



# QUISENBERRY ARCARI

## ARCHITECTS, LLC

318 Main Street, Farmington, CT 06032    www.qa-architects.com    t (860) 677 - 4594    f (860) 677 - 8534

REHABILITATION / RECONSTRUCTION WORK FOR:

# CAROLE FRANKLIN

APPLICANT #1215

ISSUE DATE: 05.18.2015

13 JAMES STREET

MILFORD, CT

### LIST OF DRAWINGS

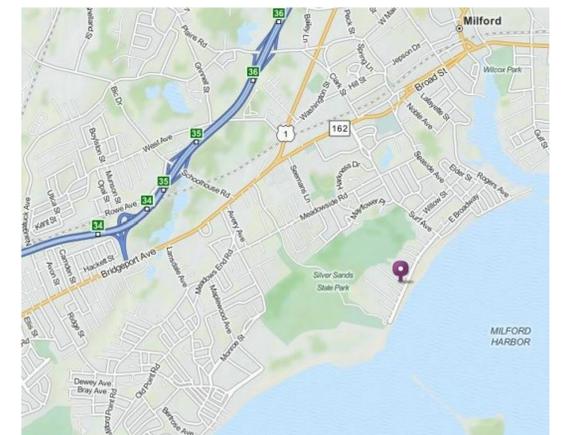
--	COVER		
--	SURVEY	A2.5	BUILDING SECTIONS
G1.0	GENERAL NOTES	A3.1	WALL SECTIONS
S 01	STRUCTURAL GEN. NOTES	A4.0	INTERIOR ELEVATIONS
S 02	STRUCTURAL GEN. NOTES	A4.1	WINDOW & DOOR ELEVS
S 1	FOUNDATION & PILE PLAN	A6.1	STAIR PLANS
S 2	MAIN FLOOR FRAMING		
S 3	STRUCTURAL DETAILS	P1.1	PLUMBING PLANS
S 4	STRUCTURAL DETAILS	P2.1	PLUMBING DETAILS
S 5	STRUCTURAL DETAILS		
		M1.1	MECHANICAL PLANS
D1.1	DEMOLITION PLANS		
D2.1	DEMOLITION ELEVATIONS	E1.1	ELECTRICAL PLANS
D2.2	DEMOLITION ELEVATIONS	E1.2	ELECTRICAL DETAILS
A1.1	PLANS		
A1.1a	PLAN DEDUCT ALT.		
A2.1	ELEVATIONS		
A2.2	ELEVATIONS		

### COMMUNITY DEVELOPMENT BLOCK GRANT DISASTER RECOVERY PROGRAM (CDBG-DR)

### OWNER OCCUPIED REHABILITATION & REBUILDING PROGRAM (OOR)

SPONSORED IN CONJUNCTION WITH FUNDING FROM  
THE CONNECTICUT DEPARTMENT OF HOUSING

### LOCATION MAP



(INSERT STREET ADDRESS, CITY/TOWN) (QA#1346-?)

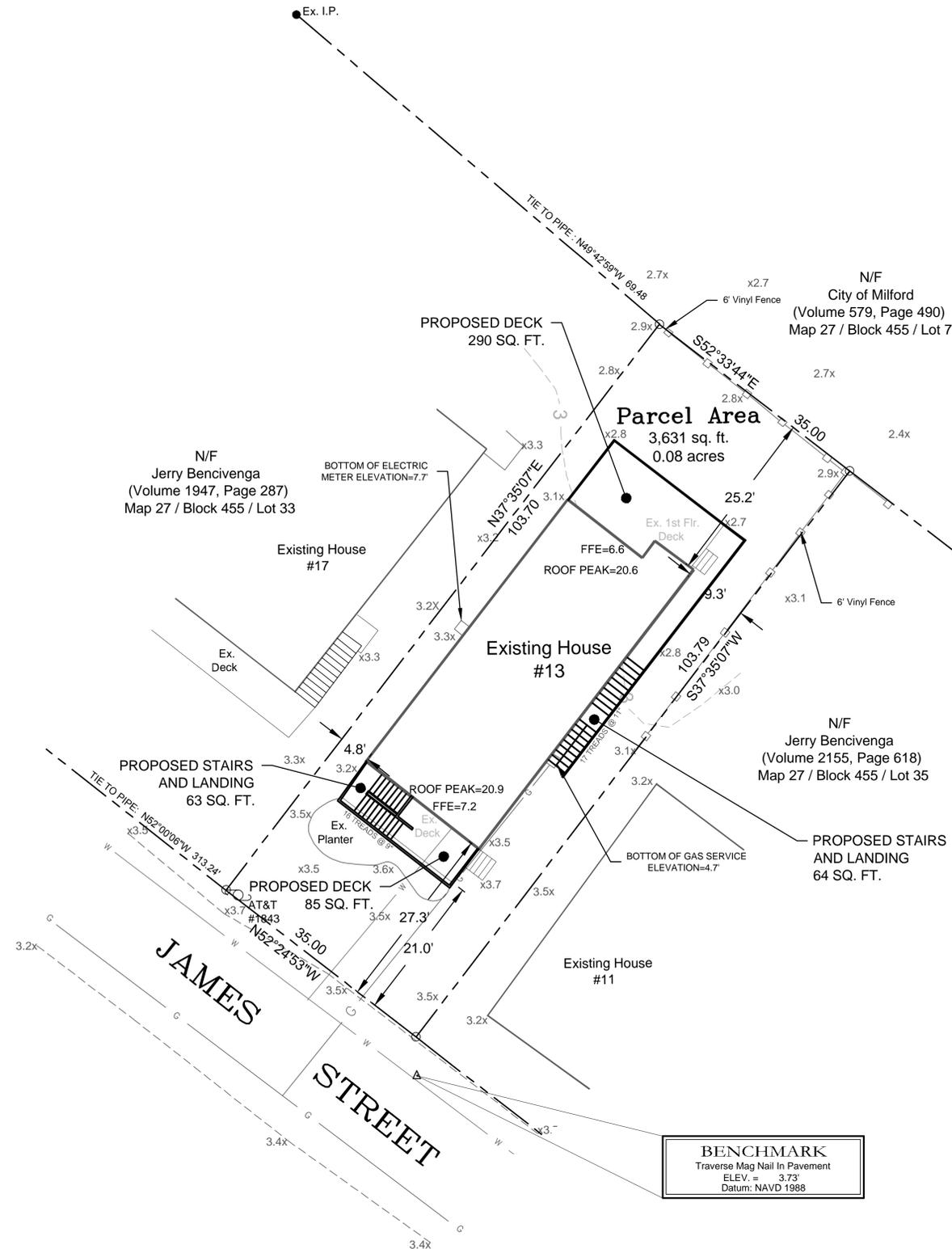


**LEGEND**

- = Existing utility pole
- = Existing light pole
- = Existing fire hydrant
- = Existing water valve
- = Existing gas valve
- = Existing underground pipe
- = Existing edge of pavement
- = Existing bituminous concrete lip curb
- = Existing well
- = Existing catch basin
- = Existing drainage manhole
- = Existing sanitary manhole
- = Existing contour
- = Existing spot elevation
- = Existing iron pin
- = Existing drill hole
- = Existing monument

**SURVEY NOTES:**

1. This map has been prepared pursuant to the Regulation of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
2. Type of survey performed: Existing Conditions Survey
3. Boundary determination category: Dependent Resurvey
4. Class of accuracy:  
Horizontal: A-2  
Vertical: T-2
5. The intent of this map is to depict or note the position of boundaries with respect to: (A) locations of all boundary monumentation found or set; (B) Apparent improvements and features, including as a minimum: dwellings, barns, garages, sheds, driveways, roadways, surface utilities, visible bodies of water and swimming pools; (C) record easements and visible means of ingress and egress; (D) record and apparent means of ingress and egress; (E) lines of occupation, including as a minimum: fences, walls, hedges and yards; (F) deed restrictions pertaining to the location of buildings or other apparent improvements; (G) unresolved conflicts with record deed descriptions and maps; (H) all apparent boundary encroachments; and (I) monumentation required to be set at all corners created by a deflection angle of not less than 70 degrees between two consecutive courses at an intervals not to exceed 600 feet (180 meters) along the boundaries between said corners, except where natural or man-made monumentation defines or occupies the line.
6. Map References:  
a) "Survey of Property Prepared For Carole Franklin of Parcel Designated as No.13 James Street Situated in the City of Milford, County of New Haven, State of Connecticut, Scale: 1"=10', Dated December 20, 2012, Revised Sept. 17, 2013 (FEMA Zone) Prepared by Flannagan's Surveying and Mapping."
7. Per agreement with property owner no boundary corners were set by this survey unless noted hereon. All monumentation found is depicted or noted hereon.
8. Zone: R5
9. Total area: 3,631 S.F. / 0.083 Ac.
10. Owner: Carole Franklin
11. Town of Milford Assessors Map #027 Block #0455 Parcel #000034
12. Filed in Volume 2221, Page 624 of the Town Clerk's office.
13. Contours are established from field topography and depicted at 2 foot intervals.
14. Vertical Datum is NAVD 1988 and based on the CGS Mon LX 7616.
15. There are no Wetlands located on the property or within 250'.
16. The subject property is situated in Zone "AE", (Elevation 11.0') which is a "Special Flood Hazard Area" subject to inundation by 1% annual-chance flood event determined by FEMA. The 500 Year Flood Event elevation is 13.75'. (Firm Map 09009C Panel 534 Suffix J/ Effective date of July 8, 2013). The Subject Property is in Coastal Area Management (CAM).
17. This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris. Nor does it necessarily reflect the existence of any waste dumps or hazardous materials. The underground items depicted or noted are approximate and are not guaranteed. Notify "CALL BEFORE YOU DIG" 1-800-922-4455 prior to any excavation operations.



DATE	REVISION
To the best of my knowledge and belief, this map is substantially correct as noted hereon.	
#70145	
Stephen M. Giudice, L.S.	
Reg. No.	
NOT VALID UNLESS EMBOSSED SEAL OR SEAL IS AFFIXED HERETO	

EXISTING CONDITIONS SURVEY  
PREPARED FOR  
**QUISENBERRY ARCARI  
ARCHITECTS, LLC**  
13 JAMES STREET  
MILFORD, CONNECTICUT

MAY 13, 2015      SCALE: 1"=10'

F.B.#: 477      PROJECT #: 1214

**cole**  
HARRY E. COLE & SON  
engineering, surveying, planning.

876 South Main Street      Tel: (860) 628-4484  
P.O. Box 44      Fax: (860) 620-0196  
Plainville, CT 06479 - 0044      www.hecole.com

**ABBREVIATIONS**

A.F.F.	Above Finish Floor	HGT.	Height
A.C.	Acoustic, Acoustical	H.M.	Hollow Metal
A.C.T.	Acoustical Tile	HORIZ.	Horizontal
A/C	Air Conditioning	H.B.	Hose Bibb
A.H.U.	Air Handling Unit	IN.	Inch
ALT.	Alternate	INCL.	Included
ALUM.	Aluminum	INFO.	Information
ALF.	Aluminum Frame	I.D.	Inside Diameter
ANCH.	Anchor, Anchorage	INSUL.	Insulation
AB.	Anchor Bolt	INT.	Interior
L	Angle	JT.	Joint
ANOD.	Anodized	K.P.	Kick Plate
APPR.	Approved	LAB	Laboratory
ARCH.	Architect, Architectural	LAV.	Lavatory
ASB.	Asbestos	LTG.	Lighting
A.P.B.O.	As Provided By Owner	MACH.	Machine
A.S.B.O.	As Selected By Owner	MAINT.	Maintenance
ASPH.	Asphalt	MFRG.	Manufacturer
ASSY.	Assembly	M.BD.	Marker Board
ASST.	Assistant	MA5.	Masonry
AUTO.	Automatic	M.O.	Masonry Opening
BM	Beam	MAT.	Maternal
BRG.	Bearing	MAX.	Maximum
BEV.	Bevel, Beveled	MECH.	Mechanical
BIT.	Bituminous	MEZZ.	Mezzanine
BLK.	Block	MIN.	Minimum
BLKG.	Blocking	MISC.	Miscellaneous
BD.	Board	N	North
BOT.	Bottom	N.I.C.	Not In Contract
B.O.	Bottom Of	N.T.S.	Not To Scale
B.E.J.	Brick Expansion Joint	OFF.	Office
BLDG.	Building	O.C.	On Center
B.U.R.	Built Up Roofing	O.H.	Overhead
CAB.	Cabinet	O.D.	Outside Diameter
C.U.H.	Cabinet Unit Heater	PTD.	Painted
CAP.	Capacity	PR.	Pair
CASE	Casement	P.T.D.	Paper Towel Dispenser
CLG.	Ceiling	PASS.	Passage
CLGHT.	Ceiling Height	PERP.	Perpendicular
CEM.	Cement	PLAS.	Plaster
CTR.	Center	PLAM.	Plastic Laminate
CL.	Centerline	PL.	Plate
C.T.	Ceramic Tile	PLUMB.	Plumbing
C.BD.	Chalk Board	PLYWD.	Plywood
CLO.	Closet	PVC.	Polyvinylchloride
COL.	Column	P.E.J.	Precast Expansion Joint
CONC.	Concrete	PREFAB.	Prefabricated
CONF.	Conference	QTY.	Quantity
CJ	Control Joint	Q.T.	Quarry Tile
CONT.	Continuous	RAD.	Radius
CONTR.	Contractor	RWC	Rain Water Conductor
CORR.	Corridor	RECV.	Receiving
CRS.	Course, Courses	REFR.	Refrigerator
DEG.	Degree	REINF.	Reinforce
DEMO.	Demolition	REM	Remove
DEPT.	Department	REQD	Required
DET.	Detail	REV.	Revised, Revision
DIA.	Diameter	R.	Riser
DIM.	Dimension	R.D.	Roof Drain
DIST.	Distance	RM.	Room
DR.	Door	S.N.D.	Sanitary Napkin Dispenser
DBL.	Double	S.N.R.	Sanitary Napkin Receptacle
D.H.	Double Hung	SCHED.	Schedule
DN	Down	SC.	Scupper
D.S.	Downspout	SECT.	Section
DWG.	Drawing	S.J.	Seismic Joint
D.F.	Drinking Fountain	SHT.	Sheet
EA.	Each	SIM.	Similar
ELEC.	Electric, Electrical	S.D.	Soap Dispenser
EWC.	Electric Water Cooler	S.T.D.	Sound Transmission Class
EL.	Elevation	S.T.C.	Sound Transmission Coefficient
ELEV.	Elevator	SPEC.	Specifications
EMERG.	Emergency	SQ.	Square
EQ.	Equal	S.F.	Square Feet
EQUIP.	Equipment	S.S.	Stainless Steel
EXIST.	Existing	STD.	Standard
E.T.R.	Existing To Remain	STL.	Steel
EXP.	Expansion	STOR.	Storage
E.J.	Expansion Joint	STRUCT.	Structure, Structural
EXT.	Exterior	S.STL.	Structural Steel
E.I.I.F.S.	Exterior Insulation Finish System	SUSP.	Suspend, Suspension
FT.	Feet, Foot	S.A.T.C.	Susp. Acoustic Tile Ceiling
F.R.G.P.	Fiber Reinforced Gypsum Panel	T.BD.	Tack Board
FIN.	Finish, Finished	THRU	Through
F.E.	Fire Extinguisher	T.P.D.	Toilet Paper Dispenser
F.R.	Fire Retardant	T.M.E.	To Match Existing
FFRFG.	Fireproofing	T&G	Tongue and Groove
FIXT.	Fixture	T.O.	Top Of
FLASH.	Flashing	T.	Tread
FLR.	Floor	TYP.	Typical
F.D.	Floor Drain	U.L.	Underwriter's Laboratory
FLR.FIN.	Floor Finish	U.H.	Unit Heater
FTG.	Footing	U.V.	Unit Ventilator
FDN.	Foundation	U.O.N.	Unless Otherwise Noted
FURN.	Furnish, Furnishings, Furniture	VEST.	Vestibule
FURR.	Furred, Furring	VCT.	Vinyl Composition Tile
GA.	Gauge	W.P.	Waterproofing
GALV.	Galvanized	W.W.F.	Welded Wire Fabric
GYP. BD.	Gypsum Board	W.BD.	White Board
G.C.	General Contractor	W/	With
H.C.	Handicapped	WD.	Wood

**FINISHES**

- GYPHUM BOARD**
- PROVIDE AND INSTALL GYPSUM WALL BOARD IN ACCORDANCE WITH AMERICAN STANDARD SPECIFICATIONS FOR THE APPLICATION AND FINISHING OF GYPSUM WALLBOARD, AS APPROVED BY THE AMERICAN STANDARDS ASSOCIATION, LATEST EDITION; APPLICABLE PARTS THEREOF ARE HEREBY MADE A PART OF THIS SPECIFICATION EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE CALLED FOR IN THE SPECIFICATION, IN LOCAL CODES, OR BY THE MANUFACTURER OF THE GYPSUM WALLBOARD, WHOSE REQUIREMENTS SHALL BE FOLLOWED.
  - PROVIDE AND INSTALL MOISTURE-RESISTANT GYPSUM WALLBOARD WHERE REQUIRED. PROVIDE TYPE X GYPSUM BOARD AS CALLED FOR ON THE DRAWINGS.
  - PROVIDE 1/2" TYPE X GYPSUM BOARD AT ALL WALLS BETWEEN GARAGE AND HOUSE. 3/8" TYPE X GYPSUM BOARD SHALL BE PROVIDED AT GARAGE CEILING WHICH HAS LIVING SPACE ABOVE.
- PAINT**
- APPLICATION OF PAINT OR OTHER COATING SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. READY-MIXED PAINT SHALL NOT BE THINNED, EXCEPT AS PERMITTED IN THE APPLICATION INSTRUCTIONS.

**THERMAL & MOISTURE PROTECTION**

- PROVIDE AND INSTALL BUILDING THERMAL INSULATION IN ACCORDANCE WITH THE FOLLOWING:
  - A. EXTERIOR WALLS: R-19 MINIMUM
  - B. SLOPED CEILINGS: R-30 MINIMUM
  - C. FLAT CEILINGS: R-38 MINIMUM
  - D. CEILINGS OVER UNCONDITIONED SPACE: R-21 MINIMUM
  - E. CEILINGS OVER BASEMENT: R-21 MINIMUM
- INSTALL VENTING IN SLOPED CEILING AREAS TO PERMIT AIRFLOW ALONG THE COOL SIDE OF THE INSULATION FROM THE EAVE TO RIDGE.
- DO NOT LEAVE KRAFT-PAPER FACED INSULATION EXPOSED. INSTALL TYPE FSK FOIL TO PROTECT EXPOSED INSULATION.
- INSTALL EITHER INTERIOR AND/OR EXTERIOR FOUNDATION INSULATION AS REQUIRED BY LOCAL BUILDING CODES.

**ELECTRICAL NOTES**

- ELECTRICAL DRAWINGS ARE INTENDED TO BE USED FOR SCHEMATIC DESIGN ONLY. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF FINAL ELECTRICAL DESIGN.
- FINAL LOCATIONS OF ALL ELECTRICAL DEVICES AND THEIR INTENDED OPERATION IS TO BE COORDINATED WITH THE OWNER.
- ELECTRICAL CONTRACTOR SHALL PURCHASE AND INSTALL ALL NEW COMPONENTS AS REQUIRED TO PROPERLY SERVICE THE SPACE(S) AFFECTED BY THIS CONSTRUCTION PROJECT. IF THE MODIFICATION OF EXISTING ELECTRICAL SYSTEMS IS NECESSARY, SUCH MODIFICATIONS SHALL NOT ADVERSELY AFFECT THE OPERATION OF THESE SYSTEMS.
- ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES. DO NOT ALTER THE WORK OF PREVIOUS TRADES WITHOUT PRIOR APPROVAL.
- ELECTRICAL CONTRACTOR MUST PROVIDE AND INSTALL ALL DUCT WORK ASSOCIATED WITH EXHAUST FANS.
- PERFORM ALL NEW ELECTRICAL WORK IN ACCORDANCE WITH LOCAL CODES AND ACCEPTED STANDARDS OF PRACTICE.

**ELECTRICAL MOUNTING HEIGHTS**

- ALL DIMENSIONS ARE TO THE CENTER OF THE DEVICE UNLESS OTHERWISE NOTED. SEE ELECTRICAL DRAWINGS FOR TYPES AND LOCATIONS.
- RECEPTACLES: 18" A.F.F. (AT LOCATIONS ABOVE CASEWORK, MOUNT BOTTOM OF RECEPTACLE AT 2" ABOVE BACKSPASH, AT LOCATIONS BELOW CASEWORK, MOUNT AT 24" A.F.F.
- EXTERIOR RECEPTACLES: 24" A.F.F. (20" A.F.F.)
- SWITCHES: 48" A.F.F.
- BOILER EMERGENCY SWITCHES: 60" A.F.F.
- DATA / PHONE OUTLETS: 18" A.F.F.
- TV OUTLETS: 18" A.F.F. OR 18" BELOW FINISHED CEILING
- WALL PHONE: 48" A.F.F. TO CENTER OF EARPHONE
- SECURITY KEYPAD: 48" A.F.F.

**CONCRETE**

- ALL CONCRETE WORK SHALL BE IN COMPLIANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING" (ACI 301).
- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT THE AGE OF 28 DAYS: 3000PSI, EXCEPT 4000PSI FOR EXTERIOR WORK.
- CONCRETE SHALL HAVE A SLUMP NOT EXCEEDING 5", EXCEPT FOR 4" SLABS.
- CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE CURING OF CONCRETE AS DIRECTED BY ACI 301. USE OF CALCIUM CHLORIDE SHALL NOT BE PERMITTED.
- REINFORCING BARS SHALL BE DEFORMED BILLET STEEL BARS AND CONFORM TO ASTM A-G-15-GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM-A-1185.
- REINFORCING BARS MARKED "CONT." SHALL BE LAPPED 32 BAR DIAMETERS AT SPLICES AND CORNERS, HOOKED AT DISCONTINUOUS ENDS. WELDED WIRE FABRIC SHALL BE LAPPED 6" AT END SPLICES.
- CONTRACTOR SHALL INSTALL ALL ANCHORS, ANCHOR BOLTS, LEVELING PLATES, AND ALL INSERTS TO BE SET IN CONCRETE AS REQUIRED FOR THE WORK OF ALL TRADES.
- ALUMINUM OBJECTS SHALL NOT BE EMBEDDED OR IN CONTACT WITH CONCRETE.
- REINFORCED CONCRETE FLOOR SLABS SHALL BE PLACED ON A MINIMUM OF 6" OF CRUSHED 3/4" STONE ON STRUCTURAL FILL PLACED IN 8" LAYERS AND COMPACTED TO 95% OF MODIFIED OPTIMUM DENSITY ON FIRM, INORGANIC, VIRGIN SOIL. NOT LESS THAN ONE LAYER OF STRUCTURAL FILL SHALL BE USED.

**CONCRETE MASONRY**

- ALL MASONRY SHALL CONFORM TO AND BE ERECTED IN ACCORDANCE WITH ACI 530 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND ACI 530.1 SPECIFICATION FOR MASONRY STRUCTURES.
- ALL MASONRY WALLS ARE TO BE CONSTRUCTED OF CONCRETE MASONRY WITH COMPRESSIVE STRENGTH FM = 1500 P.S.I. THE CONTRACTOR IS RESPONSIBLE FOR ASSURING MASONRY STRENGTH AS SPECIFIED.
- TYPE "M" OR "S" MORTAR SHALL BE USED IN ALL MASONRY.
- CONTINUOUS HORIZONTAL JOINT REINFORCING SHALL BE INSTALLED IN ALTERNATE COURSES OF ALL MASONRY. EXTERIOR MASONRY VENEER SHALL BE TIED TO INTERIOR MASONRY BLOCKWORK IN ACCORDANCE WITH DRAWING NOTATIONS.
- REINFORCING STEEL FOR MASONRY SHALL BE GRADE 60. ALL LAP SPLICES SHALL BE A MINIMUM OF 48 BAR DIAMETERS (I.E. #4 BAR = 24).
- ALL MASONRY UNIT CORES CONTAINING REINFORCING BARS SHALL BE FILLED WITH 2000 P.S.I. GROUT. GROUT SHALL BE INSTALLED IN USING LOW LIFT GROUT METHOD (5'-0" MAXIMUM LIFTS).

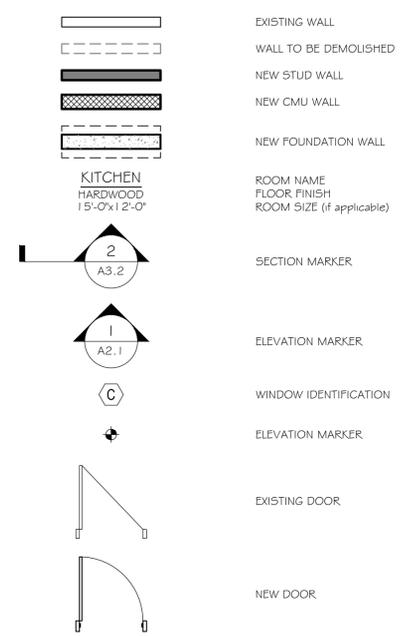
**WOOD**

- ALL STRUCTURAL WOOD SHALL BE IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION" AND THE "MANUAL OF HOUSE FRAMING" AS PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION (NFFPA), INCLUDING PROVISIONS FOR NAILING, FIRE STOPPING, ANCHORAGE, FRAMING AND BRACING.
- UNLESS NOTED OTHERWISE ON THE DRAWINGS, STRUCTURAL LUMBER SHALL BE AS FOLLOWS:
  - A. INTERIOR EXPOSURE: STRUCTURAL WOOD PROTECTED FROM MOISTURE SHALL BE HEM-FIR #2 OR BETTER
  - B. EXTERIOR EXPOSURE: STRUCTURAL WOOD EXPOSED TO MOISTURE, THE WEATHER, IN CONTACT WITH CONCRETE, LOCATED WITHIN 8 INCHES OF SOIL, OR LESS THAN 18 INCHES FROM THE FLOOR OF A CRAWL SPACE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR BETTER, WITH RETENTION MEETING OR EXCEEDING THE REQUIREMENTS OF THE BUILDING CODE.
  - C. PLYWOOD: PLYWOOD SHALL BE IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) SPECIFICATIONS (Y 510). PLYWOOD FLOOR DECKING SHALL BE CONTINUOUS OVER TWO OR MORE SPANS WITH THE FACE-GRAIN RUNNING PERPENDICULAR TO SUPPORT JOISTS.
    - I. ROOF SHEATHING: C-D/EXT-APA, 1/2" THICK
    - II. WALL SHEATHING: C-D/EXT-APA, 1/2" THICK
    - III. SUBFLOORING: C-D/EXT-APA, 3/4" THICK
- NAILING SCHEDULE SHALL BE IN ACCORDANCE WITH THE LOCAL BUILDING CODES "RECOMMENDED FASTENING SCHEDULE". NAIL PLYWOOD SHEATHING AND SUBFLOORING 6"O.C. AT EDGES AND 12"O.C. ALONG INTERMEDIATE SUPPORTS, LEAVING SPACES BETWEEN PANELS AS RECOMMENDED BY THE APA. UTILIZE RING-SHANK OR SCREW TYPE NAILS FOR PLYWOOD SUBFLOORING AND APPLY APPROPRIATE CONSTRUCTION ADHESIVE TO ADEQUATELY SECURE PLYWOOD TO FLOOR JOISTS.
- INSTALL JOIST HANGERS, COLUMN CAPS AND BASES WHERE REQUIRED. METAL FABRICATIONS SHALL BE OF APPROPRIATE SIZE AND TYPE FOR THE MEMBERS AND SUPPORT CONDITIONS. WHERE FLANGE SUPPORT JOIST HANGERS ARE USED IN CONJUNCTION WITH STEEL BEAMS, CARE SHALL BE TAKEN TO INSTALL THE HANGERS CLEAR OF CONTACT WITH THE STEEL BEAM BY INSTALLING 2X WOOD TOP PLATES.
- NOTCHING SHALL NOT EXCEED 1/4TH OF THE DEPTH OF A JOIST OR RAFTER AND SHALL OCCUR ONLY IN THE OUTER QUARTER OF THE SPAN. NOTCHES SHALL NOT BE PERMITTED IN THE MIDDLE HALF OF THE SPAN. NOTCH LENGTH SHALL NOT EXCEED 1/3RD OF THE JOIST DEPTH. NOTCHES ARE NOT PERMITTED IN ENGINEERED LUMBER PRODUCTS.
- HOLES IN JOISTS OR RAFTERS SHALL OCCUR IN THE MIDDLE 1/3RD OF THE SPAN. THE HOLE DIAMETER SHALL NOT EXCEED 1/3RD OF THE JOIST DEPTH. HOLES IN ENGINEERED LUMBER PRODUCTS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- ENGINEERED LUMBER INDICATED ON THE DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. JOISTS LABELED TJI ARE COMPOSITE I-JOISTS AS MANUFACTURED BY TRUS-JOIST. MEMBERS LABELED LVL ARE LAMINATED VENEER LUMBER (1.9E MICROLAM BY TRUS-JOIST). THE SUBSTITUTION OF OTHER PRODUCTS ARE ONLY PERMITTED WITH BACKUP ENGINEERING PLANS AND CALCULATIONS.

**FOUNDATION**

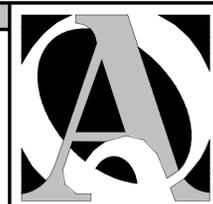
- ALL FOOTINGS SHALL REST ON UNDISTURBED SOIL WITH A MINIMUM BEARING CAPACITY OF 4000 PSF. BACKFILL OVER-EXCAVATION WITH CONCRETE, NOT ADDITIONAL SOIL.
- NO BACKFILLING OF FOUNDATION WALLS SHALL BE UNDERTAKEN UNTIL SUITABLE WALL BRACING (TEMPORARY OR PERMANENT) HAS BEEN INSTALLED.
- DO NOT POUR FOOTINGS ON FROZEN SOIL. REMOVE ALL FROST PRIOR TO POURING CONCRETE.
- BOTTOM OF FOOTINGS SHALL BE INSTALLED BELOW GRADE TO PROVIDE PROTECTION FROM FROST PENETRATION. CONSULT WITH LOCAL BUILDING OFFICIALS REGARDING REQUIRED DEPTH IN THE LOCALE WHERE THE FOUNDATION IS CONSTRUCTED.
- PROVIDE 2-#5 REINFORCING BARS CONTINUOUS IN THE TOP AND BOTTOM OF WALLS, AND IN CONTINUOUS FOOTINGS. SEE FOUNDATION PLAN FOR ADDITIONAL REINFORCING REQUIRED AT COLUMN FOOTINGS.
- PROVIDE 1/2" DIAMETER ANCHOR BOLTS AT 6'-0"O.C. MAXIMUM TO SECURE FRAMING SILL TO FOUNDATION.
- PROVIDE EXTERIOR AND/OR INTERIOR FOOTING DRAINS AS REQUIRED BY SITE CONDITIONS.
- INSTALL FOUNDATION WATERPROOFING TO BELOW GRADE SURFACES.
- INSTALL FOUNDATION INSULATION AS REQUIRED BY LOCAL CODES.

**ARCHITECTURAL SYMBOLS**



**GENERAL NOTES**

- ALL CONSTRUCTION ON THIS HOME, AND ANY CHANGES MADE TO THE DESIGN OF THIS HOME, EITHER BEFORE OR DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE BUILDING CODE. NOTHING REPRESENTED WITHIN THESE PLANS SHALL ALLEVIATE THE APPLICABLE CODE REQUIREMENTS FOR THE CONSTRUCTION RELATED TO THIS PROJECT.
- NOTIFY QUISENBERRY ARCAJI ARCHITECTS, LLC AT (860) 677-4594 IMMEDIATELY IF PROBLEMS SHOULD ARISE DURING THE CONSTRUCTION ON THIS HOME WITH RESPECT TO STRUCTURAL INTEGRITY, FRAMING CONFLICTS, OR GENERAL CONCERNS.
- THESE DRAWINGS DO NOT REPRESENT ALL COMPONENTS OR DETAILS REQUIRED TO PROPERLY CONSTRUCT THIS HOME. IT IS ASSUMED THAT THE WORK WILL BE PERFORMED BY COMPETENT, SKILLED AND LICENSED TRADE CONTRACTORS IN ACCORDANCE WITH INDUSTRY STANDARDS AND CARE.
- UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL NEW FINISHES (ROOFING, SIDING, TRIM, ETC.) SHALL MATCH EXISTING.
- PATCH EXISTING AREAS AFFECTED BY THE NEW WORK. MATCH EXISTING FINISHES UNLESS DIRECTED OTHERWISE BY THE OWNER.
- EXTEND EXISTING SERVICES (MECHANICAL, PLUMBING, ELECTRICAL, ETC.) TO ACCOMMODATE THE NEW CONSTRUCTION. PROVIDE UPGRADES TO EXISTING COMPONENTS AS NECESSARY TO PROVIDE SATISFACTORY PERFORMANCE WITHIN THE COMPLETED STRUCTURE.



**QUISENBERRY ARCAJI ARCHITECTS, LLC**  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

**REHABILITATION/RECONSTRUCTION WORK FOR:**

**CAROLE FRANKLIN**  
APPLICANT #(1215)  
13 JAMES STREET  
MILFORD, CONNECTICUT

Sheet Description:

**GENERAL NOTES**

Issue Dates:

05.18.2015

No Scale

Project #: 1215

Drawn By: RAP

Sheet #:

**G1.1**

# "STRUCTURAL GENERAL NOTES"

## A. CODES AND STANDARDS:

1. THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITIONS UNLESS NOTED OTHERWISE.
  - a. 2005 CONNECTICUT STATE BUILDING CODE
    - (1) "2009 INTERNATIONAL RESIDENTIAL BUILDING CODE"
    - (2) 2009/2011/2013 CONNECTICUT AMENDMENTS
  - b. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318", (LATEST EDITION) AMERICAN CONCRETE INSTITUTE.
  - c. HOT WEATHER CONCRETING, ACI 305R AND COLD WEATHER CONCRETING ACI 306R (LATEST EDITION).

## B. DESIGN DATA:

1. GRAVITY - FLOOR LIVE LOADS
  - a. ROOMS 40 PSF
  - b. ATTIC WITHOUT STORAGE 10 PSF
2. GRAVITY - SNOW LOADS
  - a. GROUND SNOW LOAD (Pg) 30 PSF
  - b. SNOW EXPOSURE FACTOR (Ce) 0.9
  - c. THERMAL FACTOR (Ct) 1.0
  - d. SNOW LOAD IMPORTANCE FACTOR (I) 1.0
  - e. FLAT-ROOF SNOW LOAD (Pf) 30 PSF (NON-REDUCIBLE ROOF LIVE LOAD)
3. LATERAL LOADS - WIND
  - a. MAIN WIND-FORCE RESISTING SYSTEM:
    - (1) BASIC WIND SPEED, 3 SECOND GUST (V35) 100 MPH EXPOSURE: D
4. LATERAL LOADS - SEISMIC
  - a. SEISMIC DESIGN CATEGORY: B

## C. FOUNDATIONS/GEOTECHNICAL REPORT:

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 03/21/13 LOBDELL CONSULTANTS, P.C. (15 AVALON DRIVE, MILFORD, CT) GEOTECHNICAL INVESTIGATION. SEE THAT REPORT FOR ADDITIONAL INFORMATION.

## D. MATERIALS:

1. THE FOLLOWING ASTM STANDARDS AND DESIGN STRESSES SHALL BE USED FOR THE APPROPRIATE MATERIALS USED IN CONSTRUCTION OF THIS PROJECT.
2. CEMENT: ASTM C150, TYPE I OR III
3. AGGREGATES: ASTM C33 (NORMAL WEIGHT)
4. CONCRETE: ALL CONCRETE SUBJECT TO EXPOSURE SHALL BE AIR-ENTRAINED 5% +/- 1-1/2% BY VOLUME. AIR-ENTRAINING ADMIXTURE TO COMPLY WITH ASTM C-260
 

APPLICATION	F'c @ 28 DAYS	WT (PCF)
a. GRADE BEAMS	3500	145
b. FOOTINGS/PIERS	3000	145
c. EXTERIOR CONCRETE SLABS AND CURBS	4000	145
5. REINFORCEMENT:
  - a. DEFORMED REINFORCING BARS ASTM A615, GRADE 60
  - b. WELDED WIRE FABRIC (WWF) ASTM A185

## E. CONSTRUCTION:

1. GENERAL:
  - a. REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
  - b. SUBMIT SHOP DRAWINGS AT LEAST 15 DAYS BEFORE DATE REVIEWED SUBMITTALS WILL BE NEEDED. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT THE CONTRACTOR HAS VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.
  - c. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPERLY DESIGNED FORMWORK, STAGINGS, BRACING, SHEETING, SHORING, ETC.
  - d. IMPLEMENTING JOB SAFETY, CONSTRUCTION PROCEDURES AND TEMPORARY SHORING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
  - e. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATIONS OF OPENINGS, SLEEVES, CONCRETE HOUSEKEEPING PADS, INSERTS, AND DEPRESSIONS.
  - f. HOUSE RAISING CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO BEGINNING WORK. VERIFY EXISTING BEARING WALLS ARE PLATFORM FRAMED, NOT BALLOON FRAMED. CONTRACTOR IS SOLELY RESPONSIBLE TO SHOW ALL SHORING AND BRACING, AS REQUIRED TO STABILIZE THE HOUSE DURING THE LIFTING PROCESS.

- g. DISCONNECT ALL UTILITIES AND WALL SILL ANCHORAGE BEFORE LIFTING HOUSE. WORK. VERIFY EXISTING BEARING WALLS ARE PLATFORM FRAMED, NOT BALLOON FRAMED. CONTRACTOR IS SOLELY RESPONSIBLE TO SHOW ALL SHORING AND BRACING, AS REQUIRED TO STABILIZE THE HOUSE DURING THE LIFTING PROCESS.
- h. EXCAVATE AROUND FOUNDATION AND CUT HOLES IN FOUNDATION AND HOUSE WALLS ARE REQUIRED TO INSTALL LIFTING BEAMS. RAISE HOUSE WITH JACKS.
  - i. CONTRACTOR IS RESPONSIBLE FOR REPAIR ALL WALL AND FLOOR FRAMING AND FINISHES CRACKED OR DAMAGED AS A RESULT OF THE HOUSE LIFTING PROCESS.
  - j. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, DETAILS AND SPECIFICATIONS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.
  - k. CONTRACTOR SHALL FURNISH DIMENSIONED SHOP DRAWINGS AT ALL LEVELS LOCATING FLOOR AND ROOF EDGES FOR REVIEW BY THE ARCHITECT AND STRUCTURAL ENGINEER.
  - l. THE EXISTING SUPERSTRUCTURE HAS NOT BEEN RETROFITTED TO MEET CURRENT CODE REQUIREMENTS.

## F. HELICAL PILES:

1. GENERAL:
  - a. HELICAL PIER COMPONENTS SHALL BE DESIGNED WITHIN LIMITS PROVIDED BY AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) AND COMPLY WITH ICBO REPORT ER-5110 OR PFC-5551 (SUBMIT CERTIFICATION). COMPONENTS SHALL BE MANUFACTURED BY A.B. CHANCE HELICAL PIER FOUNDATION OR DIXIE ANCHORING SYSTEM (OR APPROVED EQUIVALENT) CONSISTING OF HELICAL STEEL PIERS WITH ONE OR MORE HELICALLY SHAPED STEEL PLATES ATTACHED TO A CENTRAL SHAFT, PIERS AND EXTENDED BY ADDING SHAFT EXTENSIONS.
  - b. THE INSTALLING CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE PILE MANUFACTURER'S CERTIFICATE OF COMPETENCY IN INSTALLATION OF HELICAL PILES, CONTRACTOR'S EVIDENCE OF A MINIMUM FIVE YEARS OF EXPERIENCE IN THE INSTALLATION OF HELICAL PILES, AND A LETTER FROM THE PILE MANUFACTURER, PILE DISTRIBUTOR OR MANUFACTURER'S REPRESENTATIVE EXPRESSING ABILITY AND INTENT TO PROVIDE ON-SITE SUPERVISION OF THE PILE INSTALLATION.
  - c. CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL, SHOP DRAWINGS AND SPECIFICATIONS FOR THE HELICAL PILES AND HELICAL ANCHORS INTENDED FOR USE ON THIS PROJECT. THE SHOP DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF THE CONTRACTOR'S PILE DESIGN PROFESSIONAL (INFORMATION TO INCLUDE MAXIMUM ALLOWABLE MECHANICAL COMPRESSION AND TENSILE STRENGTH OF THE HELICAL PILES AND ANCHORS; PLANNED INSTALLATION DEPTH; NUMBER OF LEAD AND EXTENSION SECTIONS; HELICAL CONFIGURATION; MANUFACTURER'S RECOMMENDED CAPACITY TO INSTALLATION TORQUE RATIO; MINIMUM FINAL INSTALLATION TORQUES; AND CORROSION PROTECTION). CONTRACTOR'S PILE DESIGN PROFESSIONAL SHALL ALSO SUBMIT SIGNED AND SEALED DESIGN CALCULATIONS (INCLUDING CONSIDERATIONS FOR DOWNDRAG, BUCKLING, AND EXPANSIVE SOILS); SOIL BEARING AND PULLOUT CAPACITY; AND BRACKETS, BEARING PLATES, CAP PLATES OR OTHER TERMINATION DEVICES THAT ARE BOLTED OR WELDED TO THE ENDS OF THE HELICAL PILES OR ANCHORS.
  - d. THE MANUFACTURER SHALL PROVIDE A TEN YEAR WARRANTY AGAINST MANUFACTURING DEFECTS ON HELICAL PILE, HELICAL ANCHOR, AND BRACKET PRODUCTS.
  - e. WORK SHALL NOT BEGIN UNTIL ALL THE SUBMITTALS HAVE BEEN RECEIVED AND APPROVED BY THE ENGINEER. ALL COSTS ASSOCIATED WITH INCOMPLETE OR UNACCEPTABLE SUBMITTALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  - f. IT IS THE CONTRACTOR'S PILE DESIGN PROFESSIONAL'S RESPONSIBILITY TO SELECT THE APPROPRIATE SIZE AND TYPE OF HELICAL PILES, HELICAL ANCHORS, AND BRACKETS TO SUPPORT THE NOMINAL DESIGN LOADS SHOWN ON THE DRAWINGS. THESE SPECIFICATIONS AND THE DRAWINGS PROVIDE MINIMUM REQUIREMENTS TO AID THE CONTRACTOR IN MAKING APPROPRIATE MATERIALS SELECTIONS. FAILURE TO ACHIEVE PROPER TORQUE AND CAPACITY SHALL RESULT IN CONTRACTOR REPLACING HELICAL PILES AND ANCHORS AS APPROPRIATE TO SUPPORT THE REQUIRED LOADS. ALL MATERIAL REPLACEMENTS SHALL BE ACCEPTABLE TO ENGINEER.
  - g. THE DESIGN STRENGTH OF THE HELICAL BEARING PLATES, SHAFT CONNECTIONS, BRACKETS, AND THE PILE SHAFT ITSELF SHALL BE SUFFICIENT TO SUPPORT THE NOMINAL DESIGN LOADS SPECIFIED ON THE CONTRACT DRAWINGS TIMES A FACTOR OF SAFETY OF 2.
  - h. THE CENTRAL SHAFT, SHAFT CONNECTIONS AND EXTERNAL SLEEVES SHALL BE HIGH STRENGTH STRUCTURAL STEEL MEETING THE REQUIREMENTS OF ASTM A513. HELIX PLATES SHALL BE STRUCTURAL STEEL MEETING THE REQUIREMENTS OF ASTM GRADE 50 MINIMUM.
    - i. EACH PILE ASSEMBLY SHALL BE DESIGNED TO MEET CORROSION SERVICE LIFE OF 50 YEARS IN ACCORDANCE WITH ICC-ES ACCEPTANCE CRITERIA 358. PROVIDE A HOT DIPPED GALVANIZED COATING ON ALL PILES, BRACKETS, AND ASSOCIATED ASSEMBLIES IN ACCORDANCE WITH ASTM A123 MINIMUM.
  - j. EACH HELICAL PILE SHALL BE INSTALLED AT THE LOCATION AND TO THE ELEVATION, MINIMUM LENGTH, INSTALLATION TORQUE, AND ALLOWABLE CAPACITIES SHOWN ON THE DRAWINGS AND IN THE GEOTECHNICAL REPORT.
  - k. USE PLACEMENT METHOD WHICH WILL NOT CONFLICT OR CAUSE DAMAGE TO EXISTING STRUCTURES.
    - l. THE MINIMUM INSTALLATION EQUIPMENT RATING SHALL EQUAL OR EXCEED THE MAXIMUM TORQUE OF THE SPECIFIED HELICAL PIER.
    - m. PROVIDE A TORQUE MONITORING DEVICE AS PART OF THE INSTALLING UNIT OR AS A SEPARATE IN-LINE DEVICE. MONITOR TORQUE APPLIED BY THE INSTALLING UNITS DURING THE ENTIRE INSTALLATION AND RECORD VALUES ACHIEVED ON EACH PIER.
    - n. INSTALL PIERS IN A SMOOTH AND CONTINUOUS MANNER. APPLY SUFFICIENT DOWNWARD PRESSURE TO ADVANCE THE PIER. THE RATE OF PIER ROTATION SHALL BE FIVE TO TWENTY REVOLUTIONS PER MINUTE.
    - o. THE HELICAL PILE AND ANCHOR SHAFT ALIGNMENT SHALL BE WITHIN A TOLERANCE OF 3" (IN ANY DIRECTION). THE VERTICAL ALIGNMENT SHALL BE WITHIN 2 DEGREES OF VERTICAL.

## G. FOUNDATIONS + STRUCTURAL EARTHWORK:

1. GENERAL:
  - a. SEE THE 03/21/13 GEOTECHNICAL INVESTIGATION BY LOBDELL CONSULTANTS, P.C. FOR DRILLED-IN DEEP PILE FOUNDATION SYSTEM REQUIREMENTS. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK.
  - b. CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO STARTING WORK.
  - c. EXISTING UTILITIES KNOWN TO BE IN THE CONSTRUCTION AREA HAVE BEEN INDICATED. THE SIZE, LOCATION AND DEPTH OF THE UTILITIES ARE NOT KNOWN EXACTLY AND MAY VARY SIGNIFICANTLY FROM THAT INDICATED. OTHER UNKNOWN UTILITIES NOT INDICATED MAY ALSO BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, WHETHER INDICATED OR NOT, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS.
  - d. ALL GRADE BEAMS AND PILE CAPS SHALL BE PLACED ON UNDISTURBED SOIL, CRUSHED STONE OR COMPACTED STRUCTURAL FILL. VERIFICATION OF BEARING CONDITIONS SHALL BE MADE BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT.
  - e. CONCRETE FOR FOUNDATIONS SHALL BE PLACED ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER.
  - f. EXCAVATIONS SHALL BE DEWATERED TO ALLOW INSTALLATION OF FOOTINGS IN DRY ATMOSPHERE.
  - g. ALL SHORING, SHEETING, AND DEWATERING SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR. SHEETING AND SHORING SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMITTALS SHALL BEAR CONTRACTOR'S /ENGINEERING SEAL AND SIGNATURE.
2. BACKFILL
  - a. ALL BACKFILL SHALL BE PER THE 03/21/13 LOBDELL CONSULTANTS, P.C. GEOTECHNICAL INVESTIGATION, WITH OPTIMUM MOISTURE CONTENT FOR COMPACTING.
  - b. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST FOUNDATION WALLS UNTIL THE CONCRETE/GROUTED MASONRY WALLS HAVE REACHED DESIGN STRENGTH.
  - c. WHERE THE FINAL GRADE ELEVATIONS ARE APPROXIMATELY EQUAL ON BOTH SIDES OF A WALL, BACKFILL IN LIFTS TO MAINTAIN LEVEL ELEVATIONS WITHIN 12" ON BOTH SIDES AT ANY TIME.
3. STRUCTURAL FILL
  - a. REFER TO 03/21/13 LOBDELL CONSULTANTS, P.C. GEOTECHNICAL INVESTIGATION REQUIREMENTS FOR COMPACTED STRUCTURAL FILL. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK. INSPECTION OF THE PLACEMENT OF COMPACTED STRUCTURAL FILL SHALL BE BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER.

## H. CONCRETE:

1. CAST-IN-PLACE
  - a. REINFORCING STEEL CLEAR COVER SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
 

NON-POST-TENSIONED CONCRETE:	
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 BARS AND LARGER	2"
#5 AND SMALLER	1-1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALL, JOISTS:	
#11 BARS OR SMALLER	3/4"
  - b. ALL FORMWORK, SHORING AND RESHORING SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMISSIONS SHALL BEAR THE ENGINEER'S SEAL AND SIGNATURE.
  - c. NO SLEEVE SHALL BE PLACED THROUGH ANY CONCRETE ELEMENT UNLESS SHOWN ON THE STRUCTURAL DRAWINGS, APPROVED SLEEVING SHOP DRAWINGS OR SPECIFICALLY AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.
  - d. CORE DRILLING OF FOUNDATIONS, GRADE BEAMS, SHALL NOT BE PERMITTED, UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.
  - e. NO SPLICES OF REINFORCEMENT SHALL BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. MAKE BARS CONTINUOUS AROUND CORNERS.
  - f. WHEN INSTALLING EXPANSION BOLTS OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACING BOLTS OR ADHESIVE ANCHORS.
  - g. ANY STOP IN CONCRETE MUST BE MADE WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN. ALL REINFORCING IS TO BE CONTINUOUS THROUGH JOINTS.



**QUISENBERRY ARCARI  
ARCHITECTS, LLC**  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1346-30)

MILFORD, CONNECTICUT  
13 JAMES STREET

Sheet Description:

**STRUCTURAL  
GENERAL  
NOTES**

Issue Dates:

**JANUARY 16, 2015**

Project #:  
**QA1346/30**

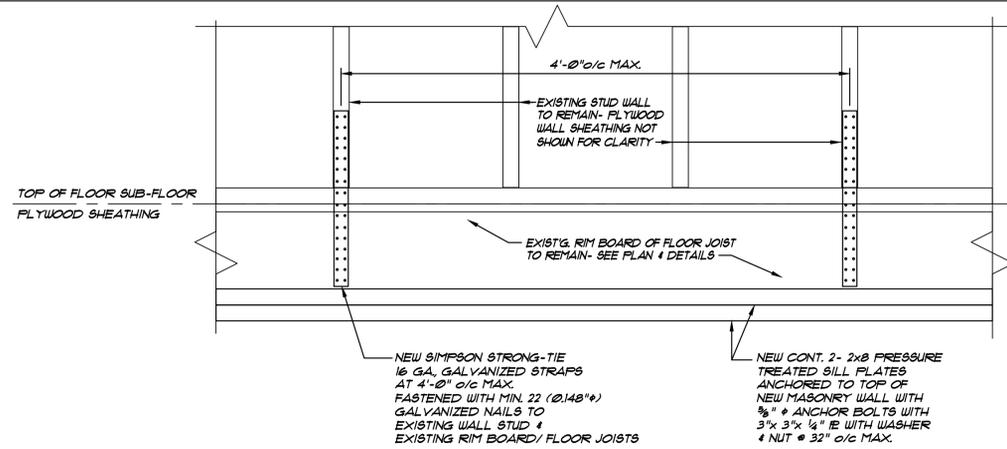
Drawn By:  
**S.A.L.**

Sheet #:

**S-01**

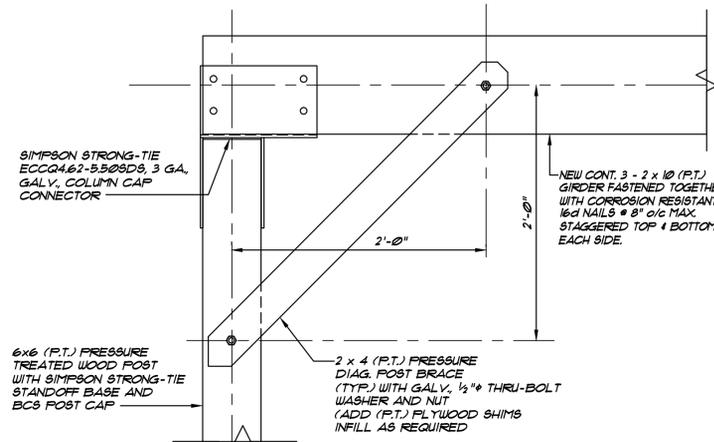


# "STRUCTURAL GENERAL NOTES"



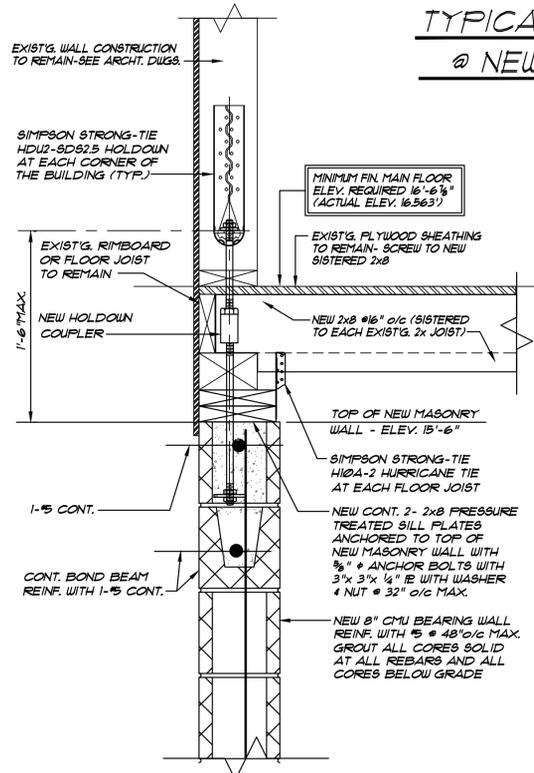
**TYPICAL ANCHORAGE DETAIL OF EXISTING STUD WALL TO EXISTING RIM BOARD/FLOOR JOIST**

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



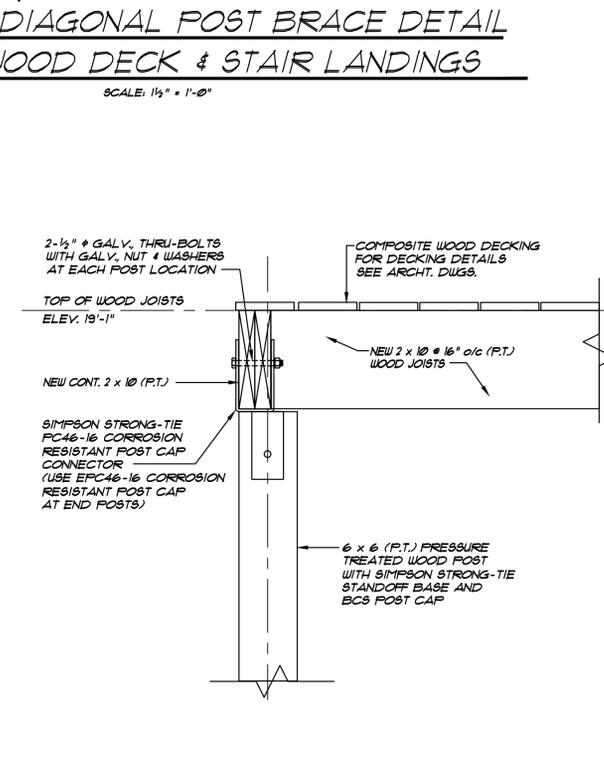
**TYPICAL DIAGONAL POST BRACE DETAIL @ NEW WOOD DECK & STAIR LANDINGS**

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



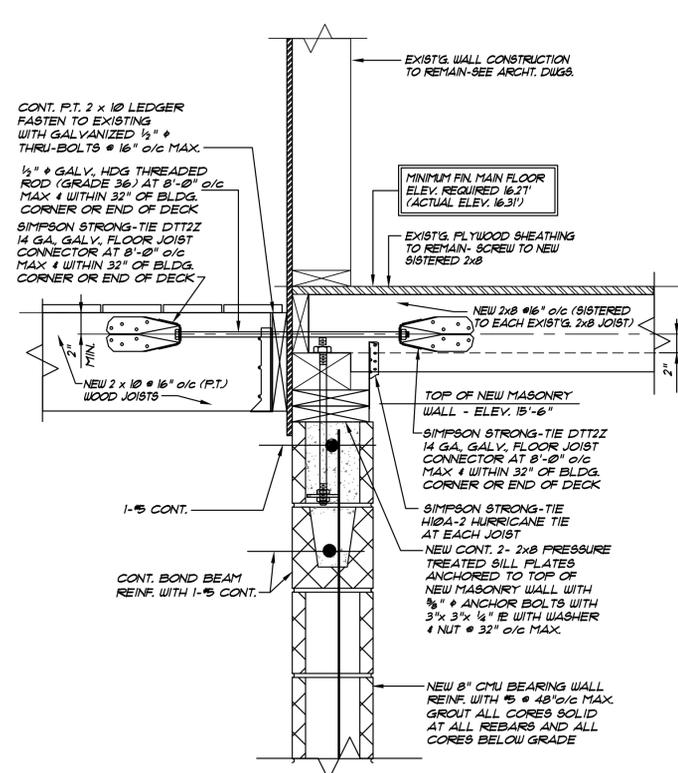
**TYPICAL DETAIL AT NEW SIMPSON STRONG-TIE HOLDDOWN LOCATION**

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



**TYPICAL CONNECTION DETAIL AT NEW WOOD DECK SUPPORT BEAM & POST**

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



**TYPICAL CONNECTION ASSEMBLY DETAIL @ NEW WOOD DECK & CONTINUOUS LEDGER**

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

## J. STRUCTURAL WOOD NOTES:

- ALL VISUALLY GRADED STRUCTURAL LUMBER AND WOOD CONSTRUCTION SHALL CONFORM TO THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND ITS SUPPLEMENT "DESIGN VALUES FOR WOOD CONSTRUCTION".
- PLYWOOD SHALL BE APA RATED SHEATHING WITH A MINIMUM THICKNESS OF 3/4" T&G FOR FLOORS, 15/32" FOR WALLS AND 19/32" FOR ROOF SHEATHING.
- ALL WOOD IN PERMANENT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
- PLYWOOD SHEATHING SHALL BE INSTALLED WITH ITS FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS AND WITH A MINIMUM TWO SPAN CONDITION.
- UNLESS OTHERWISE NOTED ON THE DRAWINGS ALL STRUCTURAL NAILING SHALL CONFORM TO APPENDIX C OF THE CBC.
- PROVIDE A MINIMUM OF TWO STUDS AT ALL BEAMS AND HEADERS, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

## WOOD FRAMING

- STRUCTURAL LUMBER INCLUDES: ROOF JOISTS, BUILT-UP HEADERS BEAMS, SISTERED JOISTS, STUD WALLS, TIES, AND BLDGCK. USE NEW LUMBER CONFORMING TO NOMINAL SIZES INDICATED.
- ALL LUMBER SUPPORT FRAMING SHALL BE DOUGLAS FIR #2 OR BETTER, AND HAVE THE FOLLOWING MINIMUM STRENGTH PROPERTIES:
 

MODULUS OF ELASTICITY	E = 1,600,000 PSI
BENDING STRESS	F <sub>b</sub> = 875 PSI
COMPRESSION PERPENDICULAR TO GRAIN	F <sub>c1</sub> = 625 PSI
COMPRESSION PARALLEL TO GRAIN	F <sub>c1</sub> = 1,300 PSI
HORIZONTAL SHEAR	F <sub>v</sub> = 95 PSI
TENSION PARALLEL TO GRAIN	F <sub>t</sub> = 575 PSI
- PANEL SPACING: 1/16" AT ENDS- 1/8" AT EDGES U.O.N., STAGGER JOINTS.
- STRUCTURAL PLYWOOD SHALL CONFORM TO REQUIREMENTS OF THE AMERICAN PLYWOOD ASSOCIATION (APA) EXPOSURE. USE NEW LUMBER CONFORMING TO NOMINAL SIZES INDICATED.

## MICROLAM (LVL)

- MICROLAM LAMINATED VENEER LUMBER (LVL) SHALL BE FABRICATED OF EASTERN SPECIES (ES) OR WESTERN SPECIES (WS). THE FINISH PRODUCT SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
 

SHEAR MODULUS OF ELASTICITY	G = 118,750 PSI
MODULUS OF ELASTICITY	E = 1,900,000 PSI
FLEXURAL STRESS	F <sub>b</sub> = 2,600 PSI
TENSION STRESS	F <sub>b</sub> = 1,555 PSI
COMPRESSION PERPENDICULAR TO GRAIN PARALLEL TO GLUE LINE	F <sub>c1</sub> = 750 PSI
COMPRESSION PARALLEL TO GRAIN	F <sub>c1</sub> = 2510 PSI
HORIZONTAL SHEAR PERPENDICULAR TO GLUE LINE	F <sub>v</sub> = 285 PSI

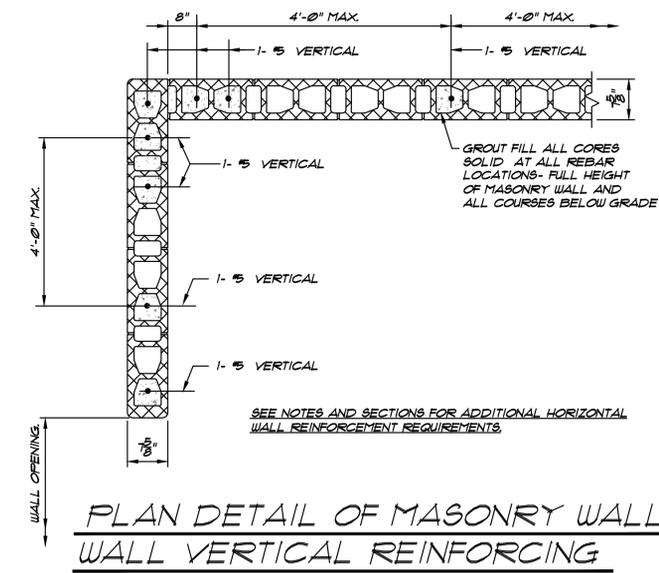
## PARALLAM (PSL)

- PARALLAM PARALLEL STRAND LUMBER (PSL) SHALL BE FABRICATED OF EASTERN SPECIES (ES) OR WESTERN SPECIES (WS). THE FINISH PRODUCT SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
 

SHEAR MODULUS OF ELASTICITY	G = 125,000 PSI
MODULUS OF ELASTICITY	E = 2,000,000 PSI
FLEXURAL STRESS	F <sub>b</sub> = 2,900 PSI
TENSION STRESS	F <sub>b</sub> = 2,025 PSI
COMPRESSION PERPENDICULAR TO GRAIN PARALLEL TO GLUE LINE	F <sub>c1</sub> = 750 p.s.i.
COMPRESSION PARALLEL TO GRAIN	F <sub>c1</sub> = 2900 p.s.i.
Horizontal shear perpendicular to glue line	F <sub>v</sub> = 290 p.s.i.
- PARALLAM MANUFACTURER SHALL PROVIDE ALL METAL HANGERS FOR PARALLAM BEAMS & COLUMNS AS REQUIRED.

## K. DIMENSIONS:

- THE CONTRACTOR SHALL COORDINATE THE DIMENSIONS AND LOCATIONS OF THE ROOF, FLOOR & WALL OPENINGS SO THE FRAMING PROPERLY FITS THE REQUIREMENTS OF ALL TRADES.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO ANY FABRICATION AND INSTALLATION OF ANY NEW MATERIALS. IF ANY DISCREPANCIES ARE FOUND BETWEEN ACTUAL CONDITIONS AND THESE DRAWINGS NOTIFY ARCHITECT AND/OR ENGINEER FOR FURTHER INSTRUCTIONS.



**PLAN DETAIL OF MASONRY WALL WALL VERTICAL REINFORCING**

SCALE: 3/4" = 1'-0"

**PERRONE & ZAJDA ENGINEERS LLC**  
SOUTHWAY EXECUTIVE PARK, UNIT #511  
35 COLD SPRING ROAD, ROCKY HILL, CT. 06067  
Phone (860) 513-1156 Fax (860) 436-3362



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**  
APPLICANT # (1346-30)

MILFORD, CONNECTICUT  
13 JAMES STREET

Sheet Description:

**STRUCTURAL GENERAL NOTES AND TYPICAL DETAILS**

Issue Dates:

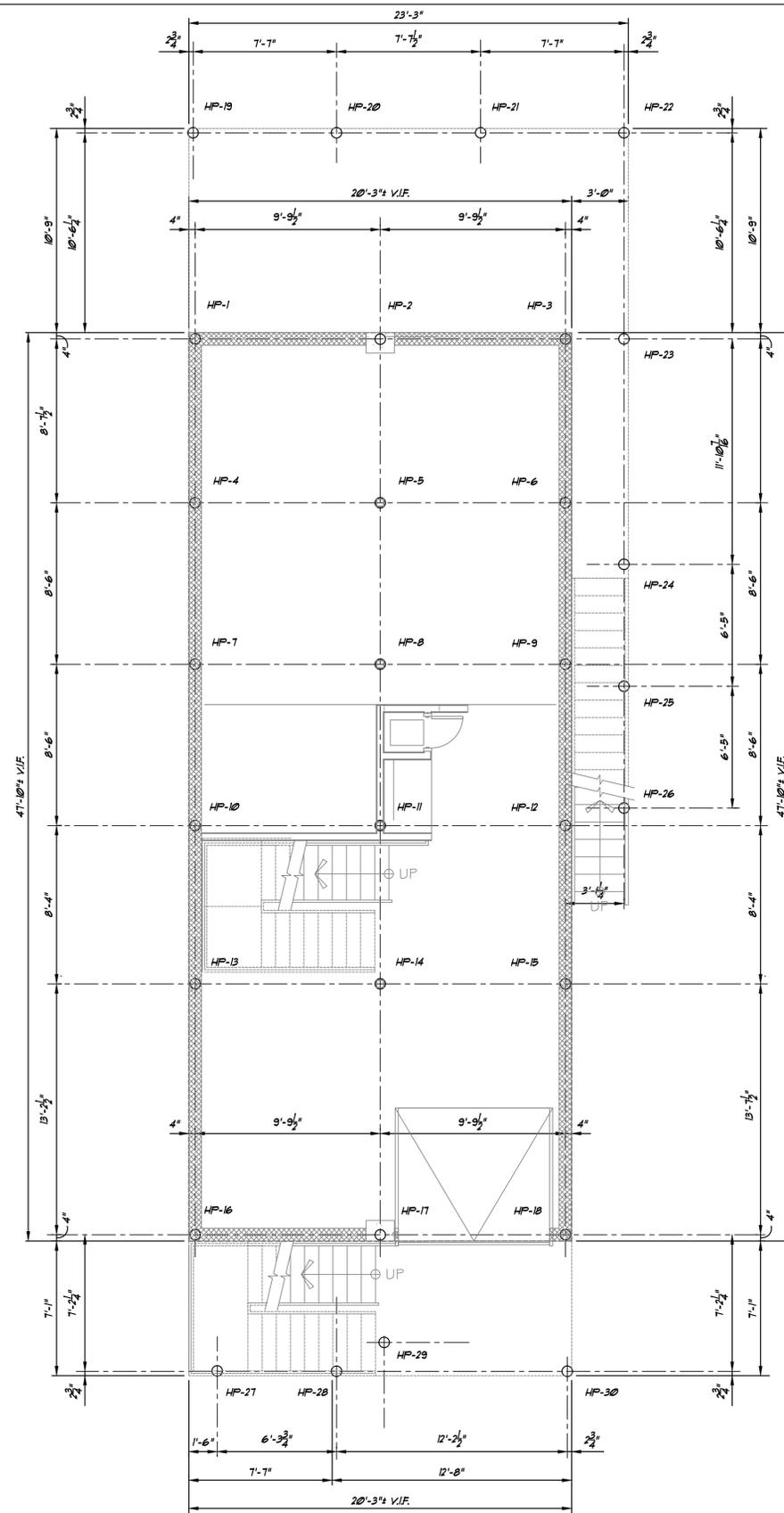
**JANUARY 16, 2015**

Project #:  
QA1346/30

Drawn By:  
S.A.L.

Sheet #:

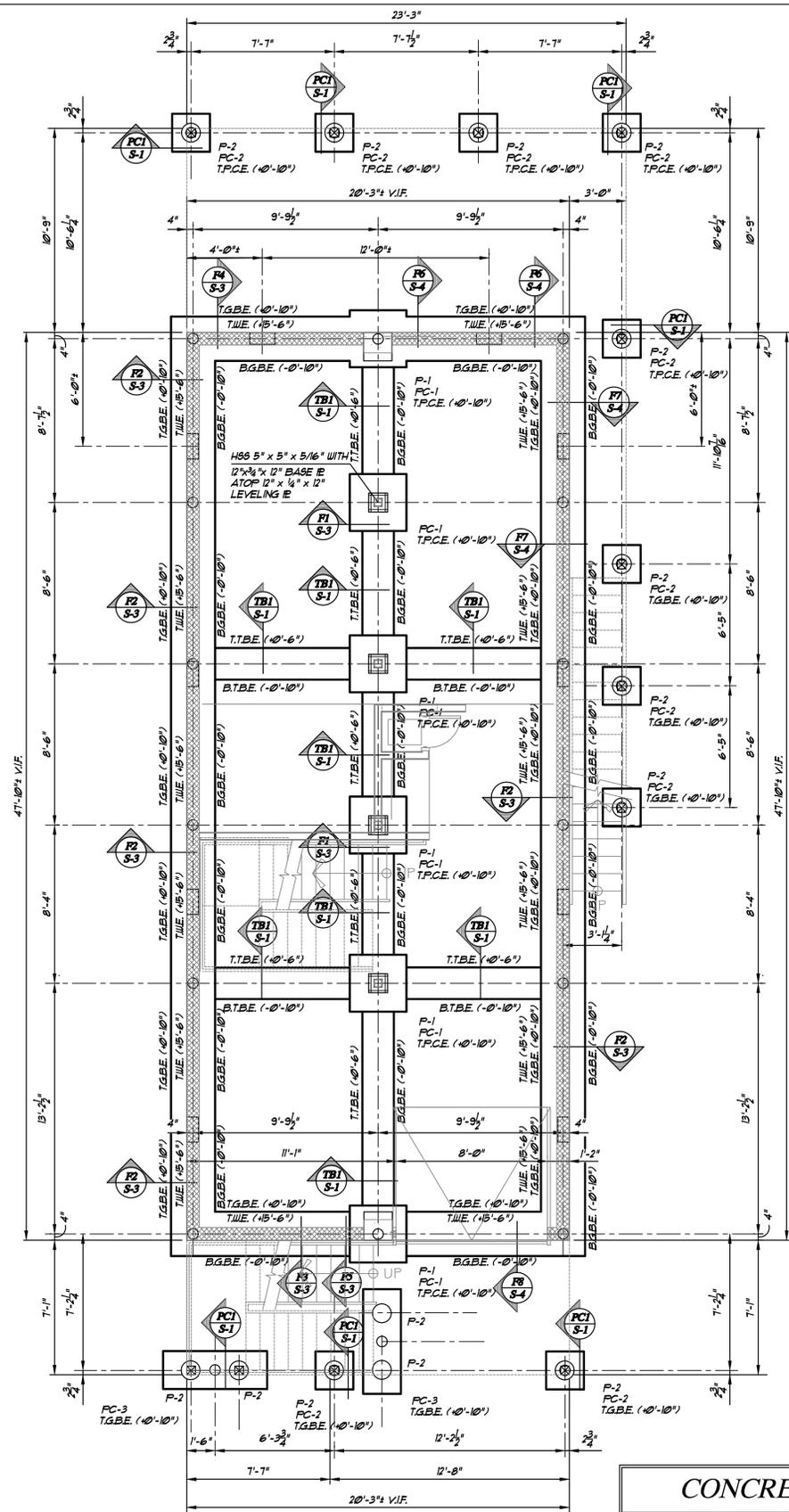
**S-02**



**PILE LOCATION PLAN**

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

- NOTES:**
- VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO STARTING FABRICATION AND INSTALLATION OF ANY NEW MATERIALS. NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES FOR POSSIBLE FURTHER INSTRUCTIONS AS MAY BE REQUIRED.
  - PILES HP-1 THRU HP-18 SHALL BE HELICAL (AUGER) DRILLED-IN PILES INSTALLED CAPACITY = 21 TONS, DESIGN CAPACITY = 16 TONS.
  - PILES HP-19 THRU HP-30 SHALL BE HELICAL (AUGER) DRILLED-IN PILES INSTALLED CAPACITY = 4 TONS, DESIGN CAPACITY = 3 TONS.
  - INSTALL ALL PILES WHERE SHOWN ON PLAN.



**FOUNDATION PLAN**

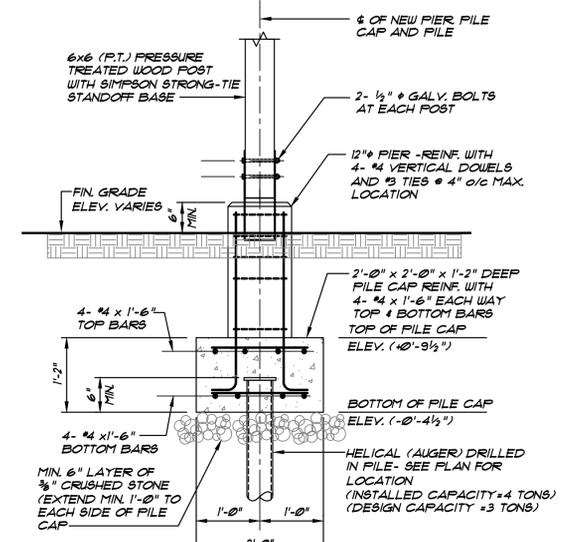
SCALE: 1/4" = 1'-0"

- NOTES:**
- VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO STARTING FABRICATION AND INSTALLATION OF ANY NEW MATERIALS. NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES FOR POSSIBLE FURTHER INSTRUCTIONS AS MAY BE REQUIRED.
  - PC-1 INDICATES 3'-0" x 3'-0" x 1'-8" DEEP CONCRETE PILE CAP REINFORCED WITH 5 - #5 x 2'-6" EACH WAY TOP AND BOTTOM BARS.
  - PC-2 INDICATES 2'-0" x 2'-0" x 1'-2" DEEP CONCRETE PILE CAP REINFORCED WITH 4 - #4 x 1'-6" EACH WAY TOP AND BOTTOM BARS.
  - PC-3 INDICATES 2'-0" x 5'-6" x 1'-2" DEEP CONCRETE PILE CAP REINFORCED WITH 4 - #5 x 5'-0" LONG WAY TOP AND BOTTOM BARS WITH #4 @ 8" O/C MAXIMUM STIRRUPS.
  - TOP OF MASONRY WALL TO BE AT ELEVATION 15'-6", UNLESS OTHERWISE NOTED THIS WAY.
  - T.G.B.E. INDICATES TOP OF GRADE BEAM ELEVATION.
  - B.G.B.E. INDICATES BOTTOM OF GRADE BEAM ELEVATION.
  - NEW CONTINUOUS GRADE BEAM SHALL BE 2'-4" x 1'-8" DEEP CONCRETE BEAM REINFORCED WITH CONTINUOUS 4 - #5 HORIZONTAL TOP & BOTTOM BARS WITH #4 @ 8" O/C MAXIMUM STIRRUPS.
  - NEW FOUNDATION WALLS SHALL BE 8" CMU MASONRY WALLS REIN. WITH VERTICAL #5 @ 48" O/C MAX. FULL HEIGHT OF WALL WITH CONTINUOUS BOND BEAM AT ELEVATION 14'-8" REINFORCED WITH CONTINUOUS 1 - #5 HORIZONTAL BAR GROUT ALL CORES SOLID AT ALL REBARS. GROUT ALL MASONRY CORES BELOW GRADE SOLID.

**CONCRETE PIER SCHEDULE**

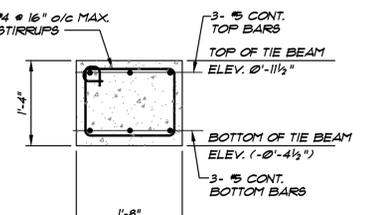
DESIGNATION	SIZE	REINFORCING		REMARKS
		VERTICAL	HORIZONTAL	
P-1	18" x 18"	8 - #5	#5 @ 12"	TOP 3 (2) #5 HORIZ. TIES @ 3" O/C MAX.
P-2	12" DIAM.	4 - #4	#5 @ 4"	

- NOTES:**
- ALL VERTICAL PIER REINFORCING SHALL BE DOUELED INTO CONCRETE GRADE BEAM OR CONCRETE PILE CAP.
  - VERTICAL PIER REINFORCING SHALL BE LAPPED MINIMUM 30 x BAR DIAMETERS.



**SECTION S-1**

SCALE: 3/4" = 1'-0"



**SECTION S-1**

SCALE: 3/4" = 1'-0"

**TYPICAL TIE BEAM DETAIL**



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**  
 APPLICANT # (1346-30)

MILFORD, CONNECTICUT  
 13 JAMES STREET

Sheet Description:

**FOUNDATION AND PILE LOCATION PLAN**

Issue Dates:  
**JANUARY 16, 2015**

Project #: QA1346/30  
 Drawn By: S.A.L.

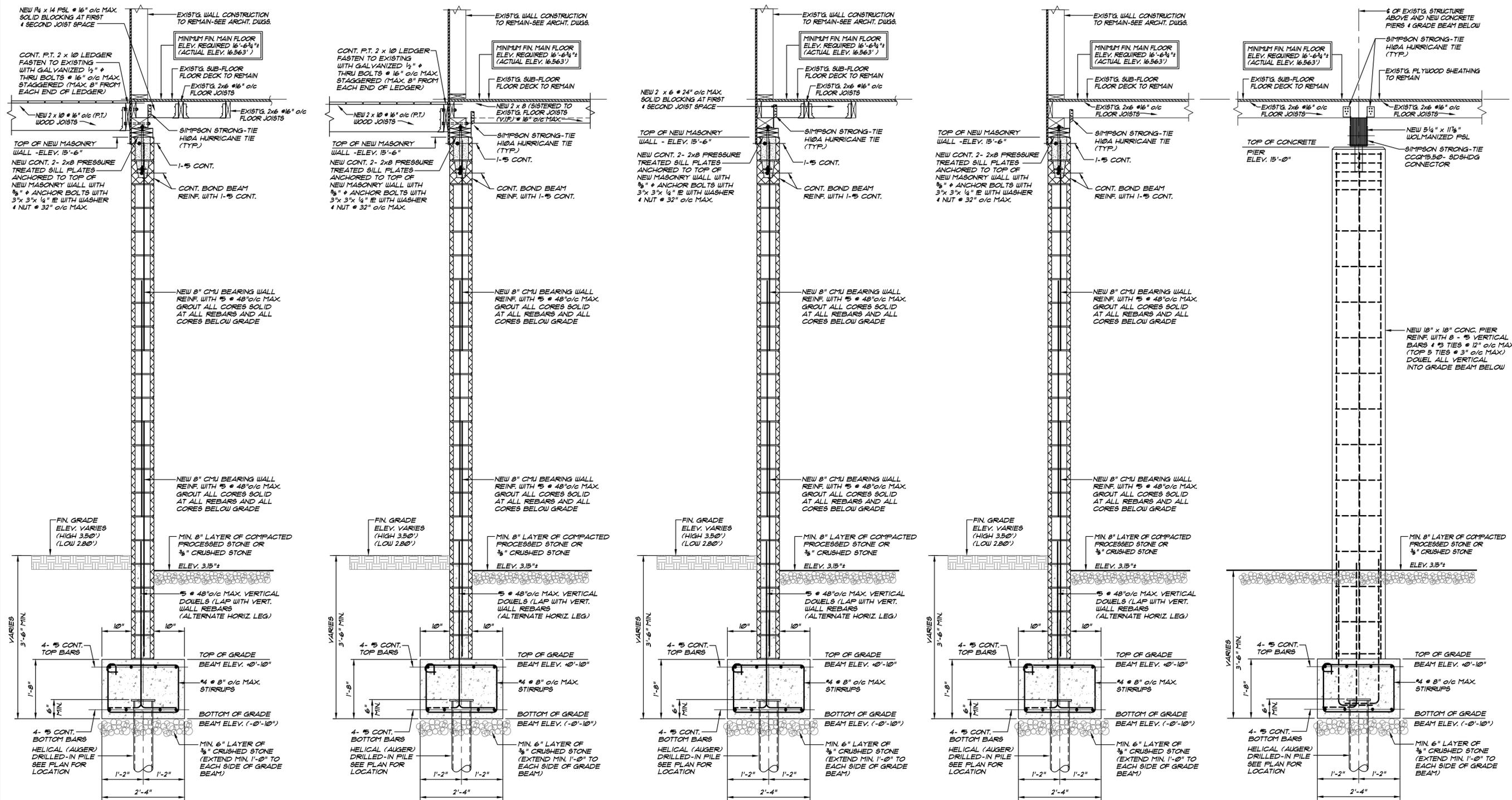
Sheet #:

**S-1**



**PERRONE & ZAJDA ENGINEERS LLC**  
 SOUTHWAY EXECUTIVE PARK, UNIT #511  
 35 COLD SPRING ROAD, ROCKY HILL, CT, 06067  
 Phone (860) 513-1156 Fax (860) 436-3362





**QUISENBERRY ARCA RI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**  
 APPLICANT # (1346-30)

13 JAMES STREET MILFORD, CONNECTICUT

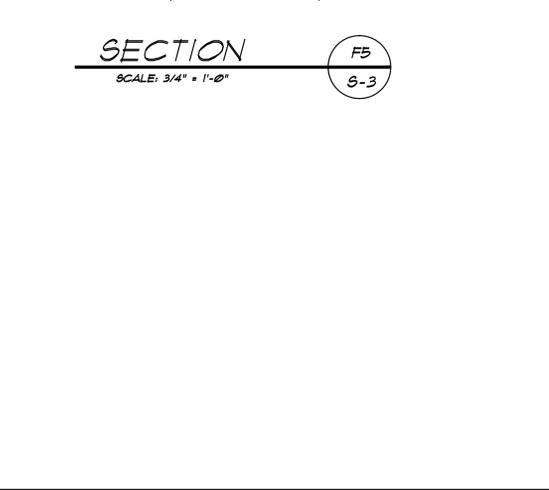
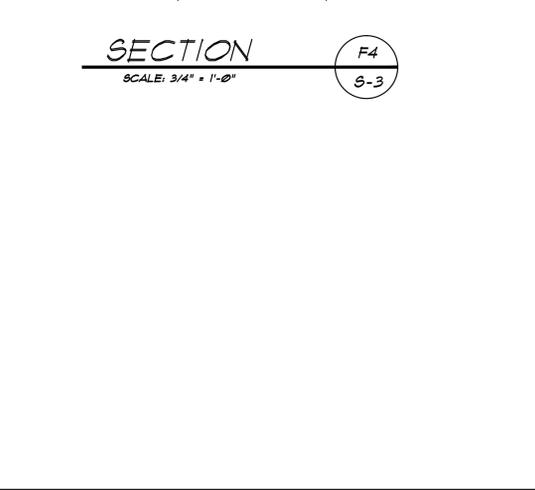
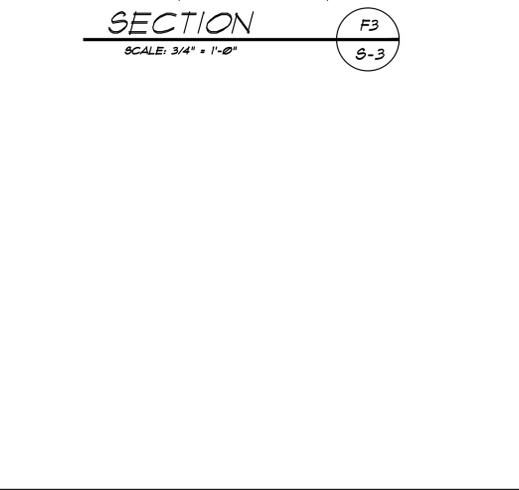
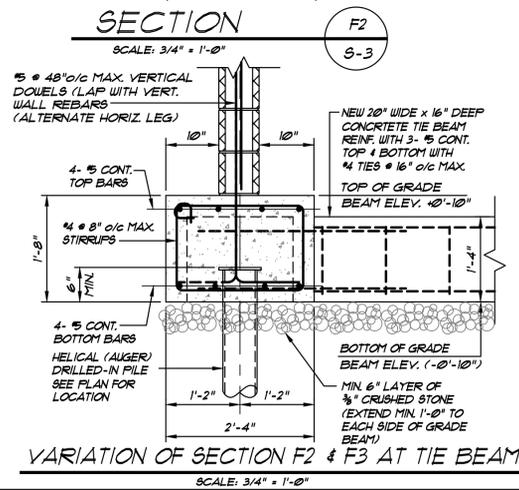
Sheet Description:  
**STRUCTURAL DETAILS**

Issue Dates:  
**JANUARY 16, 2015**

Project #: **QA1346/30** Drawn By: **S.A.L.**  
 Sheet #:

**S-3**

**PERRONE & ZAJDA ENGINEERS LLC**  
 SOUTHWAY EXECUTIVE PARK, UNIT #511  
 35 COLD SPRING ROAD, ROCKY HILL, CT, 06067  
 Phone (860) 513-1156 Fax (860) 436-3362





**QUISENBERRY ARCATATA ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT # (1346-30)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

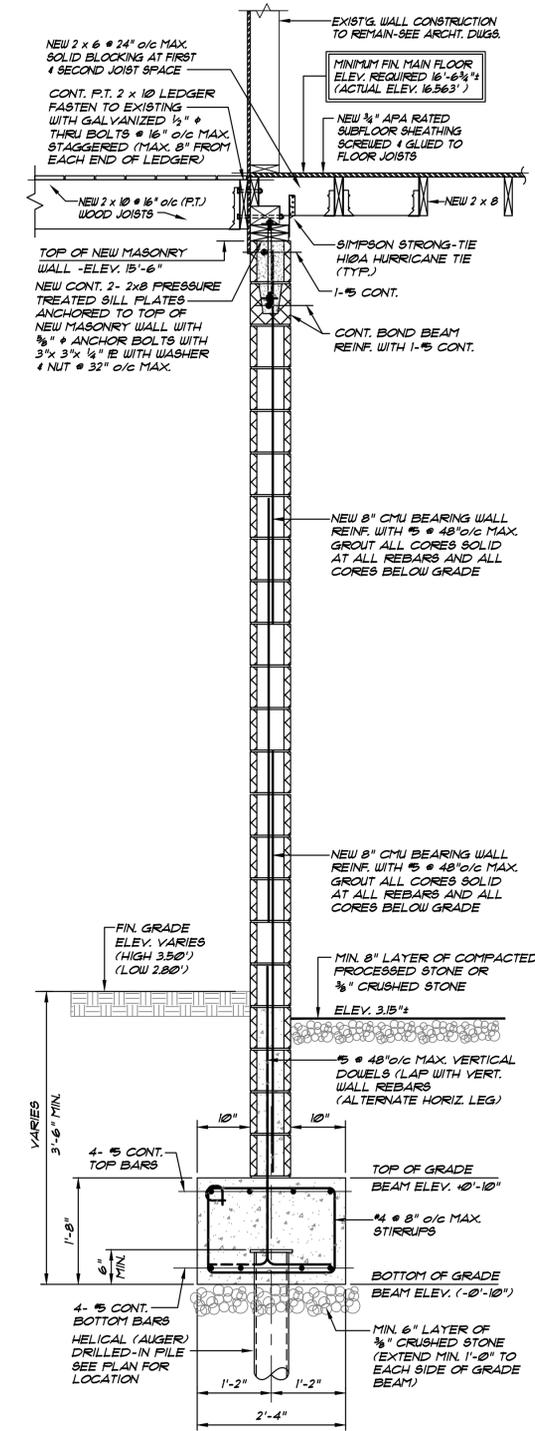
**STRUCTURAL DETAILS**

Issue Dates:  
**JANUARY 16, 2015**

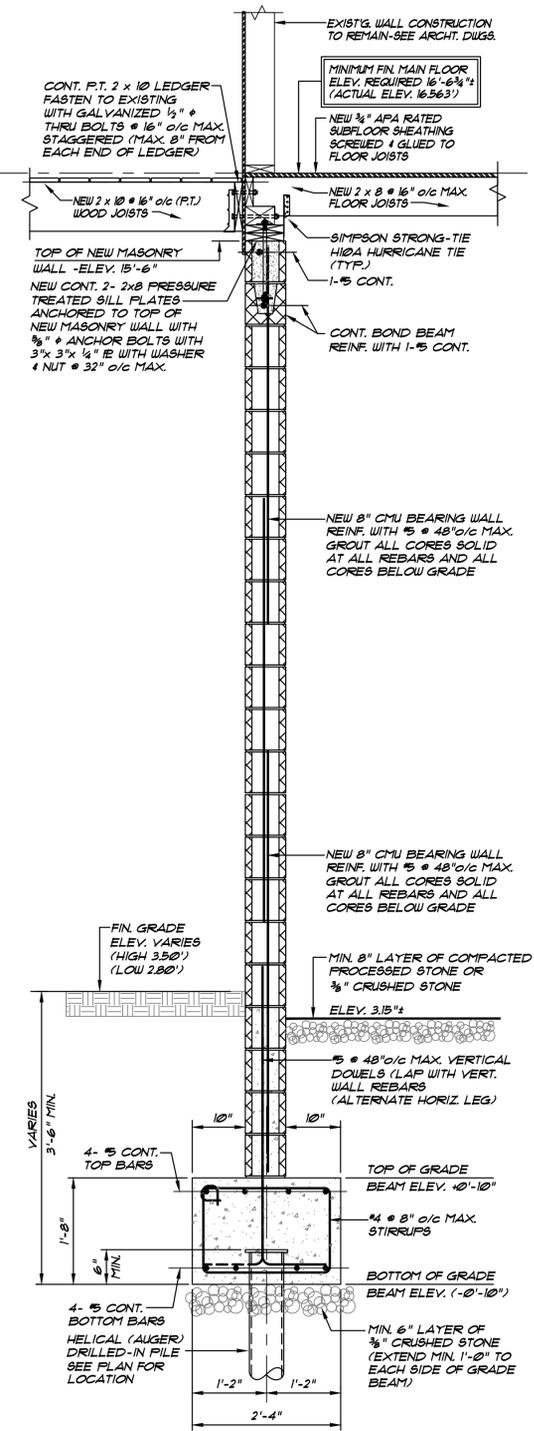
Project #: **QA1346/30** Drawn By: **S.A.L.**

Sheet #:

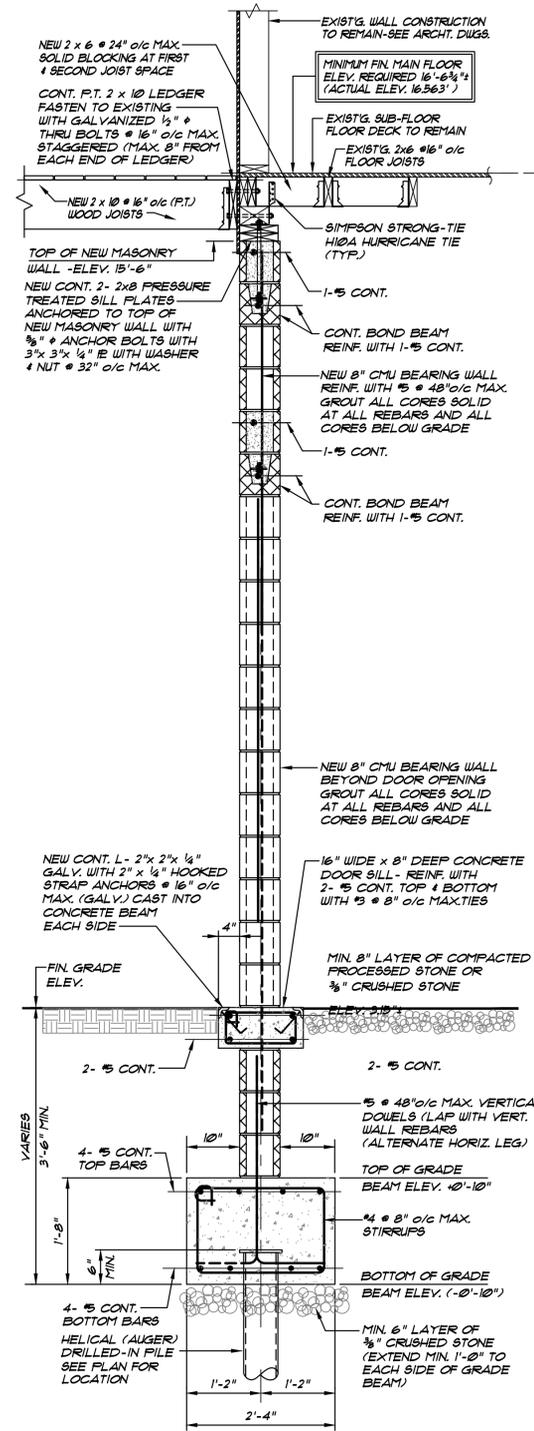
**S-4**



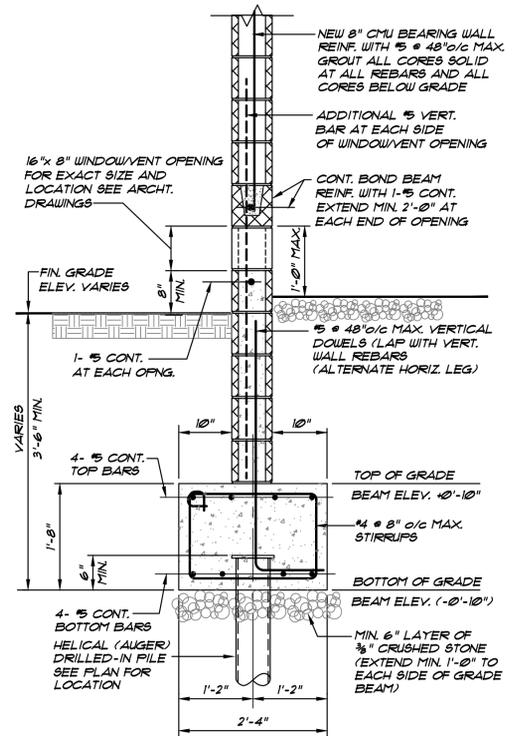
**SECTION F6**  
 SCALE: 3/4" = 1'-0"  
 S-4



**SECTION F7**  
 SCALE: 3/4" = 1'-0"  
 S-4



**SECTION F8**  
 SCALE: 3/4" = 1'-0"  
 S-4



**TYPICAL SECTION AT WINDOWVENTS**  
 SCALE: 3/4" = 1'-0"



**PERRONE & ZAJDA ENGINEERS LLC**  
 SOUTHWAY EXECUTIVE PARK, UNIT #511  
 35 COLD SPRING ROAD, ROCKY HILL, CT, 06067  
 Phone (860) 513-1156 Fax (860) 436-3362







**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**ELEVATIONS**

Issue Dates:

05.18.2015

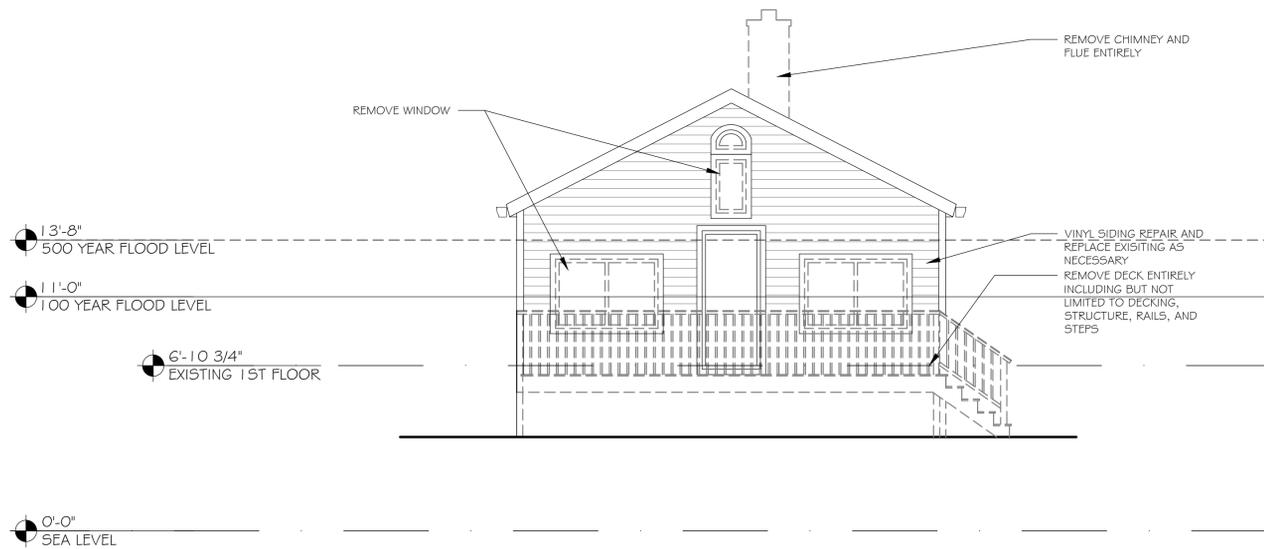
Scale: 1/4" = 1'-0"

Project #: 1215

Drawn By: RAP

Sheet #:

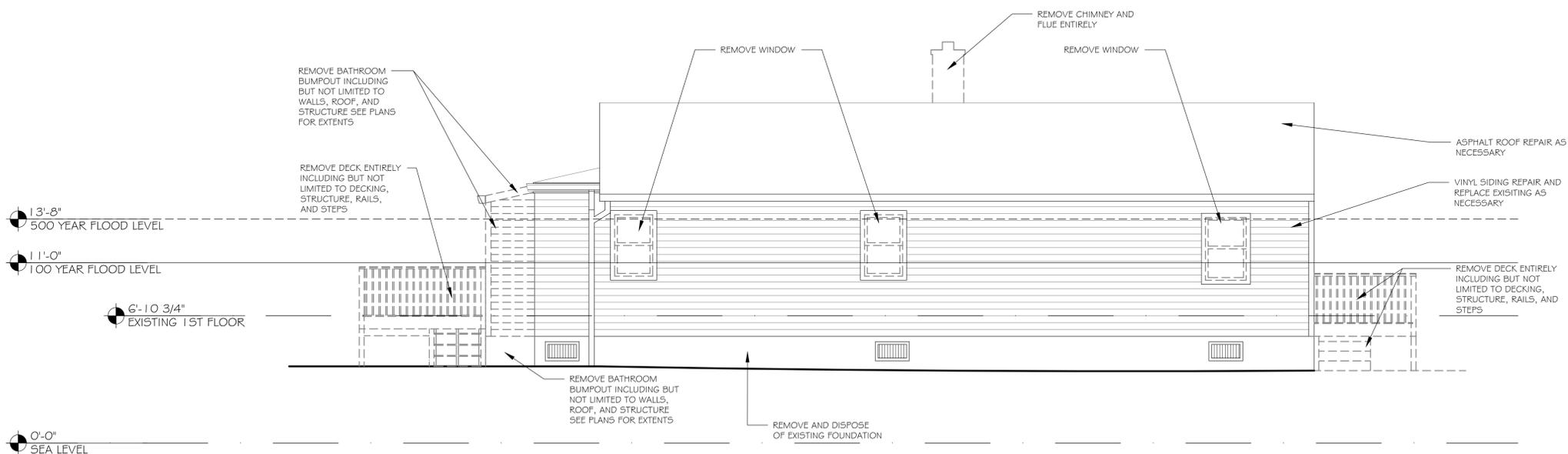
**D2.1**



**SOUTH ELEVATION**

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

2



**WEST ELEVATION**

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

1



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**ELEVATIONS**

Issue Dates:

05.18.2015

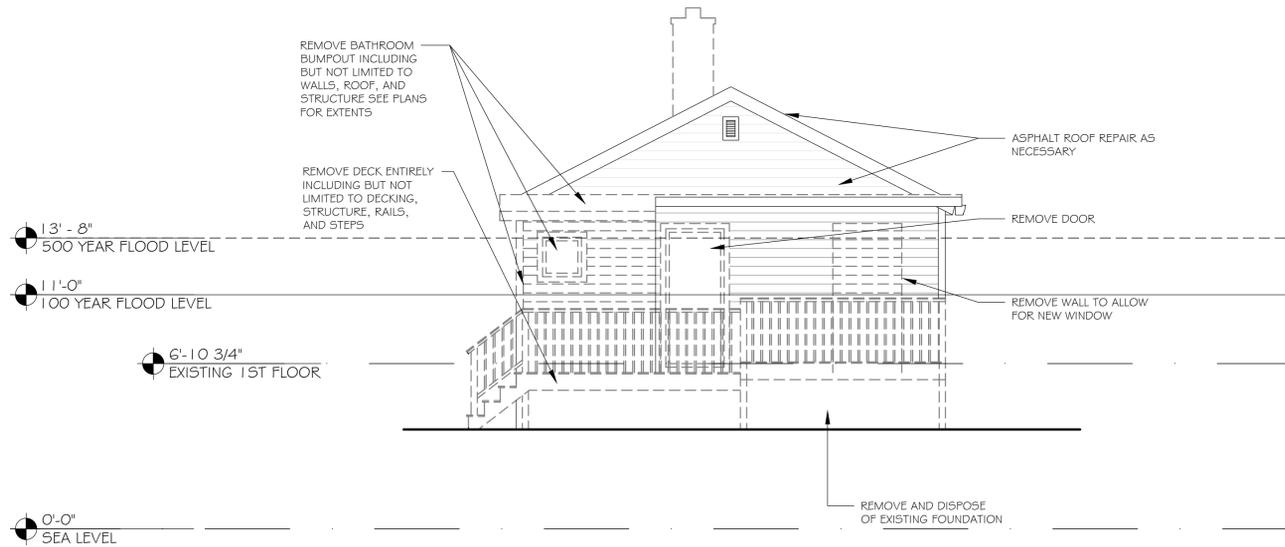
Scale: 1/4" = 1'-0"

Project #: 1215

Drawn By: RAP

Sheet #:

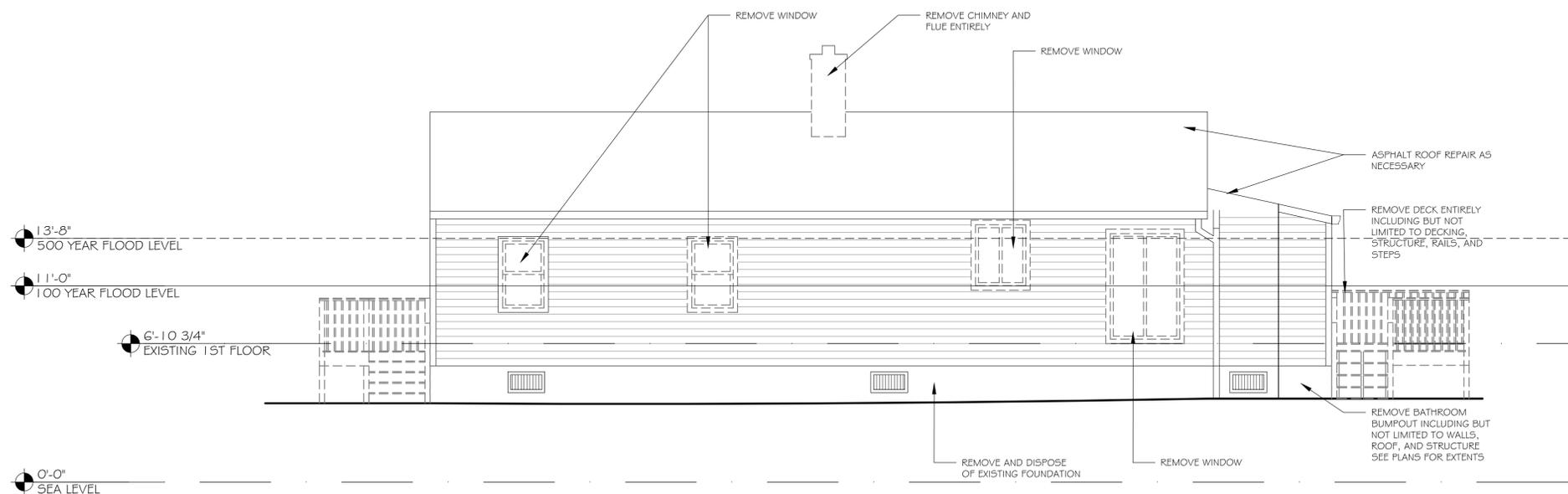
**D2.2**



**NORTH ELEVATION**

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

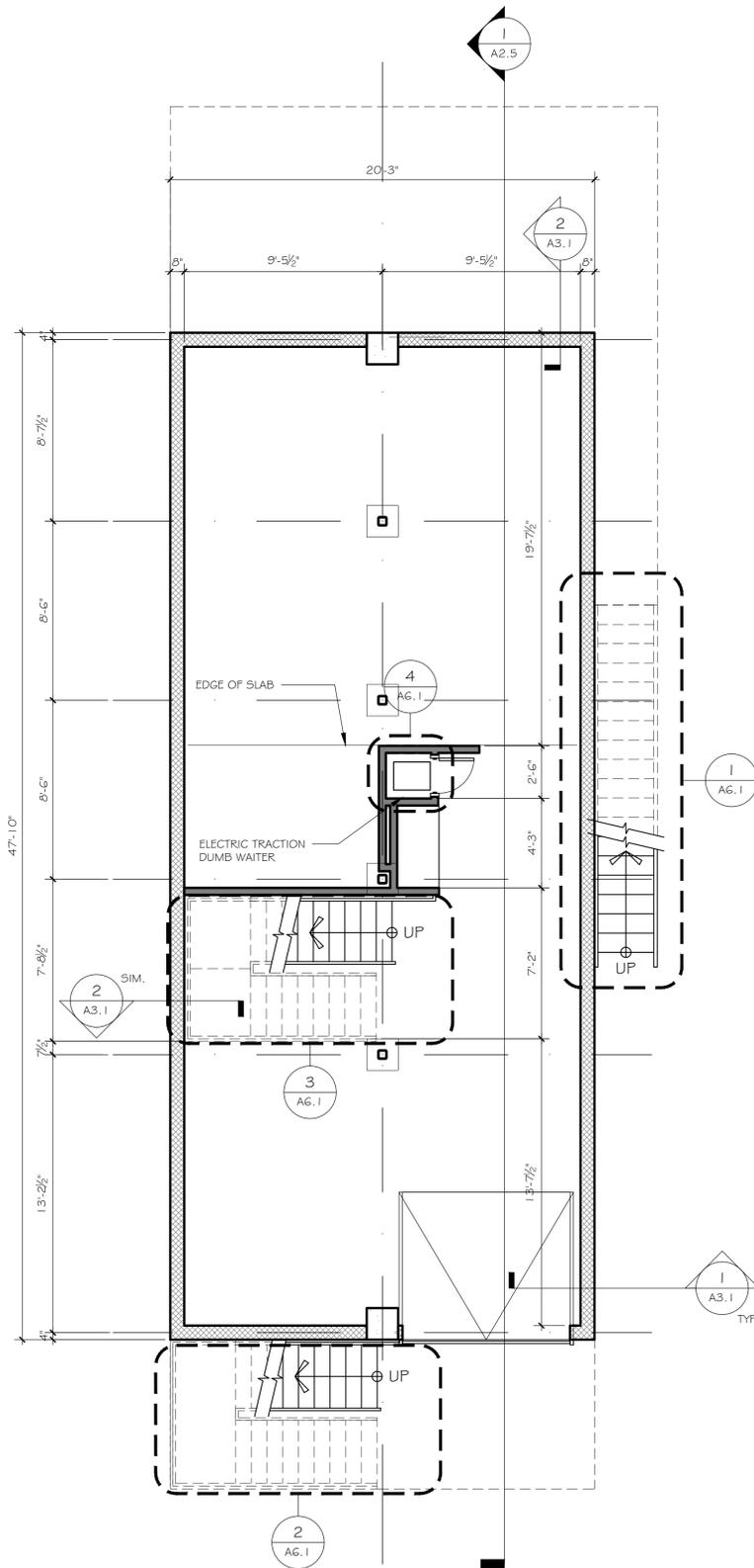
2



**EAST ELEVATION**

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

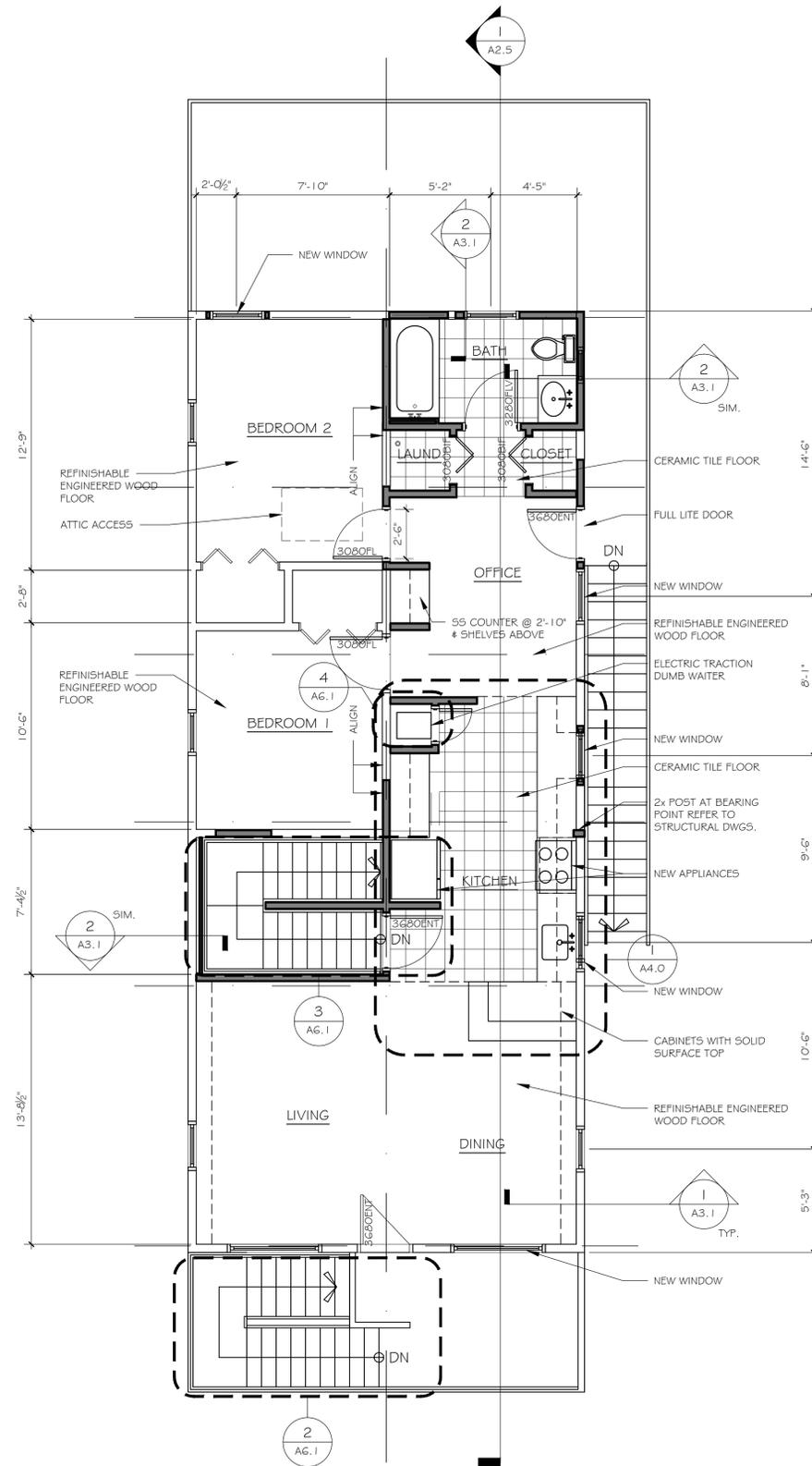
1



**LOWER LEVEL FLOOR PLAN**

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

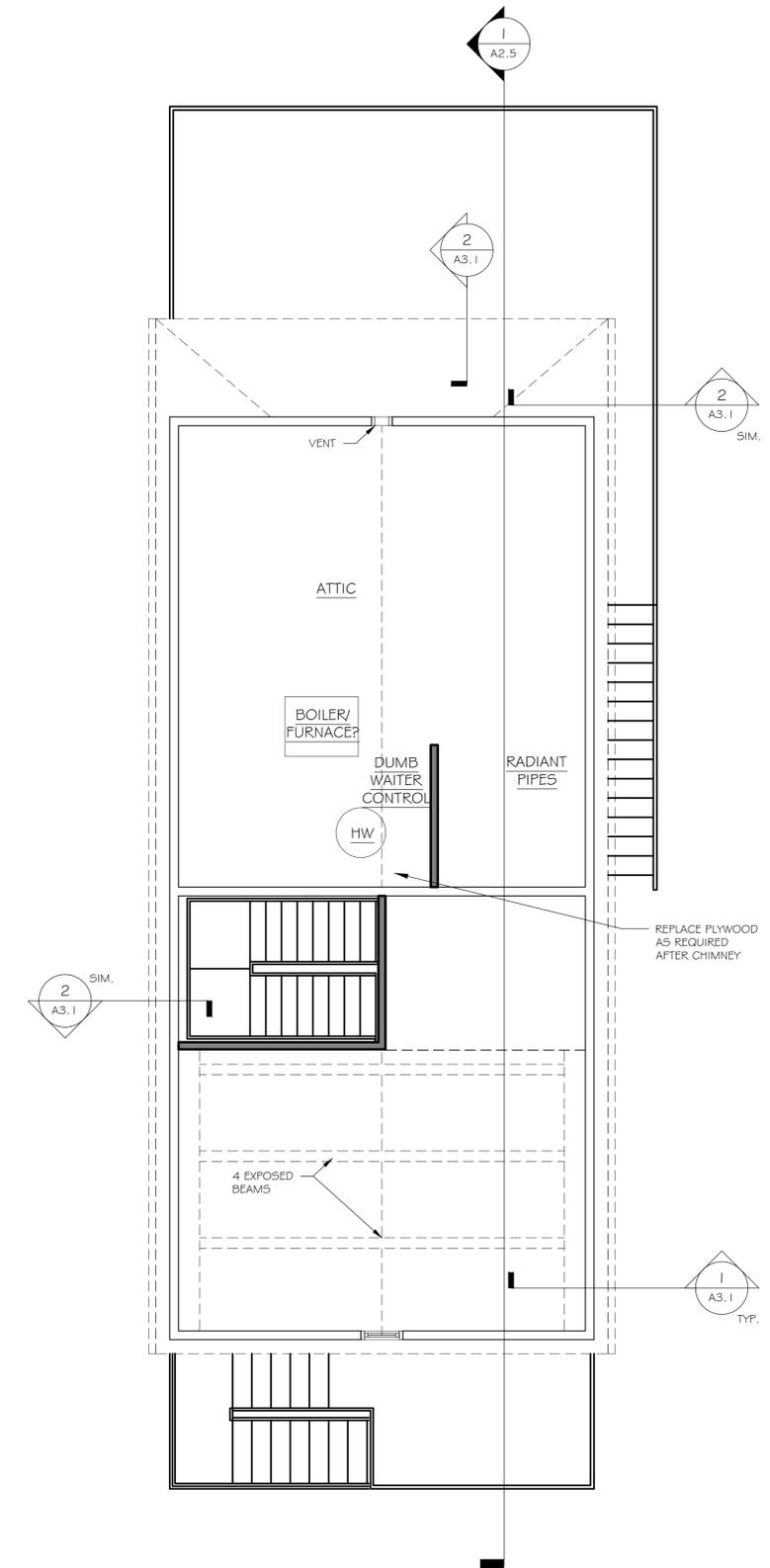
1



**MAIN LEVEL FLOOR PLAN**

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

2



**ATTIC LEVEL FLOOR PLAN**

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

3



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT # (1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**FLOOR PLAN**

Issue Dates:  
05.18.2015

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

Project #: 1215 Drawn By: RAP

Sheet #:

**A1.1**



**QUISENBERRY ARCARI  
ARCHITECTS, LLC**  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**FLOOR PLAN  
DEDUCT  
ALTERNATE**

Issue Dates:

05.18.2015

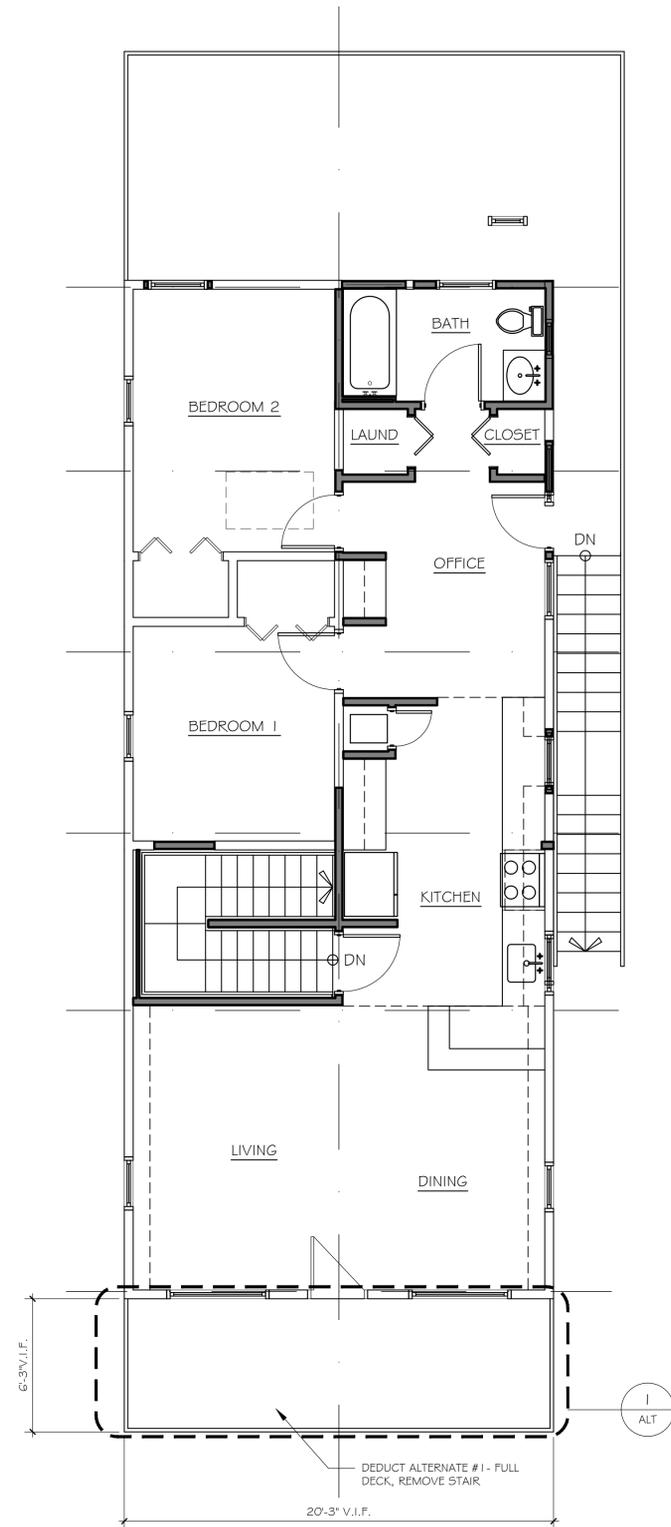
Scale: 1/4" = 1'-0"

Project #: 1215

Drawn By: RAP

Sheet #:

**A1.1a**



**MAIN LEVEL FLOOR PLAN**

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

**1**



QUISENBERRY ARCARI  
ARCHITECTS, LLC  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

ELEVATIONS

Issue Dates:

05.18.2015

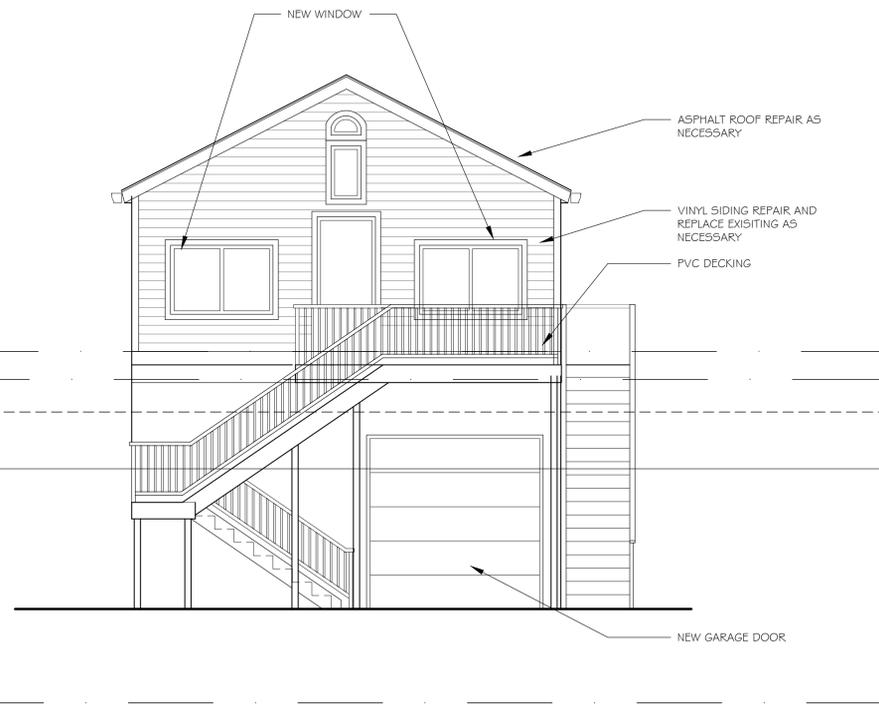
Scale: 1/4" = 1'-0"

Project #: 1215

Drawn By: RAP

Sheet #:

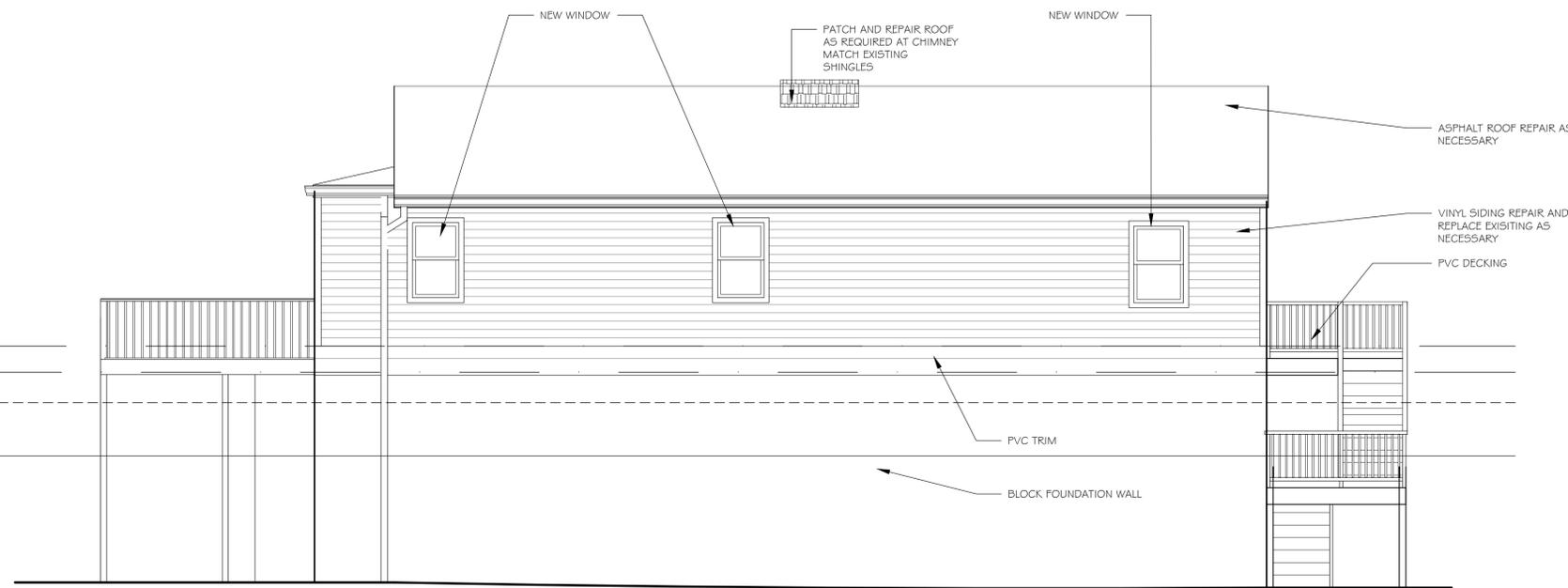
**A2.1**



**SOUTH ELEVATION**

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

2



**WEST ELEVATION**

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

1



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

ELEVATIONS

Issue Dates:

05.18.2015

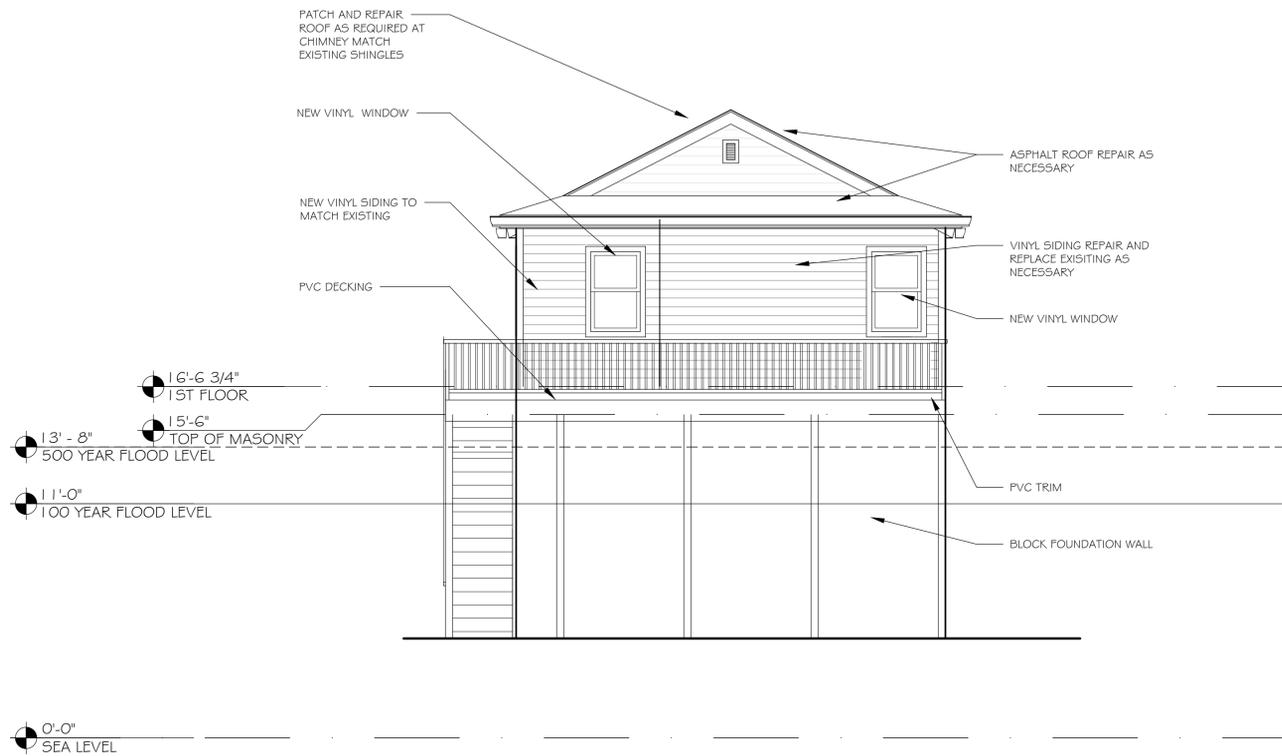
Scale: 1/4" = 1'-0"

Project #: 1215

Drawn By: RAP

Sheet #:

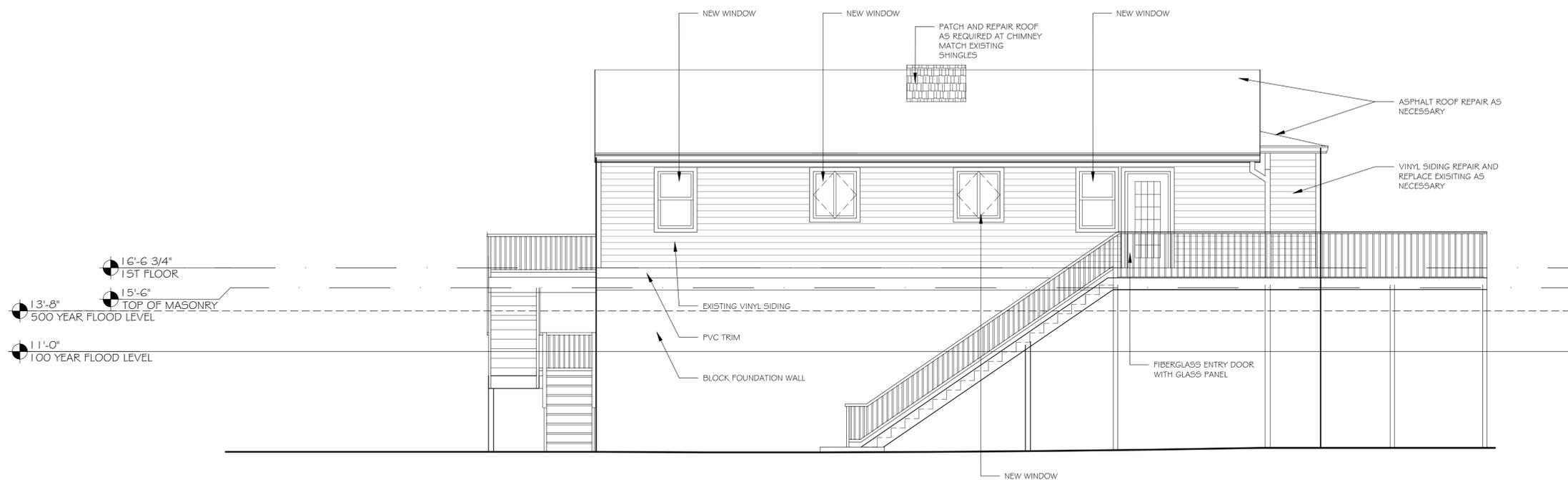
**A2.2**



**NORTH ELEVATION**

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

2



**EAST ELEVATION**

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

1



QUISENBERRY ARCARI  
ARCHITECTS, LLC  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**BUILDING SECTIONS**

Issue Dates:

05.18.2015

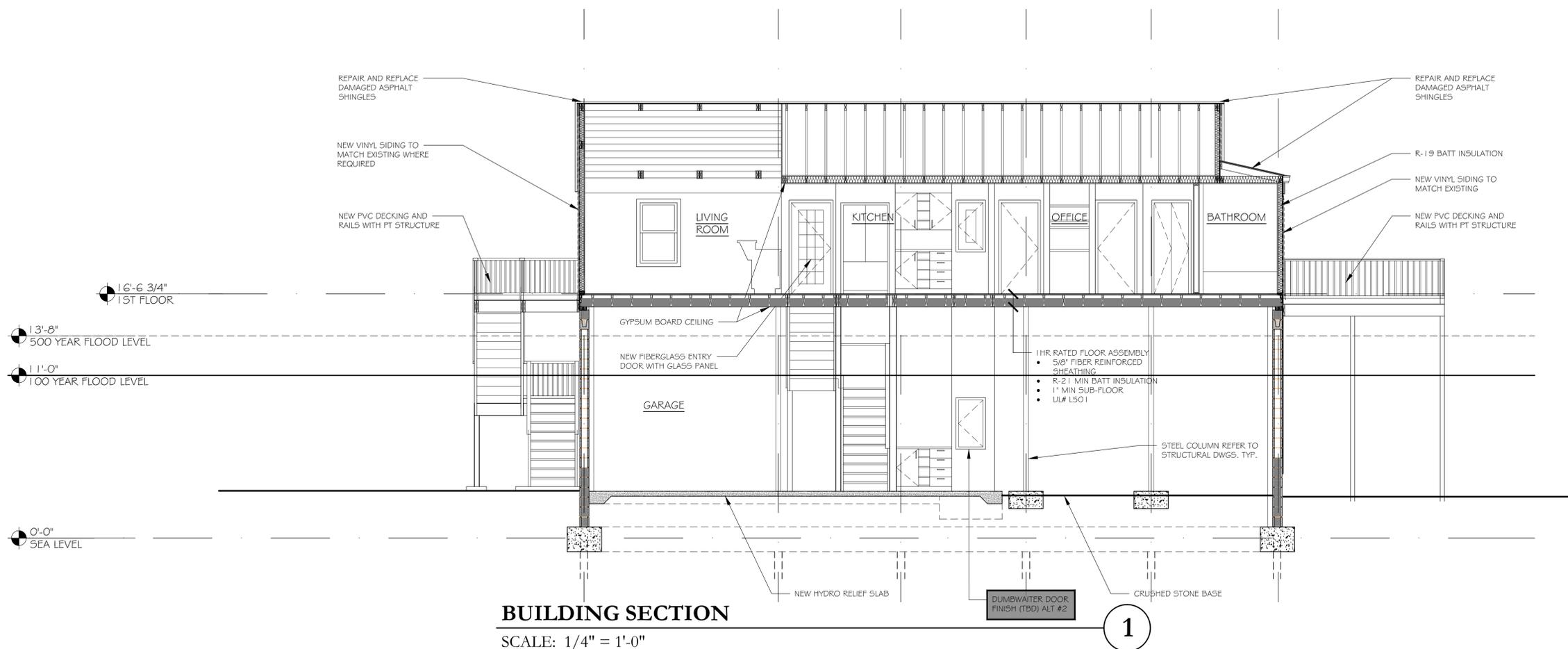
Scale: 1/4" = 1'-0"

Project #:  
1215

Drawn By:  
RAP

Sheet #:

**A2.5**





**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**WALL SECTIONS**

Issue Dates:

05.18.2015

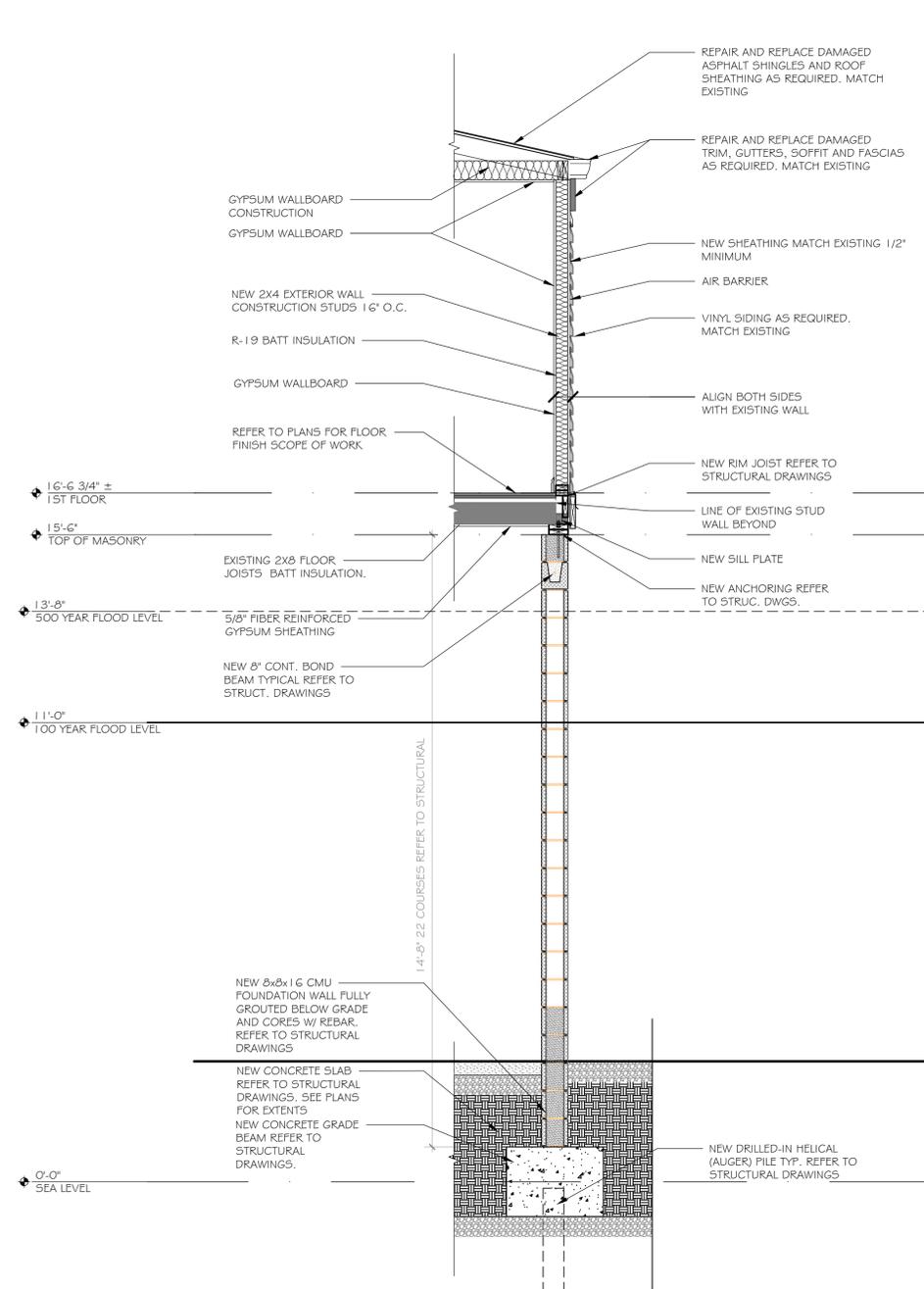
Scale: 1/4" = 1'-0"

Project #: 1215

Drawn By: RAP

Sheet #:

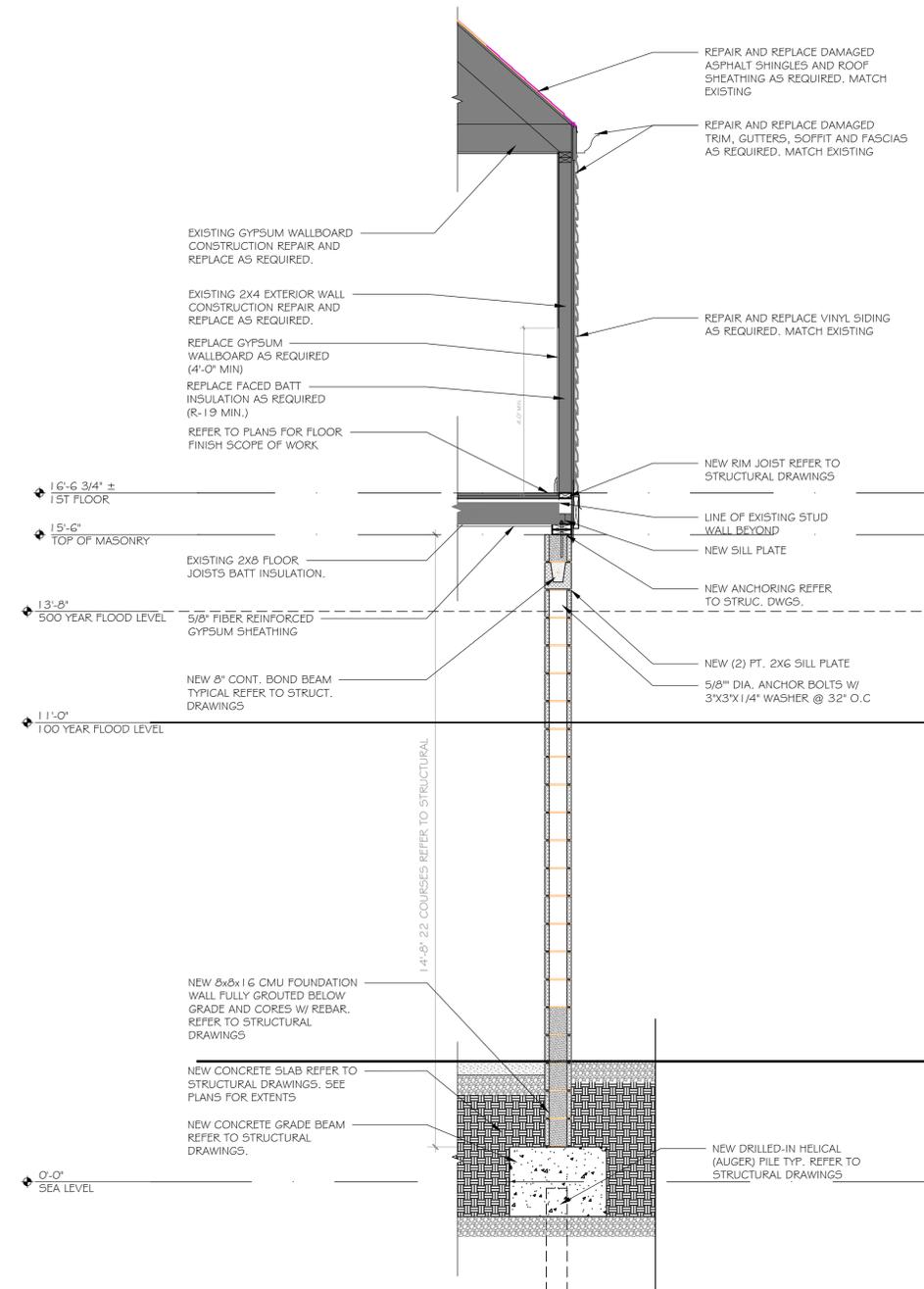
**A3.1**



**WALL SECTION**

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

2



**WALL SECTION**

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

1





QUISENBERRY ARCARI  
ARCHITECTS, L.L.C.  
www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1215)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**WINDOW AND  
DOOR  
ELEVATIONS**

Issue Dates:

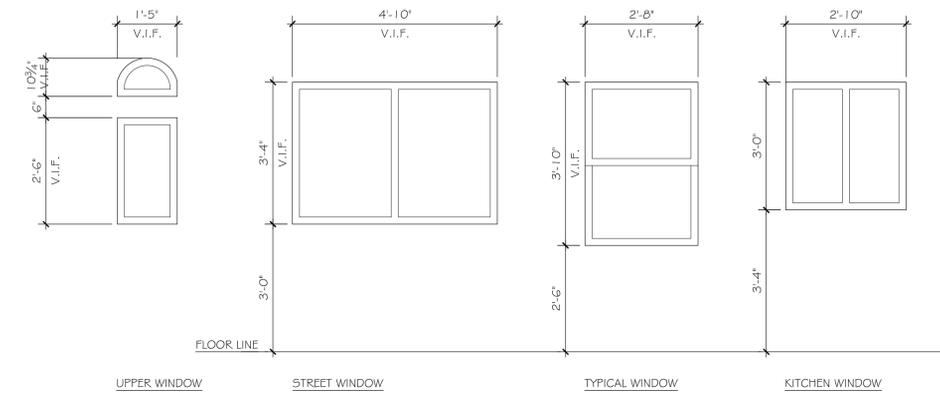
05.18.2015

Project #:  
1215

Drawn By:  
RAP

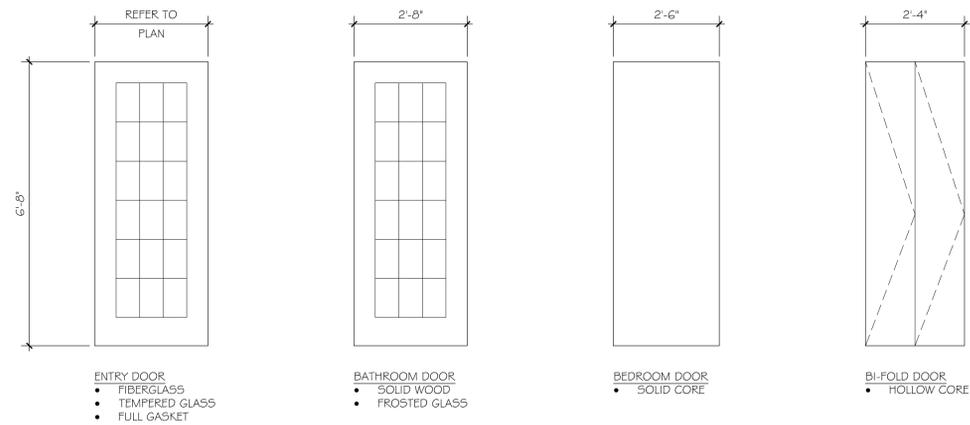
Sheet #:

**A4.1**



**1 WINDOW ELEVATIONS**  
Scale 1/2" = 1' - 0"

**GENERAL NOTE:**  
CONTRACTOR TO **VERIFY ALL EXISTING OPENING DIMENSIONS** IN FIELD BEFORE ORDERING NEW WINDOWS AND DOORS FOR EXISTING OPENINGS. TYPICAL.



**2 DOOR ELEVATIONS**  
Scale 1/2" = 1' - 0"





**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

NOT FOR CONSTRUCTION  
 ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:  
**CAROLE FRANKLIN**  
 APPLICANT # (1346-30)  
 13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

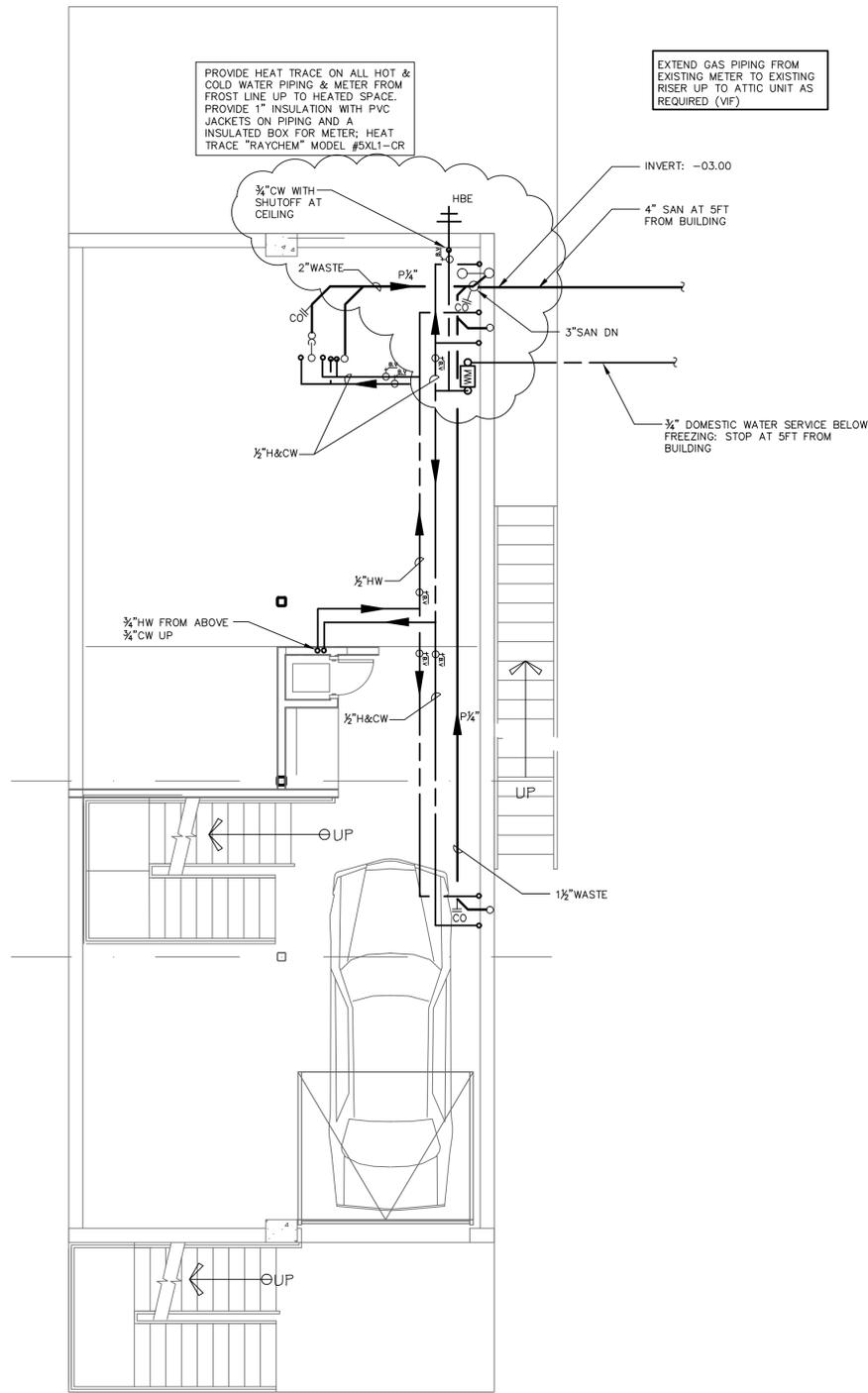
**FLOOR PLANS  
 PLUMBING**

Issue Dates:  
 (INSERT BID DATE)

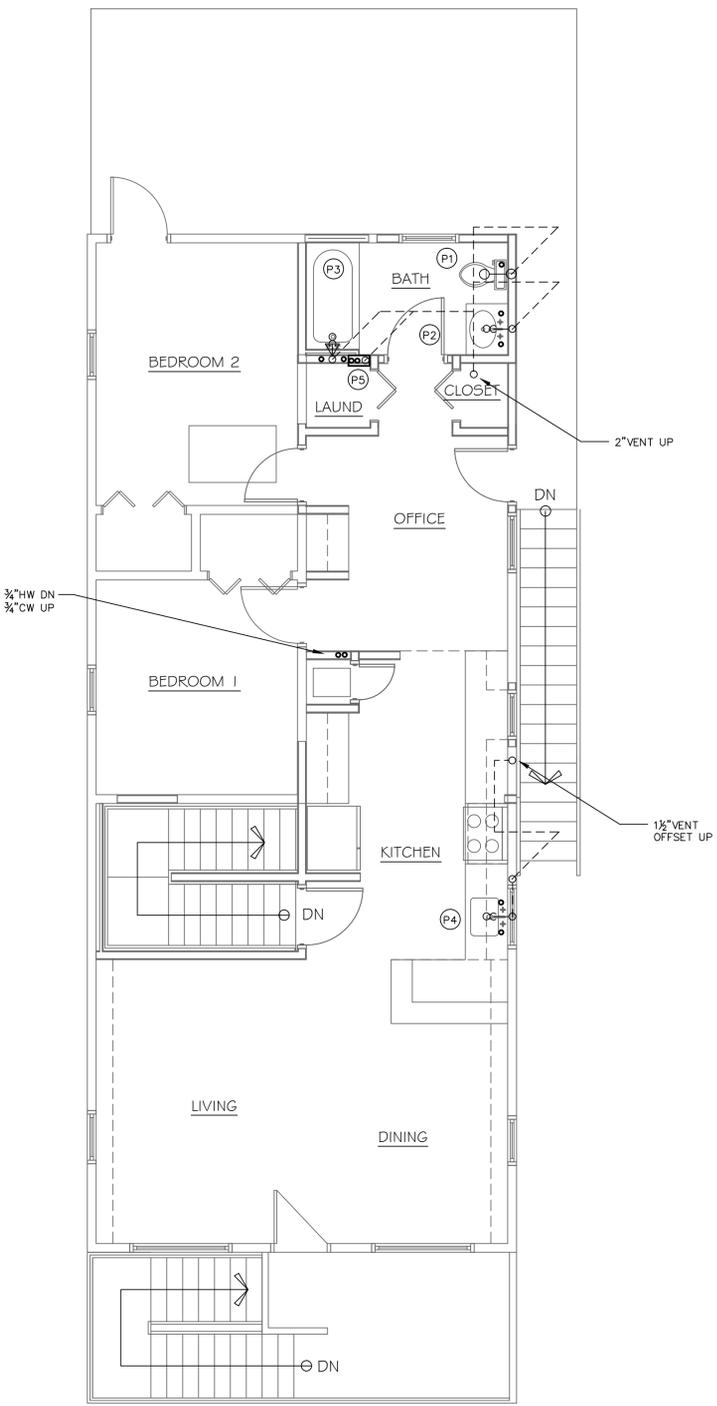
Project #: QA 1346-30  
 Drawn By: RJM

Sheet #:

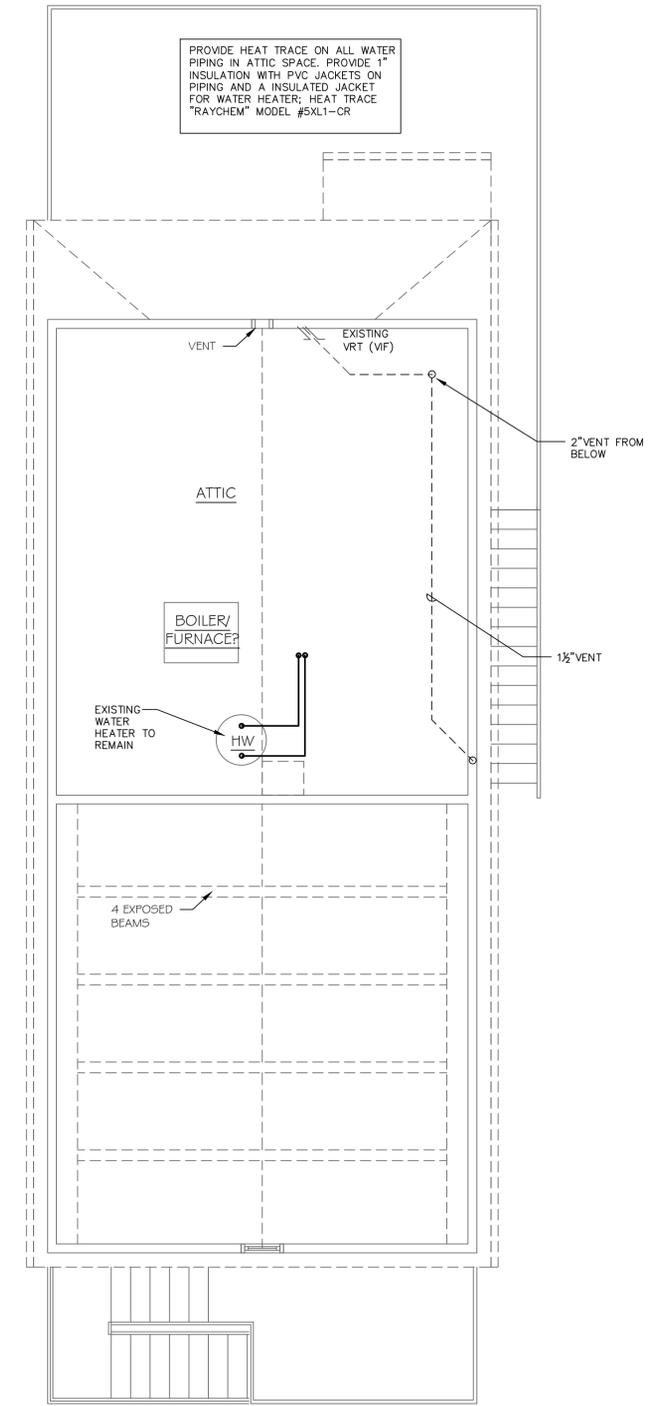
**P1.1**



**LOWER LEVEL FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"  
 1



**MAIN LEVEL FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"  
 2



**ATTIC LEVEL FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"  
 3



# PLUMBING SPECIFICATIONS

## II. PLUMBING SPECIFICATIONS

### 1.01 SCOPE

- A. All plumbing equipment, materials and accessories necessary to complete the plumbing system as shown on drawings and described, or as required to put the system in operation, are a part of this Contract.
- B. Work shall include furnishing all labor and materials, equipment, and tools necessary to install a complete plumbing system as shown on Drawings and/or called for in the specifications, including all pipe valves, fittings, fixtures, drains, insulation, miscellaneous specialties and accessories. Contractor, to identify in field all existing sanitary, vent, cold water and hot water in order to connect new plumbing lines.
- C. The plumbing system for the building shall consist of, but not be limited to, the following:
1. A complete gravity sanitary system, vent and drain pipes to be connected into existing sanitary/vent system.
  2. A complete system of hot and cold water piping system to fixtures.
  3. Insulation of piping, as hereinafter described.
  4. A complete gas system to new RTU, including connection into existing piping.

### 1.02 SOIL, WASTE, VENT AND DRAINAGE LINES

- A. All offsets shall be made at an angle of not more than 45 degrees, and all horizontal runs shall have a pitch of not less than  $\frac{1}{8}$ " to the foot ( $\frac{1}{8}$ " for piping under 3"). Branch, waste and vent connections shall be run to the house drain or vent stacks as shown on the Drawings. Vertical vent pipes may be connected to a one main vent riser above fixtures serving other fixtures, the vent line shall be extended 3 ft. above the floor on which the fixtures are located vent line before being connected to the other vent lines, so as to prevent the use of any vent line as a waste.
- B. All changes in pipe size shall be made with reducing fittings or recessed reducers, Y-fittings, and  $\frac{1}{8}$ " or  $\frac{1}{16}$ " bends or combination Y- and  $\frac{1}{8}$ " bends shall be used where possible.
- C. Sanitary long sweep bends and T's shall be used for connections to branch lines for fixtures and on vertical runs on pipe. Long turn fittings shall be used wherever conditions permit. Long sweep fittings shall be used on all horizontal to vertical runs.
- D. Soil, waste, and vent branch piping installed above floor slab shall be plastic pipe type "PVC" Schedule 40 with fittings. Joints to be solvent-cemented. Soil & waste piping installed below floor slab shall be plastic pipe type "PVC" Schedule 40 with fittings. Joints to be solvent-cemented. (Contractor to use plenum rated materials as required.)

### 1.03 CLEANOUTS

- A. The plumbing contractor shall provide cleanouts, of same size as line served up to 4", at changes in direction of drain lines of 90 degrees or more, and elsewhere as required by the Plumbing Code.
- B. Cleanouts shall have raised heads and shall be located and installed so that they may be readily accessible and removable for cleaning lines.

### 1.04 WATER PIPING

- A. Plumbing contractor shall supply and install valves, a complete system of hot and cold water piping, plumbing fixtures, etc., all as shown on Plumbing Drawings.
- B. Hot and cold water piping shall be PEX tubing with brass fittings at basement ceiling. A home run system from basement ceiling to be utilized.
- C. Pipe sizes shall be not less than sized indicated on Drawings and specified herein.

### 1.05 GAS PIPING

- A. Gas piping shall be schedule 40 black steel pipe.
- B. Plumbing contractor shall commence with gas pipe to equipment as shown on plans. Plumbing contractor shall be responsible for any charges for the complete gas service.

### 1.06 CONNECTIONS TO FIXTURES

- A. All branches from mains shall be equipped with stop and waste valves.
- B. Connections shall be made from the top of the mains, unless otherwise specified. Branches shall drain toward the mains. The piping installation shall be so arranged that the entire system can be drained through accessible valves at low points. The plumbing contractor shall provide the necessary valves.

### 1.07 UNIONS

- A. Where union connections are installed on pipe 1" in diameter and smaller, they shall be of brass composition "B".
- B. All piping shall be provided at intervals with unions to permit alterations and repairs.

### 1.08 VALVES

- A. The entire plumbing system shall be provided with valves, so located that they may be operated, repaired and/or replaced with a minimum of effort.
- B. The following list of valves is intended only as a guide to the plumbing contractor:
1. Ball Valves,  $\frac{1}{4}$ " - 4" - WATTS B6000 Series.
  2. Gate Valves,  $\frac{1}{4}$ " - 4" - WATTS GV Series.
  3. Globe Valves,  $\frac{1}{4}$ " - 2" - WATTS GLV Series.
  4. Stop and Waste Valves, 1" and smaller - WATTS Series SWS.
- C. Valves shall be Crane, Jenkins, Red & White or Nibco, located as shown on Drawings, and on all branch mains.

### 1.09 PIPE SUPPORTS

- A. Piping shall be supported from the building structure by means of approved hangers and supports. Pipeline shall be supported to maintain required grading and pitching of lines to prevent vibration and to secure piping in place, and shall be so arranged as to provide for expansion and contraction.
- B. The spacing of hangers shall not be greater than 4 ft. center to center for pipe smaller than 1".
- C. Vertical lines shall be adequately supported at their bases by a suitable hanger in place with the horizontal line near the riser.
- D. Hangers for copper tubing shall be copper plated, equal to Grinnell No. 97 CP. All other hangers shall be adjustable clevis hangers. Hanger rods shall have machine threads.

### 1.10 PIPE SLEEVES AND RECESSES

- A. The plumbing contractor shall furnish and install sleeves in connection with all piping passing through masonry. Plumbing contractor shall be responsible for location, setting and anchoring of sleeves in a substantial manner so that they will not be displaced. Plumbing pipes run in sleeves shall be made Fireproof by Contractor. Fire protection system shall meet the UL listing for existing wall or floor construction.
- B. Where recesses are required for piping, the plumbing contractor shall instruct the various trades as to sizes and locations required in advance of construction.

### 1.11 ESCUTCHEONS

- A. Where un-insulated, exposed pipes pass through floors, finished walls, or finished ceilings, they shall be fitted with neat, heavy spun or stamped escutcheons, firmly secured to pipes. Escutcheons shall be of sufficient outside diameter to amply cover the sleeve openings for pipes. Escutcheons shall be nonferrous metal, chromium plated.

### 1.12 INSULATION OF PIPING

- A. All insulation and covering on pipe and tubing to meet the IBC2003 Section 719.7 for flame spread index.
- B. Hot Water Lines: All hot water pipes shall be insulated with closed cell elastomeric insulation,  $\frac{3}{4}$ " thick, as manufactured by Armstrong Corporation, Johns-Manville, or approved thermal equal.
- C. Cold Water Lines: All cold water pipes, including horizontal and vertical runs, shall be insulated with closed cell elastomeric insulation,  $\frac{1}{2}$ " thick, with factory applied vapor barrier jacket, as manufactured by Armstrong Corporation, Johns-Manville, or approved thermal equal.

### 1.13 PLUMBING FIXTURES - GENERAL REQUIREMENTS

- A. Plumbing contractor shall furnish and install all fixtures in accordance with the Drawings and with the schedule.
- B. Where escutcheons are not furnished with plumbing fixtures, the plumbing contractor shall supply them.
- C. Each fixture shall be separately trapped, using the type and size of trap required by the Plumbing Code.
- D. Unless otherwise specified, faucets and all exposed fittings shall be chromium plated.
- E. All low voltage wire for fixtures and/or faucets shall be provided and installed by contractor.
- F. The Owner and the Architect shall be the final judges as to whether fixtures fulfill the requirements of the specifications and as to whether they are of a suitable quality.

### 1.14 INSTALLATION

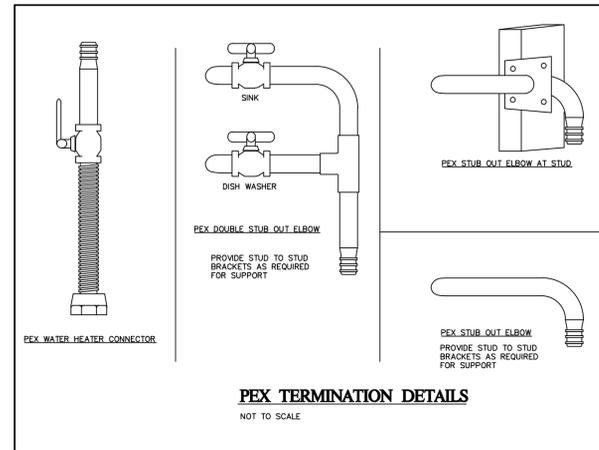
- A. Plumbing contractor shall furnish, set, seal and connect all fixtures and accessories shown and specified, including all necessary supports, connections, fittings and parts required to fully complete the plumbing installation.

### 1.15 ACCESS DOORS

- A. Where access doors in walls or ceilings are required for valves, traps, etc., they shall be of flush type with anchor, frame and hinged panel as manufactured by Milcor or Zurn. Access doors shall be furnished by plumbing contractor to the General Contractor who will install them.

### 1.16 TESTING AND START-UP

- A. Test all drainage piping, including vents to a minimum of 10 feet head for 2 hours without leakage or any drop in water level.
- B. Test all hot and cold water piping hydraulically to 150 psig for 24 hours without leaks or loss of pressure.
- C. Flush all piping to remove all dirt and debris before starting up any system.
- D. Check the water flow at faucet. Run full flow tests for each system and correct any noise, vibration, or water hammer.
- E. Perform disinfection of domestic water piping system, as required by Code.
- F. Test the final gas distribution entirely as per Code.



### PLUMBING NOTES:

NOTES PERTAIN TO ALL DRAWINGS

1. ALL BRANCH PLUMBING WATER PIPES TO HAVE STOP AND WASTE VALVES.
2. PIPING AS SHOWN IS ONLY DIAGRAMMATICALLY PRESENTED; CONTRACTOR IS TO COORDINATE WITH OTHER TRADES AND STRUCTURAL ELEMENTS.
3. ALL PENETRATIONS OF RATED ASSEMBLIES TO BE SEALED WITH APPROVED FIRE RATED CAULK; FIRE PENETRATION SYSTEMS SHALL MEET THE UL LISTING FOR EXISTING WALL OR FLOOR CONSTRUCTION.
4. SEE ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY IN THE FIELD ALL LOCATIONS AND SIZE OF EXISTING MAIN SANITARY AND WATER PIPING BEING TIED INTO AND VERIFY CONTINUITY, CONDITION AND PROPER SIZE.

### FIXTURE SCHEDULE

- (P1) FIXTURE: Toilet, Vitreous china. 14 $\frac{1}{2}$ " Rim Height, 1.28 Gal. flush, Round bowl, Floor mounted, Floor outlet. Provide Braided supplies, stops & escutcheons.  
Seat: Round bowl, closed front seat with cover.
- (P2) FIXTURE: Self-rimming lavatory, Vitreous china, 4" center holes. Provide braided supplies, stops & escutcheons, 1 $\frac{1}{4}$ " 17ga chrome P-trap, Overflow.  
Trim: Faucet with pop-up assembly,  $\frac{1}{2}$ GPM aerator.
- (P3) FIXTURE: Tub/Shower.  
Trim: Pressure balanced valve with lever handle, integral check stops, shower head & tub spout.
- (P4) FIXTURE: Countertop Single Bowl Sink, Self-rimming, Stainless Steel. Provide braided supplies, stops & escutcheons, 1 $\frac{1}{2}$ " 17ga chrome P-trap. Provide In-Sink-Erator.  
Trim: Single lever faucet with pull out spray.
- (P5) Laundry Box with water control valve for automatic washing machines, water hammer arrestors,  $\frac{1}{2}$ " copper tubing and 2" drain. Provide pan plastic pan.

H.B.E ANSI/ASSE 1019; Non-freeze, self-draining type with chrome plated hose thread spout and integral vacuum breaker. Hydrant shall be Model #25C an manufactured by Woodford or approval equal.

### SCHEDULE OF SIZING FOR ROUGHING FOR PLUMBING FIXTURES

WATER CLOSET- TANK TYPE	1/2" CW	3" S	2" V
LAVATORY SINK	1/2" H & CW	1-1/2" W	1-1/2" V
TUB / SHOWER	1/2" H & CW	1-1/2" W	1-1/2" V
KITCHEN SINK	1/2" H & CW	1-1/2" W	1-1/2" V
LAUNDRY BOX	1/2" H & CW	2" W	1-1/2" V
HOSE BIB	3/4" CW	-----	-----

### SYMBOL LIST

•	----	COLD WATER PIPE (CW)
•	----	HOT WATER PIPE (HW) (110°F)
•	-----	HOT WATER RECIRCULATION PIPE (HWR) (110°F)
•	— S —	SANITARY PIPE (BROKEN LINE IS BELOW FLOOR)
•	-----	VENT PIPE (V)
•	— CD —	CONDENSATE / DRY PIPE
•	←	DIRECTION OF FLOW
•	WCO  —	WALL CLEANOUT
•	— —	CHECK VALVE
•	V.T.R.	VENT THROUGH ROOF
•	⊕	BALL VALVE
•	⊕	BACKFLOW PREVENTER
•	H.B.  —	HOSE BIBB (NON-FREEZE WHEN INDICATED)
•	F.D. ⊕	FLOOR DRAIN
•	FCD ⊕	FLOOR CLEANOUT
•	(VIF)	VERIFY IN FIELD
•		



**QUISENBERRY ARCARI ARCHITECTS, LLC**

www.qa-architects.com  
T (860) 677-4594  
F (860) 677-8534  
318 Main Street  
Farmington, CT 06032

NOT FOR CONSTRUCTION  
ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT #(1346-30)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**SPECIFICATION & DETAILS PLUMBING**

Issue Dates:

(INSERT BID DATE)

Project #:

QA 1346-30

Drawn By:

RJM

Sheet #:

**P2.1**



**acorn Consulting Engineers Inc.**

- Mechanical - Electrical Engineering for Building Systems -  
P.O. Box 311 • Farms Village Plaza • 244 Farms Village Road  
West Simsbury, CT 06092 • (860) 651-1949 • fax (860) 651-1957  
www.acornengineers.com

**HVAC SPECIFICATIONS**

**1.1 GENERAL:**  
 Architect's General Conditions are a part of this Division. Perform work in strict accordance with applicable Codes and Regulations of local and State agencies and utility companies. The Contractor shall bear the cost of all fees, permits, licenses and taxes, and utility company charges in connection with the work. Submit six (6) copies of manufacturer's drawings of the following to the Architect/Engineer for approval: Ductwork, diffusers, registers and grilles, dampers, louvers, equipment identification, mechanical insulation, testing and balancing and all other equipment as shown on the Drawings and herein specified.

Submittals must be computer generated selections from manufacturers' software. Submittals must be generated by manufacturers or manufacturers' representatives. Photocopies and Internet printouts will be rejected. Submittals must be hard copies. Submittals sent via email or PDF format will not be accepted or reviewed.

Submit information on any other equipment when requested by the Architect/Engineer.

Submit six (6) copies of ductwork shop drawings showing clearances with structural members and major equipment of other trades.

Coordination Drawing Section

**SUBMITTALS**

- A. Shop Drawings:** CAD-generated and drawn to 1/4 inch equals 1 foot. Show fabrication and installation details for metal ducts.
1. Fabrication, assembly, and installation, including plans, elevations, sections, components, and attachments to other work.
  2. Duct layout indicating sizes and pressure classes.
  3. Elevations of top and bottom of ducts.
  4. Dimensions of main duct runs from building grid lines.
  5. Fittings
  6. Reinforcement and spacing.
  7. Seam and joint construction.
  8. Penetrations through fire-rated and other partitions.
  9. Equipment installation based on equipment being used on Project.
  10. Duct accessories, including access doors and panels.
  11. Hangers and supports, including methods for duct and building attachment, vibration isolation, and seismic restraints.

- B. Coordination Drawings:** Reflected ceiling plans, drawn to scale, on which following items are shown and coordinated with each other, based on input from installers of items involved:
1. Ceiling suspension assembly members.
  2. Other systems installed in same space as ducts.
  3. Ceiling- and wall-mounting access doors and panels required to provide access to dampers and other operating devices.
  4. Ceiling-mounting items, including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.

**C. At the end of construction, provide the Owner with a complete set of As-Built Drawings, including all mechanical plans, indicate routing of piping, ducts, location of equipment, valves, cleanouts and access panels. Include all inverts and elevations. Contractor must provide As-Built documents drawn utilizing the most recent version of AutoCad. Provide the Owner with a "CD ROM" disk and one set of reproducible mylar documents.**

The Contractor shall provide a guarantee covering all material and workmanship for one (1) year following the date of acceptance, except that refrigeration compressors shall be guaranteed for a period of five (5) years.

Upon completion of the project, Contractor shall fully instruct the Owner in the operation, adjustment and maintenance of equipment and systems.

Contractor shall provide Owner with three (3) sets of complete maintenance and operating instructions, and technical data, in booklet form, of all equipment and devices furnished in Contract, including as-built drawings for the project.

The Contractor shall examine the Architectural Drawings and the Drawings and Specifications of other trades to determine the extent of work. The Contractor shall visit site and become familiar with project and local conditions before submitting a Bid. Drawings are diagrammatic and indicate the general arrangement of systems and work included in the Contract. If so directed by the Architect or Engineer, the Contractor shall, without extra charge, make reasonable modifications in the layout to prevent conflict with those of other trades and for proper installation of work. Refer to Architectural Reflected Ceiling Plan for exact location of air diffusers, registers and grilles. The Contractor shall coordinate locations of equipment with all trades before starting construction. Any modifications to the equipment layout required for installation are to be performed at no additional cost to the Owner.

Install equipment and products in accordance with the manufacturer's instructions and recommendations.

**1.2 SCOPE OF WORK:**

Provide a complete HVAC system including, but not limited to: Ductwork, diffusers, registers and grilles, dampers, equipment identification, mechanical insulation, testing and balancing and all other equipment as shown on the Drawings and herein specified. System shall be complete in all respects, tested, accepted and ready for Owner's use.

**1.3 FILTERS AND STRAINERS:**

Any equipment which operates with filters or strainers shall have filters and strainers installed at all times. When equipment and systems are released to Owner, all equipment shall be clean and have clean, new filters installed.

**1.4 WORK BY OTHERS:**

Cutting and patching is specified under Division 1.

Excavation and backfill is specified under Division 2.

Access doors shall be provided where required, and are specified under Division 8.

Chases, openings and finish work is specified under the pertinent Divisions 3 through 14 sections.

Domestic water, drainage and respective connections to HVAC equipment specified under other Division 15 sections.

Except for factory installed components, all disconnect switches and starters are specified under Division 16. All power wiring to motors, starters, controllers, alarms, and all electrical devices, including disconnect switches for mechanical equipment, is specified under Division 16.

**1.5 FIELD MEASUREMENTS:**

The Contractor shall verify in the field all measurements necessary for the work. Verify thermostats' locations with the Owner before installation. The Contractor shall coordinate supply and return ductwork locations with steel, conduits and piping of other trades.

**1.6 MATERIALS AND METHODS:**

**Ductwork:**

All ductwork and accessories shall be constructed, fabricated and installed in accordance with the latest SMACNA Standards manuals for low pressure, high pressure, fire damper installations and flexible ducts.

All air conditioning supply ductwork on constant volume low pressure systems shall be galvanized sheet metal, two (2") inch static pressure classification, Seal Class "C".

Where the static pressure or maximum velocity of a supply, return or exhaust duct system exceeds the standard pressure classifications given above, the ductwork shall be constructed to the pressure class which exceeds that system's pressure.

Return & exhaust air ductwork shall be galvanized sheetmetal, one (1") inch static pressure classification, Seal Class "C".

Install adequate balancing devices, e.g., volume dampers, extractors, etc., to balance each system to design airflow.

Material thickness shall conform to SMACNA HVAC Duct Construction Standards for Duct Pressure Class consistent with reinforcement method and duct size.

Provide UL listed fire dampers and access doors at all duct penetrations of walls, floors, partitions, etc., that have a fire resistance rating. Provide dynamic rated fire dampers. Construct and install fire dampers, sleeves, access doors, etc., in conformance to manufacturer's instructions, NFPA 90A and building official.

All diffusers, registers and grilles shall be firmly attached to and supported by the duct system. Where fiberglass or flexible ducts are used, the diffuser, register or grille shall be firmly attached to and supported by the building structure. In the case of ceiling diffusers installed in acoustic ceiling tiles, the diffuser shall be bracketed to the ceiling support grid and firmly attached to the bracket and the grid with suitable clips, screws, wire ties or other method, so as not to impose any load on the ceiling tile itself.

**Insulation Systems:**

**Duct Systems Insulation:**

Concealed air conditioning supply duct systems shall be insulated with 1 layer of 1-1/2 inch thick fiberglass duct wrap with continuous vapor barrier.

**1.7 FIRE-STOPS:**

Seal pipe and duct penetrations through fire rated walls, ceilings or floors with a UL approved fire-stop fitting classified for an hourly rating equal to the rating of construction.

**1.8 REMOVAL, RELOCATION AND/OR ABANDONMENT:**

Certain items of existing equipment and piping or ductwork may be indicated for removal, relocation or abandonment. Items noted for removal shall be disconnected and turned over to the Owner or disposed of by the Contractor if the Owner so requests. Items noted for relocation are intended for reuse in another location as designated on the Drawings. It shall be the responsibility of the Contractor to remove the material from its present location, store the material in a safe place and reinstall the material in its new location. Questions regarding the suitability of the material or equipment shall be brought to the attention of the Architect/Engineer in writing. Abandonment shall be defined as abandoning in place any item so designated and shall include proper piping or ductwork termination within any occupied or open area. All abandoned pipes and ducts shall be disconnected and capped at their mains. All abandoned pipes shall be capped.

**1.9 BALANCING AIR SYSTEMS:**

This Contract is for labor, materials and equipment required for balancing the air systems.

Balance the following air systems: supply, return, and exhaust systems. Balancing shall include re-balancing (adjusting/replacing of sheaves and belts) of exhaust fans and air handling equipment, to provide air flows specified. The Balancing Contractor shall secure a set of As-Built Ductwork Plans prior to commencing work.

The Balancing Contractor shall attend a coordination meeting with the HVAC Contractor to coordinate sensor locations.

Upon completion of tests and balancing operations, the Contractor shall submit five (5) copies of a certified balancing report to the Engineer. This report shall include data for each of the air and water systems.

Balancing of systems shall be followed up after building is occupied; any rebalancing shall be done as required to meet occupant's requirements without extra charge.

**1.10 IDENTIFICATION:**

Identify ductwork and equipment, in compliance with ASME A13. Identify ductwork with name and flow direction every 20 ft. with adhesive labels. Identify equipment with engraved plastic markers.

**HVAC KEY NOTES:**

1. REMOVE ALL EXISTING DUCTWORK & ASSOCIATED ACCESSORIES IN ATTIC. RUN NEW DUCTWORK IN ATTIC AS SHOWN. EXISTING FURNACE TO REMAIN IN ATTIC. BALANCE TO ALL CFM'S INDICATED.
2. EXPOSED DUCTWORK SHALL BE SPIRAL ROUND.
3. NEW 7-DAY PROGRAMMABLE THERMOSTAT.

**GENERAL HVAC NOTES:**

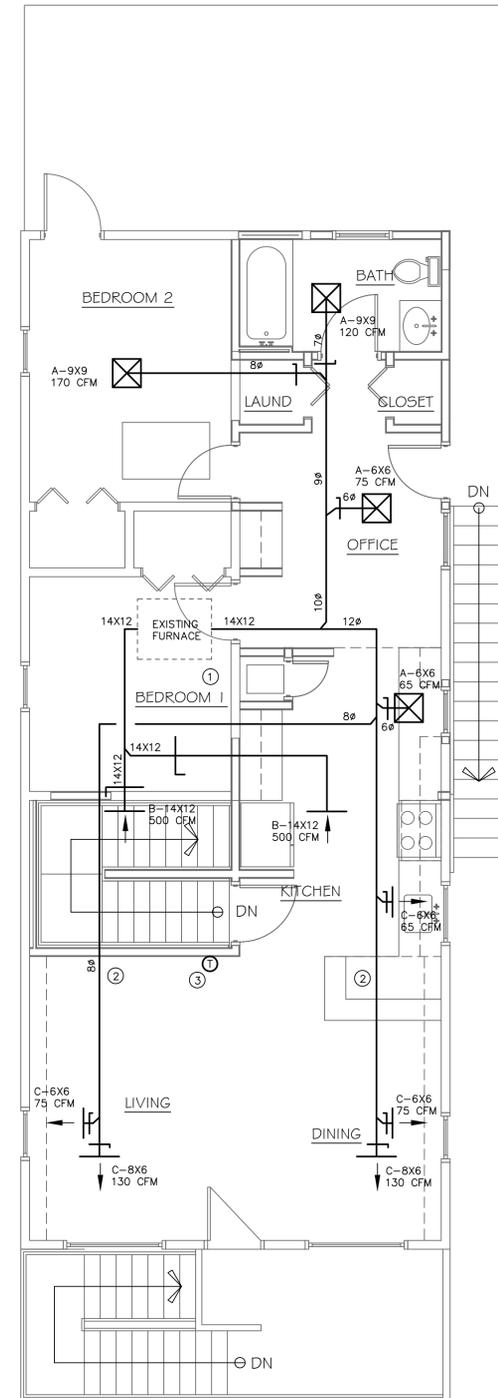
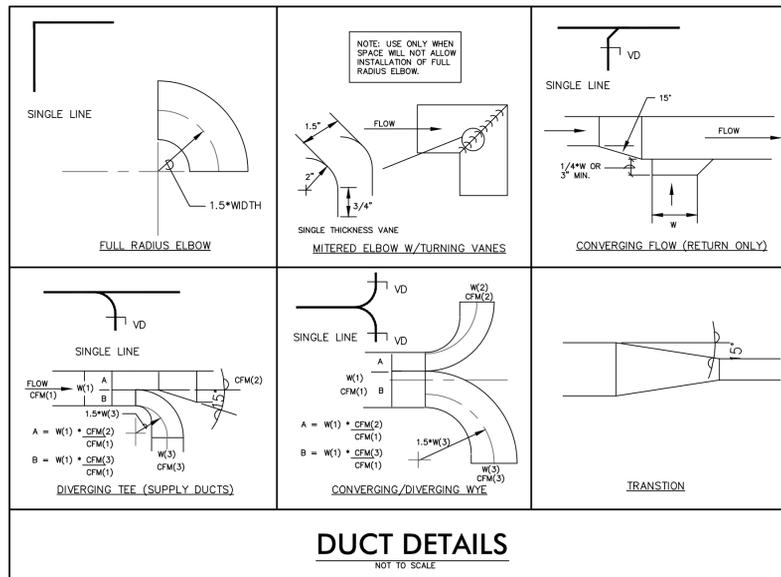
1. GENERAL DRAWING NOTES SHALL APPLY TO ALL MECHANICAL DRAWINGS.
2. FIELD VERIFY LOCATIONS OF MECHANICAL EQUIPMENT BEFORE FABRICATION OF DUCTWORK.
3. DUCTWORK DIMENSIONS INDICATED ON PLANS ARE CLEAR INSIDE DIMENSIONS. PROVIDE TURNING VANES IN MITERED FITTINGS.
4. VERIFY EQUIPMENT CONNECTIONS WITH MANUFACTURER'S INSTALLATION DRAWINGS. PROVIDE PIPE & DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE DIMENSIONS BEFORE FABRICATION.
5. COORDINATE DUCTWORK ROUTING WITH ALL TRADES. PROVIDE OFFSETS AND FITTINGS AS REQUIRED FOR INSTALLATION. CONTRACTOR SHALL BEAR COSTS ASSOCIATED WITH ROUTING MODIFICATIONS.
6. PROVIDE CONTROL WIRING FROM SENSORS TO MECHANICAL EQUIPMENT.
7. PROVIDE FLEXIBLE DUCTWORK CONNECTORS ON INLET AND OUTLET OF AIR HANDLING EQUIPMENT.
8. PROVIDE ALL SERVICE/ACCESS CLEARANCES FOR MECHANICAL EQUIPMENT PER MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS. COORDINATE PRIOR TO INSTALLATION OF EQUIPMENT, PIPING, AND DUCTWORK.
9. FIRECAULK ALL FIRE RATED PENETRATIONS.

SYMBOLS LIST	
AF	AIR FURNACE
RA	RETURN AIR
SA	SUPPLY AIR
CFM	CUBIC FEET PER MINUTE
⊖	THERMOSTAT, MOUNT AT 4'-6"
⊓	VOLUME DAMPER
⊓	SIDEWALL GRILLE / REGISTER
⊓	SUPPLY DIFFUSER, 4-WAY
⊓	RETURN GRILLE
—	NEW DUCT
- - - - -	EXISTING TO REMAIN
⊓	NEW EQUIPMENT

GRILLE AND DIFFUSER SCHEDULE					
UNIT	MODEL	DESCRIPTION	TYPE	MATERIAL	ACCESSORIES
A	AMDE	SUPPLY DIFFUSER	CEILING	EXTRUDED ALUMINUM	1,2
B	630	RETURN/EXHAUST GRILLE	CEILING / WALL	EXTRUDED ALUMINUM	2
C	620	SIDEWALL SUPPLY REGISTER	WALL	EXTRUDED ALUMINUM	2,3

**NOTES:**  
 1. SELECTIONS BASED ON PRICE  
 2. EQUIVALENT MANUFACTURES BY TITUS & METAL AIRE.  
 3. SEE PLANS FOR NECK SIZES, AND LINEAR DIFFUSER LENGTHS.  
 4. THROW PATTERNS 4-WAY UNLESS OTHERWISE NOTED.  
 5. COORDINATE MOUNTING TYPE WITH ARCHITECTURE. COLOR BY OWNER.

**ACCESSORIES:**  
 1. SQUARE TO ROUND TRANSITIONS.  
 2. ALUMINUM OPPOSED BLADE VOLUME DAMPER.  
 3. DUAL-DEFLECTION AIRFLOW CONTROL



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

NOT FOR CONSTRUCTION  
 ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:  
**CAROLE FRANKLIN**  
 APPLICANT #(1346-30)  
 13 JAMES STREET  
 MILFORD, CONNECTICUT

Sheet Description:

**FLOOR PLANS HVAC**

Issue Dates:  
 (INSERT BID DATE)

Project #: QA 1346-30  
 Drawn By: JMR

Sheet #:

**M1.1**





**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

NOT FOR CONSTRUCTION  
 ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:

**CAROLE FRANKLIN**

APPLICANT # (1346-30)

13 JAMES STREET MILFORD, CONNECTICUT

Sheet Description:

**ELECTRICAL FLOOR PLANS**

Issue Dates:

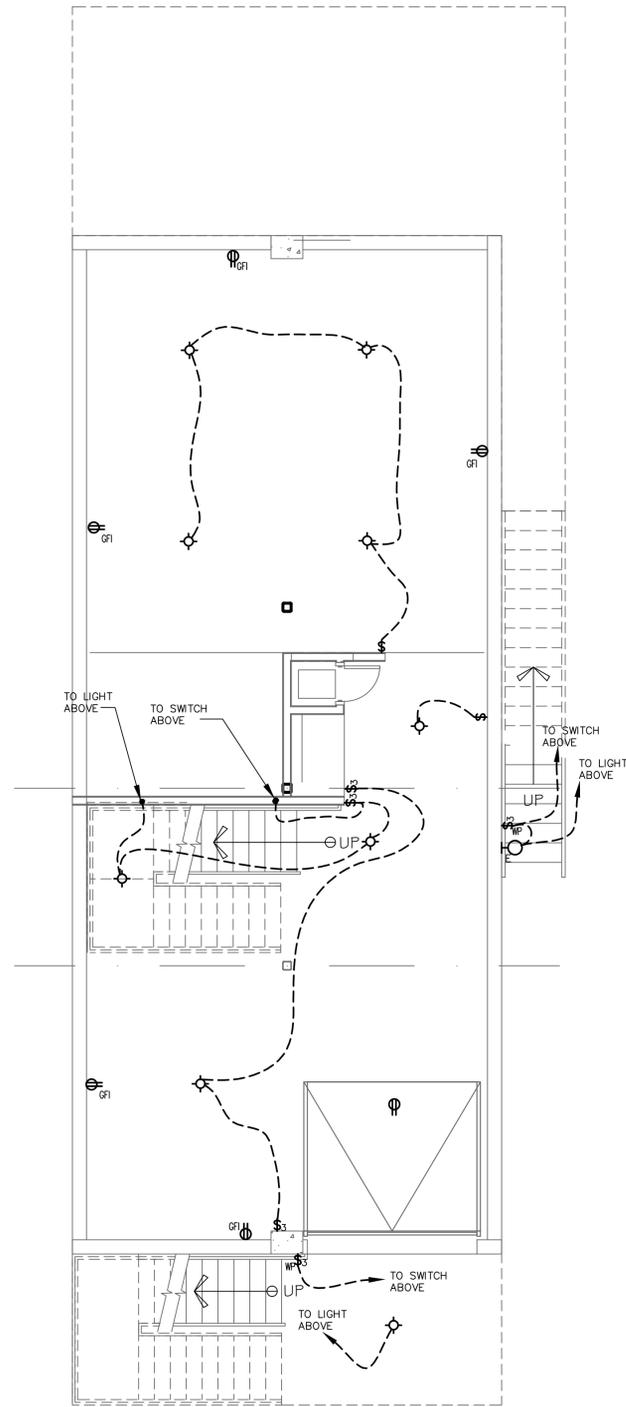
(INSERT BID DATE)

Project #:  
QA 1346-30

Drawn By:  
SS

Sheet #:

**E1.1**

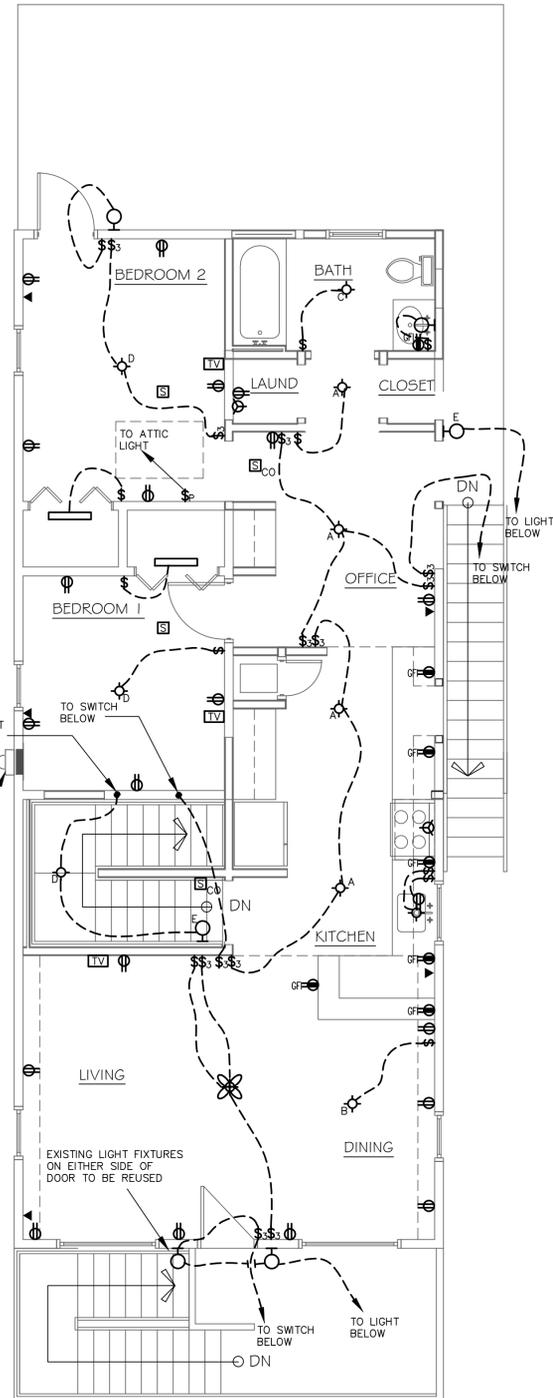


**LOWER LEVEL FLOOR PLAN**

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

1

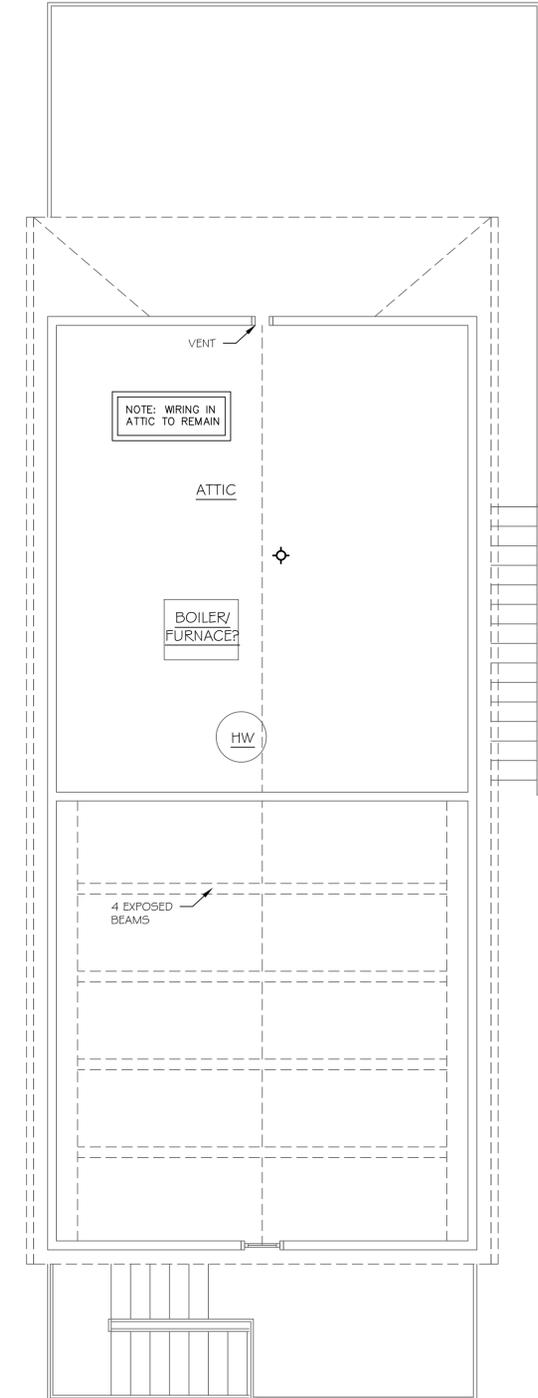
EXISTING 100 AMP METER SOCKET AND LOAD CENTER TO REMAIN. REPLACE 2/3 SEU SERVICE CABLE WITH NEW 1 1/2" PVC RISER. SEE SERVICE RISER DIAGRAM FOR MORE DETAILS.



**MAIN LEVEL FLOOR PLAN**

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

2



**ATTIC LEVEL FLOOR PLAN**

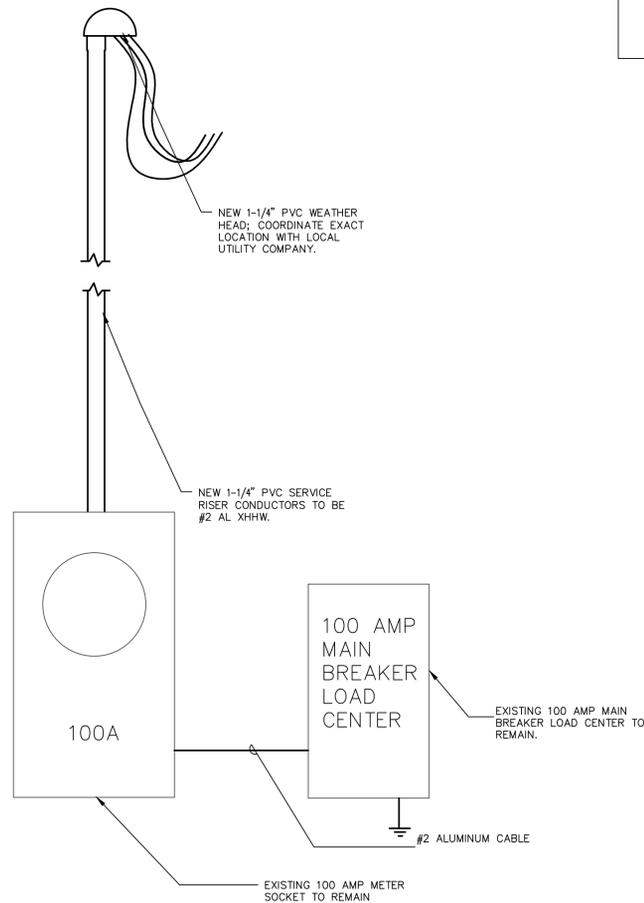
SCALE: 1/4" = 1'-0"

3



**ELECTRICAL GENERAL NOTES:**

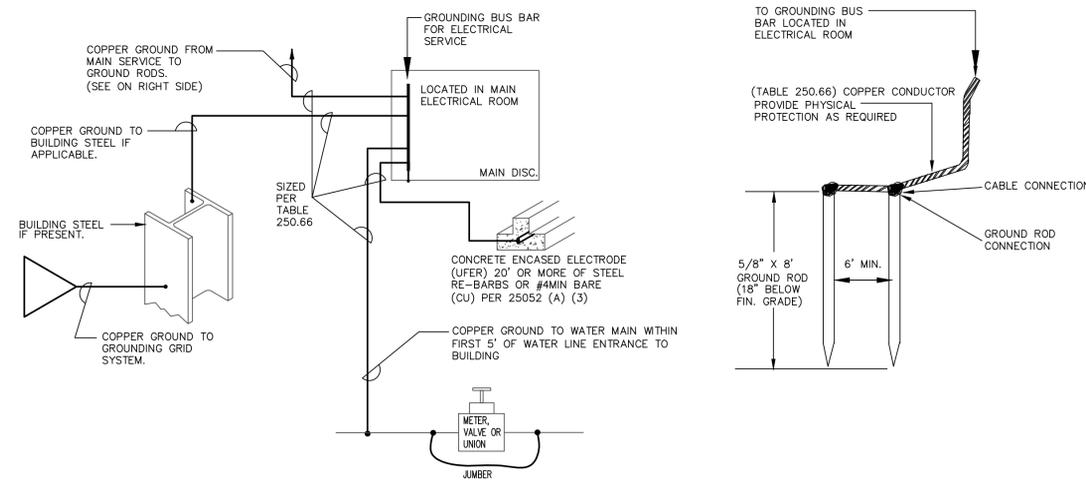
- ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE 2011 EDITION OF THE NATIONAL ELECTRICAL CODE, LOCAL AND STATE BUILDING CODES.
- E.C. SHALL OBTAIN AND PAY FOR BOTH ROUGH AND FINAL INSPECTION AND OBTAIN A CERTIFICATE OF "ELECTRICAL INSPECTION". THIS CERTIFICATE SHALL BE PRESENTED WITH REQUEST FOR FINAL PAYMENT.
- IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND OPERATING ELECTRICAL SYSTEM. THE E.C. SHALL FURNISH AND INSTALL ALL WIRING, CONDUIT, EQUIPMENT, MATERIAL, ETC. AS REQUIRED, EXCEPT WHERE SPECIFICALLY NOTED AS BEING FURNISHED BY OTHERS. SHOULD THERE BE ANY QUESTIONS CONCERNING RESPONSIBILITY, THE QUESTIONS SHALL BE SETTLED BEFORE BID SUBMISSION AND CONTRACT SIGNING. NO EXTRA CHARGES WILL BE ALLOWED.
- THE E.C. SHALL COORDINATE ALL PHASING OF WORK WITH THE ARCHITECT, GENERAL CONTRACTOR AND/OR OWNER OF THE PROJECT.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR SPECIFIC DETAILS, ARRANGEMENTS, MOUNTING HEIGHTS, CEILING CONSTRUCTION, ETC. ALL COLORS AND FINISHES TO BE SELECTED BY THE ARCHITECT.
- ALL ELECTRICAL EQUIPMENT SHALL BE SEISMICALLY SUPPORTED AS REQUIRED BY THE LOCAL AND STATE BUILDING CODE.
- ALL NECESSARY MOUNTING HARDWARE, HANGERS, BRACKETS, RAILS, YOKES, STEMS, CHAINS, ETC. SHALL BE FURNISHED AND INSTALLED BY E.C.
- ALL HOMERUNS TO PANELBOARDS DESIGNATED SHALL CONSIST OF 2#12 AWG & 1#12 GROUND IN 3/4" CONDUIT TO PANEL LABELED AT THE HOMERUN SYMBOL UNLESS OTHERWISE NOTED.
- ALL WIRING INSTALLED UNDER THIS CONTRACT SHALL BE TESTED FOR PROPER CONNECTIONS AND SHORT CIRCUITS PRIOR TO THE TURNING OVER OF WORK AS A COMPLETE UNIT.
- ALL CONDUITS PASSING THROUGH PARTITIONS ARE TO BE APPROPRIATELY SLEEVED AND SEALED.
- E.C. SHALL GUARANTEE ALL MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF APPROVAL AND FINAL ACCEPTANCE.
- ALL CONDUIT AND WIRING SHALL BE RUN CONCEALED IN WALLS, FLOORS AND CEILINGS UNLESS OTHERWISE NOTED TO BE EXPOSED.
- ALL WIRING SHALL BE TYPE THWN OR THW UNLESS OTHERWISE NOTED. FOR CONDUCTORS LARGER THAN #6 AWG, TYPE XHHW WILL BE ACCEPTED.
- CONDUCTORS SIZED #10 AWG AND SMALLER SHALL BE SOLID WIRE CONDUCTORS. CONDUCTORS SIZED LARGER THAN #10 AWG SHALL BE STRANDED TYPE. COMMUNICATIONS AND CONTROL WIRE SHALL BE #14 GAUGE STRANDED, SHIELDED.
- ALL CIRCUITS BACK TO PANEL SHALL REQUIRE 20A-1 POLE BREAKERS UNLESS OTHERWISE NOTED
- ALL DRAWINGS ARE SCHEMATIC IN NATURE; ALL DEVICES SHALL BE INSTALLED IN ALL AREAS AND LIVING SPACES PER NEC AND SHALL BE DIMENSIONED IN FIELD TO MEET PROPER CODES; ALL DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION DURING BID PROCESS AND/OR ADJUSTED IN FIELD DURING CONSTRUCTION
- ALL WORK IS NEW UNLESS OTHERWISE NOTED.



**SERVICE DIAGRAM**

**NOTE:**

- IF AVAILABLE ON THE PREMISES AT EACH BUILDING OR STRUCTURE SERVED, EACH ITEM IN NEC 250.52 (A)(1) THROUGH (A)(6) SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM. WHERE NONE OF THESE GROUNDING ELECTRODES ARE AVAILABLE, E.C. SHALL PROVIDE AT LEAST ONE PRIMARY GROUNDING ELECTRODE SYSTEM AND AT LEAST ONE SUPPLEMENTAL GROUNDING ELECTRODES AS SPECIFIED IN 250.52 (A)(4) THROUGH (A)(7).
- ALL OTHER METAL PARTS LIKE INTERNAL CU PLUMBING, MAIN SPRINKLER PIPE, WATER MAIN, GAS PIPES ETC SHALL BE BONDED WITH MAIN SERVICE GROUNDING WITH APPROPRIATE GROUNDING CONDUCTOR SIZED PER NEC.
- GROUNDING GRID TO BE INSTALLED 1'-8" BELOW FINISHED GRADE. ALL CONNECTIONS SHALL BE CADWELDED.
- THE GROUND RODS SHALL BE INSTALLED SUCH THAT AT LEAST 8 FEET OF LENGTH IS IN CONTACT WITH THE SOIL. IT SHALL BE DRIVEN TO A DEPTH OF NOT LESS THAN 10 FEET EXCEPT THAT, WHERE ROCK BOTTOM IS ENCOUNTERED, THE ROD SHALL BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 2 1/2' DEEP.
- CONNECT MAIN SERVICE GROUNDING BUS TO BUILDING STEEL IF APPLICABLE. BUILDINGS WITHOUT STEEL STRUCTURE SHALL HAVE COPPER GROUNDING DIRECTLY CONNECTED TO GROUNDING GRID SYSTEM.
- PROVIDE GROUNDING ELECTRODE CONDUCTORS SIZED PER NEC



**ELECTRICAL SERVICE AND BUILDING GROUNDING DETAIL**

NO SCALE

**CONNECTIONS TO EXISTING CONDITIONS:**

- WHERE NEW CIRCUITS ARE TO BE ADDED TO EXISTING PANELBOARDS, CONFIRM THAT PANEL HAS SUFFICIENT SPACE AND CAPACITY FOR NEW LOADS.
- MODIFY EXISTING PANEL DIRECTORIES TO REFLECT NEW CIRCUITS, ADDED OR DELETED.
- WHERE NOT SPECIFICALLY INDICATED, NEW CIRCUITS ARE TO BE EXTENDED TO THE NEAREST APPROPRIATE PANEL.
- ALL NEW CIRCUITRY SHALL BE COMPLETE WITH REQUIRED BRANCH CIRCUIT PROTECTION AND GROUNDING CONNECTIONS.
- ANY WORK REQUIRING THE SHUT-DOWN OF ELECTRICAL SERVICE TO THE BUILDING AND/OR ANY PORTION THEREOF, THE E.C. SHALL MAKE ARRANGEMENTS WITH THE OWNER AND ANY OTHER CONCERNED AUTHORITY.
- EXISTING SYSTEMS AFFECTED BY NEW WORK SHALL BE TESTED COMPLETELY FOR INTEGRITY AND PROPER OPERATION. RE-FEED CIRCUITS UP-STREAM AND DOWN-STREAM OF DEVICES BEING REMOVED.
- MAKE ANY REVISIONS TO THE EXISTING WORK FOUND NECESSARY TO MAINTAIN ORIGINAL OPERATION. FURNISH AND INSTALL ALL NECESSARY ELECTRICAL EQUIPMENT AND DEVICES AS NEEDED AT NO ADDITIONAL COST TO THE OWNER.

ELECTRIC SYMBOL LIST	
	DUPLEX RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET MOUNTED ABOVE COUNTERTOP
	SPECIAL PURPOSES OUTLET; 208/240 VOLT
	TYPICAL LIGHTING FIXTURES (see schedule)
	SINGLE POLE WALL SWITCH
	WALL SWITCH; 3 DENOTES THREE WAY; 4 DENOTES FOUR WAY
	SWITCH WITH THERMAL OVERLOAD
	WIRE CONCEALED IN WALLS OR CEILING
	SWITCHED CIRCUIT
	HOMERUN TO SERVICE PANEL; NUMBER OF WIRES INDICATED
	TELEVISION LOCATION; PROVIDE CABLE PER UTILITY COMPANY SPECIFICATIONS PULLED FROM BUILDING DEMARC TO BOX IN WALL WITH COVER PLATE; REFER TO SPECIFICATIONS FOR FURTHER DETAIL
	CIRCUIT BREAKER PANEL BOARD - VOLTAGE NOTED
	TRANSFORMER
	DISCONNECT SWITCH
	THERMOSTAT
	JUNCTION BOX
	TELEPHONE OUTLET; PROVIDE CABLE PER UTILITY COMPANY SPECIFICATIONS PULLED FROM BUILDING DEMARC TO BOX IN WALL WITH COVER PLATE. TYPICAL TO ALL PHONE LOCATIONS; REFER TO SPECIFICATION FOR FURTHER DETAIL
	SMOKE DETECTOR; D DENOTES DUCT SMOKE DETECTOR E DENOTES ELEVATOR RECALL
	FIRE ALARM HEAT DETECTOR
	GROUND FAULT CIRCUIT INTERRUPTER
	WEATHERPROOF

**ELECTRICAL POWER NOTES:**

- ALL WORK IS NEW UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL PLANS FOR EXACT DIMENSIONS AND LOCATIONS. VERIFY WITH ARCHITECTURAL PLANS AND COORDINATE WITH THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN. NOTIFY THE ARCHITECT/G.C. OF ANY DISCREPANCIES IF DISCREPANCIES ARE NOTED. DO NOT PROCEED WITHOUT ARCHITECTURAL APPROVAL.
- HVAC AND PLUMBING EQUIPMENT ARE SHOWN FOR REFERENCE ONLY. E.C. SHALL COORDINATE EXACT LOCATIONS AND POWER REQUIREMENTS OF APPLICABLE HVAC AND PLUMBING EQUIPMENT WITH MECHANICAL DRAWINGS. E.C. SHALL MAKE ALL FINAL CONNECTIONS TO ALL CONTROLS. OWNER-SUPPLIED EQUIPMENT, MECHANICAL AND PLUMBING EQUIPMENT AS NEEDED.
- E.C. SHALL PROVIDE DISCONNECT SWITCHES AND STARTERS AS REQUIRED FOR ALL EQUIPMENT WHERE THE DISCONNECT SWITCH IS NOT PROVIDED WITH THE EQUIPMENT OR BY OTHERS.
- E.C. SHALL SUPPLY AND INSTALL FEEDERS, FUSES AND CIRCUIT BREAKERS TO MATCH THE NAME-PLATE RATING OF ALL EQUIPMENT. THIS SHALL BE INCLUDED IN THE INITIAL BID PROPOSAL AND NO EXTRAS WILL BE ACCEPTED.
- ELECTRICAL OUTLET PLATE GASKETS SHALL BE INSTALLED IN ALL RECEPTACLES, SWITCHES OR OTHER ELECTRICAL BOXES IN WALLS SEPARATING CONDITIONED AND UNCONDITIONED SPACE.
- ALL HOMERUNS TO PANELBOARDS DESIGNATED SHALL CONSIST OF 2#12 AWG & 1#12 GROUND IN 3/4" CONDUIT TO PANEL LABELED AT TH.
- PROVIDE AFCI TYPE BREAKERS FOR ALL 120 VOLT 15 AND 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN SLEEPING AREAS.
- PROVIDE TAMPER PROOF OUTLETS FOR ALL 15A AND 20A CIRCUITS (EXCLUDING OUTLETS LOCATED IN DEDICATED SPACES IE REFRIGERATORS, DISHWASHER, WASHING MACHINES AND THE LIKE) IN LIVING SPACES OF DWELLING UNITS, CHILD CARES AREAS AND EDUCATIONAL AREAS.
- CONNECT ALL BATHROOM EXHAUST FANS TO ASSOCIATED LIGHT SWITCH UNLESS OTHERWISE NOTED.
- ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO HVAC CONTROL WIRING; COORDINATE ALL REQUIREMENTS WITH DIV 15
- ALL CIRCUITS BACK TO PANEL SHALL REQUIRE 20A-1 POLE BREAKERS UNLESS OTHERWISE NOTED
- CONNECT SMOKE/CO DETECTORS TO BEDROOM ARC FAULT CIRCUIT.
- REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS OF PLUGS AND LIGHTS IN BATHROOMS.
- PROVIDE DUPLEX RECEPTACLE UNDER SINK BASE. TOP HALF TO BE SWITCHED TO ACCOMMODATE CORD CONNECTED DISPOSAL. PROVIDE CIRCUIT TO BOTTOM HALF TO ACCOMMODATE CORD CONNECTED DISHWASHER. NOTE: USE OF THIS CONFIGURATION REQUIRES THESE CIRCUITS TO BE CONNECTED TO A TWO(2) POLE BREAKER PER NEC 210.4.



**QUISENBERRY ARCARI ARCHITECTS, LLC**  
 www.qa-architects.com  
 T (860) 677-4594  
 F (860) 677-8534  
 318 Main Street  
 Farmington, CT 06032

NOT FOR CONSTRUCTION  
ISSUED FOR REVIEW ONLY

REHABILITATION/RECONSTRUCTION WORK FOR:  
**CAROLE FRANKLIN**  
 APPLICANT #(1346-30)  
 13 JAMES STREET  
 MILFORD, CONNECTICUT

Sheet Description:  
**ELECTRICAL DETAILS**

Issue Dates:  
 (INSERT BID DATE)

Project #: QA 1346-30  
 Drawn By: SS

Sheet #:  
**E1.2**

