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I▫HOUSE
ARCHITECTURE

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ihousearchitecture.com

March 22, 2022

Mr. Gary A. Loftus
Building Sub Code Official
Township of Manchester
1 Colonial Drive
Manchester Township, NJ 08759

Reference: **1108 4th Avenue** Block: 1.63 Lot: 9

Dear Mr. Loftus,

Thank you for your review of our drawings of the above referenced project. Per your action item list, the following changes have been made to the construction documents (three signed & sealed copies supplied here with).

- The ResCheck Energy Code Calculations shown on the plans are revised under the 2018 energy code.
- The window above the bathroom tub is to be tempered safety glass.
- Contractor to follow up with revision to his building permit application to include the foundation repair work and addition of noted structure (parallam, column and footing) as per your email.

If you should have any questions or comments about this, please do not hesitate to contact me at my office; (732)749-3525. Thank you.

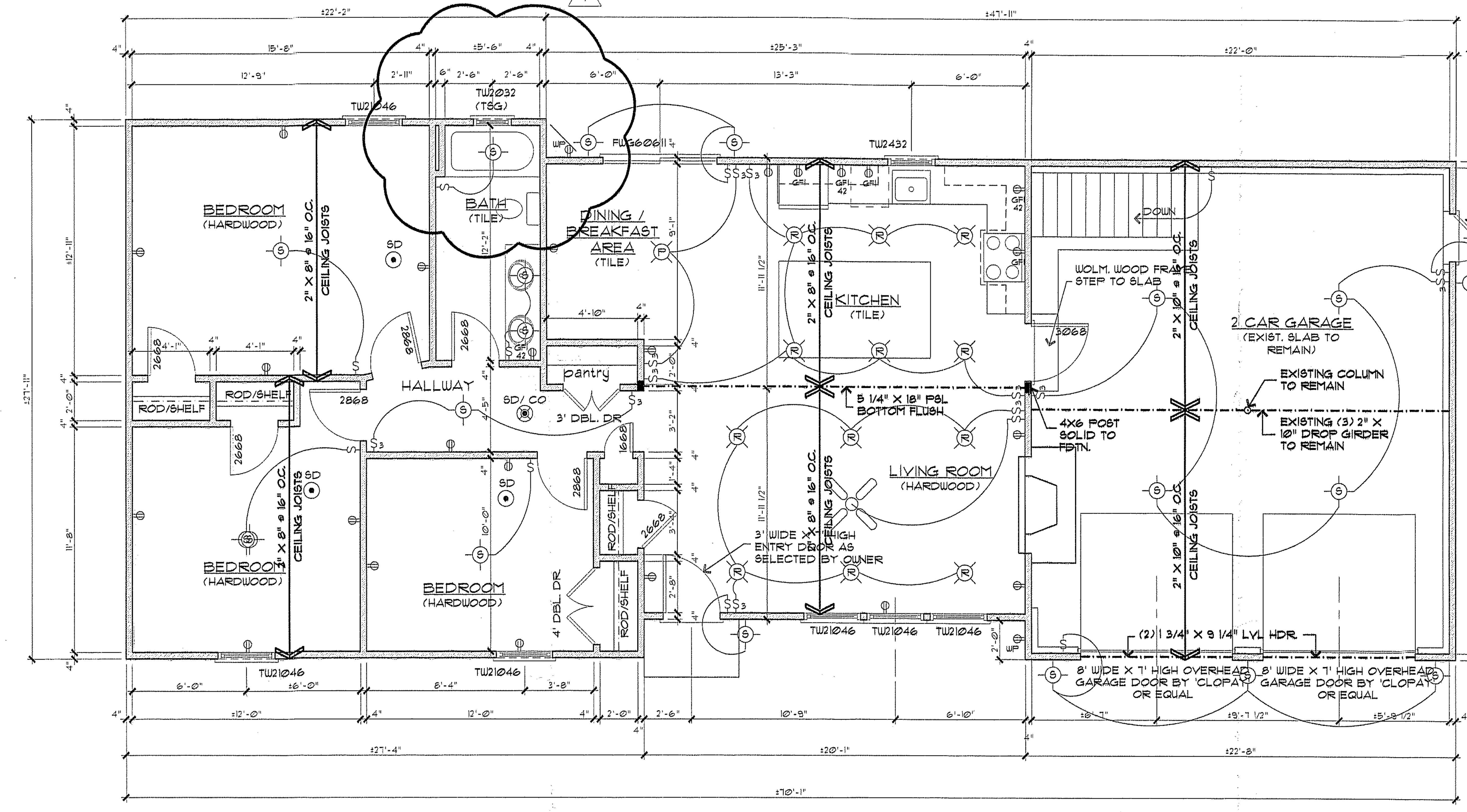
Yours truly,

Paul Lawrence, R.A.

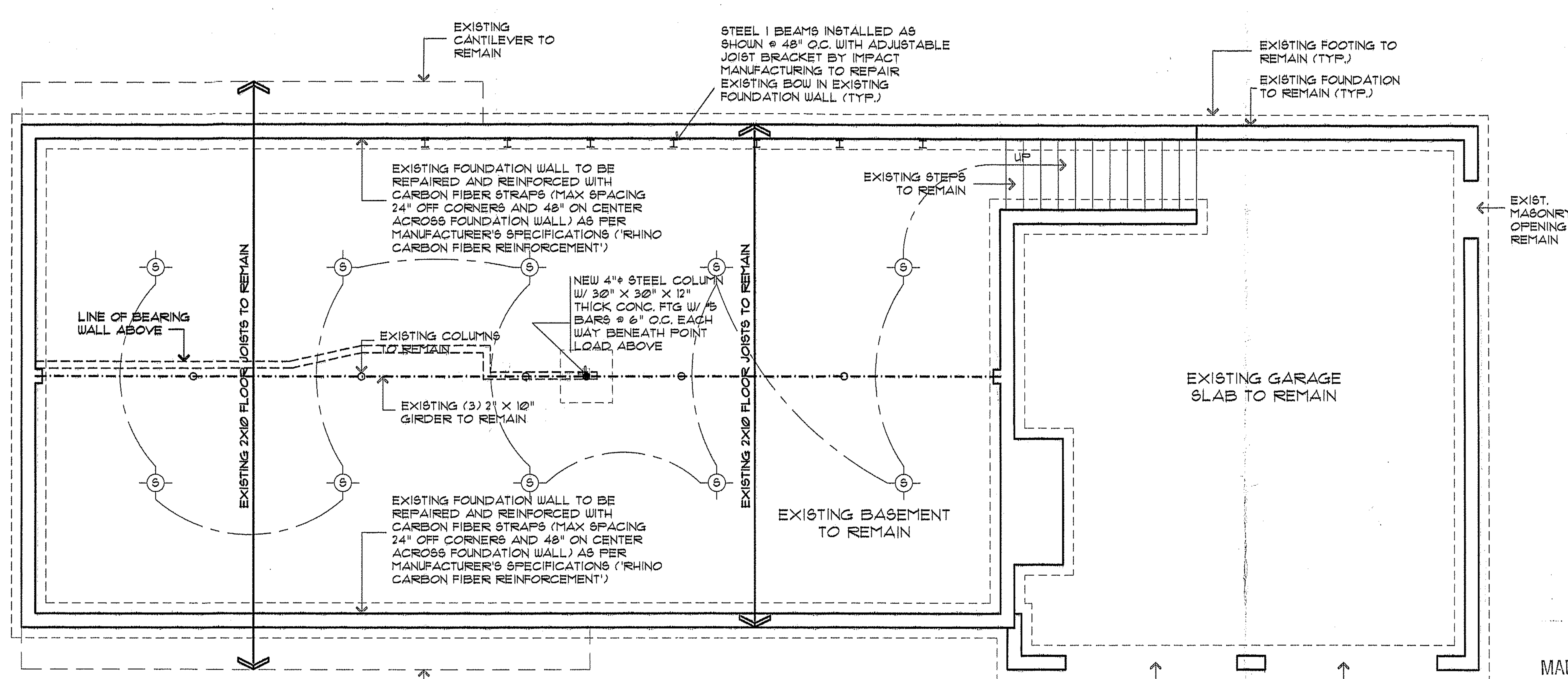
ELECTRICAL LEGEND

Symbol	Description
$	SINGLE POLE SWITCH
$3	THREE WAY SWITCH
	DUPLEX RECEPTACLE OUTLET
	1/2 SWITCHED DUPLEX RECEPTACLE OUTLET
GFI 42	GROUND FAULT RECEPTACLE - 42" A.F.F
WP	WATERPROOF RECEPTACLE
	SURFACE MTD. CLG. FAN
SD	HARD WIRED SMOKE DETECTOR W/ BATTERY BACK UP
S	SURFACE MTD. INCAND. FIXTURE
R	RECESSED INCAND. FIXTURE
P	PENDANT INCAND. FIXTURE
	EXHAUST FAN / LIGHT FIXTURE
CO	CARBON MONOXIDE DETECTOR (BATT. OP.)
SD/CO	SMOKE DETECTOR & CARBON MONOXIDE DETECTOR COMBINATION UNIT

NOTES:
1.) THIS IS A SUGGESTED LAYOUT AS PER CODE ONLY. G.C. SHALL PERFORM A WALK-THRU W/ OWNER AND ELECTRICAL CONTRACTOR TO DETERMINE SPECIFIC LOCATION AND FIXTURE TYPES.
2.) COMPUTER, PHONE, AND CABLE LINES ARE TO BE AS PER OWNER.
4.) PROVIDE CONCRETE ENCASED GROUND AS REQUIRED BY THE NEW JERSEY UNIFORM CONSTRUCTION CODE, ELECTRICAL SUBCODE



FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



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

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MANCHESTER TOWNSHIP RELEASED FOR PERMIT SUB-CODE DATE
BUILDING 3/25/2022
3/25/2022

I-HOUSE ARCHITECTURE
1600 Highway 71 Suite 3, Belmar, New Jersey 07719
Phone: 732-749-3525 Fax: 732-749-8427

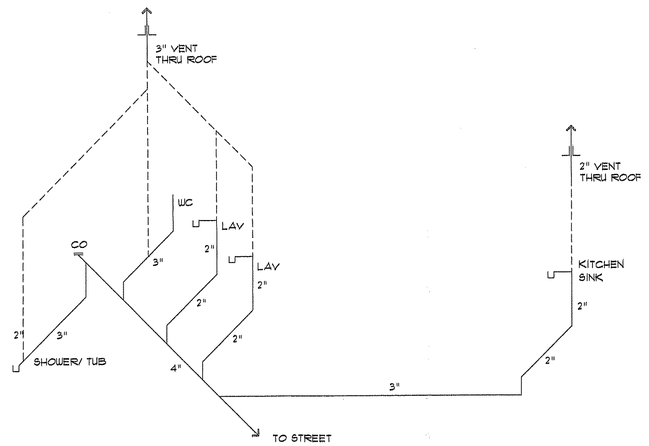
N.J. LIC. NO. 12441
PAUL LAWRENCE

DATE	REVISIONS / COMMENTS:	BY
3/21/22	AS PER REVIEW LETTER 3/21/22	MKY

RENOVATION / RE-BUILD
ESTATE OF DENNIS JAY HARKER
1108 4TH AVENUE, MANCHESTER TOWNSHIP
LOT: 9 BLOCK: 163

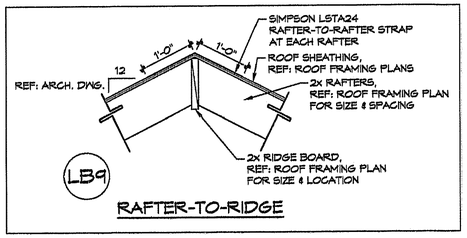
DRAWN:	MKY
JOB:	2203
DATE:	3/15/22

A-2



PLUMBING RISER DIAGRAM

NOT TO SCALE



RAFTER-TO-RIDGE

UPLIFT RAFTER CONNECTION:

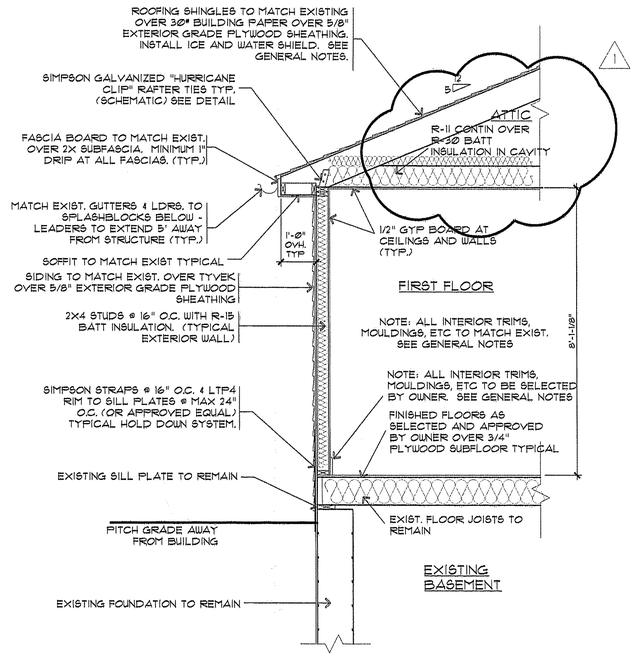
1. IF THE ROOF RAFTERS AND 2ND FLOOR STUDS ALIGN VERTICALLY, THEN THE CONTRACTOR SHALL PROVIDE SIMPSON H2A HOLDDOWNS AT THE END OF EACH RAFTER. THIS TYPE OF HOLD DOWN CAN BE INSTALLED FROM THE INTERIOR OF BUILDING.
2. IF THE ROOF RATERS AND 2ND FLOOR STUDS DO NOT ALIGN VERTICALLY, THEN THE CONTRACTOR SHALL PROVIDE SIMPSON H2.5A HOLDDOWNS AT THE END OF EACH RAFTER. (THIS TYPE OF HOLDDOWN MUST BE INSTALLED FROM THE EXTERIOR OF THE BUILDING.)

(REFERENCE TYPICAL DETAILS ON S4.1 FOR ADDITIONAL INFORMATION)

FASTENER SCHEDULE

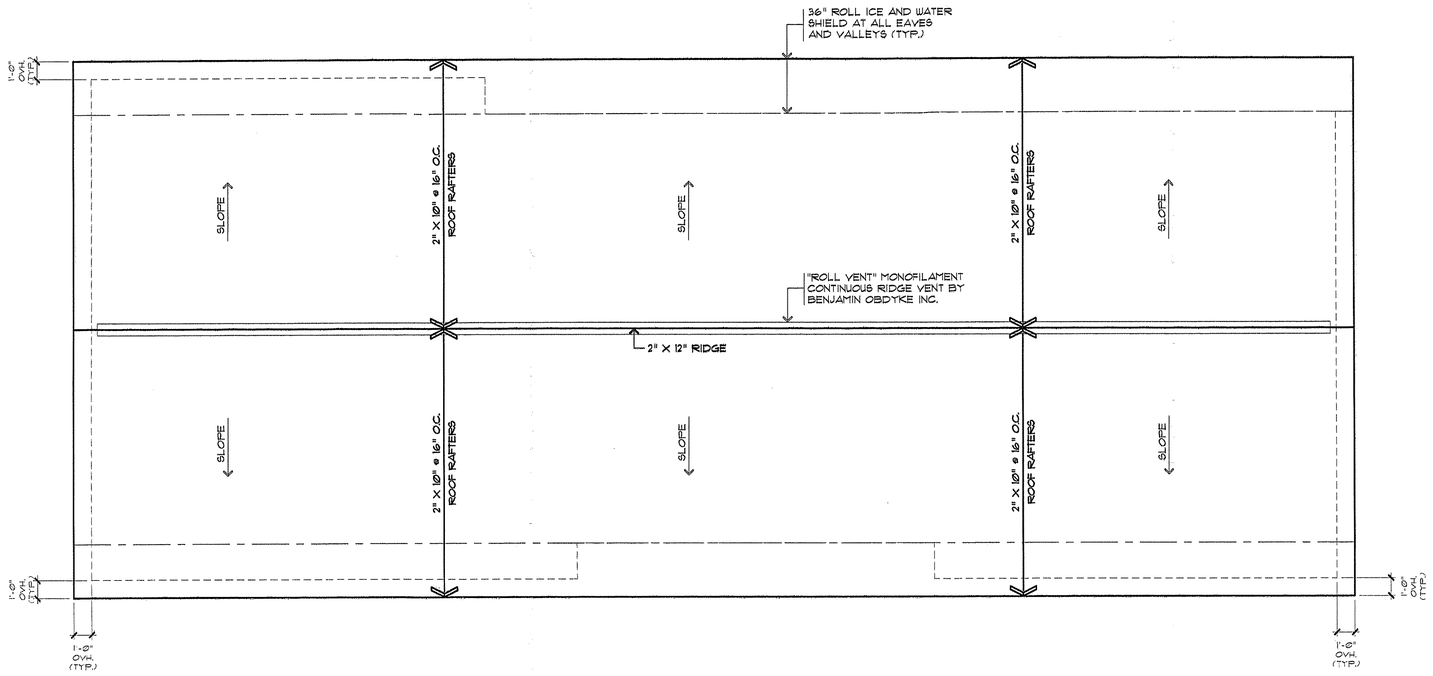
Joint Description	No. of Common Nails	No. of Box Nails	Nail Spacing
Roof Framing			
Blocking to Rafter (Toe-nailed)	2- 8d	2- 10d	each end
Rim Board to Rafter (End-nailed)	2- 16d	3- 16d	each end
Wall Framing			
Top Plates at Intersections (Face-nailed)	2- 8d	2- 10d	at joints
Stud to Stud (Face-nailed)	2- 16d	3- 16d	24" o.c.
Header to Header (Face-nailed)	16d	16d	16"o.c. Along edges
Floor Framing			
Joist to Sill, Top plate or Girder (Toe-nailed)	4- 8d	4- 10d	Per joist
Blocking to Joist (Toe-nailed)	2- 8d	2- 10d	each end
Blocking to Sill or Top Plate (Toe-nailed)	3- 16d	4- 16d	each block
Ledger Strip to Beam or Girder (Face-nailed)	3- 16d	4- 16d	each joist
Joist on Ledger to Beam (Toe-nailed)	3- 8d	3- 10d	per joist
Band Joist to Joist (End-nailed)	3- 16d	4- 16d	per joist
Band Joist to Sill or Top Plate (Toe-nailed)	2- 16d	3- 16d	per foot
Roof Sheathing			
Wood Structural Panels			
rafters or trusses spaced up to 16"o.c.	8d	10d	6" edge / 6" field
rafters or trusses spaced over 16"o.c.	8d	10d	4" edge / 4" field
gable endwall rake or rake truss w/o gable overhang	8d	10d	6" edge / 6" field
gable endwall rake or rake truss w/ structural outlookers	8d	10d	6" edge / 6" field
gable endwall rake or rake truss w/ lookout blocks	8d	10d	4" edge / 4" field
Ceiling Sheathing			
Gypsum Wallboard	5d coolers	-	7" edge / 10" field
Wall Sheathing			
Wood Structural Panels			
studs spaced up to 24"o.c.	8d	10d	6" edge / 12" field
1/2" and 25/32" Fiberboard Panels	8d	-	3" edge / 6" field
1/2" Gypsum Wallboard	5d coolers	-	7" edge / 10" field
Floor Sheathing			
Wood Structural Panels			
1" or less	8d	10d	6" edge / 12" field
greater than 1"	10d	16d	6" edge / 6" field

Note: Sizes given for nails are common wire sizes. Box and pneumatic nails of equivalent diameter and equal or greater length to the specified common nails may be substituted unless otherwise prohibited.



TYPICAL WALL SECTION

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



ROOF PLAN

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

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DATE	REVISIONS / COMMENTS:	BY
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RENOVATION / RE-BUILD
ESTATE OF DENNIS JAY HARKER
1108 4TH AVENUE, MANCHESTER TOWNSHIP
LOT: 9 BLOCK: 163

DRAWN: MKY
JOB: 2203
DATE: 3/15/22

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SHT. 3 OF 4

GENERAL NOTES & SPECIFICATIONS

Estate of Dennis Jay Harker
1108 4th Avenue, Manchester Township, New Jersey

NOTE: THESE GENERAL NOTES ARE TO BE THOUROUGHLY READ AND REVIEWED BY ALL CONTRACTORS, SUBCONTRACTORS AND FIELD PERSONELL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

Modifications to these plans and specifications by the owner or contractor shall not be made without written permission of the architect. Any modifications made without the architect's written permission will be the sole responsibility of the party enacting such modification.

The owner and contractor shall hold harmless the architect from all claims, damages, losses and expenses including legal fees arising out of or resulting from the performance of the work by the contractor. Upon obtaining a building permit, the owner and contractor hereby accept the hold harmless condition as stated.

Designs for job site safety, construction methods, procedures and sequencing are not part of these construction documents and are to be provided by others. The contractor shall provide bracing as required to maintain plumbness and stability during construction.

The contractor shall check and verify all dimensions and conditions prior to construction. Do not scale the drawings. Written dimensions shall govern. In case of conflict between the General Notes, Specifications and Details, the most rigid requirements shall govern.

These drawings are an instrument of service and remain the property of the architect. The drawings shall not be used without the architect's consent. The drawings shall not be used for issue of a building permit unless signed and sealed by the architect. Construction administration and management are not part of these drawings or contract.

BUILDING & SITE DATA
Construction Type: 5B
Use Group: R5
Wind Speed Design: Wind speed @ 33': 95 mph and 115 mph @ 3 second gusts
Building code reference: IRC 2015 NJ Edition

PROTECTION OF ADJACENT PROPERTY AND JOB SITE SAFETY
Job site safety, construction means and methods and designs and compliance with NJ State regulations regarding the protection of adjacent property are not part of these construction documents and are to be provided by others. The contractor shall provide shoring to maintain the structural integrity of the existing structures where applicable.

SITE ENGINEERING
Site engineering, grading, drainage, landscape, walkway, patio and driveway designs & specifications are to be provided by others. Schematic walkway and driveway designs are shown for the purposes of calculating impervious coverages.

LUMBER
All structural framing lumber to be douglas fir #2 structural Fb 1200 p.s.i. E 1,300,000 or better and as noted on drawings. All engineered wood framing is to be to be installed as per manufacturer's recommendations and specifications. All joist and framing cuts and/or notches for plumbing and mechanicals to be performed in strict accordance with manufacturers guidelines. All cuts to be kept to an absolute minimum. All sills are to be 2X6 decay resistant 'Borate' treated, ACQ, or approved equal and anchored with 1/2" diameter by minimum 22" long stainless steel bolts (or as noted on plans and details) set at 4'-0" o.c. maximum. Install sill sealer, termite shields and minimum of two bolts per sill. Install 3" square hold down washers at all anchor bolt locations.

Wood girders resting on masonry are to be set on galvanized steel leveling plates as required. Where leveling plates are not necessary, set girders on .019 aluminum flashing. No untreated lumber is to bear directly on masonry. All headers are to be minimum (2) 2 x 10 at 2x4 walls and (3) 2 x 10 at 2x6 walls or as noted on drawings. All openings at 2 x 6 walls spanning 6 feet or greater are to receive (3) 1 ¼ x 9 ½ microlam headers or as noted on drawings. Coordinate header locations with window, door and opening heights as required. Install Simpson foundation tie down straps and strap ties #CS16 at every other stud. Typical between floor platforms. Solid & built up posts are to have full continuous solid bearing to the foundation. All hangers, connectors, caps, bases, etc. for carpentry are to be by Simpson or approved equal. Install in strict accordance to manufacturer's recommendations and specifications. Install reinforced double joists below parallel partitions above or as noted on plans. For mechanical access, install (2) pairs of double joists @ 16" oc with solid bridging @ 16" oc below partitions parallel to joists unless noted otherwise on plans. All specific framing notes on plans to take precedence.
All plywood sheathing shall be exterior type as follows (or as noted on drawings):
Roof sheathing : 5/8" C-D APA Exterior glue
Wall sheathing: 5/8" C-D APA Exterior glue
Floor sheathing: 3/4" APA Group 1 underlayment grade tongue and groove.INT-APA with exterior glue. Install all plywood glued and nailed.

Install plywood sheathing in order that plywood continuously laps rim board, bottom of studs and top of studs at all floor platforms, where applicable, including the first floor.

All engineered framing is to be installed as per the specifications and recommendations of Trus Joist / Weyerhauser, Georgia Pacific, or approved equal. Contractor may substitute multiple boards for single sizes where applicable. (Example: Use (1) 3 1/2" wide board instead of (2) 1 3/4" wide boards). Fasten all multi member units as required. Install squash blocks at load bearing areas as required by manufacturer.

WALL BRACING
Plywood sheathing shall serve as wall bracing: 5/8" plywood structural panels 32/16 grade with studs at 16" oc or better. Provide blocking as required for sheathing nailing, see fastener schedule. All sheathing installations to be performed in strict compliance with current codes and standards.

GENERAL SHEAR WALL CONSTRUCTION NOTES
1. All exterior walls shall be sheathed w/ 5/8" structural sheathing. Contractor shall provide a minimum of 8d at 6"oc along edges and 12" oc in field. Refer to plans for additional sheathing, nailing and holddown requirements.
2. Continuous exterior sheathing shall be oriented vertically and staggered vertically @ 4 ft o.c. to ensure a continuous transfer for shear forces throughout the entire wall.
3. Contractor shall place exterior sheathing to ensure that 2ft overlap for vertically oriented sheathing and 1ft overlap for horizontally oriented sheathing, between first and second floor walls at rim board location. Where overlap is not provided, contractor shall provide Simpson LTP4 plates @ 16" oc.
4. Wall construction nailing and sheathing applies to all portions of the designated walls including areas above and below windows, doors and other openings.
5. Gable end walls and rafter to ridge construction shall be built in accordance with typical details shown on plans where applicable.
6. All hold downs shall be continuous to foundation for ends of second and first floor shear walls that don't align. Provide Simpson straps as noted attached to (2) 2x studs minimum. Nail studs together with (2) 10d common wire nails @ 6" oc.
7. Typical sill plate anchor bolts shall be 5/8" diameter hooked bolt with a minimum 12" embedment. Provide Simpson LBPS5/8 square washers at each anchor bolt location. Reference plans for additional information.
8. Where applicable, CMU foundation walls located below shear walls shall be grouted solid with 3000 psi concrete and reinforced w/ a minimum of #5 bars @ 24" oc.
9. Typical holddown anchor bolt to be SB7/8x24 or as noted on plans. Contractor shall coordinate vertical reinforcing to provide (1) additional vertical bar at all holddown locations.
10. All sheathing and holddown fasteners shall meet the following requirements:
    - 8d common nails (length = 2 ½", dia. = 0.131")
    - 10d common nails (length = 3", dia. = 0.148")
    - 16d common nails (length = 3 ½", dia. = 0.162")

    If nail gun is used to install fasteners, contractor shall adjust penny size of nail to meet minimum length and diameter requirements above.

GYPSUM WALL BOARD
Install 1/2" gypsum board at all walls and ceilings typical or as noted on plans. Install moisture resistant "watercheck" green gyp. board at bathrooms and wet areas. Tape and spackle a minimum three coats. Finish walls as selected by owner. Painted walls and ceilings to receive a minimum of (1) coat primer, (2) coats high quality paint. "Durock" backer board or equivalent is to be installed at tile walls where applicable. (No sheetrock to be a manufactured in China)

FASTENERS
All fasteners shall comply with the fastening schedule. See fastening schedule for specific requirements. All exterior fasteners shall be stainless steel, galvanized or as noted on plans. Fasteners are to be compatible with any and all materials that they contact.

FINISH FLOORS
Finish floor selections to be confirmed with owner prior to construction. Install thresholds and transition saddles where applicable. Closets to receive continuous flooring to match their respective adjacent room flooring. Install flooring as per industry standards and as per the manufacturer's specifications and recommendations.

INSULATION
Install environmentally friendly "Eco-batt" insulation by Knauf. Insulation Typical. Knauf Insulation, One Knauf Drive, Shelbyville, IN 46176, TEL: 317-398-4434. Install in strict accordance with manufacturers recommendations and specifications. Install sound deadening insulation at interior walls and floors for sound control typical at bathrooms, laundry, and bedrooms. Install all insulation as per manufacturer's specifications. Install rigid insulation at basement foundation wall and slab perimeter.

SEALANTS
Seal the perimeter of all exterior doors and windows with GE silicone sealant or approved equal.

FLASHING
Install heavy gauge pre-finished aluminum flashing over all windows and doors at exterior. Install fiberglass pan flashing at balcony door sill areas receiving fiberglass. Flash all wood abutting masonry at exterior.

WINDOWS and DOORS
Install windows by **Andersen Windows & Doors 400 Series (w/ SDL)** as selected and approved by owner. Any glass components of doors and adjacent side windows are to be tempered safety glass. Confirm tempered glass panel orientation as required based on function and location. Contractor to confirm window grill patterns and style with owner prior to ordering. Window color, specialty glazing, hardware, grill profiles (where applicable), ramped sill insert and additional accessories are to be selected and approved by owner prior to construction. All units to include window screens where applicable. Provide screen options to owner for consideration. Units with sills less than 18" above finish floor are to include tempered glazing. Extend building paper into and over head, jamb, and sill rough opening. Install windows as per manufacturer's recommendations and specifications. Coordinate window heads as required for alignment with door heads where applicable. Verify extension jambs as required at various wall thicknesses. Combination window units to include reinforced steel joiners. Install full Tyvec window wrap at all window rough openings as per Tyvec specifications. Provide architect and owner with window presentation drawings and cut sheets for review and approval prior to ordering units.

Where the lowest portion of an operable window is greater than 72" above grade, the lowest point of clear opening of said window unit is 24" maximum above finished floor. Window and transom units are to be factory joined, where applicable. Multiple window units are to be factory joined with heavy duty reinforced steel joiners where applicable.

Interior hinged doors to be 1 ¾" solid core raised panel as selected and approved by owner. Exterior door units, transoms & sidelites to be insulated, corrosion resistant units as selected and approved by owner. Door panel style and appearance to be approved by owner prior to ordering & installation. All hardware as selected by owner. Contractor is to verify all door heights, rough in dimensions and clearances prior to ordering units. Verify rough opening requirements with door manufacturer prior to construction.

GUTTERS & LEADERS
Install new aluminum gutter and leader system, components, profile and color as selected and approved by owner. System design and specifications to be provided by others. All leaders to discharge to splash blocks or connect to approved underground drainage system complete with cleanouts, as required. Drainage designs and specifications are to be provided by others.

WATERPROOFING
Install "Ice and Water Shield" by 'Vycor' or approved equal self-adhesive strip membrane roof underlayment and flashing at eaves, valleys and other locations as recommended by manufacturer. Material to be installed in strict accordance to manufacturer's recommendations and specifications. 'Vycor' membranes supplied by Grace Construction Products, 62 Whittemore Ave, Cambridge, MA 02140 phone: 800-444-6459.

HANDRAILS AND GRAB BARS
Wall mounted handrails shall be supported by metal brackets spaced 4'-0" oc maximum. Minimum one bracket at ends. Brackets to be screwed directly to studs or solid blocking between studs. Install hand rails and grab bars as per manufacturer's recommendations and specifications. Grab bars to be screwed to studs and or solid blocking. Set handrails 36" above stair nosing. The handgrip portion of handrails shall have a circular cross section of 1 ¼" minimum to 2 5/8" maximum diameter.
Other grip surfaces to be approved by the building department prior to installation.

EXTERIOR COLORS
Exterior colors of all building components are to be provided by others. All painted, stained and /or field applied coatings are to be high quality, durable, and installed in multiple coats.

INTERIOR GUARD RAILS
Style and finish as selected and approved by owner. Top of guards to be no less than 36" above finished floor. Intermediate posts are to be bolted directly to the framing. Tops of guards to match handrail designs. Minimum guard height is 36". Spindles shall not create a ladder effect nor allow passage of a 4" sphere.

STAIR NOTES – where applicable
Maximum riser height is 8 ¼"
Minimum riser height is 4"
Minimum tread is 9"
Minimum head room at stairs = 6'-8" or as noted on plans
Minimum clear finished width of stairs not to be less than 36"
Handrails shall not project more than 4 ½" on either side of the stairway.
A minimum of one handrail shall run continuous.
The minimum clear width of the stairwell with one handrail is 31 ½" at the handrail.
The minimum clear width of the stairwell with handrails at both sides is 27" at the handrails.

EXTERIOR TRIM
Install vinyl or approved equal trim where applicable. Install trim in strict conformance with manufacturer's specifications. Verify trim is compatible with siding and other systems where applicable.

INTERIOR TRIM
All interior trim designs and specifications are to be provided by others. Provide allowances for base and crown moldings at locations approved by owner.

QUALITY & WORKMANSHIP
All work is to be performed with quality and workmanship and is to be performed as per recognized industry standards. All personnel to be highly trained and experienced in their respective fields. Minor details or incidental items not shown or specified, but necessary for a proper and complete installation shall be included as required.

PLUMBING
All plumbing work to be installed in conformance with the National Standard Plumbing Code and local jurisdiction. Complete designs and specifications are to be supplied by others. All fixtures to be selected by owner and installed by contractor. All plumbing lines to be insulated where applicable. All cutting of framing for plumbing access and all other mechanicals is to be kept at a bare minimum. The contractor is to provide new water and utility service / waste lines to & from the building as required. Confirm waste line locations and routing will fit within proposed framing designs prior to construction. Final designs and specifications to be provided by others and coordinated between the General Contractor and Mechanical Subcontractor. Install frost proof hose bibbs at locations selected and approved by owner.

KITCHEN AND MILLWORK
Cabinetry designs and specifications shown are schematic only. Kitchen, bath, laundry and other built in cabinet designs and specifications are to be provided by others.

APPLIANCES
Appliance selections are not part of these working drawings. All appliances are to be Energy Star compliant or better.

ELECTRICAL
All electrical work to be performed in strict accordance with the National Electrical Code. Complete designs and specifications to be provided by others. Contractor to obtain all permits and have required inspections made and obtain certificate of approval. All electrical equipment to bear U.L. label. All cutting of framing for electrical access is to be kept at a bare minimum. Furnish and install all wiring, wiring boxes, wiring devices, outlet boxes, fittings, panels, breakers, safety disconnects, plates, switches, and all items necessary for a complete installation.

UL tested, approved and labeled smoke and carbon monoxide detectors to be installed. Units to be hard wired with battery back up. One unit to activate all units. Furnish owner with all care and maintenance manuals. Light bulbs to be compact fluorescent where applicable. Verify recessed lighting works with mechanical designs where applicable.

Steel reinforcement rods to be electrically grounded as required by code. See detail.

HVAC / MECHANICAL SYSTEMS
The design of the heating, ventilation and air conditioning systems and all other mechanically related items are not part of these construction documents and are to be provided by others. The system is to be installed complete with all components and be fully operational. All floor penetrations of ducts, pipes, etc. to be fire stopped with non-combustible material throughout.

Provide mechanical access as required for HVAC equipment to service the various floor levels. The mechanical contractor is to review the plans prior to construction in order to locate potential areas requiring mechanical access ways, soffits, etc. Contractor to confirm mechanical equipment will fit within the proposed construction prior to the start of work. Provide outside combustion air and ventilation to mechanical equipment and laundry room equipment as required.

Mechanical designs and specifications are not part of this drawing set. Mechanical equipment areas are to be properly vented for mechanical systems as per code and installation manuals. Mechanical exhaust systems, combustion air supply and all other designs are to be provided by others. All equipment to be UL tested and approved and meet all state and local code requirements. Install all equipment in accordance to manufacturer's requirements and installation manuals. Install smoke and carbon monoxide detector in close proximity to mechanical equipment. All detectors to be hard wired with battery backup. One unit to activate all units. Thermostat units and mounting locations are to be installed where required by the manufacturer.

MANUFACTURER'S SPECIFICATIONS & RECOMMENDATIONS
All equipment, appliances, building components and various manufacturer systems are to be installed in compliance with the manufacturer's designs, specifications, recommendations and installation manuals and to conform to industry standards, state and local codes where applicable. All systems to be installed complete to be fully operational.

1

Generated by RES*check-Web* Software

Compliance Certificate

Project Estate of Dennis Jay Harker

Energy Code:	**2018 IECC**
Location:	**Toms River, New Jersey**
Construction Type:	**Single-family**
Project Type:	**New Construction**
Conditioned Floor Area:	**1,241 ft2**
Glazing Area	**11%**
Climate Zone:	**4 (5294 HDD)**
Permit Date:	
Permit Number:	

Construction Site:
1108 4th Avenue
Toms River, NJ 08753

Owner/Agent:

Designer/Contractor:
I House Architecture
1600 hwy 71, suite #3
Belmar, NJ 07719-2806
7327493525
mky@ihousearchitecture.com

Compliance Requirements (As entered)

Compliance: **1.9% Better Than Code** Maximum UA: **211** Your UA: **207** Maximum SHGC: **0.40** Your SHGC: **0.26**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.
It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Ceiling: Flat Ceiling or Scissor Truss	1,241	30.0	11.0	0.025	0.026	31	32
Wall: Wood Frame, 24" o.c.	1,226	15.0	0.0	0.074	0.060	77	63
Door 1: Solid Door (under 50% glazing)	41			0.400	0.320	16	13
Door: Glass Door (over 50% glazing) SHGC: 0.21	40			0.300	0.320	12	13
Window 1: Wood Frame SHGC: 0.28	100			0.300	0.320	30	32
Floor: All-Wood Joist/Truss	1,241	30.0	0.0	0.033	0.047	41	58

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2018 IECC requirements in RES*check* Version : REScheck-Web and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

Name - Title _____ Signature _____ Date _____

Project Title: Estate of Dennis Jay Harker
Data filename:
Report date: 03/21/22
Page 1 of 1

DESIGN LOADS (International Residential Code 2018):

Bedrooms = 30 psf (L.L.) + 10 psf (D.L.) = 40 psf (T.L.)
Floor = 40 psf (L.L.) + 10 psf (D.L.) = 50 psf (T.L.)
Attic (with clear height > 3'-6") = 20 psf (L.L.) + 10 psf (D.L.) = 30 psf (T.L.)
Attic (with clear height < 3'-6") = 10 psf (D.L.) = 10 psf (T.L.)
Roof = 20 psf (L.L.) + 15 psf (D.L.) = 35 psf (T.L.)
Balconies = 60 psf (L.L.) + 10 psf (D.L.) = 70 psf (T.L.)
Decks = 40 psf (L.L.) + 10 psf (D.L.) = 50 psf (T.L.)
Stairs = 100 psf (L.L.) + 10 psf (D.L.) = 110 psf (T.L.)
Handrails = 200 lbs. applied in any direction
Wind Loads = 115 m.p.h.

DESIGN DATA (International Residential Code 2018)

** Number of stories =	1		
** Height of structure =	16'-3"		
** Area calculations:	Basement Level =	Square Feet	
	First Floor =	1241	Square Feet
	Second Floor =	0	Square Feet
	Garage =	579.5	Square Feet
	Largest Floor =	1241	Square Feet
** Building area - All floors =	1241 Livable +	579.5 Gar. =	1820.5 Square Feet
** Volume of structure =	21,245 Cubic Feet	(addition only)	
** Construction classification =	5B		
** Total land area disturbed =	0 Square Feet		
** Fire grading =	0		
** Maximum live load =	See above		
** USE GROUP =	R5		

VENT SCHEDULE

** Ceiling Area =	1820.5 SF	
Total F.V.A required =	1820.5 X 144 / 300 =	873.8 Sq.In.
Soffit/Roof Vents required =	873.8 Sq.In./2 =	437 Sq.In.FVA
PROVIDED:		
Soffit Vents minimum =	48 L.F. x 9.5 Sq.In./L.F. =	437 Sq.In.FVA
Roof Ridge Vents minimum =	24.3 L.F. x 18 Sq.In./L.F. =	437.4 Sq.In.FVA
OR		
Roof Jack (Vents) minimum =	8 RJ x 60 Sq.In. each (min.)	480 Sq.In.FVA

** NOTE: VENTS USED FOR ABOVE CALCULATIONS ASSUME:
** Soffit Vents = 9.5 Sq.In./Ft. FVA minimum (2 3/4" wide)
** Ridge Vents = 18 Sq.In./L.F. FVA minimum
** Roof Jacks = 60 Sq.In. (min.) FVA each unit

I·HOUSE ARCHITECTURE
1600 Highway 71 Suite 3, Belmar, New Jersey 07719
Phone: 732-749-3525 Fax: 732-749-8427
NJ LIC. NO. 21441
PAUL LAURENCE

DATE	REVISIONS / COMMENTS:	BY
3/21/22	AS PER REVIEW LETTER 3/21/22	MKY

RENOVATION / RE-BUILD
ESTATE OF DENNIS JAY HARKER
1108 4TH AVENUE, MANCHESTER TOWNSHIP
LOT: 9 BLOCK: 163

DRAWN: MKY
JOB: 2203
DATE: 3/15/22

A-4

SHT. 4 OF 4