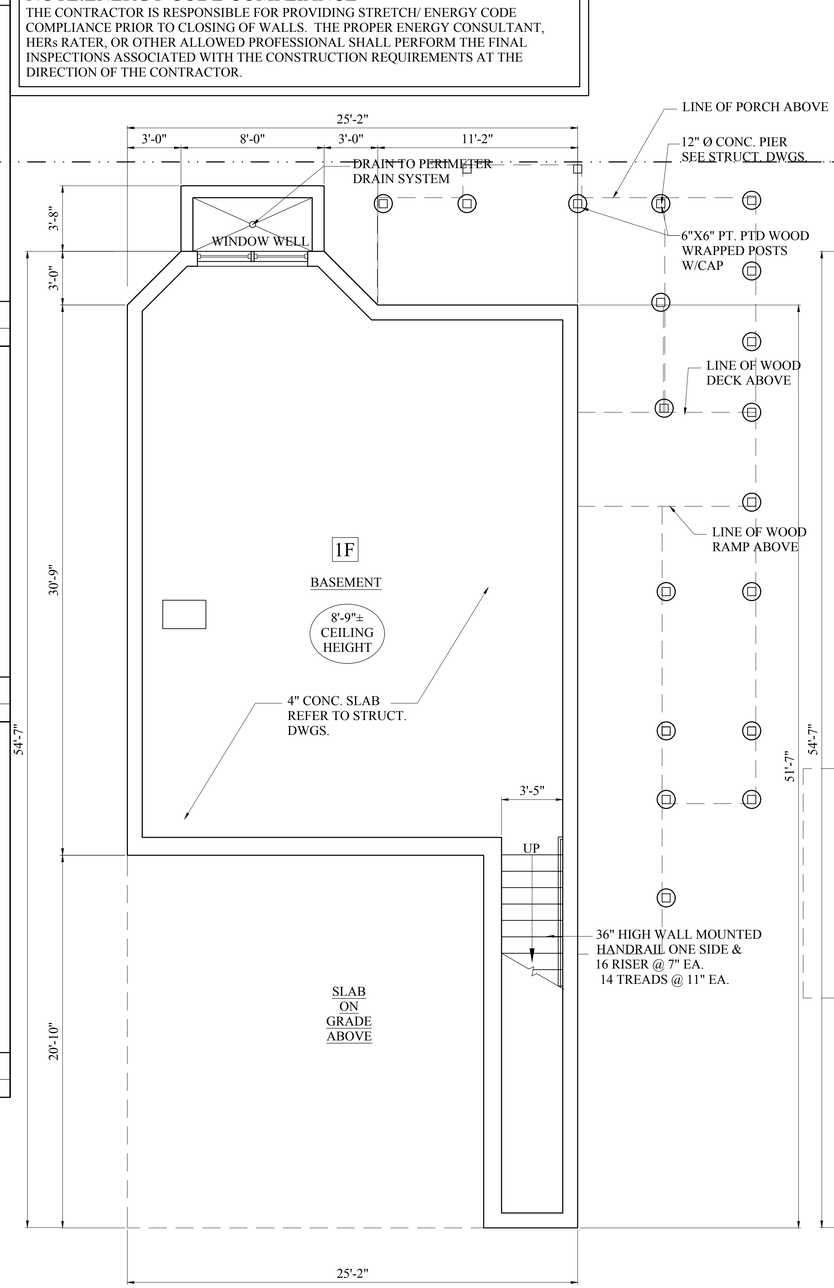
System Performance
1 HR Fire
UL Design No. U311
52 STC Sound
SA-830702

1B 1 HR PARTITION BATH / WOOD BEARING STC +50

SCALE: 3"=1'-0"

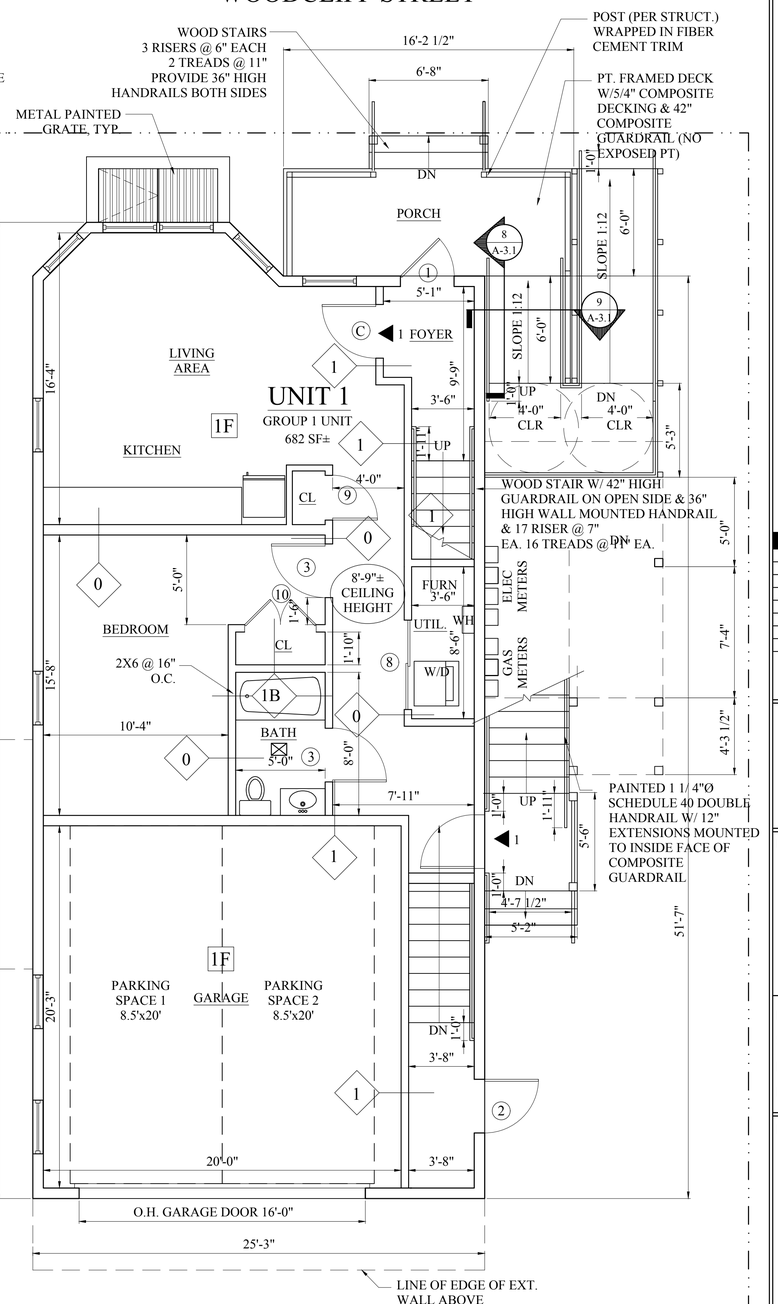
NOTE:ENERGY CODE COMPLIANCE

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



1 PROPOSED FOUNDATION PLAN

1/4" = 1'-0"



2 PROPOSED FIRST FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE R-30 INSULATION IN ALL FLOOR JOIST CAVITIES.
2. PROVIDE R-21 INSULATION IN ALL EXTERIOR STUD WALL CAVITIES.
3. PROVIDE R-49 INSULATION IN ALL ROOF JOIST CAVITIES, TYPICAL.
4. PROVIDE R-10 INSULATION IN SLAB.
5. PROVIDE R-19 INSULATION IN ALL EXTERIOR BASEMENT STUD WALLS CAVITIES.

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: DF

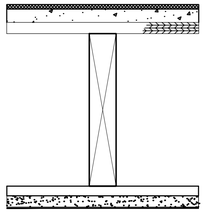
Drawing Name

PROPOSED FLOOR PLANS

Sheet No.

A-1.1

FLOOR ASSEMBLIES

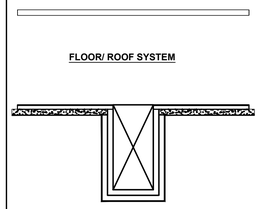


System Description
Engineered Joist

- Hardwood Floor System
- Ecore 5mm ECO silence underlayment
- 1" gypsum underlayment
- 19/32" wood sheathing perpendicular
- 9-1/2" min. wood "I" joist max 24" o.c.
- Cellulose Blow In
- RC-1 resilient channel or equivalent
- 5/8" FIRECODE C Core Gypsum Plaster Base
- 1/16" veneer plaster

System Performance
1 HR Fire
IBC 2009 TABLE 720.1(3) ITEM 23
58 STC Sound
50 IIC Sound

1F 1 HR FLOOR ASSEMBLY - +50 STC
SCALE: 3"=1'-0"



System Description
WOOD BEAM

- WOOD BEAM
- (LAYER 1) 5/8" FIRECODE C Core Gypsum
- (LAYER 2) 5/8" FIRECODE C Core Gypsum Plaster Base
- 1/16" veneer plaster exterior

System Performance
1 HR Fire BEAM PROTECTION
UL Design No. P517

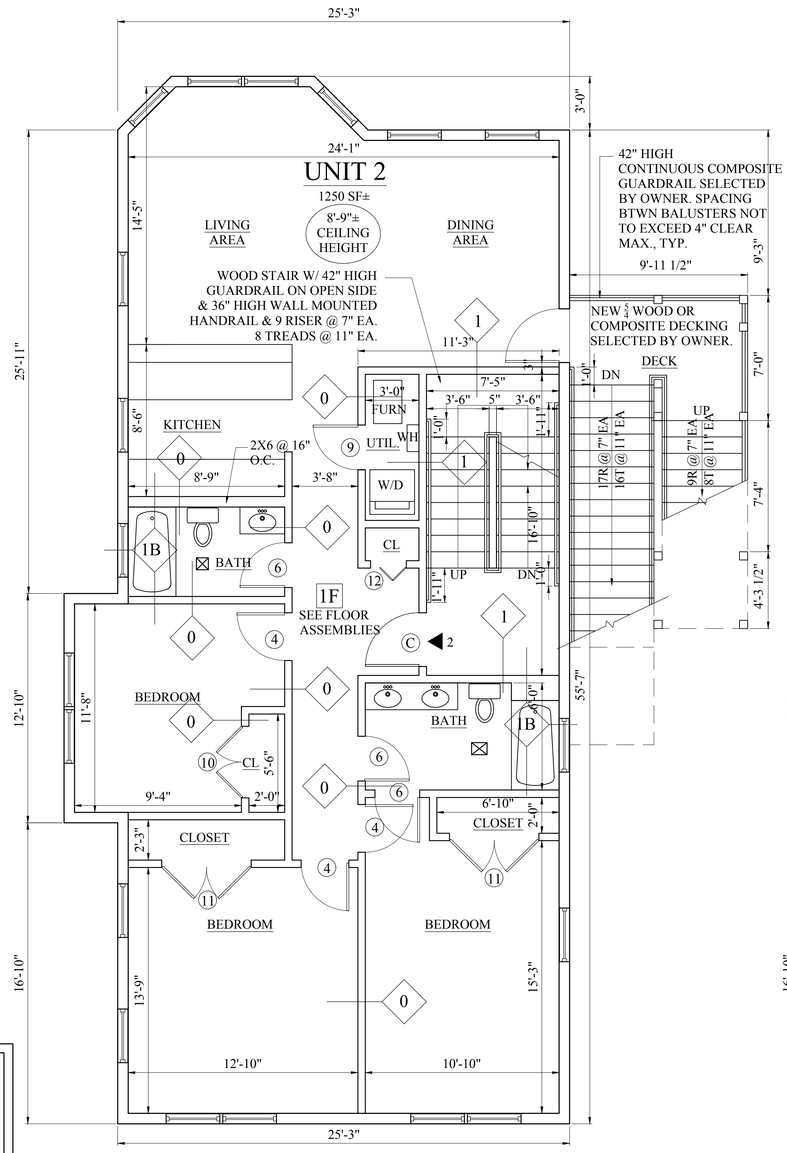
1BE 1 HR BEAM PROTECTION
SCALE: 1.5"=1'-0"

NOTE:ENERGY CODE COMPLIANCE

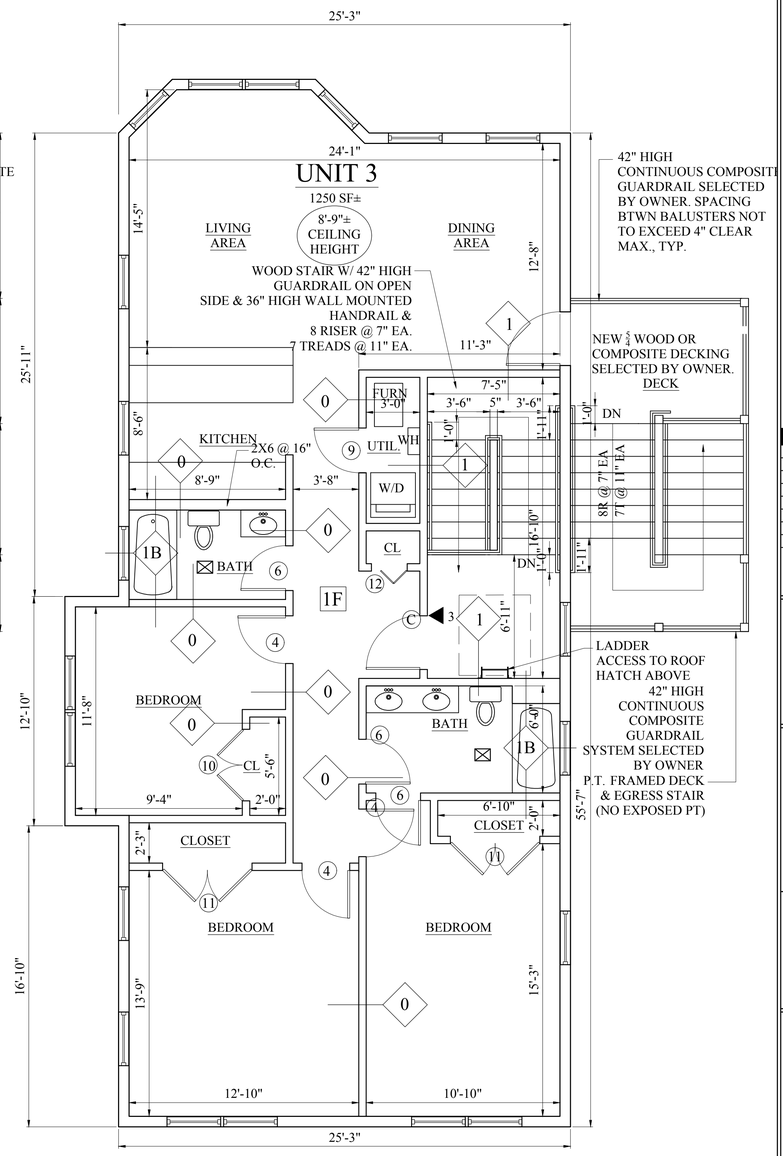
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING STRETCH/ ENERGY CODE COMPLIANCE PRIOR TO CLOSING OF WALLS. THE PROPER ENERGY CONSULTANT, HERs RATER, OR OTHER ALLOWED PROFESSIONAL SHALL PERFORM THE FINAL INSPECTIONS ASSOCIATED WITH THE CONSTRUCTION REQUIREMENTS AT THE DIRECTION OF THE CONTRACTOR.

GENERAL NOTES

1. PROVIDE R-30 INSULATION IN ALL FLOOR JOIST CAVITIES.
2. PROVIDE R-21 INSULATION IN ALL EXTERIOR STUD WALL CAVITIES.
3. PROVIDE R-49 INSULATION IN ALL ROOF JOIST CAVITIES, TYPICAL.
4. PROVIDE R-10 INSULATION IN SLAB.
5. PROVIDE R-19 INSULATION IN ALL EXTERIOR BASEMENT STUD WALLS CAVITIES.



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



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

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: DF

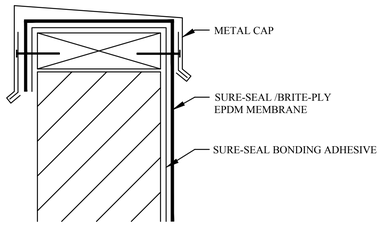
Drawing Name

PROPOSED FLOOR PLANS

Sheet No.

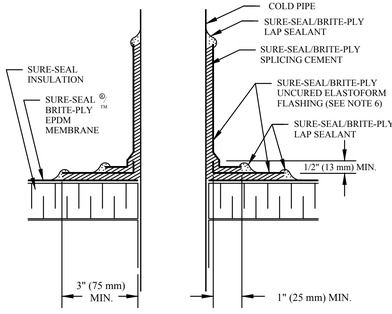
A-1.2

ROOF DETAILS



CAP FLASHING TERMINATION

2

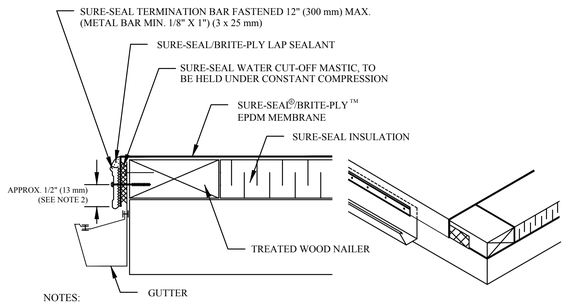


NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING BEFORE INSTALLING FIELD-FABRICATED PIPE SEAL.
2. SECUREMENT REQUIRED AROUND ALL PIPES GREATER THAN 18 INCHES (500 mm) IN DIAMETER.
3. UNCURED ELASTOFORM FLASHING WRAPPED AROUND THE PIPE SHALL HAVE 3" (75 mm) MINIMUM SPLICE.
4. A HEAT GUN MUST BE USED WHEN FORMING BRITE-PLY FLASHING.
5. ON MECHANICALLY-FASTENED ROOFING SYSTEMS, ADDITIONAL MEMBRANE SECUREMENT IS REQUIRED. REFER TO DETAIL MFS-14.
6. SURE-SEAL PRESSURE-SENSITIVE UNCURED FLASHING IN CONJUNCTION WITH PRIMER CAN BE USED IN LIEU OF ELASTOFORM FLASHING.

FIELD FABRICATED PIPE SEAL

4

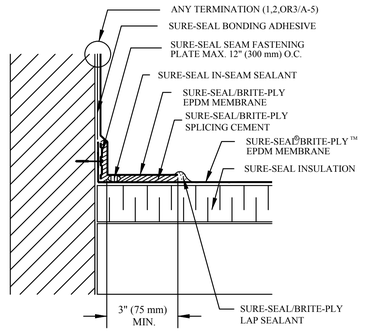


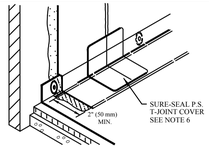
NOTES:

1. FASTENER PATTERN OF METAL BAR MUST PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
2. WHEN REINFORCED MEMBRANE IS USED, ENSURE FASTENER PENETRATES REINFORCEMENT.

METAL BAR TERMINATION

6



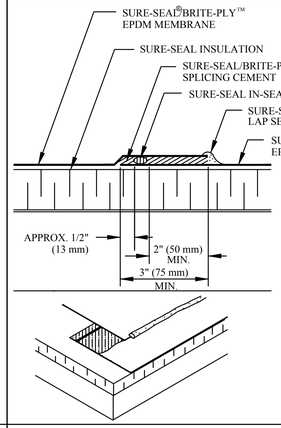


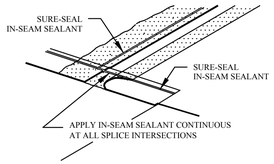
NOTES:

1. LOCATE (1,2,OR3/A-5) TERMINATION ABOVE ANTICIPATED WATER LEVEL.
2. FOR CORNER APPLICATIONS, SEE DETAIL (5/A-5).
3. MAINTAIN A CONTINUOUS BEAD OF IN-SEAM SEALANT AT ALL ADHESIVE MEMBRANE SPLICES, ESPECIALLY AT SPLICE INTERSECTIONS.
4. IN-SEAM SEALANT IS REQUIRED ON ALL VERTICAL ADHESIVE SPLICES BETWEEN ADJOINING SECTIONS OF CURED EPDM MEMBRANE.
5. IF A CONTINUATION OF THE DECK MEMBRANE IS TO BE USED AS WALL FLASHING, REFER TO DETAIL U-12-C OR U-12-D.
6. 6" (150 mm) WIDE UNCURED ELASTOFORM FLASHING OR PRESSURE-SENSITIVE FLASHING MAY ALSO BE CENTERED OVER FIELD SPLICE AT ANGLE CHANGE.
7. POLYMER SEAM PLATES ARE REQUIRED IN LIEU OF SEAM FASTENING PLATES FOR MECHANICALLY-FASTENED ROOFING SYSTEMS OVER STEEL DECKS.
8. SecurTAPE MAY BE USED IN LIEU OF SPLICING CEMENT.

PARAPET/CURB CURED EPDM

3



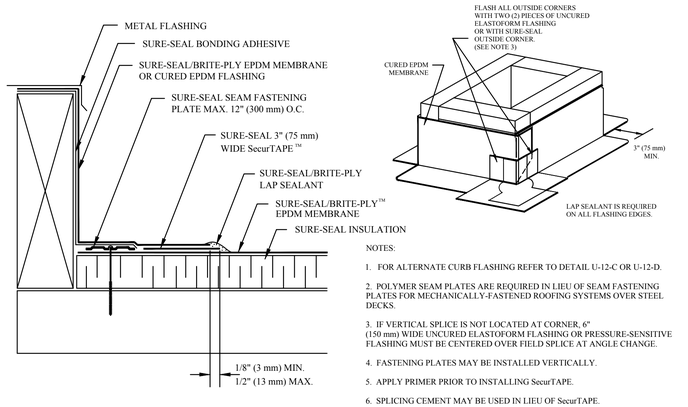


NOTES:

1. MEMBRANE SPLICE PROCEDURE IS FOR SPLICES BETWEEN CURED EPDM SECTIONS.
2. APPLY SPLICING CEMENT OVER ENTIRE 3" (75 mm) MINIMUM SPLICE AREA PRIOR TO APPLICATION OF IN-SEAM SEALANT.
3. IN-SEAM SEALANT SHALL BE CONTINUOUS ALONG THE LENGTH OF THE SPLICE.

MEMBRANE SPLICE WITH SPLICING CEMENT

5



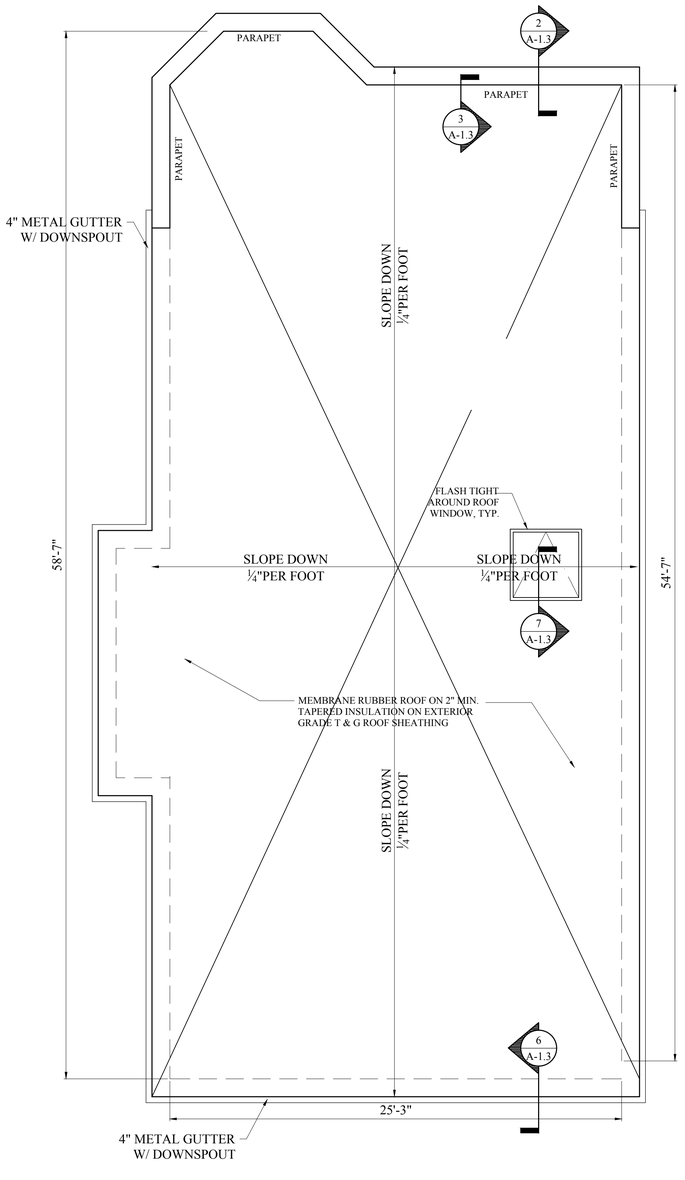
NOTES:

1. FOR ALTERNATE CURB FLASHING REFER TO DETAIL U-12-C OR U-12-D.
2. POLYMER SEAM PLATES ARE REQUIRED IN LIEU OF SEAM FASTENING PLATES FOR MECHANICALLY-FASTENED ROOFING SYSTEMS OVER STEEL DECKS.
3. IF VERTICAL SPLICE IS NOT LOCATED AT CORNER, 6" (150 mm) WIDE UNCURED ELASTOFORM FLASHING OR PRESSURE-SENSITIVE FLASHING MUST BE CENTERED OVER FIELD SPLICE AT ANGLE CHANGE.
4. FASTENING PLATES MAY BE INSTALLED VERTICALLY.
5. APPLY PRIMER PRIOR TO INSTALLING SecurTAPE.
6. SPLICING CEMENT MAY BE USED IN LIEU OF SecurTAPE.

CURB FLASHING

7

WOODCLIFF STREET



1 PROPOSED ROOF PLAN
1/4" = 1'-0"

Location

PROPOSED THREE-FAMILY

49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: DF

Drawing Name

PROPOSED ROOF PLAN & ROOF DETAILS

Sheet No.

A-1.3

2 PROPOSED ELEVATION
1/4" = 1'-0"

WINDOW SCHEDULE

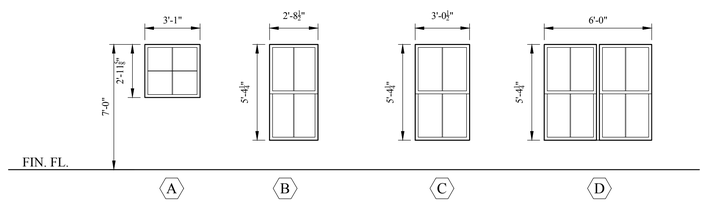
NOTE THIS SCHEDULE IS BASED ON STANDARD SIZES WHEN AVAILABLE.
PROVIDE WINDOW FALL PREVENTION DEVICES PER ASTM F2090 ON ALL WINDOWS W/ SILL HEIGHT BELOW 3' A.F.F.

NO.	MANUFACTURER	MODEL	# NEEDED	R.O.	REMARKS
A	MARVIN INTEGRITY	IAWN3335	7	3'-1" x 2'-11 5/8"	AWNING OPERATOR, WOOD-ULTREX SERIES, TEMPERED GLASS
B	MARVIN INTEGRITY	ITDH3264	6	2'-8 1/2" x 5'-4 1/4"	DOUBLE HUNG, PRIMED INTERIOR, SIMULATED DIVIDED LITE, 2 OVER 2 LITES
C	MARVIN INTEGRITY	ITDH3664 E	17	3'-0 1/2" x 5'-4 1/4"	DOUBLE HUNG, PRIMED INTERIOR, SIMULATED DIVIDED LITE, 2 OVER 2 LITES, EGRESS WINDOW
D	MARVIN INTEGRITY	ITDH3664 2W E	10	6'-0" x 5'-4 1/4"	DOUBLE HUNG 2 WIDE OPERATOR, PRIMED INTERIOR, SIMULATED DIVIDED LITE, 2 OVER 2 LITES, EGRESS WINDOW
E					
F					

WINDOW NOTES:

1. ALL WINDOWS ARE BASED ON MARVIN INTEGRITY OR EQUAL.
2. GLAZING TO BE LOW-E TYPE
3. ALL WINDOWS TO INCLUDE INSECT SCREENING PER MANUFACTURER
4. DIMENSIONS SHOWN ARE BASED ROUGH OPENINGS. G.C. TO COORDINATE ROUGH OPENING DIMENSIONS WITH WINDOW MANUFACTURES THAT COMPLY W/ ASTM F2090.
5. PROVIDE WINDOW OPENING CONTROL DEVICE.

* GC IS RESPONSIBLE FOR VERIFYING SIZES & QUANTITIES IN THE FIELD PRIOR TO ORDERING
PROVIDE HALF SCREENS ON TRACKS, WHITE FINISH HARDWARE, COLOR SELECTED BY OWNER



1 PROPOSED ELEVATION
1/4" = 1'-0"

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

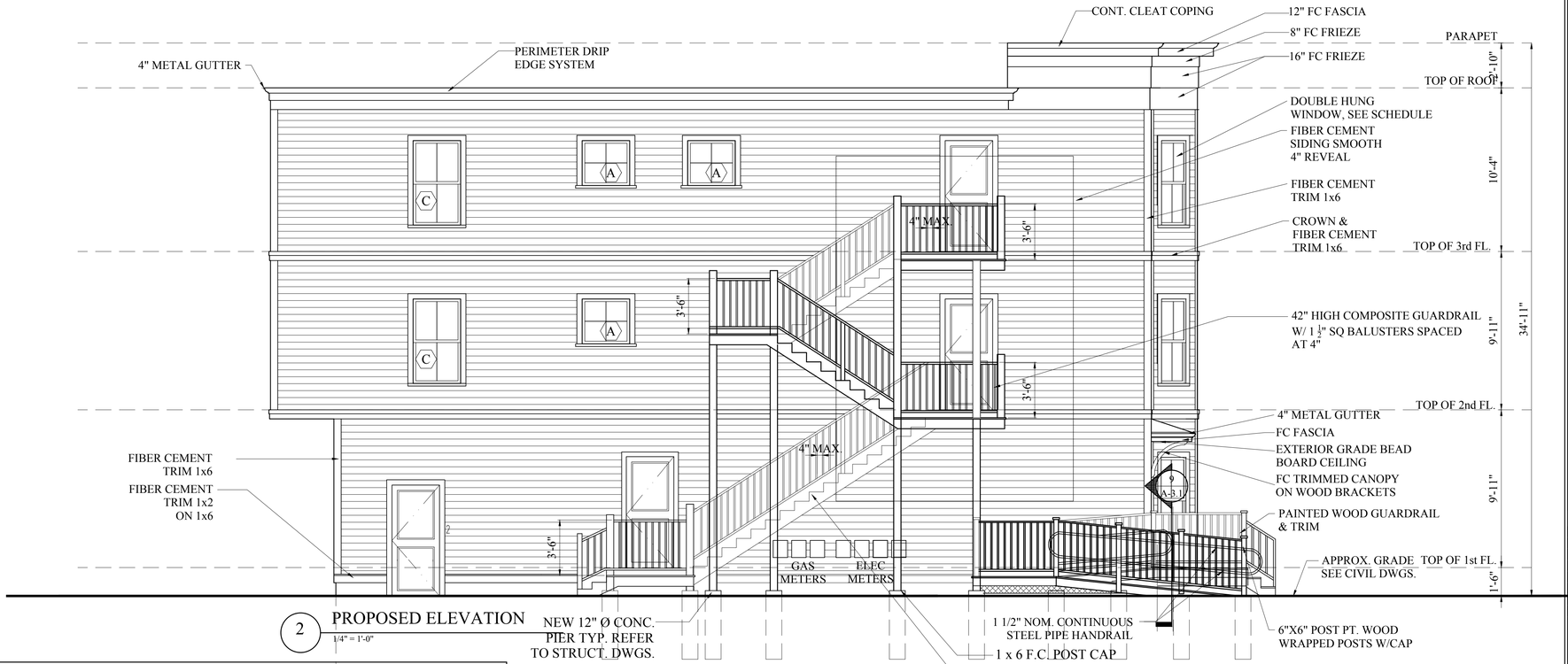
Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: MA

Drawing Name

PROPOSED ELEVATIONS

Sheet No.

A-2.1



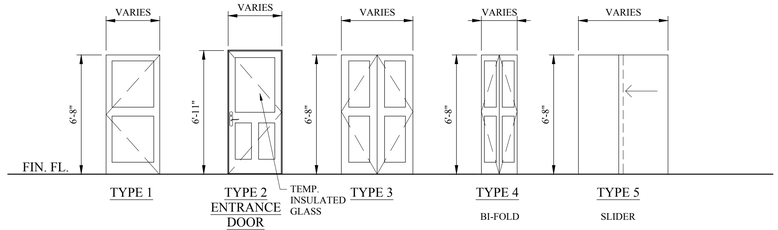
2 PROPOSED ELEVATION
1/4" = 1'-0"

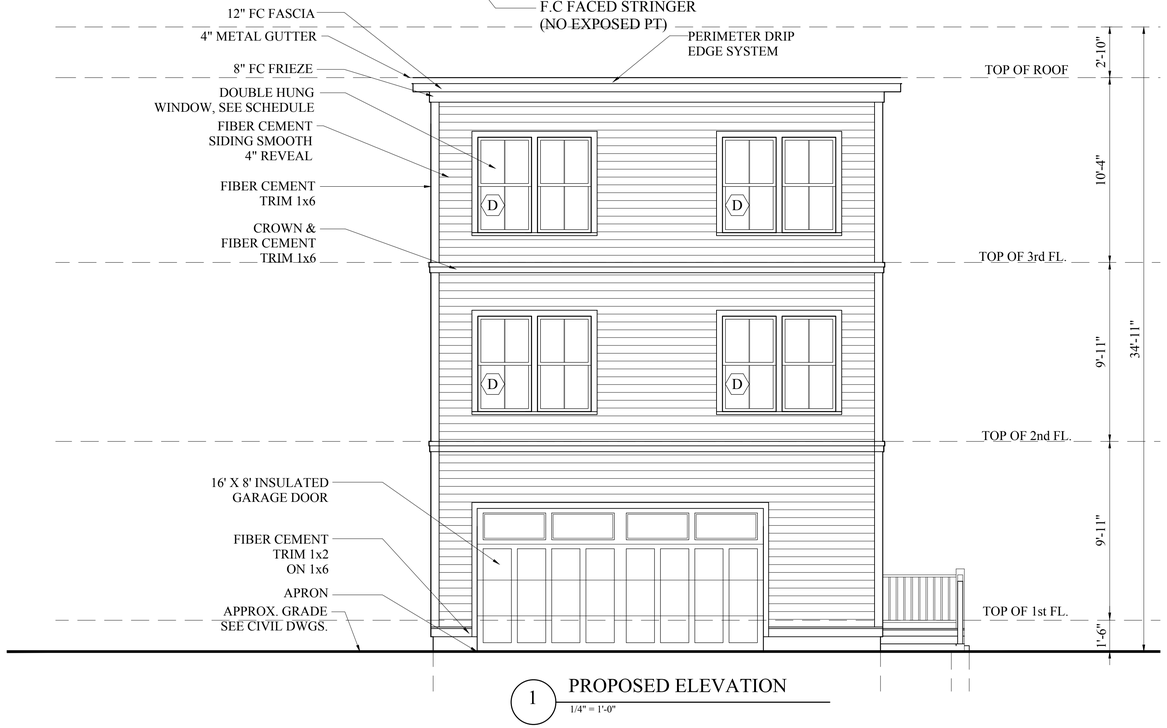
DOOR SCHEDULE

NOTE: GC TO CONFIRM SIZES & QUANTITIES PRIOR TO ORDERING

NO.	SIZE	MATERIAL	RATING	FRAME	TYPE	HARDWARE	REMARKS
C	3'-0" x 6'-8" x 1 3/4"	FBGLS	1 HR	WOOD	1	ENTRANCE	ENTRY PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER, ENTRANCE LOCK, PROVIDE DEADBOLT, 1 HR RATED FRAME & DOOR
1	3'-0" x 7'-0" x 1 3/4"	FBGLS	-	WOOD	2	ENTRANCE	ENTRY PANEL DOOR, SMOOTH FINISH, PAINTED, GLASS TEMP, STYLE SELECTED BY OWNER, ENTRANCE LOCK, PROVIDE DEADBOLT
2	3'-0" x 7'-0" x 1 3/4"	FBGLS	-	WOOD	1	DECK	ENTRY PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER, PROVIDE DEADBOLT LOCK
3	3'-0" x 6'-8" x 1 3/8"	WOOD	-	WOOD	1	BED	PANEL DOORS, STYLE SELECTED BY OWNER, PROVIDE PRIVACY LATCH & ASTRAGAL
4	2'-8" x 6'-8" x 1 3/8"	WOOD	-	WOOD	1	BED	PANEL DOORS, STYLE SELECTED BY OWNER, PROVIDE PRIVACY LATCH & ASTRAGAL
5	3'-0" x 6'-8" x 1 3/8"	WOOD	-	WOOD	1	BATH	PANEL DOORS, STYLE SELECTED BY OWNER, PROVIDE PRIVACY LATCH & ASTRAGAL
6	2'-6" x 6'-8" x 1 3/8"	WOOD	-	WOOD	1	BATH	PANEL DOORS, STYLE SELECTED BY OWNER, PROVIDE PRIVACY LATCH & ASTRAGAL
7	2'-6" x 7'-0" x 1 3/8"	WOOD	-	WOOD	1	SINGLE DUMMY	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
8	(2) 2'-6" x 6'-8" x 1 3/8"	WOOD	-	WOOD	5	SLIDER	PAIR OF PANEL DOOR, PAINTED, STYLE SELECTED BY OWNER
9	2'-6" x 6'-8" x 1 3/8"	WOOD	-	WOOD	1	SINGLE DUMMY	PANEL DOOR, SMOOTH FINISH, PAINTED, STYLE SELECTED BY OWNER
10	4'-0" x 6'-8" x 1 3/8"	WOOD	-	WOOD	3	CLOSET	PAIR OF PANEL DOOR, PAINTED, STYLE SELECTED BY OWNER
11	5'-0" x 6'-8" x 1 3/8"	WOOD	-	WOOD	3	CLOSET	PAIR OF PANEL DOOR, PAINTED, STYLE SELECTED BY OWNER
12	2'-0" x 6'-8" x 1 3/8"	WOOD	-	WOOD	4	CLOSET	BI-FOLD PANEL DOOR, PAINTED, STYLE SELECTED BY OWNER

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





1 PROPOSED ELEVATION
1/4" = 1'-0"

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: MA

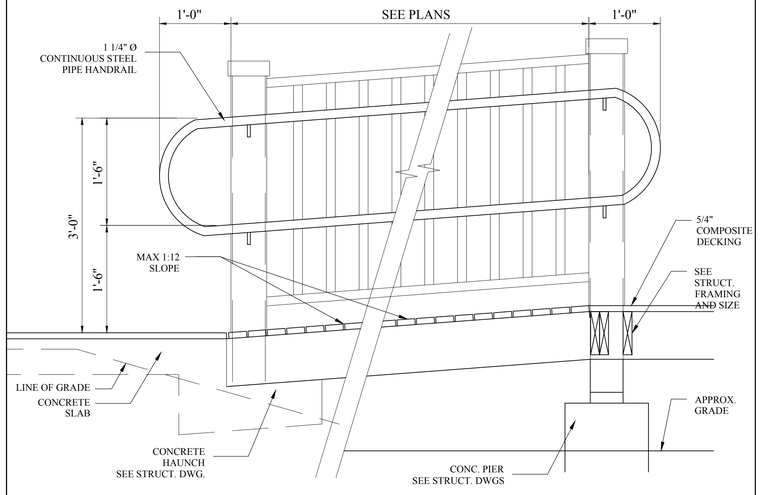
Drawing Name

PROPOSED ELEVATIONS

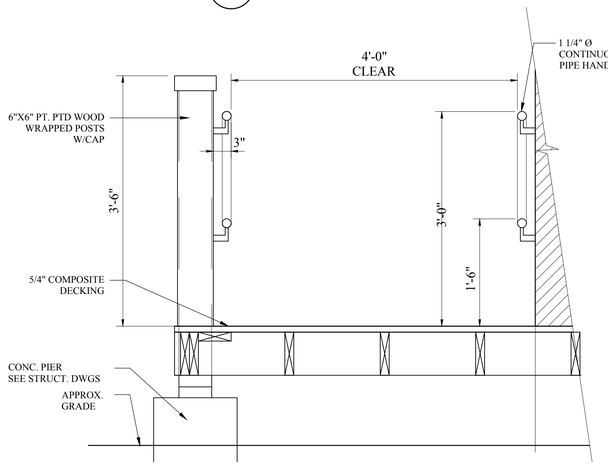
Sheet No.

A-2.2

WOOD RAMP

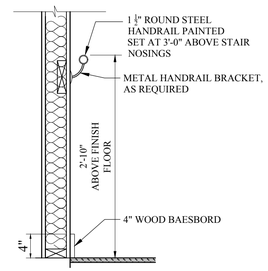


8 HANDRAIL DETAIL @ RAMP
1"=1'-0"

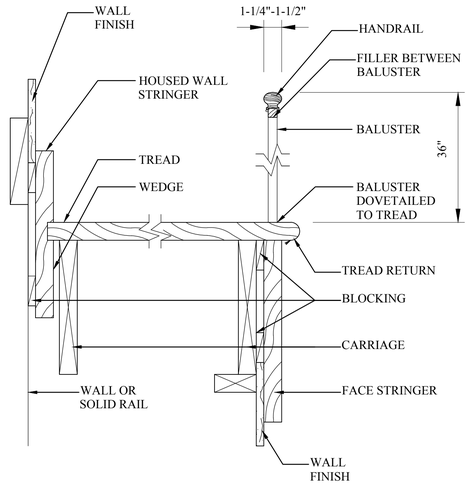


9 SECTION @ RAMP
1"=1'-0"

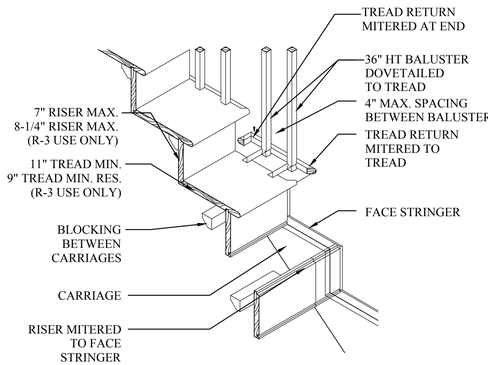
WOOD STAIR



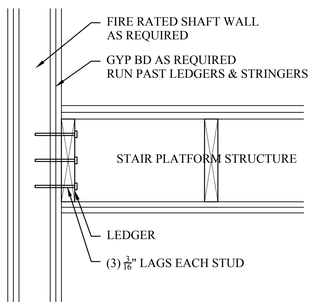
7 HANDRAIL DETAIL
1"=1'-0"



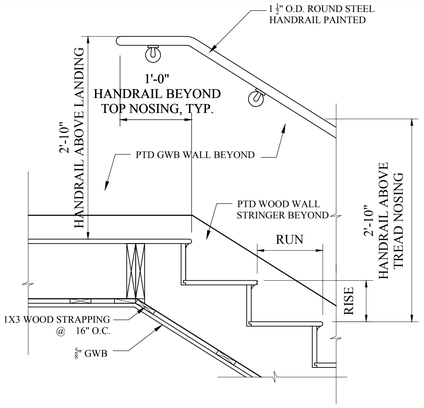
6 STAIR DETAIL
NTS



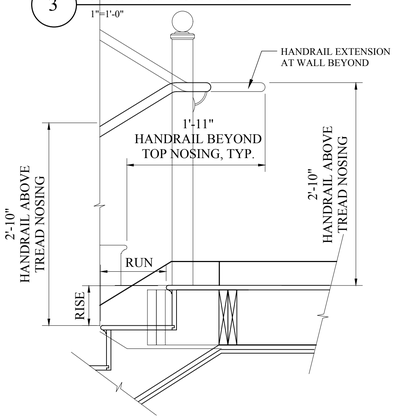
5 STAIR DETAIL
NTS



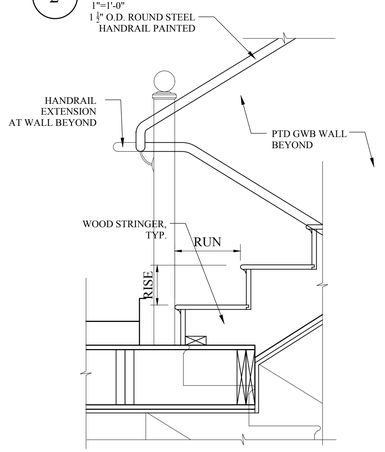
4 PLATFORMS IN
FIRE RATED STAIR SHAFT
NTS



3 SECTION DETAIL
1"=1'-0"



2 SECTION DETAIL
1"=1'-0"



1 SECTION DETAIL
1"=1'-0"

Location

PROPOSED THREE-FAMILY

49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: AMF

Drawing Name

WOOD STAIRS
& RAMP

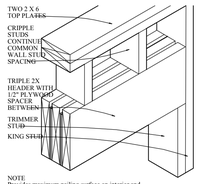
Sheet No.

A-3.1

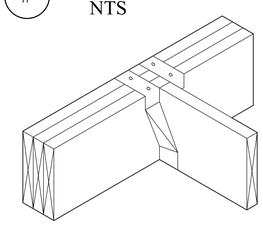
RECOMMENDED FASTENING SCHEDULE

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 6D ANNULAR OR SPIRAL THREAD 8D COMMON OR 8D ANNULAR OR SPIRAL THREAD 10D COMMON OR 8D RING SHANK OR 8D ANNULAR OR SPIRAL THREAD 16D GALVANIZED WIRE STAPLES 3/8" MINIMUM CROWN; 1 3/8" LENGTH	 6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 6" O.C. INTERMEDIATE 4" O.C. EDGES & 7" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 4" O.C. INTERMEDIATE
BUILT-UP GIRDERS AND BEAMS	20D COMMON	32" O.C. DIRECT
CONTINUOUS HEADER TO STUD	8D COMMON	4 TOE-NAIL
CONTINUOUS HEADER, TWO PIECES	16D COMMON	16" O.C. DIRECT
1/2" FIBER BOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
25/32" FIBER BOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL OR 8D COMMON NAIL OR 16 GAUGE: STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
GYPSUM SHEATHING	12 GAUGE 1 3/4" LARGE HEAD CORROSION-RESISTANT	4" O.C. EDGE 8" O.C. INTERMEDIATE
PARTICLE BOARD UNDERLAYMENT (1/4"-3/4")	6D ANNULAR THREADED	6" O.C. DIRECT EDGES 10" O.C. INTERMEDIATE
PARTICLE BOARD ROOF AND WALL SHEATHING 1/2" OR LESS	6D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
5/8" OR GREATER	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
PARTICLE BOARD SUBFLOORING (5/8" OR GREATER)	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
SHINGLES, WOOD*	NO. 14 B&S GAGE CORROSION RESISTIVE	2 EACH BEARING
WEATHER BOARDING	8D CORROSION	2 EACH BEARING

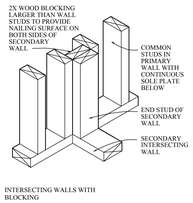
NOTE *: SHINGLE NAILS SHALL PENETRATE NOT LESS THAN 3/4" INTO NAILING STRIPS, SHEATHING OR SUPPORTING CONSTRUCTION EXCEPT AS OTHERWISE PROVIDED IN 780 CMR 1225.4.4.



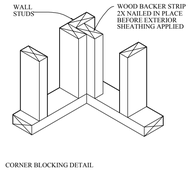
2X6 BEARING HEADER DETAIL
NTS



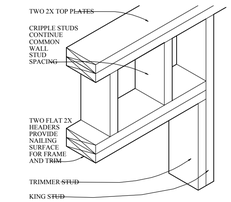
WOOD JOISTS SUPPORTED ON WOOD GIRDERS
1"=1'-0"



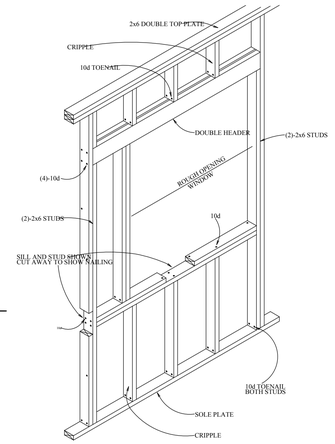
INSULATED WALL DETAILS
1"=1'-0"



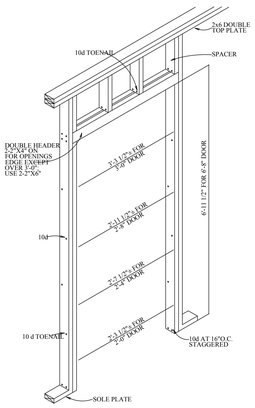
INSULATED WALL DETAILS
1" = 1'-0"



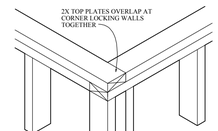
2X_PARTITION WALL HEADER DETAIL
NTS



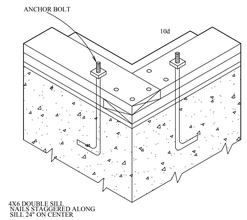
WINDOW OPENING DETAIL
1"=1'-0"



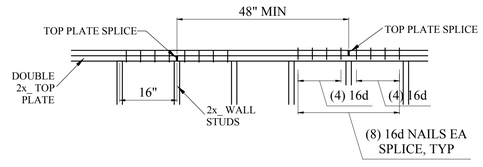
DOOR OPENING DETAIL
1"=1'-0"



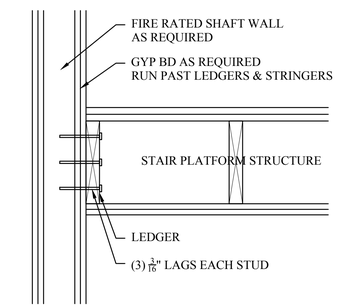
TOP PLATE FRAMING DETAIL
NTS



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



TYPICAL DOUBLE TOP PLATE SPLICE DETAIL
NTS



PLATFORMS IN FIRE RATED STAIR SHAFTS
1/2"=1'-0"

Location

PROPOSED THREE-FAMILY

49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

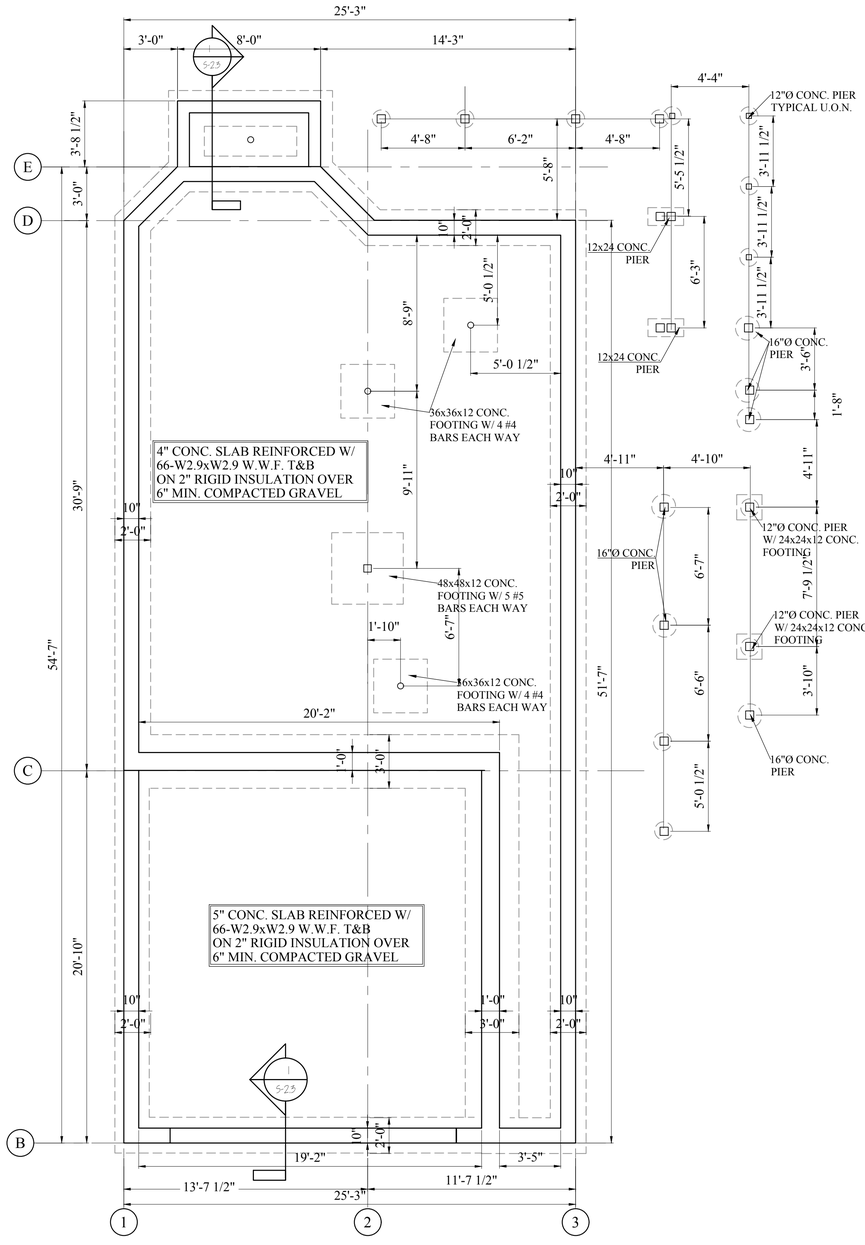
Project No: 19107
Scale: AS NOTED
Date: 5-8-19
Drawn By: AMF

Drawing Name

FASTENING SCHEDULE & FRAMING DETAILS

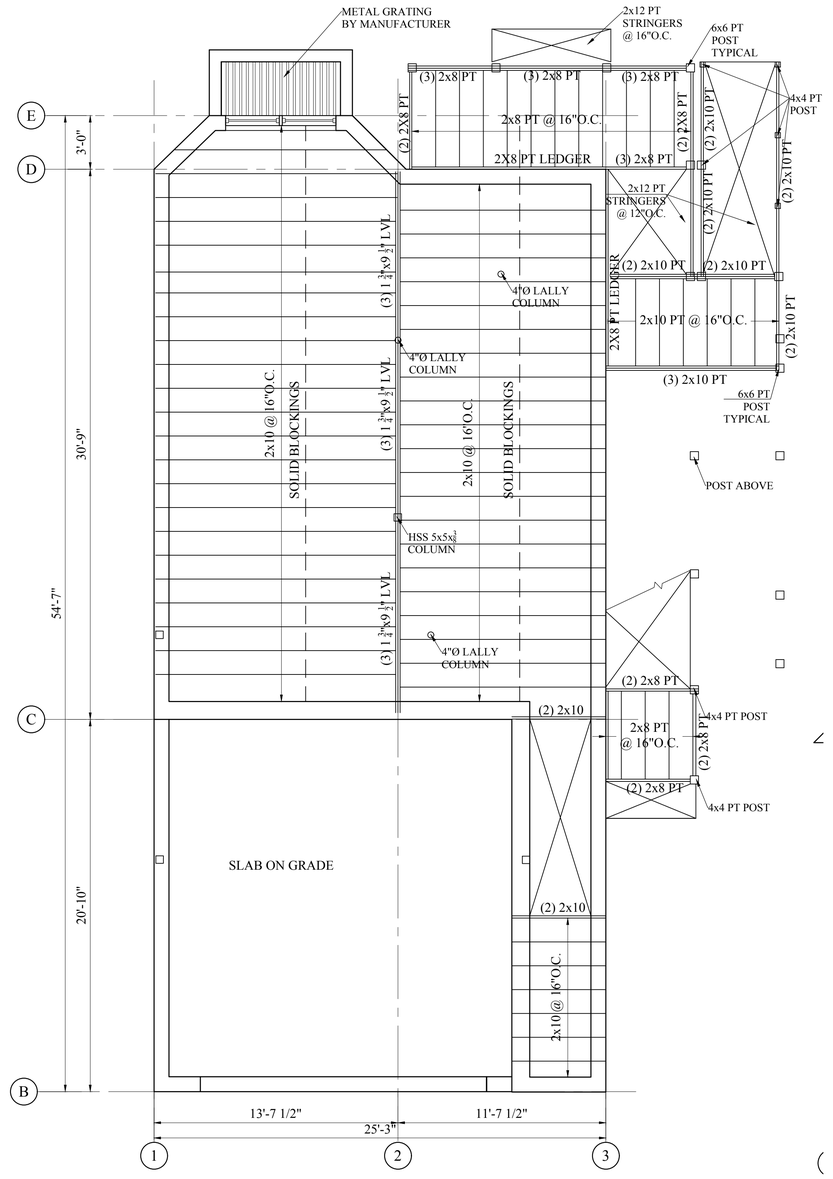
Sheet No.

A-3.2



1 PROPOSED FOUNDATION PLAN

1/4" = 1'-0"



2 PROPOSED FIRST FLOOR FRAMING PLAN

1/4" = 1'-0"

Location

PROPOSED THREE-FAMILY

49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

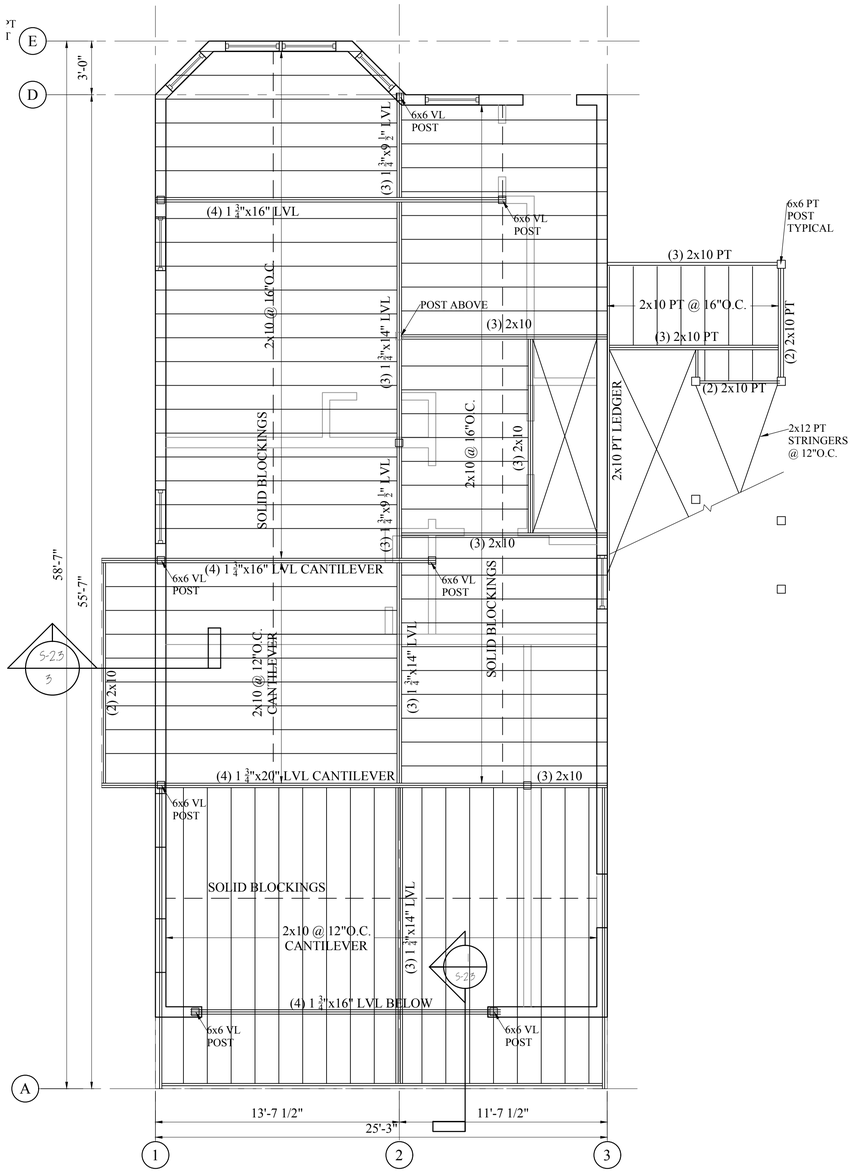
Project No: 19107
Scale: AS NOTED
Date: 6-25-2019
Drawn By: AC

Drawing Name

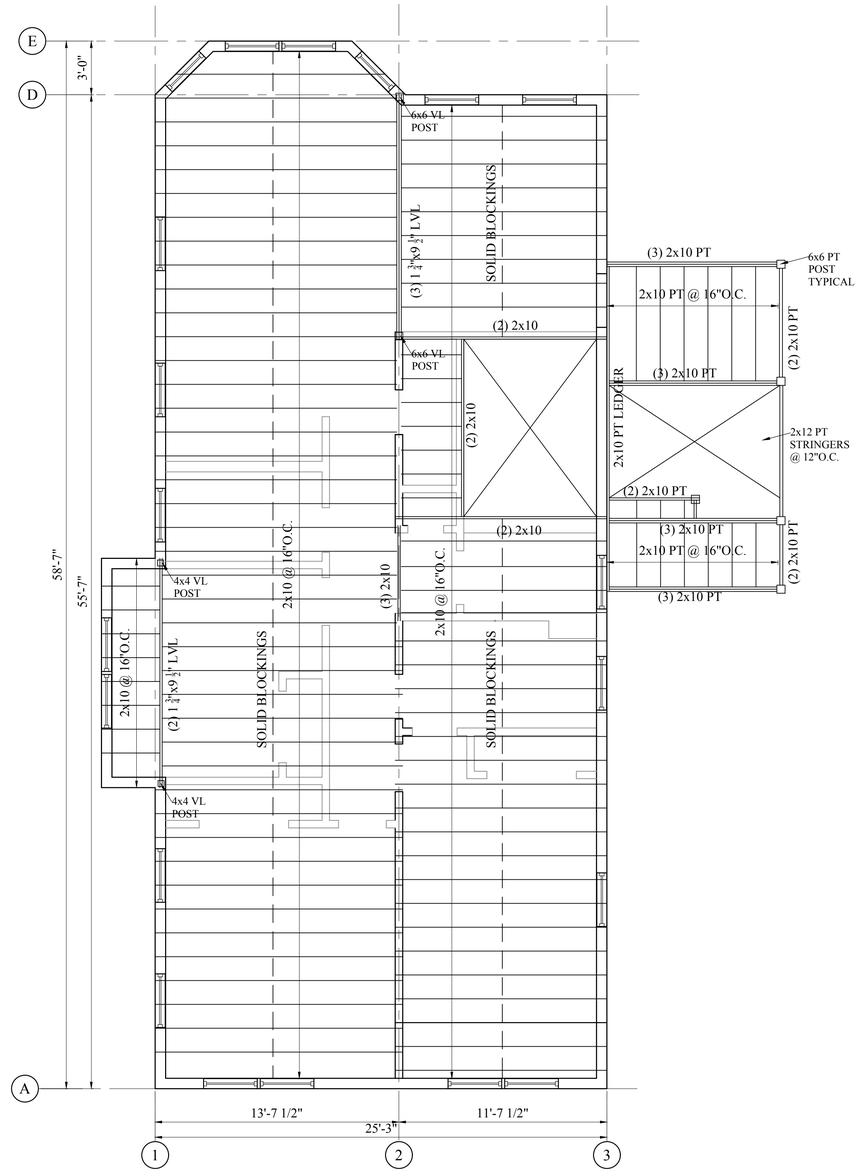
PROPOSED FRAMING PLANS

Sheet No.

S-1.1



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



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

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

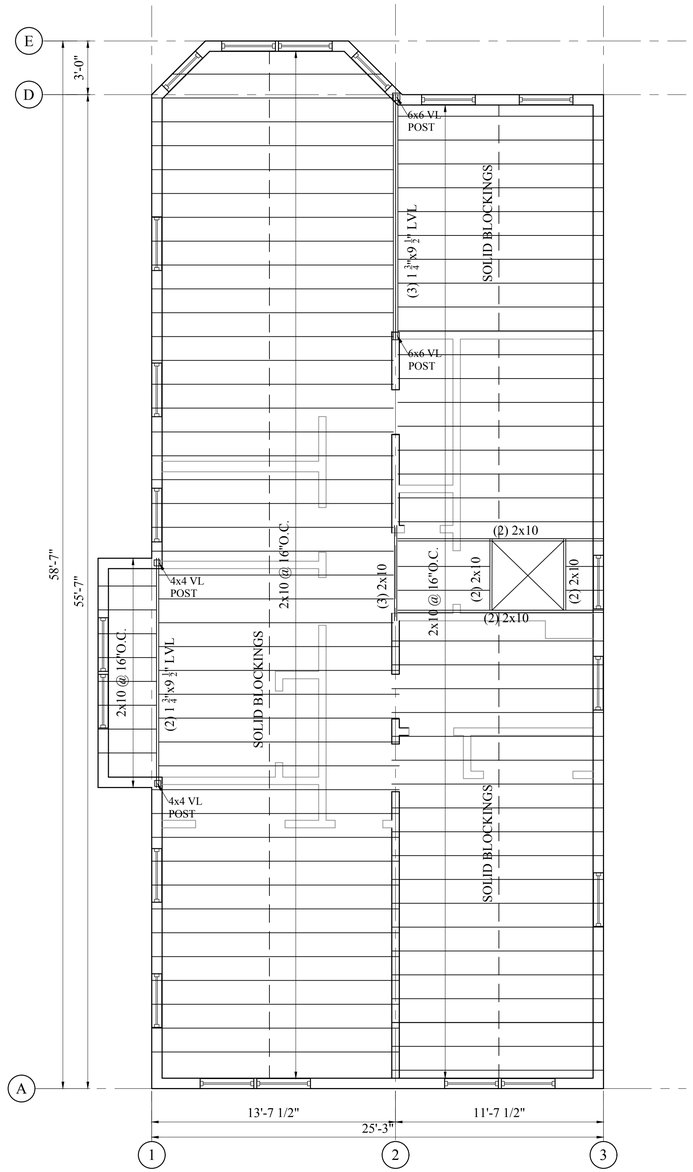
Project No: 19107
Scale: AS NOTED
Date: 6-25-2019
Drawn By: AC

Drawing Name

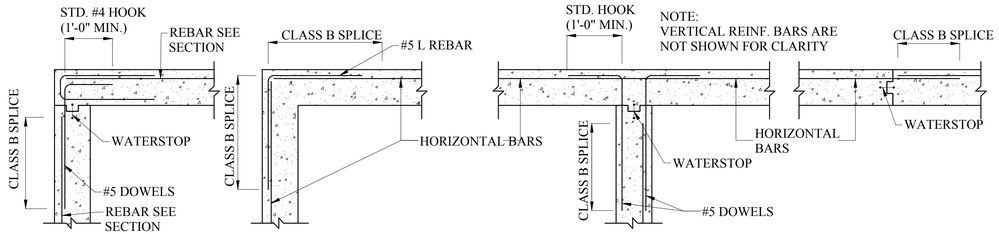
PROPOSED FRAMING PLANS

Sheet No.

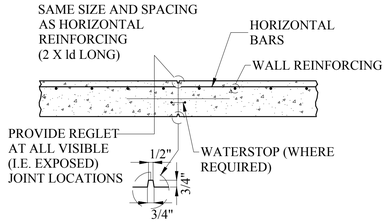
S-1.2



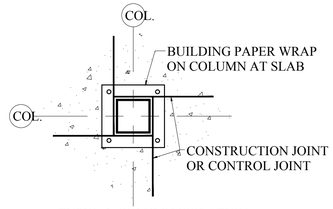
1 PROPOSED ROOF FRAMING PLAN
1/4" = 1'-0"



TYPICAL PLAN OF HORIZONTAL WALL REINFORCING

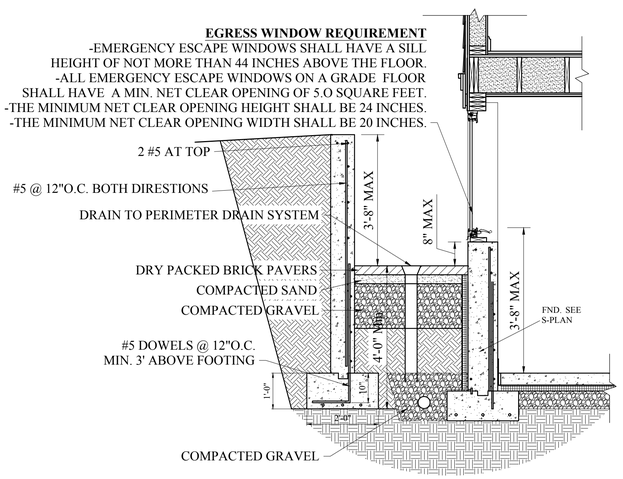


TYPICAL VERTICAL WALL CONTROL JOINT

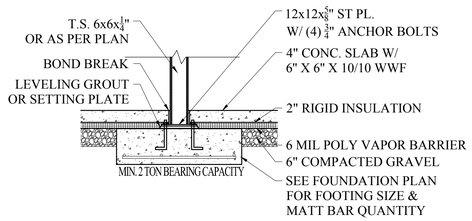


TYPICAL COLUMN ISOLATION JOINT DETAIL
SCALE: 1"=1'-0"

2 PROPOSED CONCRETE DETAILS
1/2" = 1'-0"



3 WINDOW WELL DETAIL
1/2" = 1'-0"



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

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET
DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

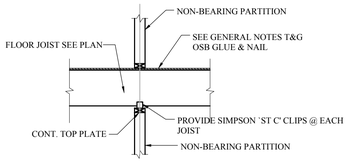
Project No: 19107
Scale: AS NOTED
Date: 6-25-2019
Drawn By: AC

Drawing Name

PROPOSED FRAMING PLANS

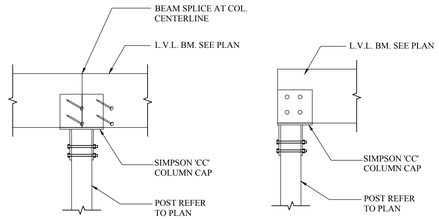
Sheet No.

S-1.3

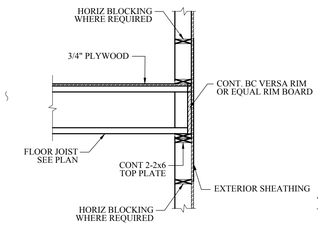


TYPICAL FRAMING
AT NON-BEARING PARTITIONS

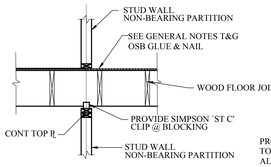
PERPENDICULAR TO FRAMING
(REFER TO ARCH DWGS FOR WALL LOCATIONS)



POST AND BEAM CONNECTION DETAIL

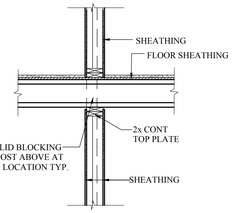


TYPICAL SECTION AT EXTERIOR WALL

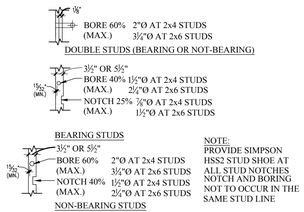


TYPICAL FRAMING AT NON-BEARING PARTITIONS

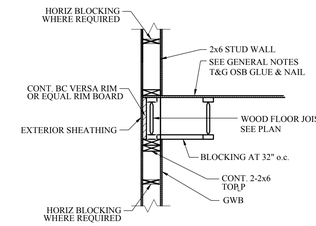
PARALLEL TO FRAMING
(REFER TO ARCH DWGS FOR WALL LOCATIONS)



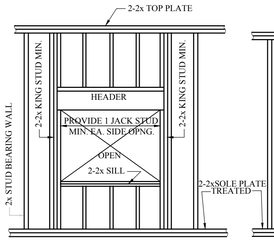
TYPICAL POST DETAIL



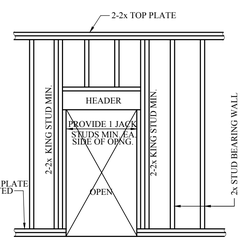
TYPICAL CUTTING AND BORING STUD DETAIL



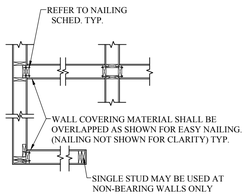
TYPICAL SECTION AT EXTERIOR WALL



TYP. WINDOW OPENING

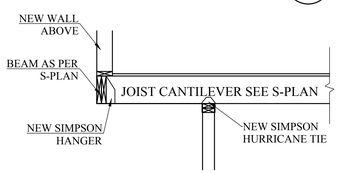


TYPICAL DOOR FRAMING

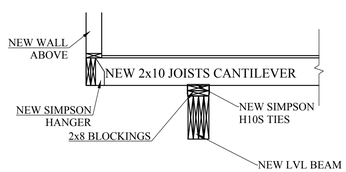


TYPICAL PLAN DETAILS

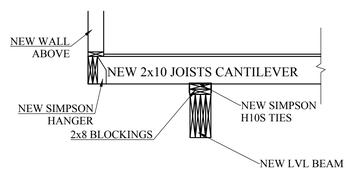
1 PROPOSED WOOD DETAILS
1/2" = 1'-0"



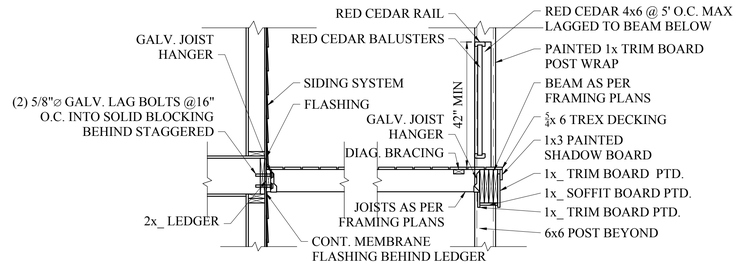
5 CANTILEVER DETAILS
1/2" = 1'-0"



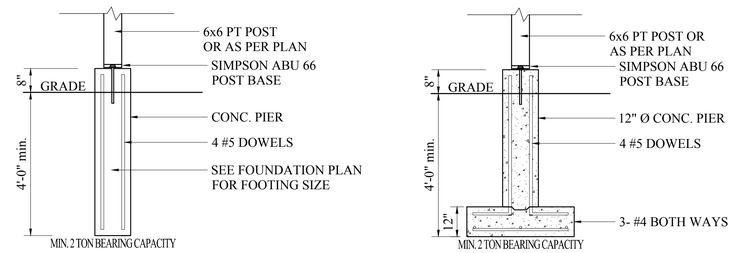
6 CANTILEVER DETAILS
1/2" = 1'-0"



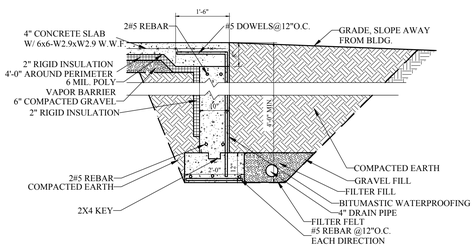
6 CANTILEVER DETAILS
1/2" = 1'-0"



2 PROPOSED DECK DETAILS
1/2" = 1'-0"



3 PROPOSED PIER DETAILS
1/2" = 1'-0"



4 PROPOSED GARAGE ENTRANCE DETAILS
1/2" = 1'-0"

Location

PROPOSED THREE-FAMILY
49 WOODCLIFF STREET DORCHESTER, MA 02125

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

No.	Revision Date
	11-18-19 PMT

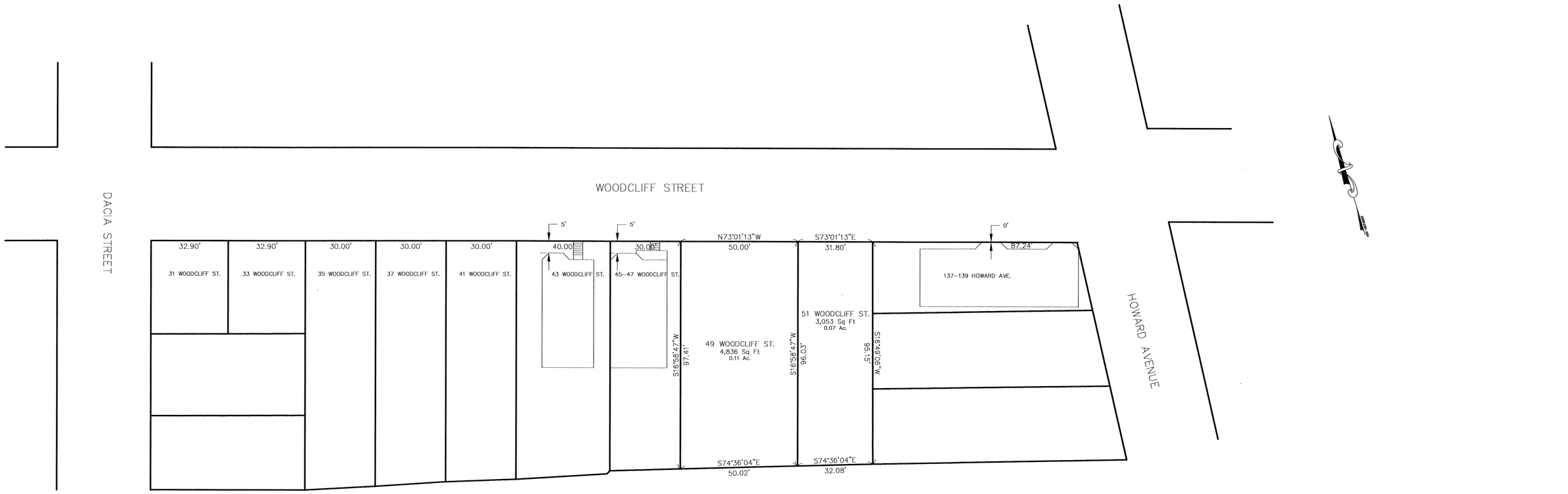
Project No: 19107
Scale: AS NOTED
Date: 6-25-2019
Drawn By: AC

Drawing Name

PROPOSED FRAMING PLANS

Sheet No.

S-1.4



WOODCLIFF STREET ODD SIDE MODAL TABLE FROM HOWARD AVENUE TO DACIA STREET		
ADDRESS	FRONTAGE	SETBACK
137–139 HOWARD	87.24'(SIDE)	0'
51 WOODCLIFF	31.80'	--
49 WOODCLIFF	50'	--
45–47 WOODCLIFF	30'	5'
43 WOODCLIFF	40'	5'
41 WOODCLIFF	30'	--
37 WOODCLIFF	30'	--
35 WOODCLIFF	30'	--
33 WOODCLIFF	32.90'	--
31 WOODCLIFF	32.90'	--
MODAL SETBACK WOODCLIFF STREET ODD SIDE FROM HOWARD AVE. TO DACIA STREET 70' FRONTAGE @ 5' SETBACK MODAL = 5'		

DACIA/WOODCLIFF COMMUNITY GARDEN

DACIA/WOODCLIFF COMMUNITY GARDEN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

COMMONWEALTH OF MASSACHUSETTS
JAMES A. HERRICK
CIVIL
NO. 40195
REGISTERED
PROFESSIONAL ENGINEER

MODAL PLAN
49 & 51 WOODCLIFF STREET
ROXBURY, MA
FOR
FIRST PARADISE LLC

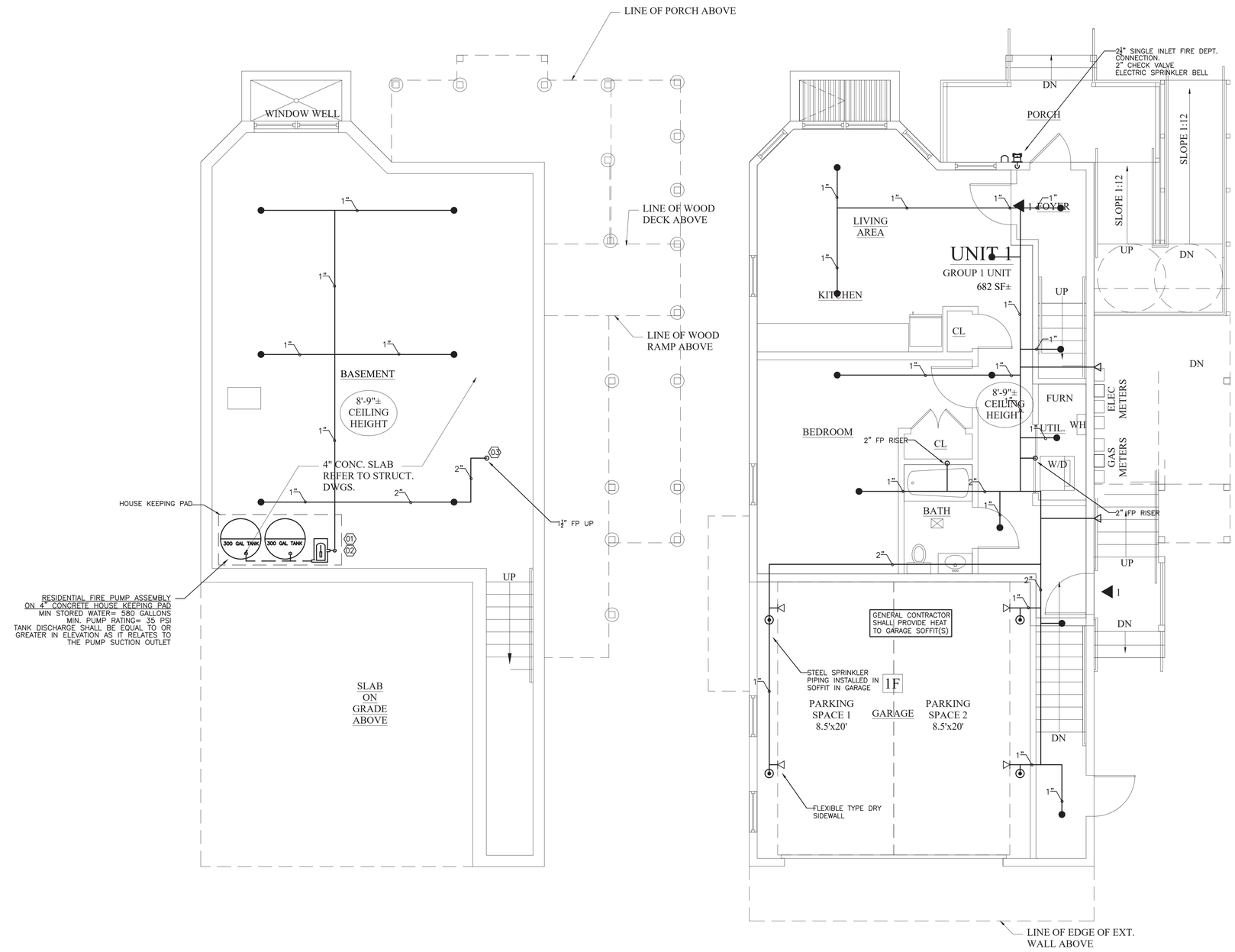
CIVIL ENVIRONMENTAL CONSULTANTS
8 OAK STREET PEABODY, MA 01960 978-531-1191

SHEET NO: 1 OF 1

DATE: 5/17/2019 JOB: 3989

DRAWN BY: L.J.B.

WOODCLIFF STREET



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

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

COMMONWEALTH OF MASSACHUSETTS
MURAT FER MUSTEFIZADE
FIRE PROTECTION
No. 39362
REGISTERED PROFESSIONAL ENGINEER

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338-4406
FAX. (617) 451-2540
E-MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

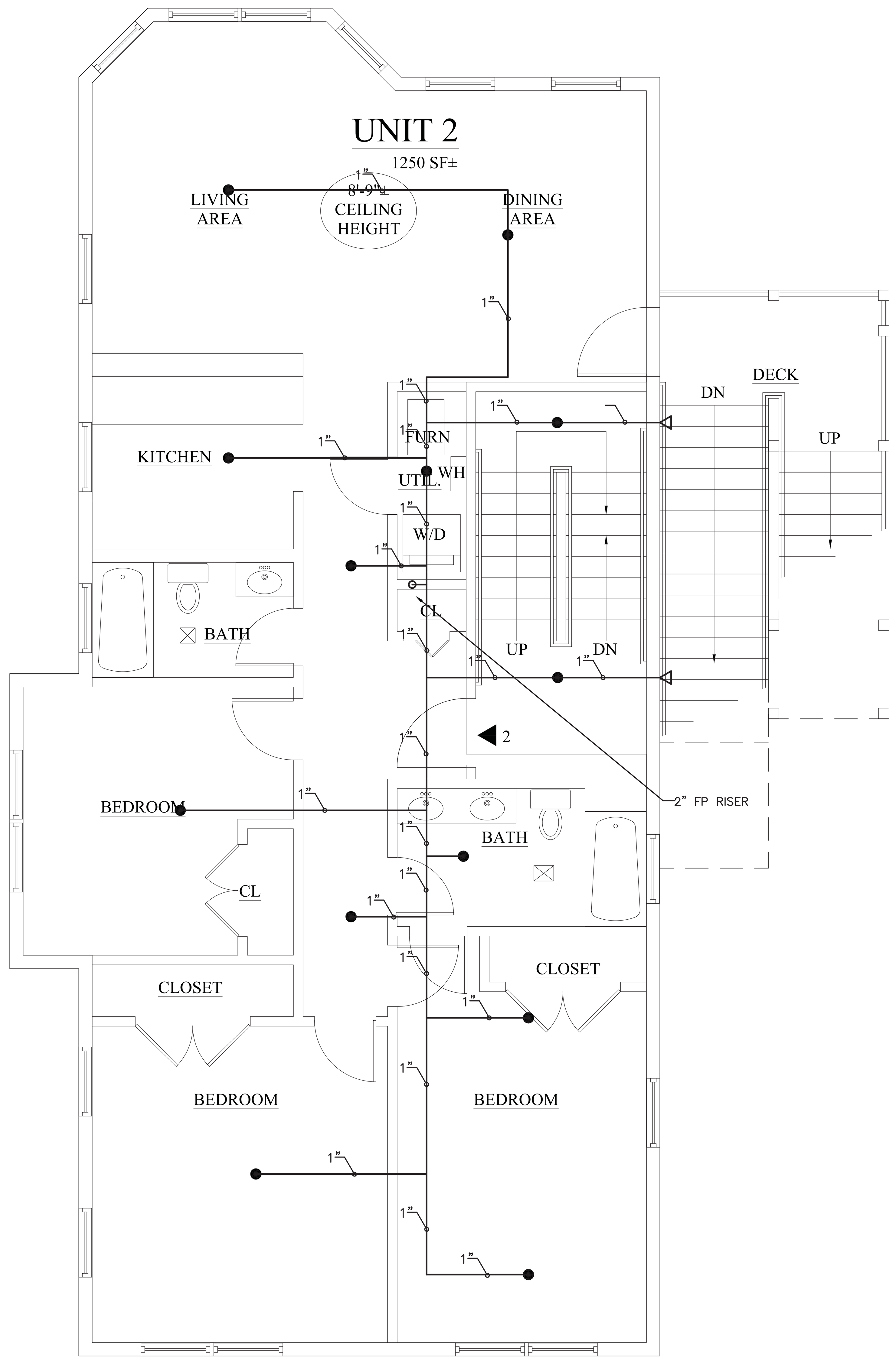
Title:
PROPOSED FIRE PROTECTION PLAN

Revisions:

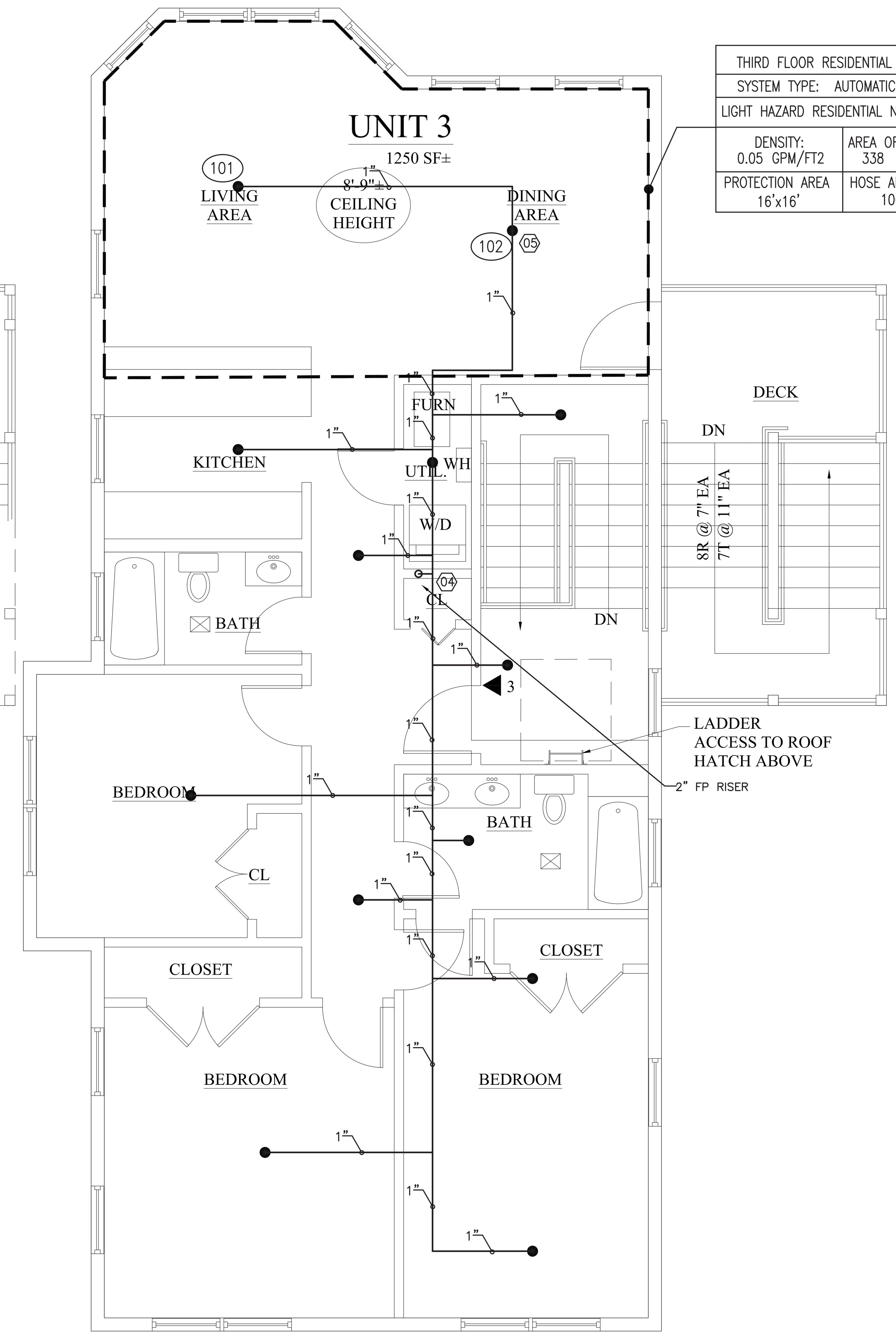
Project No.:	Drawn: JD
Date: 11/21/19	Checked:
Scale: 1/4"=1'-0"	Approved:

Sheet:
FP-1
No. of

Verify All Dimensions in Field Do Not Scale



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



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

THIRD FLOOR RESIDENTIAL	
SYSTEM TYPE: AUTOMATIC-WET	
LIGHT HAZARD RESIDENTIAL NFPA-13D 2013	
DENSITY: 0.05 GPM/FT2	AREA OF APPLICATION: 338 FT2
PROTECTION AREA 16'x16'	HOSE ALLOWANCE 100 GPM

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338-4406
FAX. (617) 451-2540
E-MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

Title:
PROPOSED FIRE PROTECTION PLAN

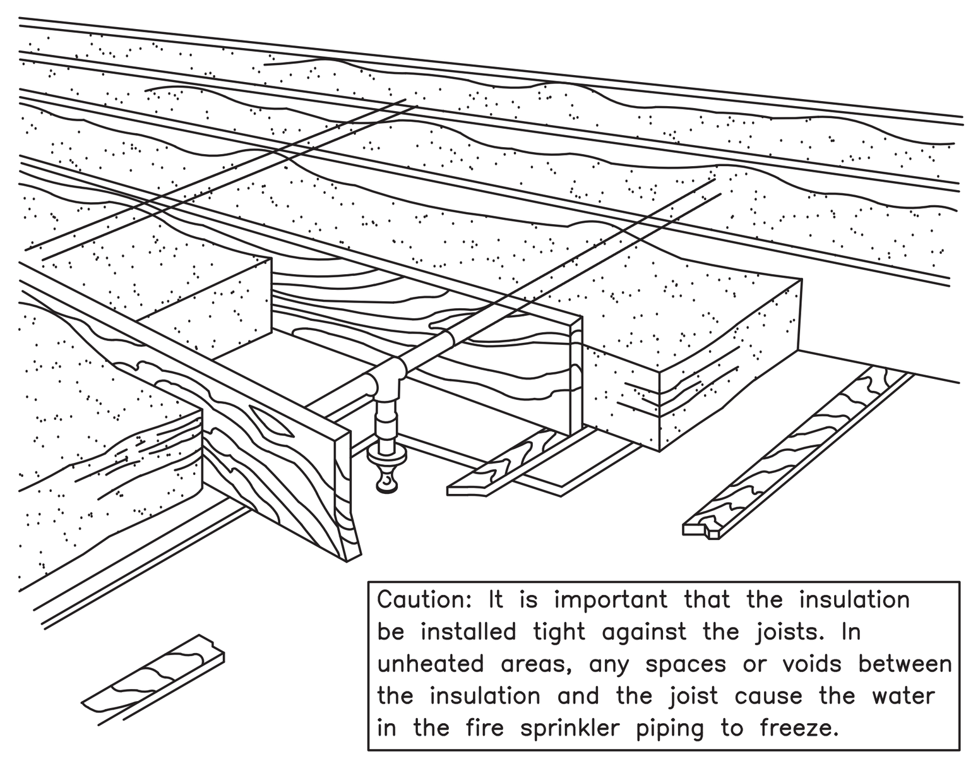
Revisions:

Project No.:		Drawn:	JD
Date:	11/21/19	Checked:	
Scale:	1/4"=1'-0"	Approved:	

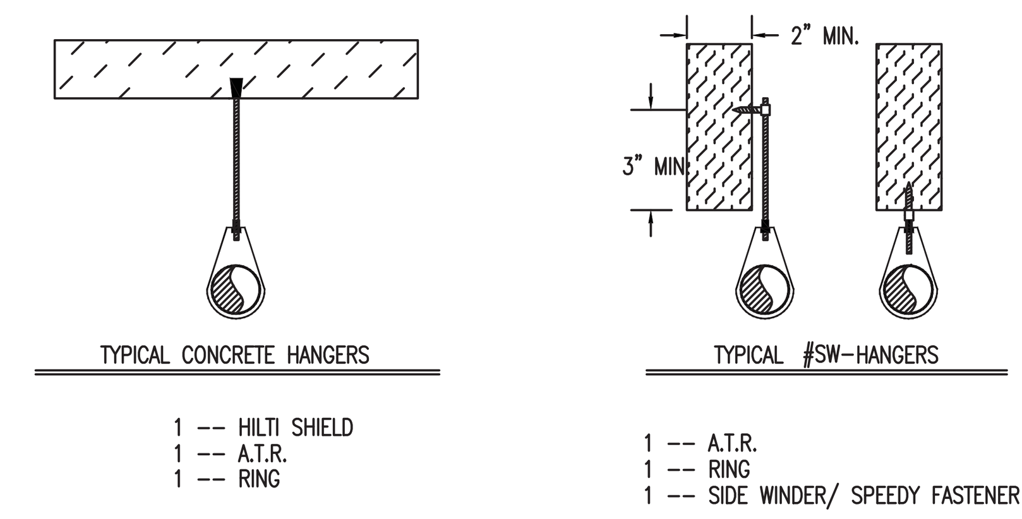
Sheet: FP-2

No. of

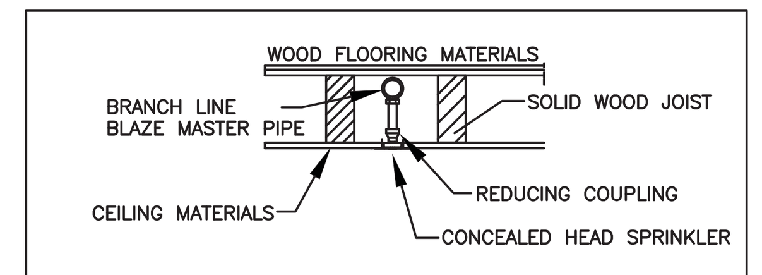
Verify All Dimensions in Field   Do Not Scale



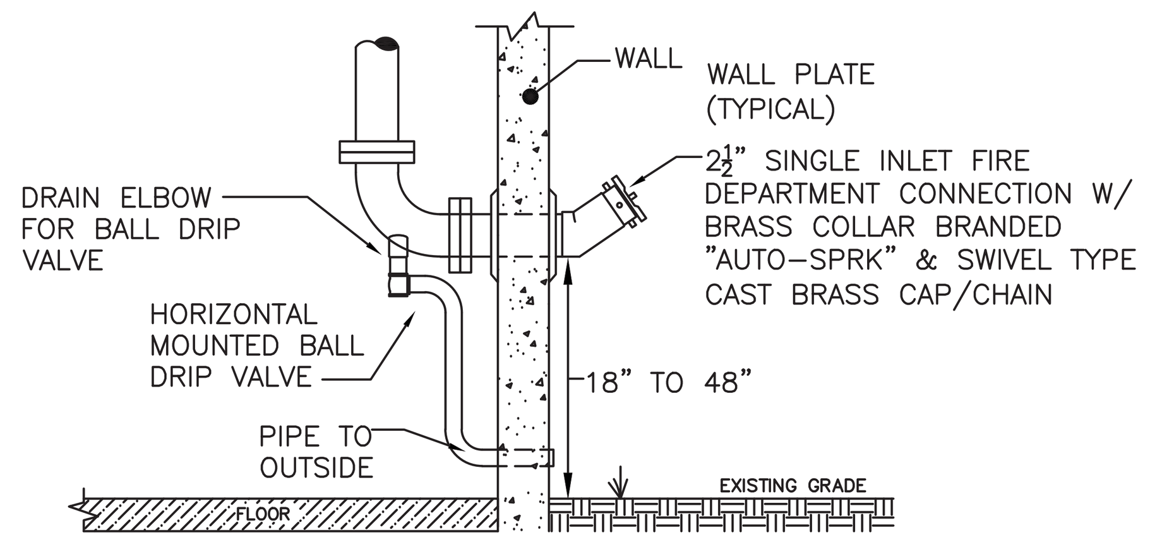
PIPE INSULATION | NTS



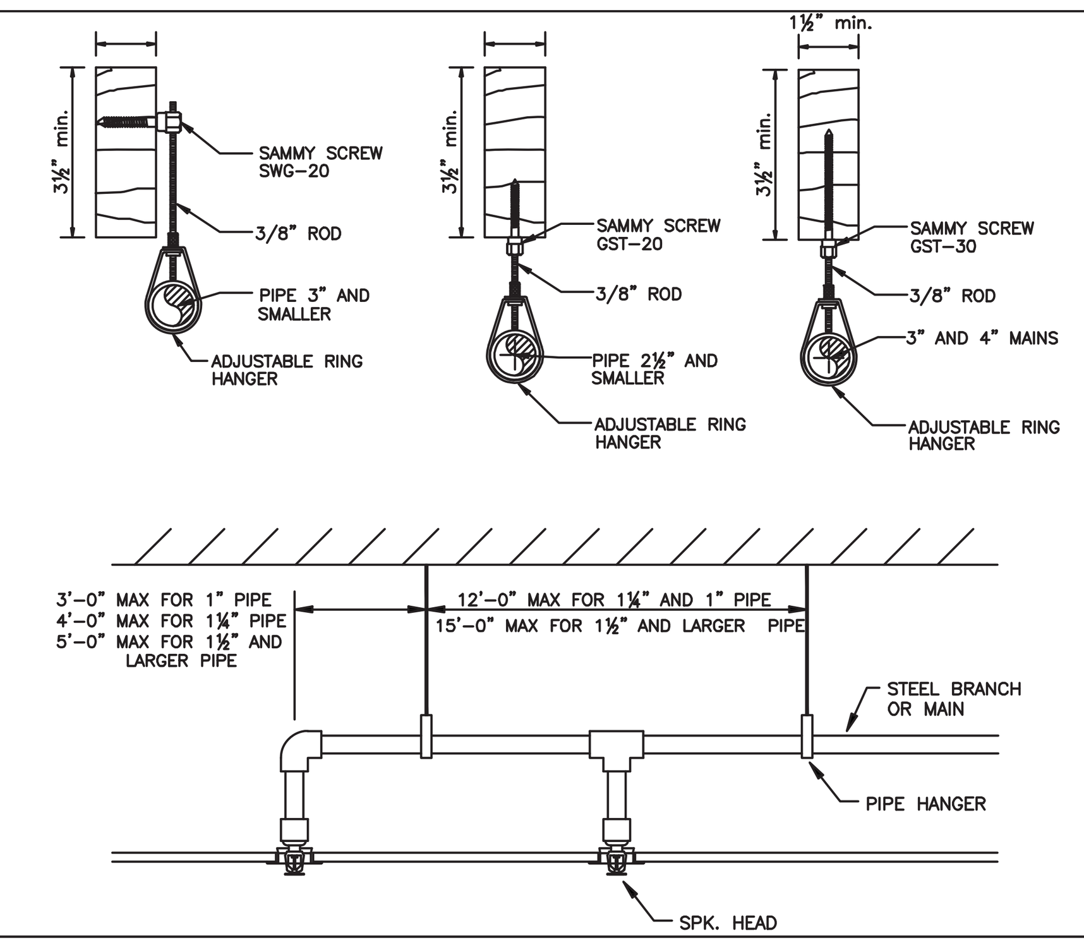
HANGER STRUCTURE ATTACHMENT | NTS



TYPICAL CPVC PIPE AT JOIST INSTALL



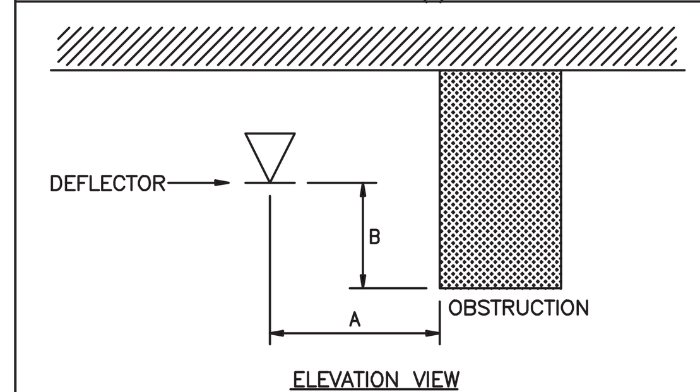
FIRE DEPARTMENT CONNECTION | NTS



PIPE HANGER SPACING | NTS

CONTINUOUS OBSTRUCTION GUIDE

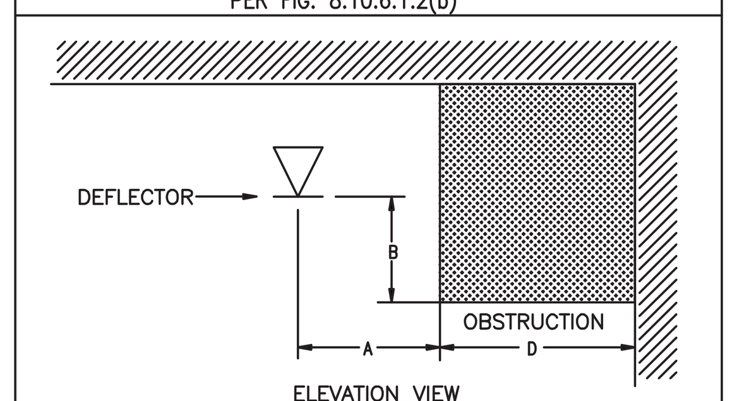
RESIDENTIAL UPRIGHT & PENDENT SPRAY SPRINKLERS
PER FIG. 8.10.6.1.2(a)



DISTANCE FROM SPRINKLERS FROM SIDE OF OBSTRUCTION (A)	MAXIMUM ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION (IN.) (B)
LESS THAN 1 FT.	0
1 FT. TO LESS THAN 1 FT. 6 IN.	0
1 FT. 6 IN. TO LESS THAN 2 FT.	1
2 FT. TO LESS THAN 2 FT. 6 IN.	1
2 FT. 6 IN. TO LESS THAN 3 FT.	1
3 FT. TO LESS THAN 3 FT. 6 IN.	3
3 FT. 6 IN. TO LESS THAN 4 FT.	3
4 FT. TO LESS THAN 4 FT. 6 IN.	5
4 FT. 6 IN. TO LESS THAN 5 FT.	7
5 FT. TO LESS THAN 5 FT. 6 IN.	7
5 FT. 6 IN. TO LESS THAN 6 FT.	7
6 FT. TO LESS THAN 6 FT. 6 IN.	9
6 FT. 6 IN. TO LESS THAN 7 FT.	11
7 FT. & GREATER	14

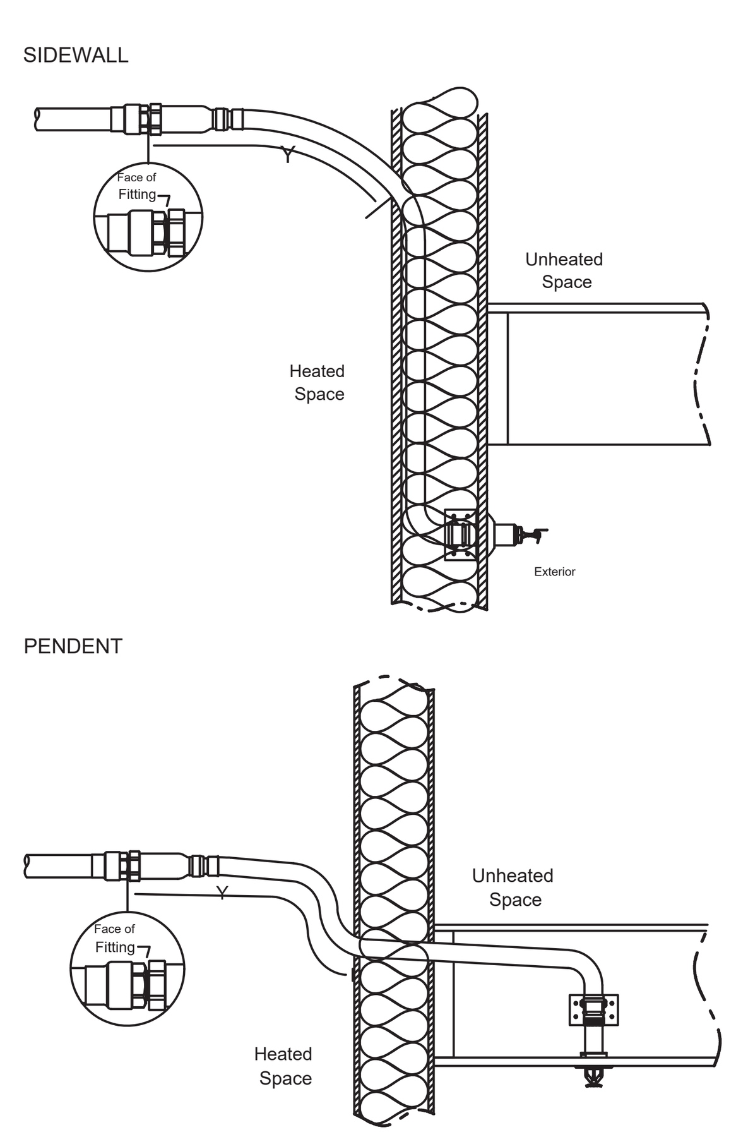
OBSTRUCTIONS AGAINST WALLS GUIDE

RESIDENTIAL UPRIGHT & PENDENT SPRAY SPRINKLERS
PER FIG. 8.10.6.1.2(b)



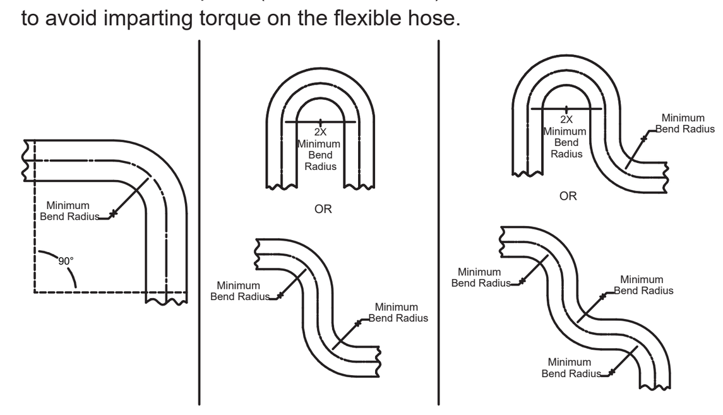
A ≥ (D − 8 in.) + B
WHERE D ≤ 30 in.

OBSTRUCTION SPACING



Flexible Hose Bend Characteristics:

NOTE: For out-of-plane (three-dimensional) bends, care shall be taken to avoid imparting torque on the flexible hose.

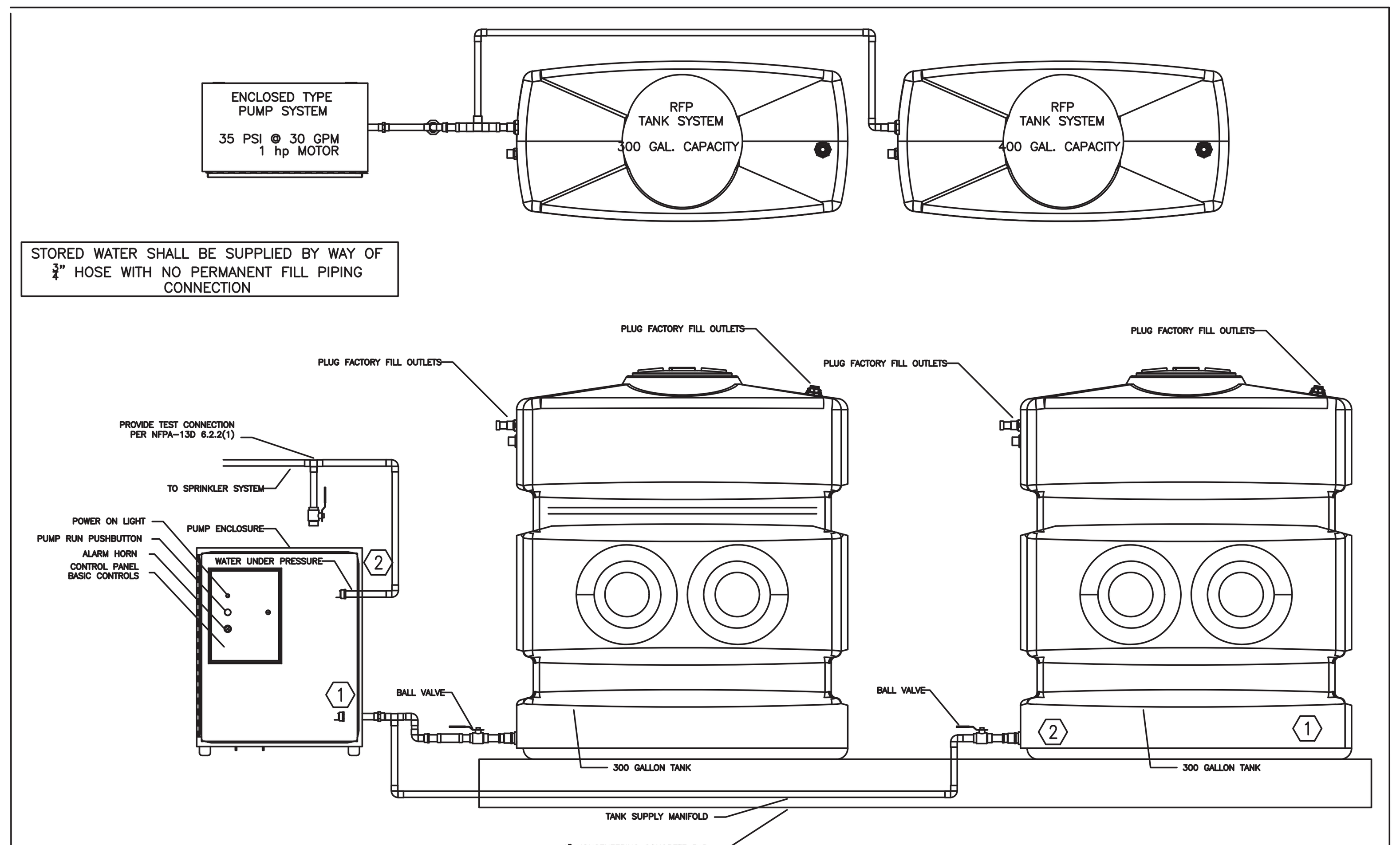


The following table is used when the ambient temperature is maintained between 40°F/4°C and 60°F/16°C around the wet piping system.

Ambient Temperature Exposed to Discharge End of Sprinkler °F/°C	Exposed Minimum Barrel Length "Y" inches/mm		
	40°F 4°C	50°F 10°C	60°F 16°C
40 4	0 0	0 0	0 0
30 -1	0 0	0 0	0 0
20 -7	4 100	0 0	0 0
10 -12	8 200	25	0 0
0 -18	12 300	3 75	0 0
-10 -23	14 350	4 100	25
-20 -29	14 350	6 150	3 75
-30 -34	16 400	8 200	4 100
-40 -40	18 450	8 200	4 100
-50 -46	20 500	10 250	6 150
-60 -51	20 500	10 250	6 150

NOTE: Exposed minimum barrel lengths are inclusive up to 30-mph/48-kph wind velocities

DRY SIDEWALL INSTALLATION DETAIL | NTS



N.T.S. | TYPICAL NEW SPRINKLER SERVICE DETAIL

RESIBENTIAL PUMP SYSTEM\GENERAL ARRANGEMENT ENCLOSED SYSTEM BASIC WITH TANK RESEVOIR
DIAGRAMMATIC ONLY
TO OBTAIN REQUIRED 628 GALLON MINIMUM—

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338-4406
FAX. (617) 451-2540
E-MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

Title:
FIRE PROTECTION DETAILS

Revisions:

Project No.:	Drawn: JD
Date: 11/21/19	Checked:
Scale: 1/4"=1'-0"	Approved:

Sheet: FP-3
No. of

Verify All Dimensions in Field | Do Not Scale

DRAWING NOTES

DESIGN CRITERIA: NFPA 13D

1. SPRINKLER CLASSIFICATION FOR ALL RESIDENTIAL AREAS TO BE LIGHT HAZARD AND SHALL PROVIDE A DESIGN DENSITY OF .05gpm FOR UP TO (2) SPRINKLERS WITHIN A COMPARTMENT

2. ALL WORK TO BE DONE IN FULL CONFORMANCE WITH NFPA–13D 2013 EDITION, MA. STATE BUILDING CODE AND ALL REQUIREMENTS OF THE LOCAL FIRE DEPARTMENT.

3. SPARE SPRINKLERS TO BE PROVIDED AS DEFINED BY NFPA–13D 2013 EDITION.

4. CPVC SHALL BE ALLOWED TO BE INSTALLED PER THE MANUFACTURERS INSTRUCTION

5. SPRINKLER HEADS NEAR HEAT PRODUCING AREAS SHALL BE HIGHER TEMPERATURE PER NFPA 13D

6. OWNER IS RESPONSIBLE TO MAINTAIN MINIMUM 40F ALL TIMES FOR ALL AREAS PROTECTED BY WET SYSTEMS

7. IN ALL RESIDENTIAL BUILDINGS WHERE CPVC SPRINKLER PIPING IS INSTALLED TO PROVIDE SPRINKLERS WITHIN THE CEILING CAVITY THE PLENUM SHALL BE DRAFT STOPPED AT EVERY 1000 SQF , MINIMUM 8" OR ⅓ OF THE PLENUM HEIGHT WHICHEVER IS GREATER

8. SPRINKLERS SHALL BE RESIDENTIAL
MAX SPACING–15'
MIN. SPACING–8'

MATERIALS:
1. ALL SPRINKLER PIPING 2–1/2" – 4" TO BE SCHEDULE 10 BLACK STEEL PIPING WITH GROOVED FITTINGS.
2. ALL SPRINKLER PIPING 2" AND SMALLER TO BE LISTED CPVC WITH FITTINGS OF THE SAME MANUFACTURER
3. PUMP/TANK ASSEMBLY TO BE PROVIDED BY A LOCAL VENDOR WITH CONVENIENT TECHNICAL REPS.
4. ALL SPRINKLERS TO BE FULLY CONCEALED WITH A WHITE FLAT PLATE UNLESS MODIFIED BY ARCHITECT/OWNER
5. DRY SIDEWALL SPRINKLERS SHALL BE SEMI–RECESSED TYPE WITH MIN. 16" DRY BARREL
6. SPRINKLERS OUTSIDE RESIDENTIAL UNITS SHALL BE QUICK RESPONSE TYPE

FIRE PROTECTION SPECIFICATION

a. BEFORE SUBMITTING A BID CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE COMPLETE BUILDING PERMIT DRAWING SET, CONSTRUCTION SITE OR EXISTING BUILDING AND THE FULL SCOPE OF WORK
b. APPLY AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS TO COMMENCE WORK PRIOR TO MOBILIZATION
c. ALL WORK TO BE FULLY COORDINATED WITH OTHER MEP TRADES, ARCHITECTURAL FEATURES AND STRUCTURAL LAYOUT
d. THE SYSTEM SHALL BE HYDROSTATICALLY TESTED TO A MIN. OF 200 PSI FOR A DURATION NOT LESS THAN 2 HOURS
e. ALL WORK TO BE GUARANTEED FOR ONE YEAR FROM DATE OF ACCEPTANCE
f. CONTRACTOR SHALL PREPARE A SET OF TIER II SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THIS OFFICE PRIOR TO INSTALLATION. A FINAL AFFIDAVIT WILL NOT BE PROVIDED WITHOUT APPROVED DRAWINGS FROM THE CONTRACTOR

GENERAL NOTE:

BASED ON NFPA–13D:
1) SPRINKLER SHALL NOT BE REQUIRED IN BATHROOMS OF 55 SF AND LESS.
2) SPRINKLER SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRY THAT MEET THE FOLLOWING CONDITIONS:
   A) THE AREA OF THE SPACE DOES NOT EXCEED 24 SF.
   B) THE SHORTEST DIMENSION DOES NOT EXCEED 3 FT.
   C) THE WALLS AND CEILINGS ARE SURFACED WITH NON–COMBUSTIBLE OR LIMITED COMBUSTIBLE AS DEFINED BY NFPA–220.
3) SPRINKLER SHALL NOT BE REQUIRED IN COVERED, UNHEATED PROJECTIONS OF THE BUILDING AT ENTRANCE/EXITS AS LONG AS THE DWELLING UNIT HAS ANOTHER MEANS OF EGRESS.
4) SPRINKLER SHALL NOT BE REQUIRED IN CLOSETS IN GARAGE AND EXTERIOR CLOSETS (REGARDLESS OF SIZE) LOCATED ON EXTERIOR BALCONIES, EXTERIOR BREEZEWAY/CORRIDORS, OR ACCESSED FROM OUTDOOR WHERE THE CLOSET DOES NOT HAVE DOORS OR UNPROTECTED PENETRATIONS DIRECTLY INTO THE DWELLING UNIT.
5) SPRINKLER SHALL BE INSTALLED IN ANY CLOSET USED FOR HEATING AND/OR AIR–CONDINONING EQUIPMENT, WASHERS AND/OR DRYERS, OR WATER HEATERS EXCEPT AS AS ALLOWED BY 8.3.8. (SEE NOTE #4 ABOVE)

GENERAL NOTES:

1. SHOULD ANY CONTRADICTION, AMBIGUITY, ERROR, INCONSISTENCY, OMISSION OR INCOMPLETE SYSTEM APPEAR IN OR BETWEEN ANY OF CONTRACT DOCUMENTS THE CONTRACTOR SHALL, BEFORE SUBMITTING THE FINAL BID AND SIGNING THE CONTRACT FOR CONSTRUCTION, NOTIFY THE ARCHITECT AND REQUEST A WRITTEN RESOLUTION AS TO WHICH METHODS OR MATERIALS WILL BE REQUIRED. IN THE EVENT OF CONFLICTING REQUIREMENTS OF STANDARDS , DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR SHALL COMPLY WITH THE MORE STRINGENT REQUIREMENTS. BEFORE SUBMITTING THE FINAL BID AND THE SIGNING THE CONTRACT FOR THE CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A WRITTEN INTERPRETATION FROM THE ARCHITECT. IN NO CASE SHALL THE CONTRACTOR PROCEED WITH THE AFFECTED WORK UNTIL ADVISED BY THE ARCHITECT.

IF THE CONTRACTOR FAILS TO MAKE A REQUEST FOR INTERPRETATION OR RESOLUTION NO EXCUSE WILL BE ACCEPTED FOR FAILURE TO CARRY OUT THE WORK IN A SATISFACTORY MANNER, AS INTERPRETED BY THE ARCHITECT. THIS GENERALLY MEANS THE USE OF THE HIGHEST QUALITY MATERIAL, MOST EXPENSIVE WAY OF PERFORMING WORK AND PROVIDING COMPLETE FUNCTIONING SYSTEM FOR PROPER OPERATION.

EACH AND EVERY TRADE OR SUBCONTRACTOR WILL BE DEEMED TO HAVE FAMILIARIZED THEMSELVES WITH ALL THE CONTRACT DOCUMENTS OF THIS PROJECT, INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND SITE WORK, AND TO HAVE VISITED THE SITE, SO AS TO AVOID ERROR, OMISSIONS AND MISINTERPRETATIONS. RELATED INFORMATION MAY BE PROVIDED ON CONTRACT DOCUMENTS OTHER THAN THOSE ASSOCIATED WITH THE SUBCONTRACTOR'S TRADE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELATED WORK OF ALL THE CONTRACT DOCUMENTS. NO ADDITIONAL COMPENSATION WILL BE AUTHORIZED FOR ALLEGED ERRORS, OMISSIONS AND MISINTERPRETATIONS WHETHER THEY ARE A RESULT OF FAILURE TO OBSERVE THIS REQUIREMENT OR NOT.

2. ALL PENETRATIONS OF ASSEMBLIES EXPOSED TO THE EXTERIOR ENVIRONMENT SHALL BE SEALED WITH FOAM SEALANT OR EQUIVALENT SEALER TO PROVIDE ZERO AIR INFILTRATION. COORDINATE WITH FIRE STOPPING REQUIREMENTS.

3. NO COMPONENT OF ANY SYSTEM SHALL RUN THROUGH THE STAIR ENCLOSURE THAT DOES NOT RELATE TO OR SERVE THE STAIR ENCLOSURE.

PREPARATION OF SHOP DRAWINGS:

PER 780CMR 901.2.1
SPRINKLER CONTRACTOR SHALL PREPARE TIER ii SHOP DRAWINGS INCLUDING PIPING & HYDRAULIC CALCULATIONS, AND SHALL SUBMIT TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK. ENGINEER SHALL CERTIFY SYSTEM INSTALLATION FOR CODE COMPLIANCE AT PROJECT COMPLETION.

FIRE PROTECTION ABBREVIATIONS

DSW	DRY SIDEWALL
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DIA	DIAMETER
DR	DRAIN
ETR	EXISTING TO REMAIN
FHV	FIRE HOSE VALVE
IT	INTERMEDIATE TEMPERATURE
FP	FIRE PROTECTION
FS	FLOW SWITCH
SP	STANDPIPE
GV	GATE VALVE
GAL	GALLONS
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
DN	PIPE DROP
PSI	POUNDS PER SQUARE INCH
PRV	PRESSURE REDUCING VALVE
RV	RELIEF VALVE
SPK	SPRINKLER
TS	TAMPER SWITCH
UP	PIPE RISE
VIF	VERIFY IN FIELD

FIRE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	SUPERVISED BUTTERFLY VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	SUPERVISED OS&Y GATE VALVE
FS	FLOW ALARM SWITCH
	SPRINKLER ZONE CONTROL ASSEMBLY (SEE DETAIL)
	PUMP (FIRE OR JOCKEY)
	DRY ALARM VALVE
	WET ALARM VALVE
	CHECK VALVE
	DRAIN VALVE
	FIRE VALVE ASSEMBLY 2–1/2"W X 2–1/2" X 1–1/2"
	PRESSURE GAUGE

SYM	POSITION	FINISH	TEMP	K	NPT	SIN
○	UPR	BRASS	135°	5.60	1/2"	
⊠	UPR	BRASS	200°	5.60	1/2"	
◐	PEND	CONCEALED	155°	5.60	1/2"	
●	PEND	CONCEALED	155°	4.90	1/2"	
◉	DRY PEND	CONCEALED	155°	5.60	1/2"	
▶	SIDE	CONCEALED	155°	4.00	1/2"	VK480
▷	DRY SIDE	CONCEALED	155°	5.60	1/2"	VS–1

HYDRAULIC DESIGN BASIS

NFPA–13D 2013 DESIGN CRITERIA

THE SPRINKLER SYSTEM SHALL PROVIDE AT LEAST THE FLOW REQUIRED TO PRODUCE A MINIMUM DENSITY OF 0.05 pgm/sf OR THE LISTING OF THE SPRINKLER HEAD WHICHEVER IS GREATER, TO THE DESIGN SPRINKLERS.
THE NUMBER OF SPRINKLERS IN THE DESIGN AREA SHALL BE ALL OF THE SPRINKLERS WITHIN A COMPARTMENT, UP TO A MAXIMUM OF TWO SPRINKLERS, THAT REQUIRE THE GREATEST HYDRAULIC DEMAND.

HYDRAULIC DESIGN NOTE:

PROPOSED SYSTEM IS FED BY WAS OF A STORED WATER SUPPLY SIZED TO SUPPLY THE SYSTEM WATER DEMAND FOR 20 MINUTES PER 780 CMR 903.2.8

COMMONWEALTH OF MASSACHUSETTS
JEFFREY M. ZADE
No. 39152
REGISTERED PROFESSIONAL ENGINEER
STATE OF MASSACHUSETTS

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338–4406
FAX. (617) 451–2540
E–MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

Title:
FIRE PROTECTION DETAILS

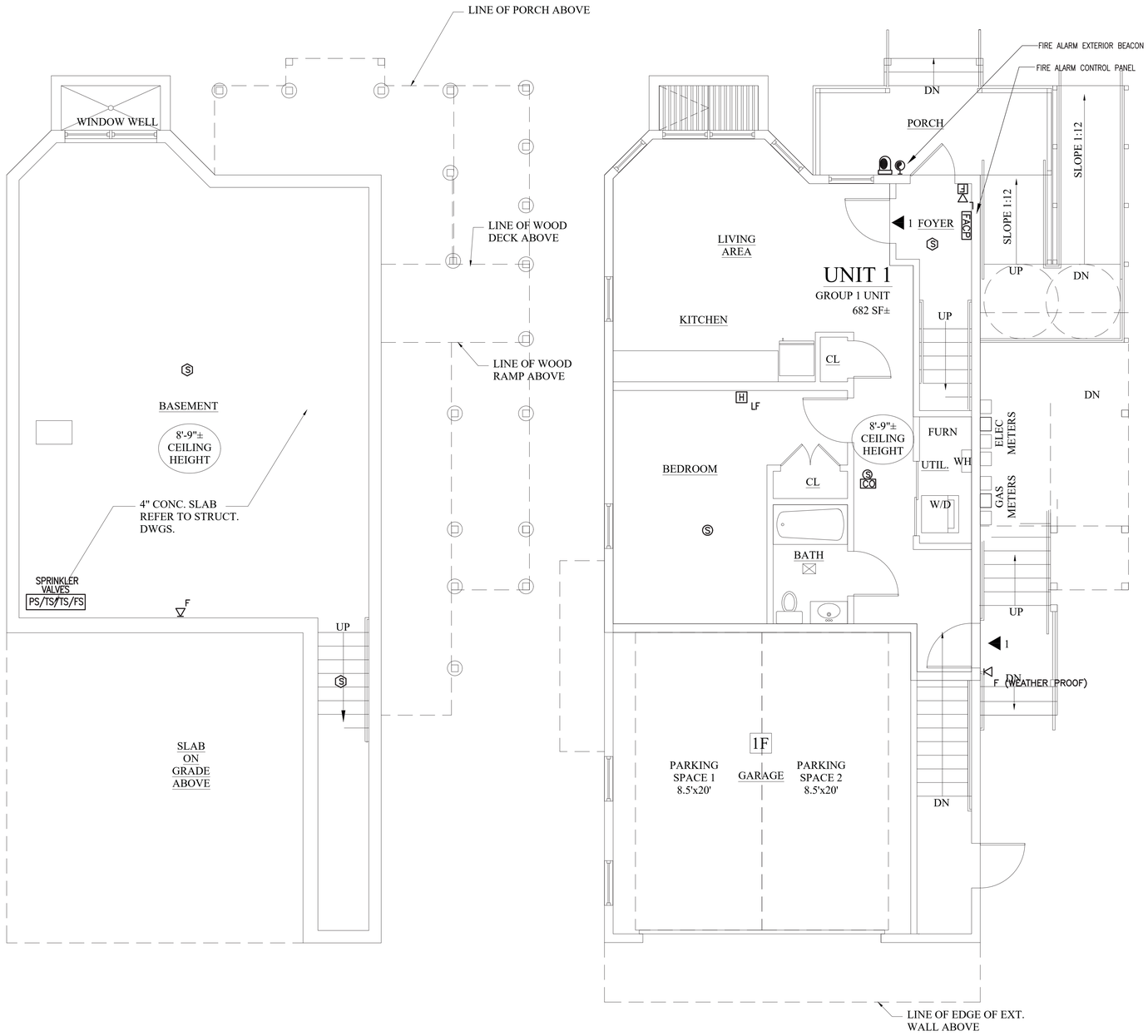
Revisions:

Project No.:	Drawn: JD
Date: 11/21/19	Checked:
Scale: 1/4"=1'-0"	Approved:

Sheet: FP-4
No. of

Verify All Dimensions in Field — Do Not Scale

WOODCLIFF STREET



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

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

COMMONWEALTH OF MASSACHUSETTS
MICHAEL MOSTOFI ZADE
FIRE PROTECTION
No. 39362
REGISTERED
PROFESSIONAL ENGINEER

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338-4406
FAX. (617) 451-2540
E-MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

Title:
PROPOSED FIRE ALARM PLAN

Revisions:

Project No.:	Drawn: JD
Date: 11/21/19	Checked:
Scale: 1/4"=1'-0"	Approved:

Sheet:
FA-1
No. of

Verify All Dimensions in Field Do Not Scale

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

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

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338-4406
FAX. (617) 451-2540
E-MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

Title:
PROPOSED FIRE PROTECTION PLAN

Revisions:

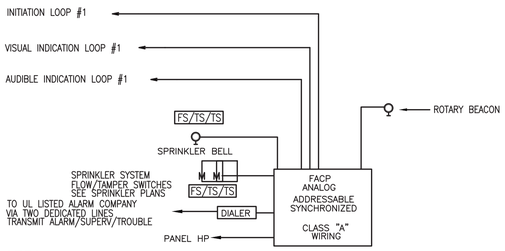
Project No.:	Drawn: JD
Date: 11/21/19	Checked:
Scale: 1/4"=1'-0"	Approved:

Sheet:
FA-2
No. of

Verify All Dimensions in Field Do Not Scale

LEGEND

(S)	SYSTEM TYPE SMOKE DETECTOR. ANALOG ADDRESSABLE
(H)	HEAT DETECTOR. ADDRESSABLE TYPE
▽F	FIRE ALARM PULL AND HORN/LIGHT DEVICE. PER NFPA 72/.SYCHRONIZED. 15CD IN CORR., 60CD IN COMMON AREAS
F	FIRE ALARM PULL STATION. ADDRESSABLE, MOUNTED AT 4'-0" AFF.
▽▽F	FIRE ALARM HORN/LIGHT(SYCHRONIZED). MTD AT 6'-8" AFF 15 CD IN CORRIDORS, 60 CD IN COMMON AREAS
▽L	FIRE ALARM LIGHT ONLY(SYCHRONIZED).MTD AT 6'-8"AFF 15 CD IN CORRIDORS, 60 CD IN COMMON AREAS
FS	SPRINKLER SYSTEM FLOW SWITCH, WIRING ONLY.
TS	SPRINKLER SYSTEM TAMPER SWITCH, WIRING ONLY.
PS	LOW PRESSURE SWITCH WIRED AS SUPERVISORY
FACP	FIRE ALARM CONTROL PANEL.
ANN	FIRE ALARM REMOTE ANNUNCIATOR WITH TROUBLE BUZZER.
DIAL	DIALER BY E.C. WIRED TO UL LISTED ALARM CO.
(S)	LOCAL TYPE 110V SMOKE DETECTOR, PHOTOELECTRIC TYPE WITH BATTERY BACK-UP. "L" INDICATES BUILT-IN STROBE 177CD)TANDEM WIRED WITH OTHER LOCAL DETECTORS IN THE UNIT. WIRED TO LIGHTING CIRCUIT
H	LOW FREQUENCY MINI HORN
CO	LOCAL TYPE CO DETECTOR



NOTES

PROVIDE ADDRESS MODULES FOR ALL FLOW & TAMPER SWITCHES SEE FLOOR PLANS FOR DETECTOR TYPES AND LOCATIONS AND QUANTITIES. SEE SPRINKLER DRAWINGS FOR FLOW/TAMPER SWITCH LOCATIONS AND QUANTITIES.
CARRY MINIMUM OF (1)FLOW AND (4)TAMPER SWITCH AT SPRINKLER SERVICE LOCATION
PROVIDE BATTERY CALCULATIONS AND TIER 2 DRAWINGS
PROVIDE RADIO SIGNAL COVERAGE THROUGHOUT BUILDING AS REQUIRED PER 915.3
BEDROOM MINI HORNS SHALL COMPLY WITH NEW NFPA 72 SOUND FREQUENCY REQUIREMENTS

SEQUENCE OF OPERATION

UPON ACTIVATION OF ANY FIRE DETECTOR, MANUAL PULL STATION OR FLOW SWITCH
-FIRE ALARM PANEL WILL TRIP AND CALL FIRE DEPARTMENT
-ALL AUDIO DEVICES WILL INITIATE ALARM SIGNAL TO ALERT ALL OCCUPANTS FOR ALARM CONDITION IN THE BUILDING FOR FULL EVACUATION.
-ALL VISUAL DEVICES WILL ACTIVATE, THEY SHALL BE SYNCHRONIZED TYPE.

FIRE ALARM SYSTEM RISER DIAGRAM

PROVIDE ALL NECESSARY STRUCTURE AND RACEWAYS TO BE ABLE TO INSTALL BDA SYSTEM PER IBC 915.2&3 UPON COMPLETION OF THE BUILDING AND AFTER ESTABLISHING THE NEED TO INSTALL HEAD END EQUIPMENT OF A BDA SYSTEM TO MEET EMERGENCY SERVICES COMMUNICATION NEEDS AS TO BE DETERMINED BY THE FD.
PROVIDE ADD ALTERNATE COST FOR ALL HARDWARE COMPONENTS AND INSTALLATION OF FOR EACH BUILDING (EACH BUILDING MAY HAVE DIFFERENT NEEDS) RUN CONDUITS IN 2HR RATED ENCLOSURE.
IF EQUIPMENT IS TO BE INSTALLED IT WILL BE HOUSED IN 2HR ENCLOSURE
CARRY THE COST OF TESTING THE BUILDING UPON COMPLETION OF INTERIOR PARTITIONS

REGARDLESS SHOWN ON PLANS OR NOT PROVIDE CARBON MONOXIDE DETECTORS AT
-OUTSIDE EACH BEDROOM WIRED TO SMOKE DETECTOR CIRCUIT AND
-IN THE ROOM HOUSING THE GAS APPLIANCE.
DETECTORS SHALL BE UL LISTED.
DETECTORS SHALL BE HARD WIRED WITH BATTERY BACK-UP
CO DETECTORS SHALL BE AS MANUFACTURED BY BRK CO 5120BN, VOICE TYPE

AUDIBLE APPLIANCES PROVIDED FOR THE SLEEPING AREAS TO AWAKEN OCCUPANTS SHALL PRODUCE A LOW FREQUENCY ALARM SIGNAL THAT COMPLIES WITH THE FOLLOWING.

(1) THE ALARM SIGNAL SHALL BE A SQUARE WAVE OR PROVIDE EQUIVALENT AWAKENING ABILITY.
(2) THE WAVE SHALL HAVE A FUNDAMENTAL FREQUENCY OF 520 HZ +/- 10 PERCENT.

IN RESIDENTIAL BUILDINGS, FOR ALL GAS FIRED VENTILATION/AIR CIRCULATION EQUIPMENT, PROVIDE DUCT MOUNTED CO DETECTOR COMPLETE WITH HOUSING AND SAMPLING TUBE AS MANUFACTURED BY MACURCO CM 15A OR EQUAL AND CONNECT TO FIRE ALARM PANEL VIA MONITOR MODULE

ALL CO DETECTORS MUST "LATCH" AT THE PANEL; THAT IS TO SAY, THE RESPONDER TO A CO DETECTOR SUPERVISORY ALARM MUST BE LEAD TO MITIGATE THE CO ISSUE AT THE DETECTOR AND THEN CLEAR/RESET THE FIRE ALARM PANEL. THIS WILL MEAN THE CO SUPERVISORY ALARM CANNOT BE MITIGATED AT THE POINT LOCATION, BUT REQUIRES A COMPETENT RESPONDER TO ADDRESS THE PANEL IN THE FIRE COMMAND CENTER.

ALARM MONITORING SERVICE RECEIVES A SUPERVISORY CARBON MONOXIDE SIGNAL; THAT IS TO SAY, LITERALLY THE WORDS "CARBON MONOXIDE" MUST BE PRESENT AT ALARM COMPANY, THE LETTERS "CO" ARE NOT ACCEPTABLE.

-ALL SMOKE DETECTOR LOCATIONS SHALL BE COORDINATED WITH REFLECTED CEILING PLANS IN FIELD SO THAT DETECTORS SHALL BE MINIMUM 3FT AWAY FROM SUPPLY DIFFUSER.
-DUCT SMOKE DETECTORS SHALL BE INSTALLED IN HEATED AREAS AT THE SUPPLY SIDE BEFORE THE FIRST TAKE OFF, MINIMUM 5FT AWAY FROM THE UNIT COIL. REMOTE TEST/INDICATOR LOCATIONS SHALL BE NEXT TO FACP PANEL OR AS DIRECTED BY THE FIRE DEPARTMENT.
-A/V DEVICE LOCATIONS ARE SHOWN BASED ON DISTANCE REQUIREMENTS. CONTRACTOR SHALL COORDINATE PHYSICAL STRUCTURES SO THAT VISIBILITY WILL BE MAINTAINED. PROPOSED CHANGES SHALL BE FORWARDED TO ARCHITECT/ENGINEER FOR APPROVAL.

		CONTROL UNIT ANN						NOTIFICATION								FIRE SAFETY SYSTEM CONTROLS				
		ACTUATE COMMON ALARM SIGNAL	ACTUATE AUDIBLE ALARM-GLOBAL	ACTUATE COMMON SUPERVISORY SIGNAL ALARM	ACTUATE AUDIBLE SUPERVISORY ALARM	ACTUATE COMMON SUPERVISORY TROUBLE SIGNAL	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTUATE APPROPIATE LOCATION INDICATOR	ACTUATE ALL AUDIBLE EVACUATION SIGNALS	ACTUATE ALL VISIBLE ALARM SIGNALS	DISPLAY CHANGE OF STATUS	TRANSMIT ALARM SIGNAL TO SUPERVISORY STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISORY STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISORY STATION			ACTUATE EXTERIOR BEACON		
1	COMMON AREA SMOKE DETECTORS	●	●					●	●	●	●	●					●		1
2	COMMON AREA HEAT DETECTORS	●	●					●	●	●	●	●					●		2
3	–																		3
4	COMMON AREA MANUAL PULL STATIONS	●	●					●	●	●	●	●					●		4
5																			5
6	SPRINKLER MAIN FLOW	●	●					●	●	●	●	●					●		6
7	SPRINKLER FLOOR FLOW SWITCH	●	●					●	●	●	●	●					●		7
8	SPRINKLER TAMPER SWITCH ACTUATION			●	●								●	●					8
9	PRESSURE SWITCH ACTUATION			●	●								●	●					9
10	FIRE ALARM AC POWER FAILURE					●	●				●		●						10
11	FIRE ALARM SYSTEM LOW BATTERY					●	●				●		●						11
12	OPEN CIRCUIT OR GROUND FAULT					●	●				●		●						12
13	CLASS A NOTIFICATION OR SHORT					●	●				●		●						13
14																			14
15																			15
16																			16

ZADE ASSOCIATES, LLC
CONSULTING ENGINEERS
140 BEACH STREET, BOSTON, MA 02111
TEL. (617) 338-4408
FAX. (617) 451-2540
E-MAIL : zade@zadeengineering.com

Project:
49 WOODCLIFF ST.
BOSTON, MA 02125

Title:
FIRE ALARM NOTES & DETAILS

Revisions:

Project No.:	Drawn: JD
Date: 11/21/19	Checked:
Scale: 1/4"=1'-0"	Approved:

Sheet:
FA-3
No. of

Verify All Dimensions in Field Do Not Scale