

2020 Residential Code Of New York State

Climatic & Geographic Design Criteria Table R301.2(1)											
Ground Snow Load 30 lb/ft	Wind Design		Special Wind Region	Wind-Borne Debris Zone	Seismic Design Category	Subject To Damage From		Winter Design Temp. °F	Ice Shield Underlayment Required	Flood Hazards	Air Freezing Index
	Speed (mph)	Topographic Effects				Heating	Frost Line Depth				
	15 - 120 mph	No	Yes	Zone I	B	Severe	42"	Moderate Heavy	Yes	No	1500 or Less

Manual J Design Criteria							
Elevation	Latitude	Winter Heating	Summer Cooling	Altitude Correction Factor	Indoor Design Temperature	Design Temperature Cooling	Heating Temperature Difference
436	41	7	87	1	68	75	61
Cooling Temperature Difference	Wind Velocity Heating	Wind Velocity Cooling	Coincident Wet Bulb	Daily Range	Winter Humidity	Summer Humidity	
12	20.4	15	75	M	30	55	

Schedule For Proposed Building Material and Color Scheme

	Name:	Type:	Color:
Siding:	JamesHardie	HardiPlank	To Match Existing House
Windows:	Andersen (400 Series)	Double Hung	To Match Existing House
Trim:	Azek	Composite	To Match Existing House
Garage Door:	Clapay	Composite	White
Roofing:	GAF	Asphalt	To Match Existing House
Gutter/ Leaders:	n/a	Aluminum	To Match Existing House

Construction Type Note:

As Per Title 19 NYCRR Part 1265

Provide Label As Shown Below



V = Construction Type
As Per Section 602 of BCNYS

FR = Floor And Roof Framing
As Per Designation For Structural Components
That Are Of Truss/ Engineered Type Construction

Size:
6" Diameter Circle

Color:
Circle To Be 1/2" Stroke - Reflective Red Pantone #187
Inner Circle - Reflective White
Text - Reflective Red Pantone #187

Sign Location:

The Sign Or Symbol Required Shall Be Affixed To The
Electric Box Attached To The Exterior Of The
Residential Structure.

See Section 1265.5 For Further Notes On Sign Location.

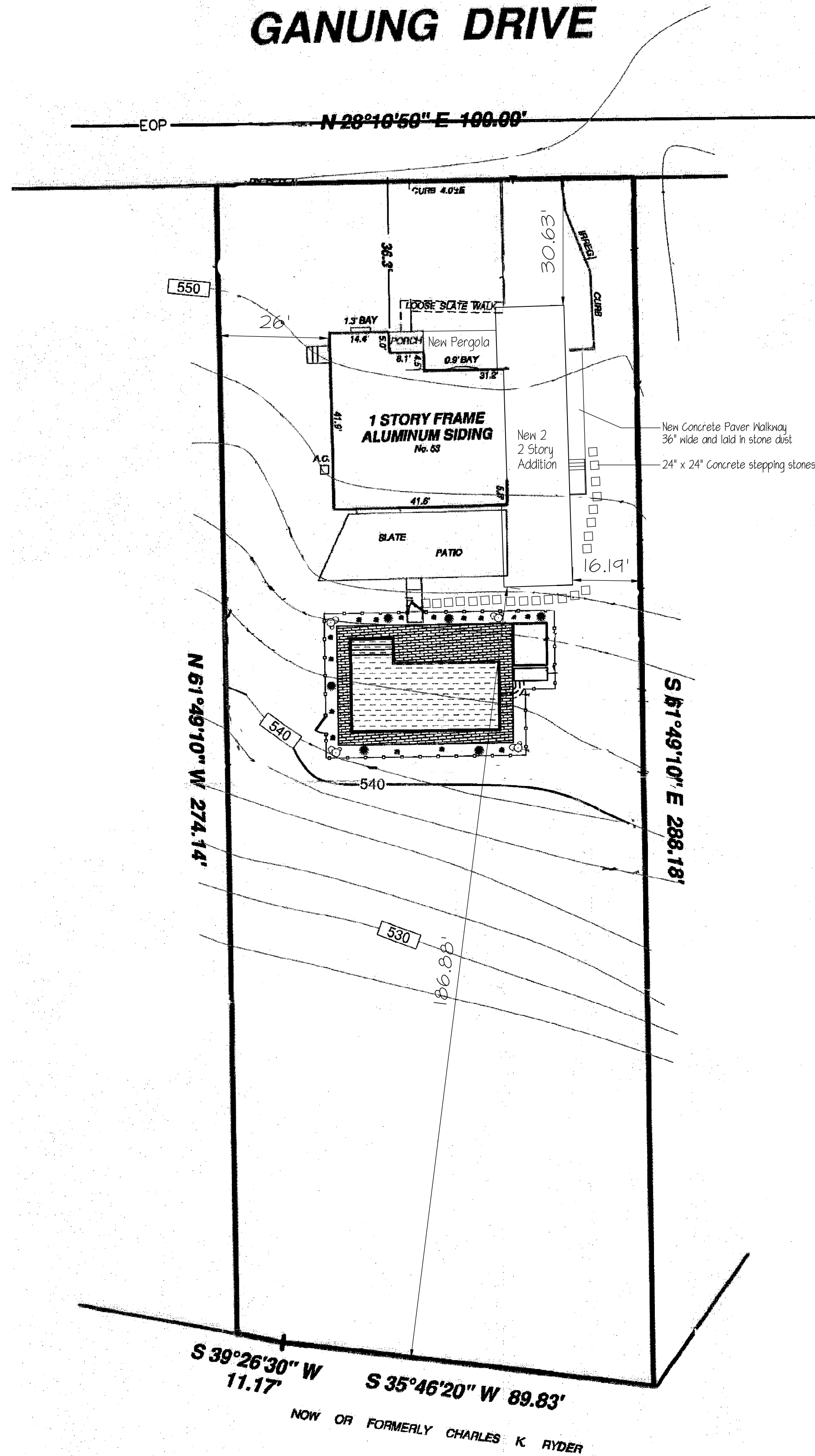
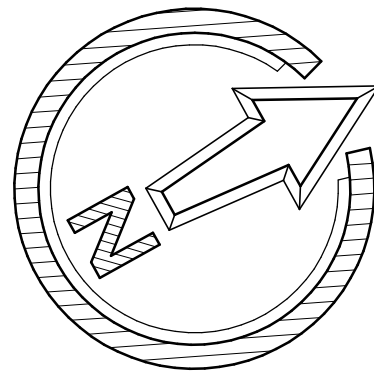
See Title 19 NYCRR Part 1265 For Other Specs

Zoning Data

Zone: R-20

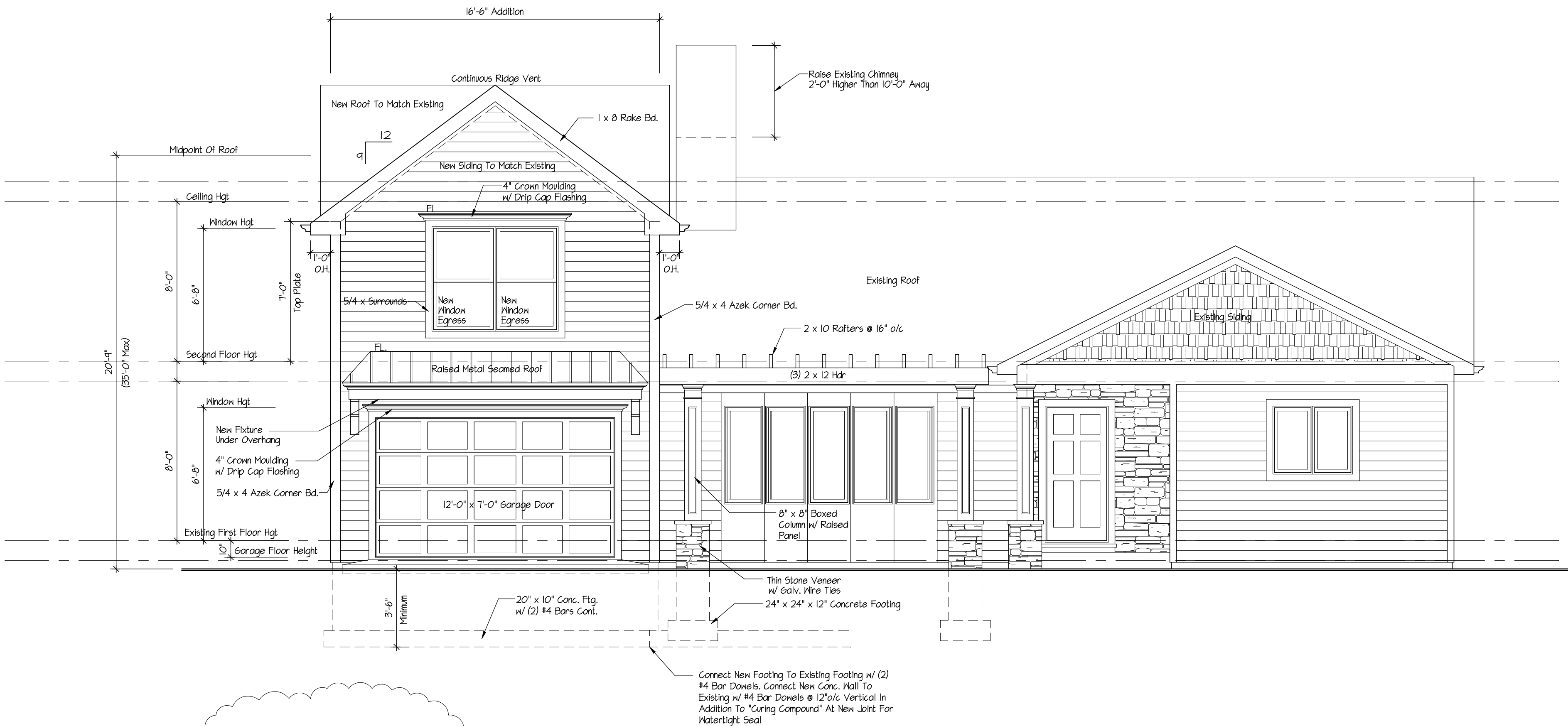
Use: Single Family Residence

	Required By Code	Provided
Lot Area	20,000 sf	28,147 sf
Lot Width	100'	162.53'
Set Backs		
Front	30'	30.63'
Side	16'	16.19'
Total of Both	34'	42.19'
Rear	186.88'	304'
Building Hgt	2 1/2 Sty or 35'	2 Sty or 20'-9"
Building Coverage	22 %	19.6 %



Site Plan Is Based on Survey By KULHANEK &
PLAN LAND SURVEYORS P.C.,
Dtd. January 1, 2020
Which was provided by OWNER

Site Plan
Scale: 1" = 20'-0"



New Exterior Light Note:

All New Light @ Exterior To Be Low Voltage
(Less Than 2,100V) w/ Motion Sensor

Proposed
Front Elevation

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

DeMasi Architects P.C.

105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549

PHONE: (914) 666-3850 EMAIL: Lou@DemasiArchitects.com

These plans are the property of the Architect. Any use or reproduction in whole or part without the written authorization of the Architect is prohibited. Any person or corporation who reproduces these plans without the written authorization of the Architect will be responsible to compensate the Architect.
These plans are not valid for a building permit unless they are accompanied by a signed and sealed professional stamp for the construction of one structure only by the person whose name appears on the plans.

Addition For
53 Ganung Drive
Ossining NY

ARB Comments 7/17/20

Revision Date

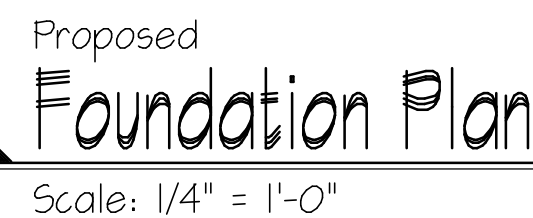
Date June 26, 2020

Job No 220-053

Drawing

1 OF 5

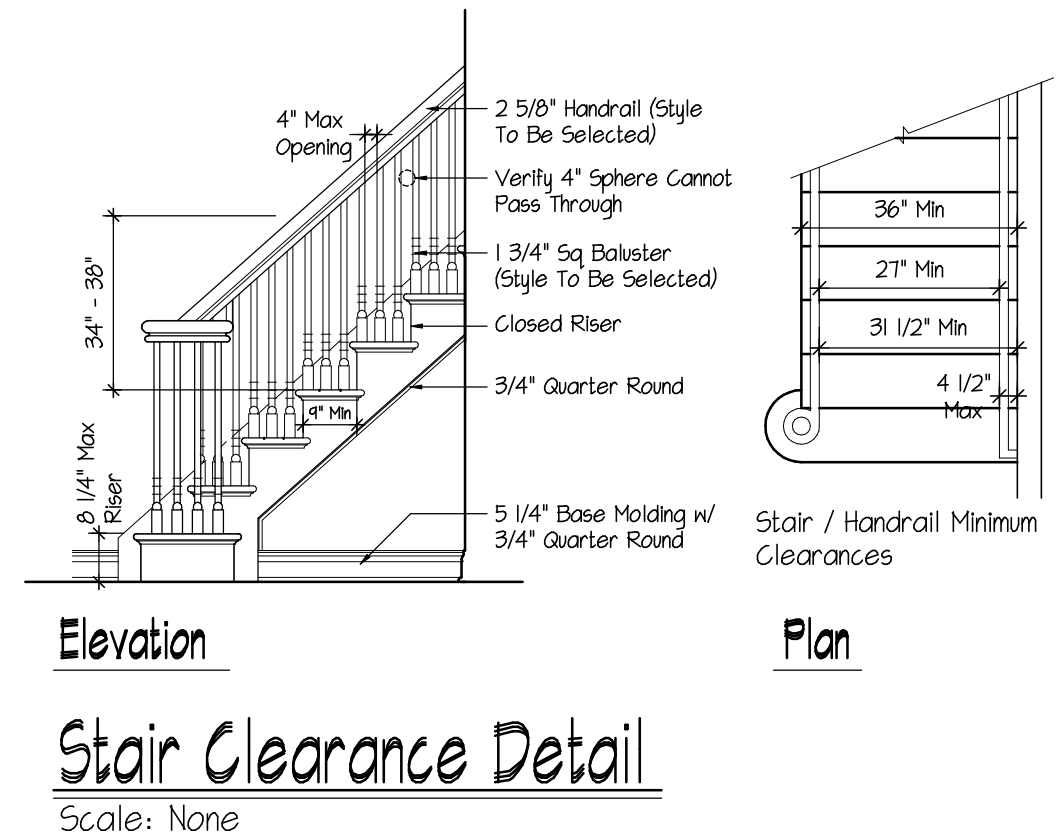
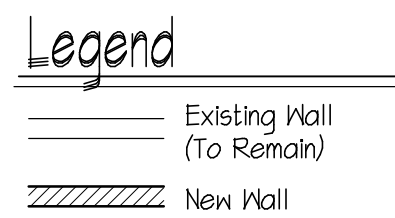
Do Not Scale Prints



Window Note:

1. All Glazing To Be Low "E" Insulated Glass w/ Minimum R-31 (U=0.32).
2. All Windows Within 10' Of Floor To Have Tempered Glass (Double Hang's-Bottom Sash Only, All Others Full Unit).
3. All Glazing In Doors & Showers Enclosing Hot Tubs, Whirlpool Tubs, Saunas, Steam Rooms, Bathtubs and Showers Within 60" Of Window or Door Unit Shall Have Tempered Glass.
4. All Egress Windows To Have A Minimum Clear Opening Area Of 5.7 SF Total w/ 24" min Clear Opening Height & 20" min Glazed Width. Refer To Manufacturers Specifications For All Other Information.
5. All Windows or Doors Marked w/ "TEMP" To Have Full Unit Tempered.
6. All Windows Shall Within 24" Above The Finished Floor & Greater Than 12" Above Finished Grade Or Other Surface. Requires Fall Protection.

See Section K912.2 For More Info.



Addition For

53 Gang Drive
Ossining NY

These plans are the property of the Architect. Any use or reproduction in whole or part without the written authorization of the Architect is prohibited. Any person or corporation using plans without proper authorization will be responsible to compensate the Architect.

These plans are not valid for a building permit unless originally signed and sealed by the Architect and are for the construction of one Structure only by the person whose name appears on the plans.

DeMasi Architects P.C.

105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549

Egress Window Sizes:

Model #	Opening	Width	Height
TN 210410	5.81 sf	31-17/8"	26-1/4"

Notes:

All Framing Members To Be # 2 Douglas Fir-Larch Or Better
Double Frame Under All Partitions Parallel To Framing
If Tile Floor Is To Be MUD Job Consult Architect For Additional Framing Required

Legend:

Existing Wall (To Remain)
New Wall

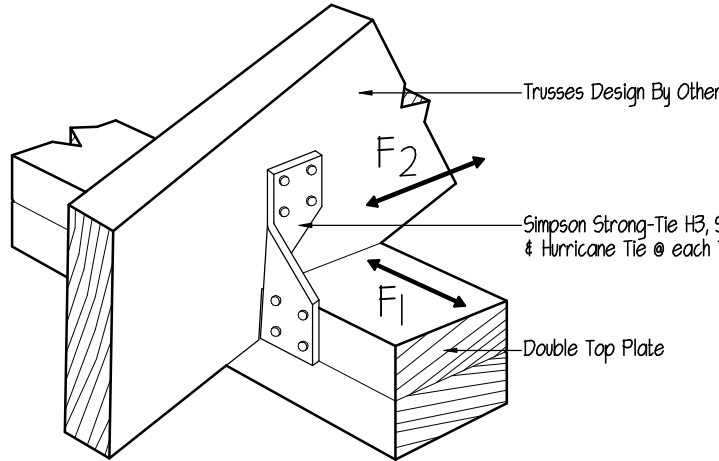
Wood Header Schedule

Span	Header Size
Up To 3'-0"	(2) 2 x 6 Hdr
Up To 4'-0"	(2) 2 x 10 Hdr
Up To 6'-0"	(3) 2 x 10 Hdr

Notes:
Unless Otherwise Noted On Plans

Window Note:

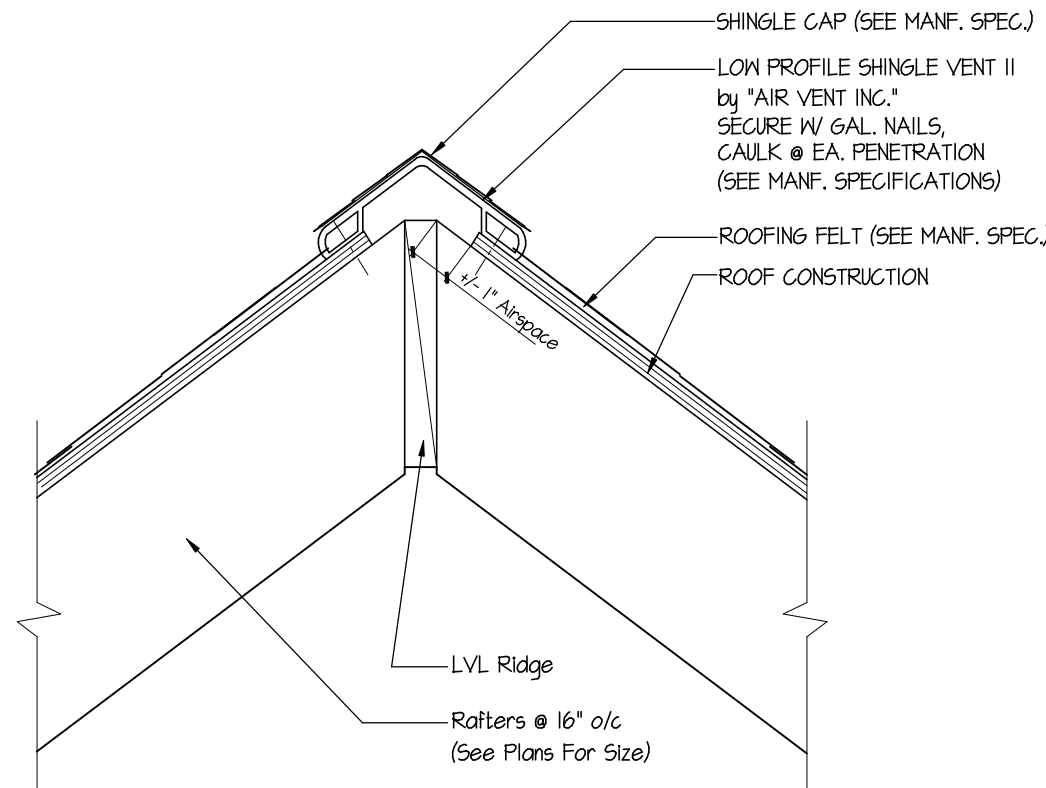
- All Glazing To Be Low "E" Insulated Glass w/ Minimum R-31 (U=0.32).
- All Windows Within 18" Of Floor To Have Tempered Glass (Double Hung's-Bottom Sash Only, All Others Full Unit).
- All Glazing In Doors & Windows Enclosing Hot Tubs, Whirlpool Tubs, Saunas, Steam Rooms, Bathtubs and Showers Within 60" Of Window or Door Unit Shall Have Tempered Glass.
- All Egress Windows To Have A Minimum Clear Opening Area Of 5.7 Sf Total w/ 24" min Clear Opening Height & 20" min Clear Width, Refer To Manufacturers Specifications For All Other Information.
- All Windows or Doors Marked w/ "TEMP" To Have Full Unit Tempered.
- All Window Sills Within 24" Above The Finished Floor & Greater Than 12" Above Finished Grade Or Other Surface. Requires Fall Protection. See Section R312.2 For More Info.



Note:
Simpson Strong Ties Is Recommend by Truss Supplier

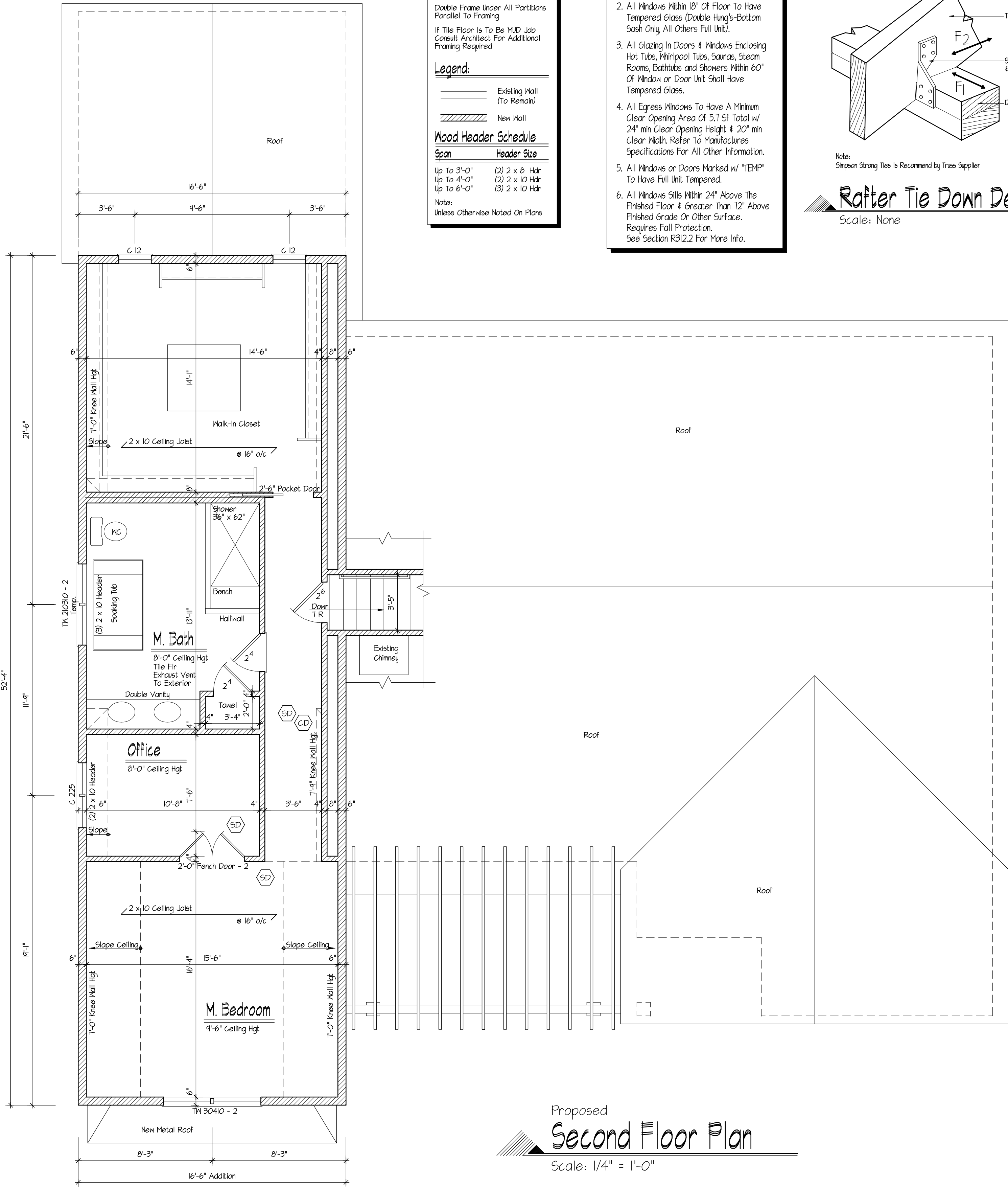
Rafter Tie Down Detail

Scale: None

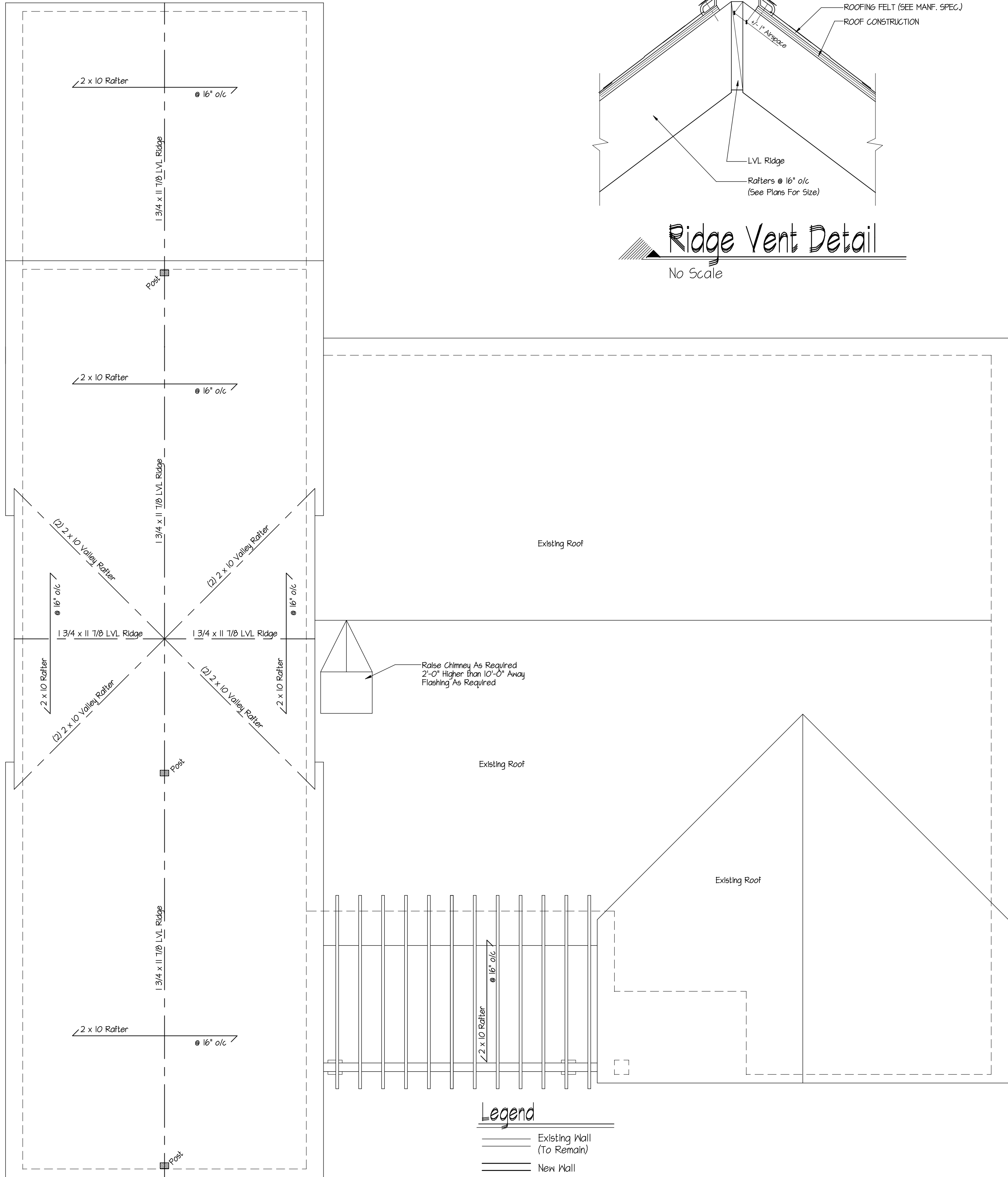


Ridge Vent Detail

No Scale



Proposed
Second Floor Plan
Scale: 1/4" = 1'-0"



Proposed
Second Floor Plan
Scale: 1/4" = 1'-0"

DeMasi Architects P.C.

105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549

PHONE: (914) 666-3850 EMAIL: Lou@DemasiArchitects.com

Do Not Scale Prints

These plans are the property of the Architect. Any use or reproduction in whole or part without the written authorization of the Architect is prohibited. Any person or corporation who reproduces these plans without the written authorization of the Architect will be responsible to compensate the Architect.

These plans are not valid for a building permit unless they are accompanied by a professional seal and signature for the construction of one structure only by the person whose name appears on the plans.

Addition For

53 Ganung Drive
Ossining NY

ARB Comments 7/17/20

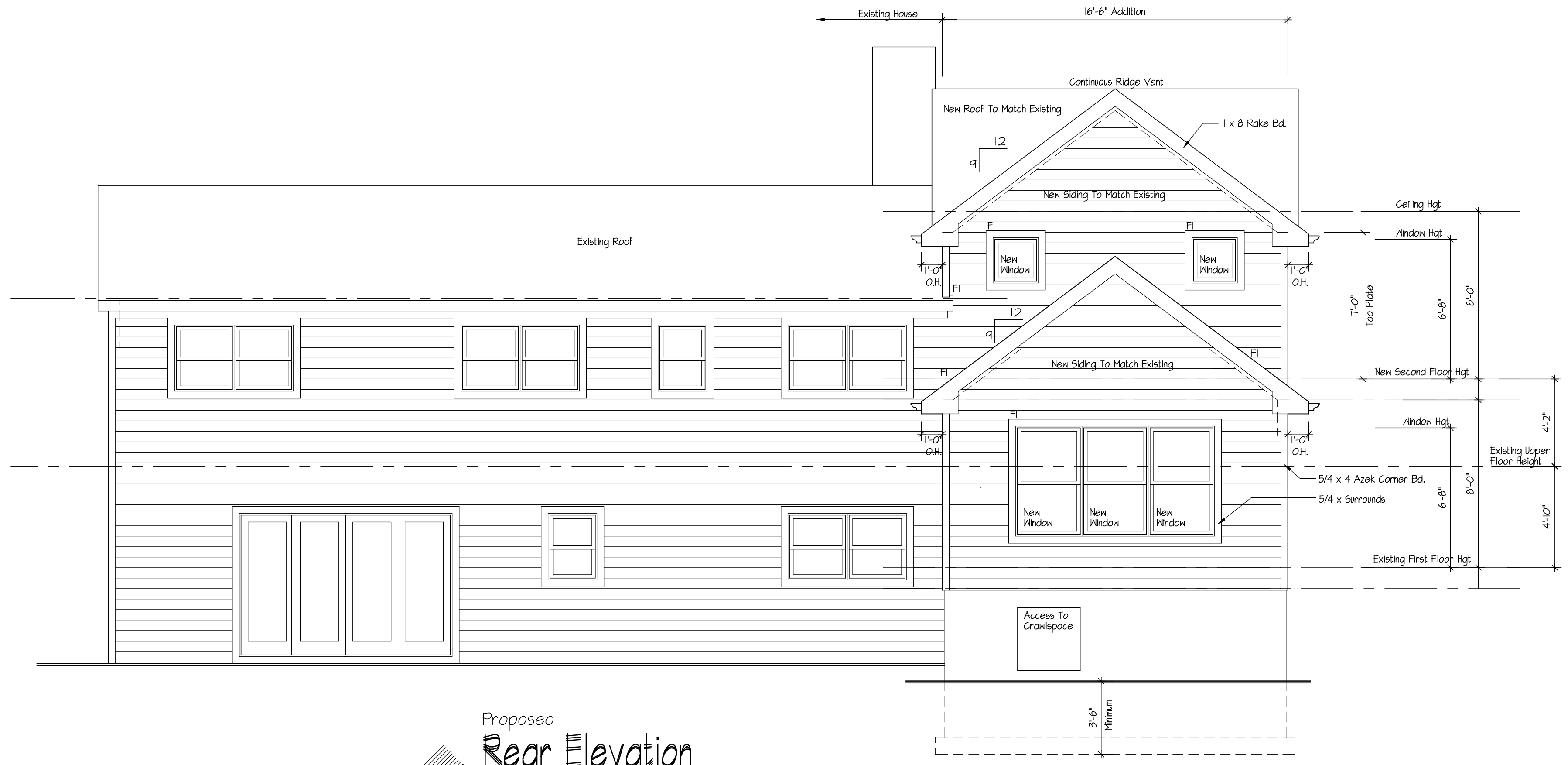
Revision Date

Date June 26, 2020

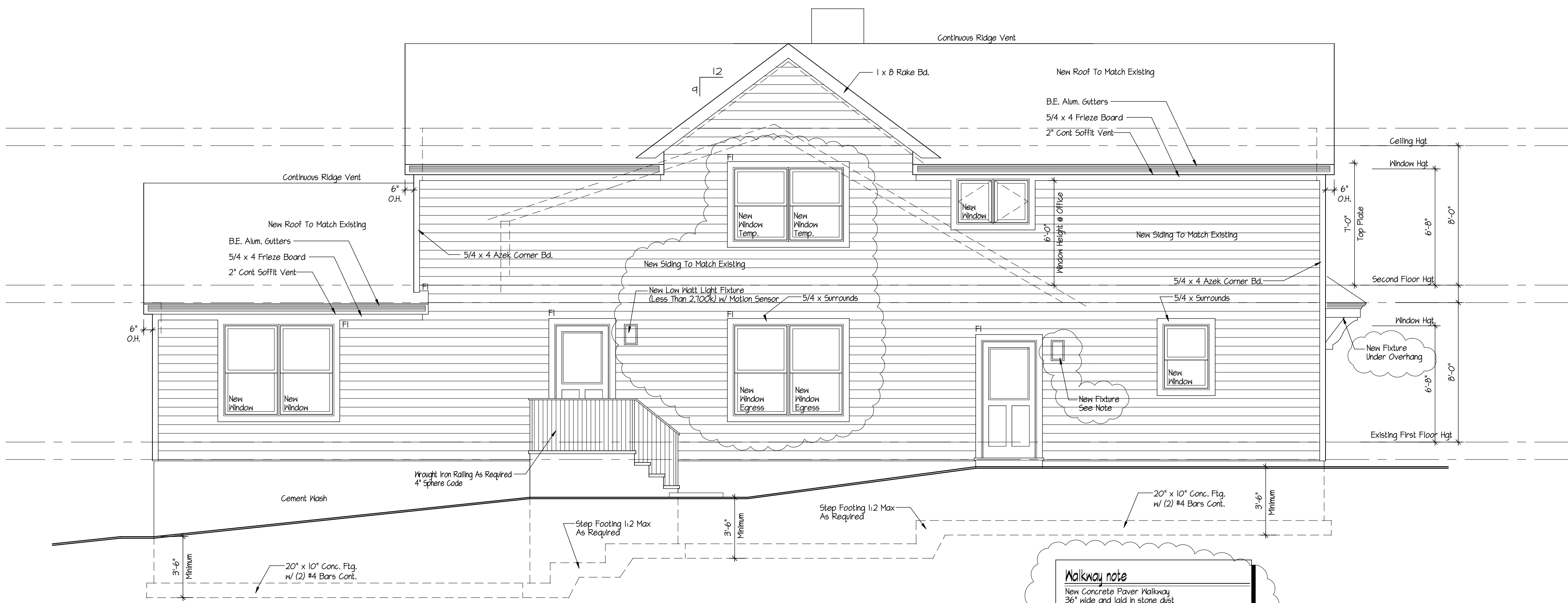
Job No 220-053

Drawing

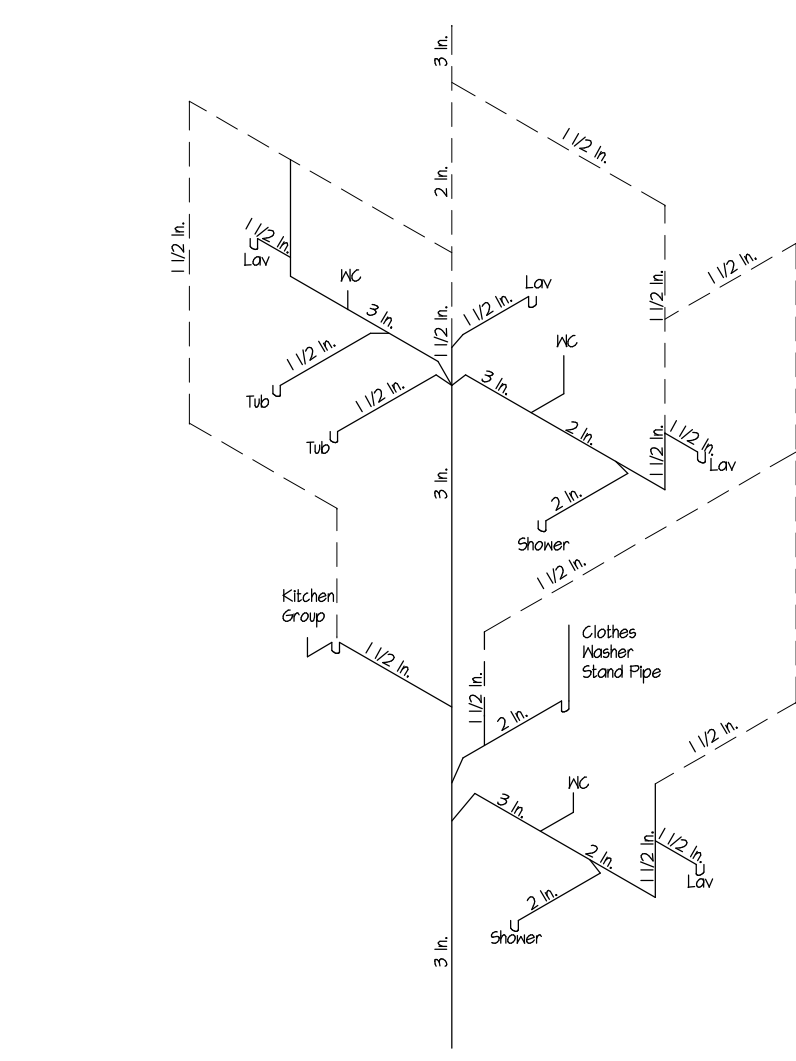
3 OF 5



Proposed
Rear Elevation
Scale: 1/4" = 1'-0"

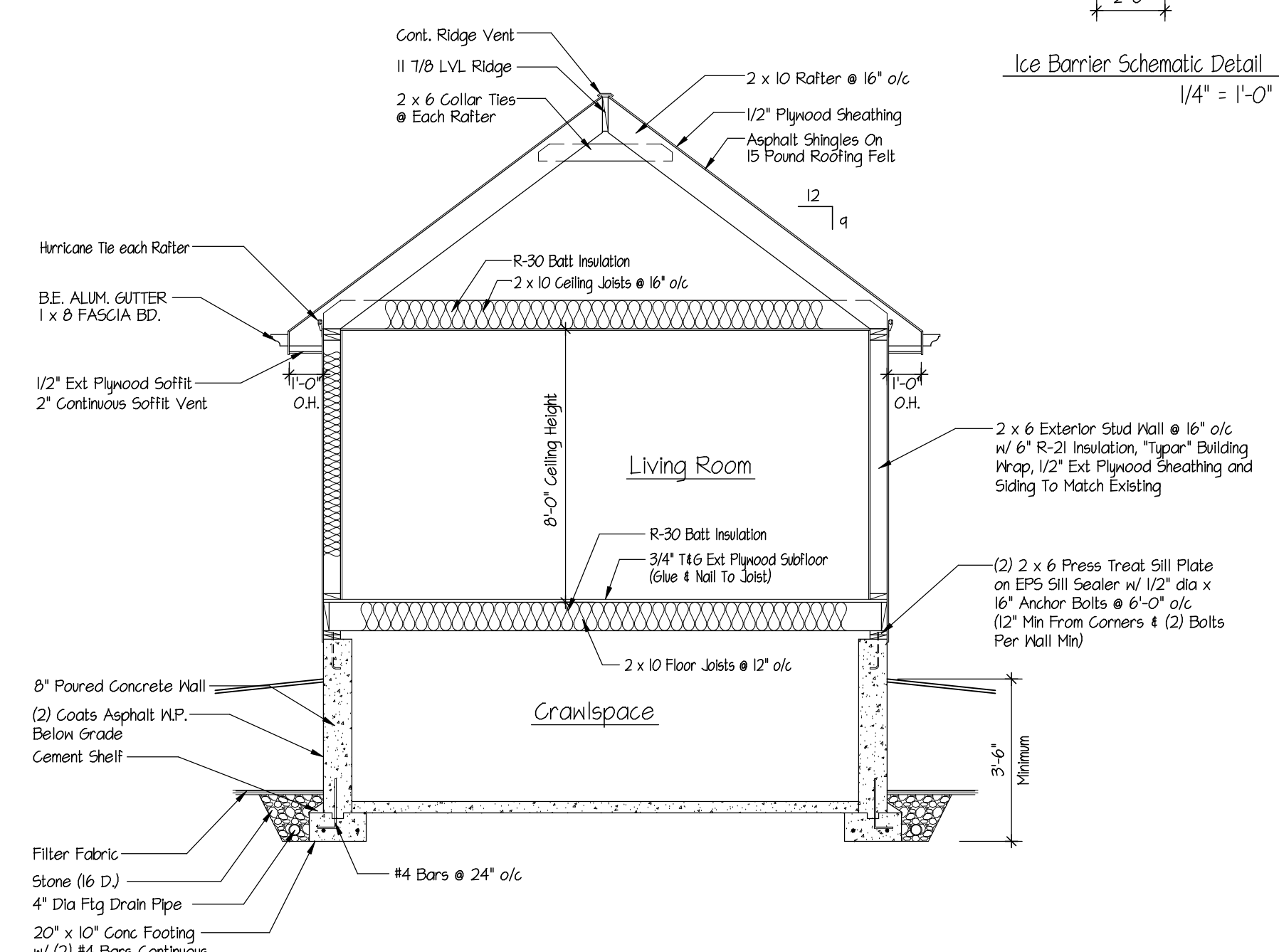
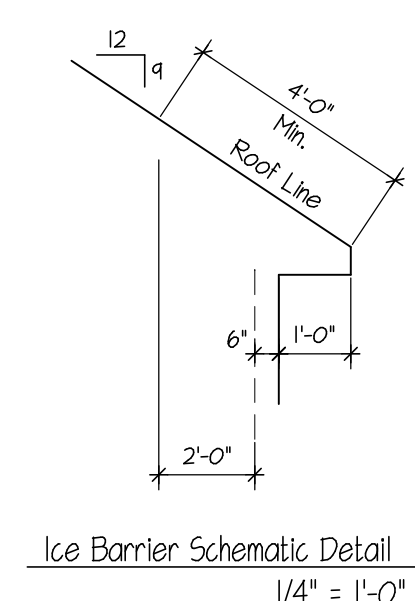
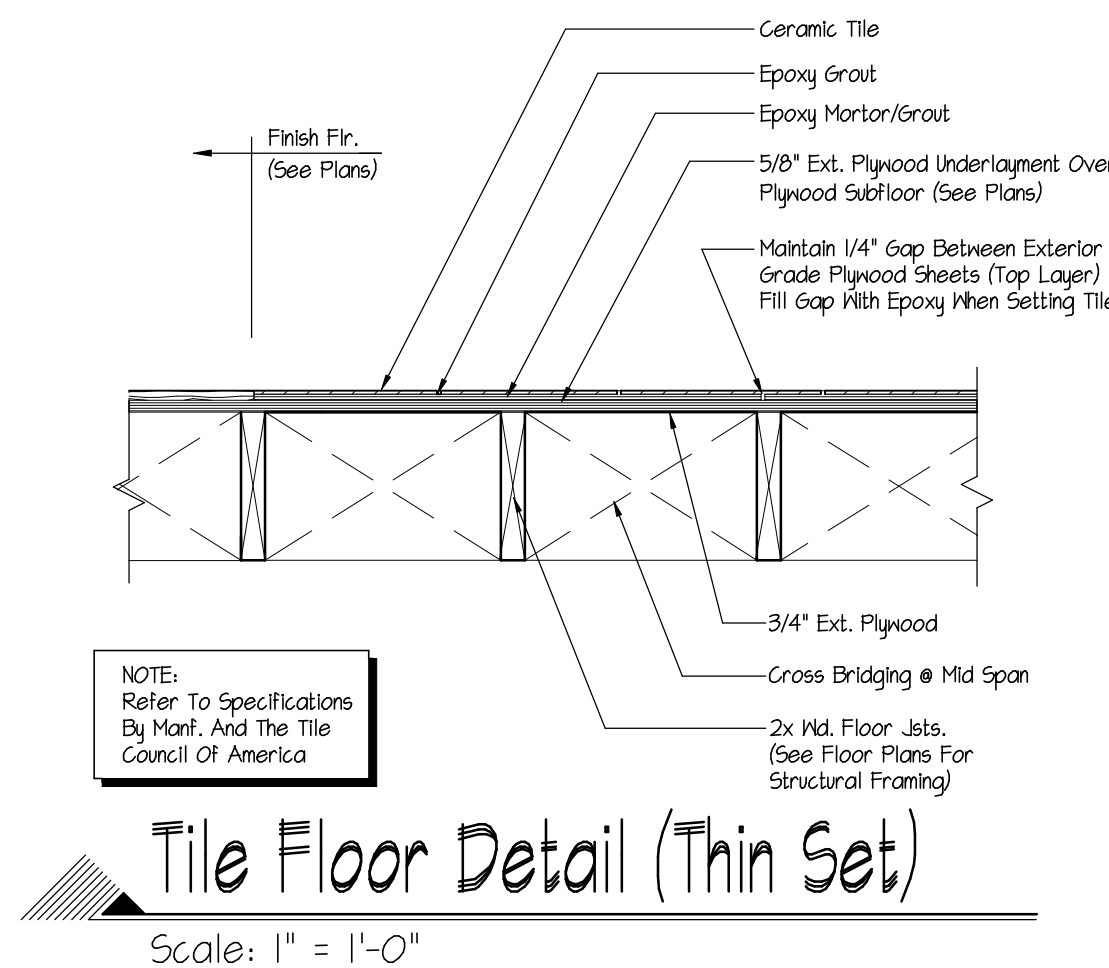


Proposed
Left Side Elevation
Scale: 1/4" = 1'-0"



Note:
Plumbing riser diagram shown is generic,
and should be used only for informational
purposes. Plumbing contractor to install
plumbing system as per state & local
building codes.

Typical Plumbing Riser Diagram
Scale: None
Riser diagram taken from "2015 International Residential Code"
Figure P3108.2(2). Refer to diagram for all other information



General Conditions:

SPECIFICATIONS: These specifications are made in general form only and not specifically for any one building. The owner applying these specifications, assumes complete responsibility for their use, changes, or omissions.

SCOPE OF WORK: The Contractor shall provide all labor, materials, appliances and equipment required to complete all work, etc., as shown on the drawings necessary for a complete job, unless otherwise specified. All material and workmanship shall be of good quality.

OMISSIONS: All written figures (notes and dimensions) on the floor plans or specifications shall take precedence over any drawn figures (elevations). Do not scale prints. All dimensions must be verified by the contractor before start of construction. Any discrepancies on the plans or specifications must be reported to the Architect prior to the start of construction.

CODES: All work and materials must conform to all local and The 2020 Residential Code of New York State, National Board of Fire Underwriters, 2020 Energy Conservation Code of New York State and requirements of the Board of Health.

ACCEPTABLE BUILDING STANDARDS: Installation of materials shall comply with industry standards as instituted by the national association or equivalent group of material used. Acceptable associations shall include, but are not limited to, the following: Western Wood Products Assoc., Cedar Shake & Shingle Bureau, Brick Industry Assoc., Tile Council of America, National Roofing Contractors Assoc., and American Concrete Institute, etc.

MATERIALS: Shall be installed according to the manufacturer's specifications. All work shall comply with applicable sections of the state and local codes and the generally accepted standards as listed in the state building code.

PERMANENT CERTIFICATION: A permanent certificate shall be completed by the builder or registered design professional and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and floor) and ducts outside conditioned spaces; U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelope air leakage testing done on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired vented room heater, electric furnace or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired vented room heater," "electric furnace"; or "baseboard electric heater," as appropriate. An efficiency shall not be listed for gas-fired vented room heaters, electric furnaces or electric baseboard heaters. See Section R403.3.3 Of The 2015 International Energy Conservation Code.

SITE CONDITIONS: The General Contractor shall verify all conditions before submitting his proposal. No allowance for extra charges will be permitted because of lack of knowledge of the conditions prior thereto except as otherwise specified elsewhere in the contract documents. Each contractor will be responsible for his own engineering and layout once the owner has established property lines and minimum number of benchmarks. The contractor shall verify all lines, levels and dimensions shown on the drawings; and will be held responsible for the correctness and setting out of his work.

OWNERSHIP OF PLANS: These plans are the property of DeMasi Architects P.C.. Any use or reproduction, in whole or in part, without the written authorization of DeMasi Architects P.C., is prohibited. Any person or corporation using plans without proper authorization will be responsible to compensate the Architect. This plan is for the construction of one house only.

ARCHITECT STATUS: Architect has not been retained by owner to provide periodic job inspections or job administration. Purchaser of the plans shall assume full responsibilities for any deviations or changes to these plans.

Excavation:

FOUNDATIONS: Excavate all earth, boulders, loose and soft rock to the lines and depths indicated on the drawings. All footings to bear on solid, undisturbed earth. Excavate for all utilities as required.

FOOTINGS: To bear 12" below line of solid undisturbed earth. Design of footings are based on 2,000 psi soil. If soil bearing conditions are questionable, contractor shall consult engineer for footing design. Sloped footings shall be 1:2 max. slope. Provide (2) #4 bars continuous (refer to wall section). All footings bearing from rock to soil shall be reinforced with (4) #5 bars (6" min. on both sides of joint). Dowel and pin all footings bearing on rock with a slope greater than 1:12 (30 degrees) w/ #4 dowels @ 24" o/c max.

FINISH GRADING: Finish grading shall be established to provide surface drainage in all directions away from the house and excavated areas.

Concrete & Masonry:

Weathering Condition: Severe

CONCRETE: Shall be a min. F_c = 3,000 psi compressive strength for footings & foundation walls and F_c = 3,500 psi compressive strength for porches, steps & garage floors. Concrete shall be "Air Entrained"; total air content shall not be less than 5 % or more than 7 %. All concrete work shall conform to the latest American Concrete Institute (ACI) guidelines.

CONCRETE FLOORS: Shall have a smooth, dense steel trowel finish, suitable to receive composition flooring. Concrete floors in living areas shall have 6 mil. poly vapor barrier and 2" x 24" (min.) rigid polystyrene foam insulation around the perimeter of the slab, where slab is within 2'-0" of grade. Pitch all garage and porch floors for drainage. (1/8"/ft. min.)

POURED CONCRETE FOUNDATION: Shall comply with the latest edition of American Concrete Institute Specification and shall be plumb, straight, level and true. Forms to be properly constructed to hold concrete. Provide (2) #4 bars located at top and bottom of wall. All reinforcing bars for concrete work shall conform to A.S.T.M. A615 grade 60.

MASONRY: Concrete block shall be load bearing laid level, plumb and straight. In a full bed of cement mortar (TYPE "S") with galvanized metal truss-type ties @ 24" horizontal and vertical. All joints to be well tooled. All masonry work shall conform to ACI 530 code and all reinforcement work shall conform to ACI 308-1I. Fill top two courses solid with cement mortar.

MASONRY CHIMNEY & FIREPLACES: Where shown on the plans, shall be brick or stone where exposed and laid in a full bed of cement mortar with well tooled joints. Flues to be fire clay, size shown on the plans. Provide cast iron damper, ash pit and clean-out doors. Provide for proper clearances with combustible construction. Firestop at all clearances with non-combustible material. Contractor shall ensure proper clearances of chimney and fireplace per 2020 Residential and Energy Codes Of New York State.

PREFAB CHIMNEY AND FIREPLACE: Installation of prefab flues and fireplaces shall be in strict accordance with manufacturer's specification. Install firestops as required by code. Fireplace shall be metal prefab with compatible flue and shall be UL listed.

FIREPLACES: All fireplaces shall have tempered glass fire doors and closable combustion air intake ducts and comply with the 2020 Energy Conservation Code Of New York State.

DAMPROOFING: Foundation wall shall be damproofed with two (2) coats of asphalt waterproofing over 1/2" cement paste (block wall) or cement wash (poured wall). Provide 4" perforated pipe footing drain laid in 16" stone with layer of filter fabric. Drain to outflow above ground or stone drywell.

DAMPROOFING: Provide a complete TUFF-N-DRI Exterior Foundation Waterproofing System as manufactured by KOGH MATERIALS COMPANY or equal. Provide 4" perforated PVC footing drain laid in 16" deep (min) stone with a layer of filter fabric over. Drain to outflow above ground, min. 30' from house, when not permitted, provide drywell.

DAMPROOFING: In areas of high water table or severe soil-water conditions are known to exist, provide 2-ply hot mopped felts, 55 pound roll roofing from top of footing to finished grade. All joints are to be lapped and sealed with adhesive.

Miscellaneous Metals:

STEEL: Shall conform to ASTM specification A-36 for structural steel.

FLITCH BEAMS: All steel plates shall conform to ASTM specifications A-36 for structural steel. All bolt holes to be properly drilled. Torched holes are not acceptable.

ANCHOR BOLTS: Provide 1/2" dia. X 16" with hooked end. Bolts to be placed 6'-0" o.c. max. 12" min. from corner and 2 bolts min. per sill. Consult Architect for anchoring in other seismic zone.

Carpentry:

Decay Design Condition: Slight - Moderate

Termite Design Condition: Moderate - Heavy.

Design Loads;			
First Floor Loads	Live Load	40 #/sf	
	Dead Load	12 #/sf	
Second Floor Loads	Live Load	30 #/sf	
	Dead Load	12 #/sf	
Attic Load (4'-6" Headroom)	Live Load	20 #/sf	
	Dead Load	12 #/sf	
(4'-6" Headroom)	Live Load	30 #/sf	
	Dead Load	12 #/sf	
Ground Snow Load	Live Load	45 #/sf	
	Dead load	1 #/sf	
Wind Speed Design load: 115-120 mph			
LIMBER: All framing lumber to be stress grade Douglas Fir Larch No. 2 or better.			
FRAMING: Framing of the entire house shall be erected plumb, level and true, securely nailed. Joists, studs and rafters shall be doubled above all openings. All flush headers shall be connected with metal joist hangers. Double frame under all partitions parallel to framing. Sizes of joists, sheathing and rafters are shown on plans. Provide solid blocking under all posts. Contractor to provide all fire blocking at all stud wall over 10'-0" high or all horizontal turned spaces at 10'-0" intervals max.			
TERMITE SHIELD: Shall be bent aluminum with sealed lapped joints (refer to wall section for other information).			
SILL PLATES: All wood sill plates that rest on concrete or masonry exterior walls shall be pressure preservative treated in accordance with ANFA standards or shall be of decay-resistant heartwood of redwood, black locust, or cedars. All sill plates to be set on fiberglass sill sealer or equal.			
GILLIAM BEAM: Shall be No. 1 Douglas Fir (min. Fb-2200 PSI).			
LAMINATED VENEER BEAM: Shall be "Microclon 14E" by Trus Joist Meyerhaeuser or equal, min. fb. 2600. Install as per manufacturer's specifications. Install as per manufacturer's specifications.			

PLYWOOD JOISTS: Shall be "TJI" Joists by Trus Joist Meyerhaeuser. Install as per manufacturer's specifications.

SUB FLOOR: Shall be 23/32" AdvantTech Flooring w/ manufacture recommendation for glue and screwed to each framing member @ 6" o/c.

SHEATHING: Shall be 1/2" exterior grade plywood nailed to each framing member.

WOOD DECKS AND RAILINGS: Where shown on plans, shall be pressure treated No. 1 Southern yellow pine wood. All nails, bolts and all metal fastenings to be hot-dipped galvanized steel, silicon bronze or copper (see detail).

BRICK OR STONE VENEER: Shall be as shown on plans, laid in cement mortar with galvanized metal wall ties 24" horizontal and vertical. Provide weep holes at 4" o.c. max. or as required (option: provide "MortarNet" at bottom of cavity). All joints to be well tooled. Brick and/or stone shall be selected by owner.

WINDOWS: Shall be ANDERSEN "400 Series" or equal windows with insulated "Low E" glass and screens. Size and type shown on plans. Provide tempered glass where shown or where within 18" of floor.

FRENCH DOORS: Shall be ANDERSEN Frenchwood or equal with tempered insulated "Low E" glass and screens.

FIBER-CEMENT SIDING: Shall be fiber-cement plank siding by Hardie or Certainteed. Install according to manufacture's guidelines and details. Provide 3/8" x 1 1/2" wood starter strip set to true level 1/4" up from bottom edge of siding. Lap siding on 1/4" minimum over course below, placing all end joints over stud bearing. Use only galvanized or corrosion resistant fasteners.

INTERIOR DOORS: Interior doors shall be 1 3/8" flush mahogany stain grade or 6 panel pre-hung units, complete with hardware and casing. Siding, bi-fold and pocket doors shall be 1 3/8" flush mahogany or 6 panel doors or as shown on plans, complete with hardware. Provide a self-closing "30 Min." label insulated door and frame between garage and house.

EXTERIOR TRIM: Shall be "Azek" or Equal. Size and shape shown on plans.

INTERIOR TRIM: Shall be stock sections of pine and shall be neatly fitted and mitered and complete, including doors and window casings, aprons, and stools, base at the floor. Closets to have one 3/4" shelf with clothes pole adequately supported. Linen closets to have five (5) 3/4" shelves.

WOOD STAIR: Provide oak tread stair, size shown on the plan. Provide complete hardwood railing post, newel, and balusters (4 1/2" o.c. max.) as required. Stair to have oaktread (10" w/ 1 1/8" nosing @ closed stair), clear pine stringer and risers (8 1/4" max.). Provide oak tread return and balunose on open sides. Stair shall be glued and wedged. All trim to be mitered and glued. Stair shall be fabricated in millshop by professional stair-builder. The general contractor shall be responsible to field check and verify stair dimensions and compliance with local & state building codes.

FLOORS: Wood floors shall be 23/32 strip oak securely nailed to joists over a layer of rosin paper. Composition floors shall be 1/16" vinyl set in mastic on concrete, or 5/8" exterior A/C plywood underlayment in joist areas.

ATTIC/ CRAWLSPACE ACCESS: Access doors from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood-framed or equivalent battle or retainer is required to be provided when loose-fill insulation is installed, the purpose of which is to prevent the loose-fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed R-value of the loose-fill insulation. See Section R402.2.4 Of The 2020 Energy Conservation Code Of New York State.

BUILDING CAVITIES: Building framing cavities shall not be used as ducts or plenums As Per Section R403.3.5 Of The 2020 Energy Conservation Code Of New York State.

ROOFING: All chimneys shall be properly flashed. Provide self-sealing rubberized waterproof membrane (36" wide min.) at all eaves, openings, hips, valleys, and ridges by WR, Grace and Company or equal (ice and watershed). All roofing shall be installed by qualified roofing contractors, in strict accordance with manufacturer's specifications.

ASPHALT SHINGLE ROOF: Shall be 30-yr nstic asphalt shingles laid on 15 lb. roofing felt.

ROOF VENTILATION: Ventilate all attic and rafter spaces with proper sized screened ridge and soffit vents or louvers (see plans).

GYPSUM BOARD: 1/2" nailed with rosin nails according to manufacturer's specifications. All joints to be lapped and receive three (3) coats of joint compound. Finish to be smooth and even, ready for painting. Provide 5/8" type "X" gypsum board at both sides of garage house walls and ceilings. Also, provide 100 SF min. over furnace.

GUTTERS AND LEADERS: Provide baked enamel gutters and leaders as required. All leaders and gutters are to be properly supported at all joint areas.

INSULATION: Shall be fiberglass batts with vapor barrier. Provide insulation as per 2020 International Energy Conservation Code Of New York State Section R402. RES-CHECK software is allowed to be used to calculate insulation requirements.

Tile Work:

CERAMIC TILE: Baths and lavatory floors to receive matt glazed ceramic tile set in thin-set grout. Installation to be as per latest edition of the Tile Council of America specifications. Consult Architect if other setting methods are to be used to verify floor structure. Tub and shower wall to receive glazed ceramic tile set in mastic 6" high (min.) Provide water-resistant cement backer boards to tub shower walls and wet areas.

ACCESSORIES AND ATTACHMENTS: Provide ceramic accessories such as soap dish, paper holder, 2 towel bars per bath. Provide mirror medicine cabinet with light over. Provide torkmca stock vanity where shown on plans.

Painting:

EXTERIOR: Siding, fascias, and trim shall receive one (1) prime coat and one (1) finish coat of exterior stain or paint.

INTERIOR: Walls to receive one (1) prime coat and one (1) finish coat of latex or oil flat paint. Flush hardwood doors to receive one (1) coat of stain and one (1) coat of satin polyurethane finish. Six (6) panel doors to receive one (1) coat primer and one (1) coat of satin enamel finish. Floors to be sanded and receive one (1) coat of sealer and one (1) coat of floor polyurethane, gloss finish.

TRIM AND MISCELLANEOUS WOOD: Shall have one (1) prime coat and one (1) finish coat of satin enamel.

Heating:

HEATING AND AIR CONDITIONING: Shall be oil-fired hydro-air system, complete with boiler, hydronic zone controls, thermostats, oil tank, etc. for 5 zones. Provide domestic hot water coil or separate circulating storage tank if required in boiler. Provide air handling units, condensers, insulated supply ducts and vents to each room. Heating and cooling system to be designed and guaranteed to conform to the latest ASHREA specifications and the 2020 Energy Code Of New York State. Heating system shall be designed and guaranteed to maintain 73º degrees F indoor temperature with 19º degrees F outdoor temperature.

DUCTS: All ducts shall be fabricated and rigidly installed with required bracing and supports. The main supply and return duct shall be isolated from the heater and blower by means of fabric insulators. Provide duct damper for each run. Insulate all ducts located in garage, attic, and unheated areas

DUCT TESTING: Ducts shall be pressure tested to determine air leakage by one of the following methods: Rough-in test Or Postconstruction test. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. See Section R403.3.3 Of The 2020 Energy Conservation Code Of New York State.

EQUIPMENT SIZING AND EFFICIENCY RATINGS: Heating and cooling equipment shall be sized in accordance with ACCA Manual 5 based on building loads calculated in accordance with ACCA Manual 5 and other approved heating and cooling calculation methodologies. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed. See Section R403.1 Of The 2020 Energy Conservation Code Of New York State For More Detail.

GRILLS AND REGISTERS: Provide supply and return registers in each room. All supply grills to have adjustable dampers.

BALANCING: Heating contractor shall balance entire house so that all rooms heat evenly to the required temperature set on the thermostat.

Plumbing:

WORK INCLUDED: Contractor shall furnish all labor, materials and equipment required to fully complete all plumbing work shown on plans.

FLASHING: All pipes passing through roof shall receive aluminum collar, strapped and fitted to provide water-proof seal.

TESTING: Contractor shall test all water, drainage, and vent piping in accordance with local codes.

WATER SUPPLY: Water supply in street or well shall be extended to house with 1" heavy copper pipe and entire house shall be supplied with both hot and cold water by means of heavy copper pipe of appropriate sizes, min. 3/4" size min to each bath, kitchen, and laundry. The weather resistant hose fittings shall be supplied. Provide hook-up for washer where shown.

DRAINAGE SYSTEM: Shall be installed in accordance with local codes and ordinances and shall be complete with copper drains and copper vents, cleanouts, etc connected to street sewer or septic system. Drains under concrete to be cast iron.

FIXTURES: As shown on plans shall be AMERICAN STANDARD, KOHLER, or equal. All exposed fittings and pipe to be chrome plated.

SEPTIC AND WELL SYSTEMS: (if required) shall conform to all requirements of the Board of Health.

Electrical:

Electrical system to be designed to comply with NEC 70 specification.

Electrical: Provide a minimum of 120/208-200 amp, or larger, if required, for service. Switches to be silent type. Locations of outlets, fixtures, etc., as shown on plans. All electric work to conform to the National Board of Fire Underwriters Codes. Provide a complete door bell system.

Contractor to provide exhaust fans at both rooms (vent to exterior). Provide & install as per code.

Contractor to provide smoke & heat detectors with battery back-up (see plans for location). Detectors shall conform to all applicable codes and shall be installed as per code R314.3. Hard-wire and interconnected per section R314.4

Contractor to provide carbon monoxide detectors with battery back-up (see plans for location). Detectors shall conform to all applicable codes and shall be installed as per building code, Section R315.

Lighting Equipment: Not Less Than 75 Percent Of The Lamps Provided In Permanently Installed Light Fixtures Are High Efficiency Lamps Or Not Less Than 75 Percent Of The Lamps In Permanently Installed Light Fixtures Shall Contain Only High Efficiency Lamps As Per R404.1 Of The 2020 Energy Conservation Code Of New York State.

MECHANICAL VENTILATION: The building shall be provided with ventilation that meets the requirements of the 2020 Residential Code or 2020 Mechanical Code Of New York State, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating. See Section R403.6 Of The 2020 Energy Conservation Code Of New York State For More Detail.

Site Work:

SITE WORK: Provide 2" blacktop driveway, 4" gravel base to street. Sidewalks to be 3' wide, 4" concrete or 1 1/2" flagstone laid in sand, from house to driveway. Provide top soil and seed to all areas disturbed by construction.

Insulation / Energy Code:

Refer to "RES CHECK" energy study attached to plans or fixed to first page.

INSULATION: Shall be fiberglass batt with foil faced vapor barrier, "R" value stated on attached RES-CHECK.

Pack insulation in all cavities around all exterior windows, doors and other openings.

AIR LEAKAGE: Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed in accordance with the requirements of Section R402.4, through R402.4.4, of the 2020 Energy Conservation Code Of New York State. Recessed lights must be 1) type IC rated, or 2) installed inside an appropriate air-tight assembly with a 0.5" clearance from combustible materials. If non-IC rated, the fixture must be installed with a 3" clearance from insulation.

VAPOR RETARDER: Required on the warm-in-winter side of all non-vented framed ceilings, walls, and floors.

Material Identification:

Materials and equipment must be installed in accordance with the manufacturer's installation instructions. Materials and equipment must be identified so that compliance can be determined. Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided. Insulation R-values and glazing U-factors must be clearly marked on the building plans or specifications.

Duct Insulation:

Supply and return ducts in attics shall be insulated to an R-value of not less than R-6 for ducts 3 inches (76 mm) in diameter and larger and not less than R-6 for ducts smaller than 3 inches (76 mm) in diameter.

Supply and return ducts in other portions of the building shall be insulated to not less than R-6 for ducts 3 inches (76 mm) in diameter and to not less than R-4.2 for ducts smaller than 3 inches (76.2 mm) in diameter. Exception being ducts located in conditioned spaces. See 2020 Residence Code Of New York State.

Ducts buried within ceiling insulation both supply and return shall have an insulation R-value not less than R-6. At all points along each duct, the sum of the ceiling insulation R-values against, and above the top of the duct, and against and below the bottom of the duct shall be not less than R-14, excluding the R-value of the duct insulation.

Duct Construction:

All joints, seams, and connections must be securely fastened with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric, or lapses. Duct tape is not permitted.

- Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at less than 2 in. Hg. (500 Pa).
- Exception: Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.

Ducts shall be supported every 10 feet or in accordance with the manufacturer's instructions.

Cooling ducts with exterior insulation must be covered with a vapor retarder.

Air filters are required in the return air system. The HVAC system must provide a means for balancing air and water systems.

Temperature Controls:

Each dwelling unit has at least one thermostat capable of automatically adjusting the space temperature set point of the largest zone.

Electrical Systems:

Separate electric meters are required for each dwelling unit.

Fireplaces:

Fireplaces must be installed with tight fitting non-combustible fireplace doors. Fireplaces must be provided with a source of combustion air, as required by the Fireplace construction provisions of the Building Code, the Residential Code as applicable.

Service Water Heating:

Water heaters with vertical pipe risers must have a heat trap on both the inlet and outlet unless the water heater has an integral heat trap or is part of a circulating system.

Swimming Pools:

All heated swimming pools must have an on/off heater switch and require a cover unless over 20% of the heating energy is from non-depletable sources. Pool pumps require a time clock.

Heating & Cooling Piping Insulation:

Mechanical system piping capable of carrying fluids above 105 degrees F or chilled fluids below 55 degrees F must be insulated to a minimum of R-3. See Section R403.4 of the 2020 Energy Conservation Code Of New York State for more detail.

DeMasi Architects P.C.

105 SMITH AVENUE, MOUNT KISCO, NEW YORK 10549

PHONE: (914) 666-3950

EMAIL: Love@DemasiArchitects.com

These plans are the property of the Architect. Any use or reproduction in whole or part without the written authorization of the Architect is prohibited. Any person or corporation using these plans without proper authorization will be responsible to compensate the Architect.

These plans are not valid for a building permit unless the construction of one structure only by the person whose name appears on the plans.

53 Ganung Drive Ossining NY

ARB Comments 7/17/20

Revision Date

Date June 26, 2020

Job No 220-053

Drawing 5 OF 5