

**DESIGN DATA:**

STRUCTURAL DESIGN HAS BEEN PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS AND/OR ALL UPGRADED NYS CODE AND LOCAL REQUIREMENTS AND:  
 A) 2015 INTERNATIONAL RESIDENTIAL BUILDING CODE WITH NEW YORK STATE SUPPLEMENT.  
 B) ACT 318-14, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE  
 C) AISC, MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN, 14TH ED.

1. LIVE LOADS  
 FLOORS: 40 PSF

2. DEAD LOADS  
 SELF WEIGHT +  
 FLOORS: 15 PSF  
 CEILING: 10 PSF  
 ROOF: 15 PSF+5 for Solar Pv option

3. SNOW LOADS  
 GROUND SNOW LOAD: 50 PSF

4. WIND LOADS  
 BASIC WIND SPEED: 115 MPH (3-SECOND GUST)  
 EXPOSURE CATEGORY: B

5. SOILS  
 MAXIMUM NET ALLOWABLE BEARING PRESSURE IS ASSUMED TO BE 2,000 PSF. ANY NON-CONFORMING OR UNUSUAL SUB-SURFACE SITE CONDITIONS SHOULD BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION FOR INSPECTION AND EVALUATION.

**GENERAL INFORMATION:**

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING SHALL APPLY)

"LOADS" INDICATED ON THIS DRAWING ARE THOSE FOR THE DESIGN OF THE BUILDING SUPERSTRUCTURE.

- ALL DETAILS MARKED "TYPICAL" IN THE SET OF STRUCTURAL DRAWINGS SHALL BE APPLIED THROUGHOUT THE PROJECT AS REQUIRED TO SATISFY THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL COORDINATE REQUIREMENTS FOR QUANTITY AND LOCATION WHERE THE "TYPICAL" DETAILS APPLY.
- FAILURE ON THE PART OF THE CONTRACTOR TO REVIEW THE DRAWINGS OF OTHER DISCIPLINES (I.E. ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC.) TOGETHER WITH THE FULL EXTENT OF THE PROJECT SPECIFICATIONS DOES NOT RELIEVE THEM OF THE RESPONSIBILITY TO FURNISH AND INSTALL ITEMS THAT ARE PART OF THEIR WORK AS INDICATED BY THE DRAWINGS AND SPECIFICATIONS OF OTHER TRADES. ALL STRUCTURAL TRADE CONTRACTORS AND SUB-CONTRACTORS ARE PROHIBITED FROM EXCLUDING STRUCTURAL WORK FROM THEIR CONTRACT NOT SHOWN IN THE STRUCTURAL DRAWINGS.

**FOUNDATION GENERAL NOTES:**

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING SHALL APPLY)

- STRUCTURAL FILL TO BE PLACED IN 12" LAYERS WHERE HEAVY VIBRATORY COMPACTION EQUIPMENT IS USED AND 6" LIFTS WHERE HAND OPERATED EQUIPMENT IS REQUIRED. EACH LIFT SHALL BE COMPACTED TO 95% MODIFIED DRY DENSITY THROUGH THE MODIFIED PROCTOR COMPACTION TEST, ASTM D-1557.
- ALL CONTROLLED FILL MATERIAL SHALL BE A SELECT GRANULAR MATERIAL FREE FROM ALL ORGANICS OR OTHERWISE DELETERIOUS MATERIAL WITH NOT MORE THAN 20% BY WEIGHT PASSING A NO. 200 SIEVE (CLASSIFIED AS SC, SM, SP OR BETTER IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM) AND WITH A PLASTICITY INDEX NOT EXCEEDING 6%.
- FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY SOILS ENGINEER PRIOR TO CONCRETE PLACEMENT. SOFTENED OR OTHERWISE UNSUITABLE BEARING MATERIALS SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL OR WITH LEAN CONCRETE (2,000 PSI).
- LOOSENEED BEARING SOILS SHALL BE RECOMPACTED WITH A SMALL VIBRATORY PLATE COMPACTOR PRIOR TO PLACEMENT OF REINFORCING BARS.

**STRUCTURAL SPECIFICATIONS:**

FLOOR STRUCTURE: 14" TJI @ 16" O.C.  
 ROOF STRUCTURE: Trusses @ 24" O.C.  
 WALLS STRUCTURE: 2X6 @ 16" O.C.  
 Beam support posts to be continuous (no hinge)  
 BEAMS/HEADERS, FOUNDATIONS & FOOTINGS TO BE AS PER STRUCTURAL ENGINEER

**ENERGY CODE NOTES:**

ROOF R60, WALLS R23,  
 SLAB R20  
 WINDOWS/DOORS U VALUE: .28 OR BETTER  
 SHGC +VT AS TO COMPLY WITH IBC-NY 2020  
 RESIDENTIAL BUILDING & ENERGY CODE.

(NY) TABLE R602.1.2 INSULATION AND PENETRATION REQUIREMENTS BY COMPONENT\*

CLIMATE ZONE	FENESTRATION U-FACTOR*	SKYLIGHT U-FACTOR*	GLAZED FENESTRATION SHGC**	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRACK/ JOINT WALL R-VALUE
4	0.32	0.55	0.40	49	20 or 13a-17	8/13	19	10/13	10, 0.9	10/13
5	0.30	0.55	NR	49	20 or 13a-17	10/17	20†	10/19	10, 0.9	10/19
6 (Option 1)	0.30	0.55	NR	49	20a† or 13a-17	10/20	20†	10/19	10, 0.9	10/19
6 (Option 2)	0.38	0.55	NR	40	22 (25a)†	10/21	20†	10/19	10, 0.9	10/19

\* R-Value shall be as follows:  
 a) As noted on drawings. b) Outside and SHGC are minimums. Where insulation is installed a cavity that has less than the label or design thickness of the insulation, the installed R-value of the system shall be not less than the R-value specified on the label.  
 c) The transmission (U-factor) includes air leakage. The SHGC column applies to all glass fenestration.  
 d) "100% opaque" is continuous insulation on the interior or exterior of the fenestration or the fenestration and "100% opaque" means 0-5 continuous insulation on the interior or exterior of the fenestration or the fenestration and "100% opaque" means 0-5 continuous insulation on the exterior or interior of the fenestration.  
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**PLYWOOD/GYP. BOARD SHEATHING GENERAL NOTES:**  
 (UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING SHALL APPLY)

- ALL PLYWOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN PLYWOOD ASSOCIATION (APA) SPECIFICATIONS.
- ALL WALL PANEL SHEATHING SHALL BE 1/2" (NOM.) TYPE CDX. EXP. APA RATED SHEATHING. UNLESS OTHERWISE INDICATED, CONNECT WALL SHEATHING WITH 100 COMMON NAILS SPACED 6" O/C AT SUPPORTED PANEL EDGES AND 12" O/C AT INTERMEDIATE SUPPORTS.
- INSTALL ALL PLYWOOD SHEATHING WITH THE LONG DIMENSION OF THE PANEL ACROSS SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER PANEL END JOINTS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDED BY THE SHEATHING MANUFACTURER.
- ALL NAILING SHALL BE CAREFULLY DRIVEN AND NOT OVERDRIVEN. THE USE OF STAPLES IS PROHIBITED FROM USE.
- PROVIDE 2x BLOCKING AT UNSUPPORTED PANEL EDGES FOR ALL ROOFS, FLOORS AND WALLS.

**WOOD FRAMING GENERAL NOTES:**

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING SHALL APPLY)

- ALL WOOD FRAMING MATERIAL SHALL BE SURFACED DRY AND USED AT 19% MAXIMUM MOISTURE CONTENT.
  - ALL STUD AND WALL FRAMING SHALL BE EITHER OF THE FOLLOWING:
    - NO. 2 GRADE SOUTHERN YELLOW PINE (SYP)
    - NO. 2 GRADE SPRUCE-PINE-FIR (SPF)
 "STUD" GRADE MATERIAL IS STRICTLY PROHIBITED FROM USE
  - ALL JOIST, RAFTER & MISC. FRAMING SHALL BE NO. 2 GRADE, DOUGLAS FIR. PROVIDE FULL-DEPTH (OR METAL) BRIDGING AT MIDSPAN AND AT A MAXIMUM SPACING OF 8'-0" O/C IN BETWEEN.
  - ALL FRAMING EXPOSED TO THE WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE-TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION SPECIFICATION AND BE NO. 2 SOUTHERN PINE. WHERE POSSIBLE, ALL CUTS AND HOLES SHOULD BE COMPLETE BEFORE TREATMENT. CUTS AND HOLES DUE TO ON-SITE FABRICATION SHALL BE BRUSHED WITH 2 COATS OF COPPER NAPHTHENATE SOLUTION CONTAINING A MINIMUM OF 2% METALLIC COPPER IN SOLUTION (PER AWPA CT. M4).
  - THE CONTRACTOR SHALL CAREFULLY SELECT LUMBER TO BE USED IN LOADBEARING APPLICATIONS. THE LENGTH OF SPLIT ON THE WIDE FACE OF 3" (NOMINAL) AND THICKER LUMBER SHALL BE LIMITED TO 1/2 OF THE NARROW FACE DIMENSION.
  - PROVIDE DOUBLE JOISTS UNDER ALL PARTITIONS WHICH RUN PARALLEL WITH JOISTS AND UNDER ALL CONCENTRATED LOADS FROM FRAMING ABOVE.
  - PROVIDE HEADER BEAMS OF THE SAME SIZE AS JOISTS OR RAFTERS TO FRAME AROUND OPENINGS IN THE PLYWOOD DECK UNLESS OTHERWISE INDICATED.
  - STRUCTURAL STEEL PLATE CONNECTORS SHALL CONFORM TO ASTM A-36 SPECIFICATION AND BE 1/4" THICK UNLESS OTHERWISE INDICATED. BOLTS CONNECTING WOOD MEMBERS SHALL BE PER ASTM A-307 AND BE 3/4" DIAMETER UNLESS OTHERWISE INDICATED. PROVIDE WASHERS FOR ALL BOLT HEADS AND NUTS IN CONTACT WITH WOOD SURFACES.
  - BOLT HOLES SHALL BE CAREFULLY CENTERED AND DRILLED NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER. BOLTED CONNECTIONS SHALL BE SNUGGED TIGHT BUT NOT TO THE EXTENT OF CRUSHING WOOD UNDER WASHERS.
  - PREFABRICATED "MICROLAM" LUMBER HEADERS AND BEAMS SHALL BE AS MANUFACTURED BY "LEVEL BY WEYERHAEUSER," OR APPROVED EQUAL. MICRO-LAM MATERIAL SHALL BE 2.0E GRADE WITH A Fd OF 2,600 PSI. DO NOT CUT OR NOTCH MICRO-LAM MATERIAL WITHOUT THE MANUFACTURER'S APPROVAL.
  - PREFABRICATED METAL JOIST HANGERS, HURRICANE CLIPS, HOLD-DWN ANCHORS AND OTHER ACCESSORIES SHALL BE AS MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY," OR APPROVED EQUAL. INSTALL ALL ACCESSORIES PER THE MANUFACTURER'S REQUIREMENTS. ALL STEEL SHALL HAVE A MINIMUM THICKNESS OF 0.04 INCHES (PER ASTM A446, GRADE A) AND BE GALVANIZED (COATING G60).
  - HOLES AND NOTCHES DRILLED OR CUT INTO WOOD FRAMING SHALL NOT EXCEED THE REQUIREMENTS OF LATEST EDITION OF THE INTERNATIONAL BUILDING CODE.
  - ALL PLATES, ANCHORS, NAILS, BOLTS, NUTS, WASHERS, AND OTHER MISCELLANEOUS HARDWARE SHALL BE HOT DIP GALVANIZED.

SEE SHEETS A3.1 & A4.1 & A2.1 FOR BUILDING SECTION & INSULATION R AND U VALUES. PRESCRIPTIVE METHOD.



PROPOSED FRONT VIEW

LOCATION PLAN

**CAST-IN-PLACE CONCRETE GENERAL NOTES:**

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING SHALL APPLY)

- CONCRETE WORK SHALL CONFORM WITH THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318 (LATEST EDITION).
- UNLESS OTHERWISE INDICATED ON DRAWINGS CAST-IN-PLACE CONCRETE SHALL DEVELOP A STRENGTH OF 4,000 PSI (FOOTINGS, FOUNDATION WALLS AND RETAINING WALLS); 4,000 PSI (SLAB ON GRADE) AT 28 DAYS.
- TEMPERATURE REINFORCING SHALL BE SUFFICIENTLY EMBEDDED TO DEVELOP FULL STRENGTH IN CONCRETE WALLS AND SLABS.
- PROVIDE ADEQUATE TIES FOR REINFORCEMENT IN SLABS, BEAMS, PIERS AND WALLS. REINFORCEMENT TO BE HELD AT CORRECT DISTANCE FROM FORMS AND EARTH BY STEEL CHAIRS OR TIES.
- FOLLOW C.R.S.I. RULES FOR PLACING OF REINFORCING STEEL AND ACCESSORIES.
- THIS CONTRACTOR SHALL COOPERATE WITH OTHER TRADES AND WHERE REQUIRED INSTALL ALL BUILT-IN WORK, SLEEVES, INSERTS, ETC., AS REQUIRED FOR A COMPLETE JOB.
- STRUCTURAL MEMBERS SHALL BE POURED FOR THEIR FULL DEPTHS IN ONE OPERATION. CONSTRUCTION JOINTS SUCH AS A DAY'S POUR JOINTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE SPAN, MAIN REINFORCING TO RUN THROUGH THE JOINT, KEY AND ROUGHEN JOINTS TO EXPOSE AGGREGATE FOR CHEMICAL BOND.
- NO HORIZONTAL JOINTS SHALL BE PLACED IN WALLS EXCEPT AS SHOWN ON THE DRAWINGS, WITHOUT THE APPROVAL OF THE ENGINEER.
- STRUCTURAL SLABS ON GRADE SHALL BE OF A THICKNESS AND REINFORCED AS INDICATED ON DRAWINGS.
- SLABS-ON-GRADE SHALL HAVE THICKENINGS, DEPRESSIONS, OPENINGS, ETC., AS REQUIRED OR AS SHOWN HEREIN OR ON ARCHITECTURAL DRAWINGS.
- PROVIDE 100% CONTINUITY OVER SUPPORTS FOR CONTINUOUS SLABS AND BEAMS.
- TOP ELEVATION OF SLABS SHALL VARY ACCORDING TO FINISH FLOOR MATERIAL. SEE ARCHITECTURAL DRAWINGS.
- SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS IN, FLOORS AND WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.
- MAXIMUM STEP OF FOOTINGS SHALL BE ONE VERTICALLY TO TWO HORIZONTALLY WHERE ELEVATIONS CHANGE.
- CONCRETE SHALL CONSIST OF THE FOLLOWING:
  - READY MIX CONCRETE (ASTM C94)
    - MAX WATER TO CEMENT RATIO = 0.50
    - MAX AGGREGATE CONTENT SIZE OF 3/4 INCH (ASTM C33)
    - MAX SLUMP OF 5" + OR - AN INCH (ASTM C143)
    - PORTLAND CEMENT: ASTM-C 150, TYPE 1
    - CLEAN POTABLE DRINKING WATER
    - AIR CONTENT TO BE 6% +/- 1.5% (INTERIOR SLABS TO HAVE 0% AIR)
- REINFORCING STEEL SHALL CONSIST OF THE FOLLOWING:
  - REINFORCING BARS: ASTM - A 615 GRADE 60 KSI
  - WELDED WIRE FABRIC: ASTM-A 185
- PROVIDE CONTINUOUS REINFORCING WHEREVER POSSIBLE, PLACE ONLY AS SHOWN OR APPROVED. STAGGER SPLICES WHERE POSSIBLE.
- ALL REINFORCING STEEL AND EMBEDMENT TO BE HELD SECURELY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO ALLOW WALKING ON REINFORCEMENT.
- DETAIL ACCORDING TO ACI STANDARD 315, MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES.
- CONCRETE MEMBERS SHALL NOT BE LOADED UNTIL SATISFACTORY CONCRETE STRENGTH HAS BEEN OBTAINED.
- NO ADMIXTURES MAY BE USED UNLESS PRIOR APPROVAL BY THE OWNER/ENGINEER.
- COLD WEATHER REQUIREMENT SHALL BE USED DURING FREEZING OR NEAR FREEZING WEATHER - ACI 306.1-90. COLD WEATHER IS DEFINED AS 3 DAYS WITH AVG. TEMP. BELOW 40F.
- DURING HOT WEATHER CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH ACI 305.

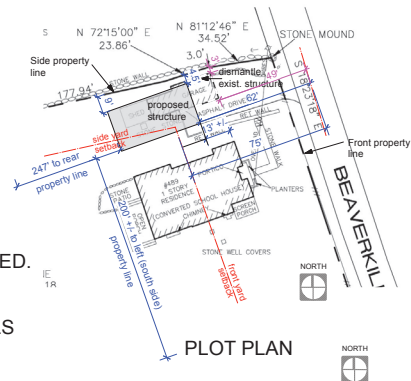
**SCOPE OF WORK:**

REPLACE EXISTING 614 SF FOOTPRINT GARAGE & STORAGE & HOME OFFICE STRUCTURE WITH A PROPOSED 792 SF FOOTPRINT GARAGE & HOME OFFICE & STORAGE. EXISTING IS 49' FROM CENTER OF ROAD AT FRONT & 3' FROM THE NORTH SIDE PROPERTY LINE. PROPOSED IS 62' FROM THE FRONT AND 4.5' FROM THE SIDE.

**DRAWING LIST:**

**A0 NOTES**

- A0.0 EXISTING SITE
- A1.0 FOUNDATION PLAN
- A1.1 1ST FLOOR PLAN
- A1.2 2ND FLOOR PLAN
- A1.1L 1ST FL LIGHTING
- A1.2L 2ND FL LIGHTING
- A2.1 ELEVATIONS
- A2.2 WINDOWS & DR SCHED.
- A3.1 SECTIONS
- A4.1 WALL DETAILS
- A4.2 FOUNDATION DETAILS
- A5.1 DETAILS



PLOT PLAN

INNOVATIVE. SUSTAINABLE. DESIGN.

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 Architect

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DATE	REVISION
10.2.23	Building Department Filing
9.20.23	Progress Drawings
9.13.23	Pre-construction drawings
5.22.23	Drawings
6.1.23	JSA FILING

489 Beaverkill Road  
 Town of Olive, NY

46.3-2-27



DESCRIPTION

NOTES

PAGE NO.

A0