Jerry Lemega Architect

March 25, 2020

Specifications

for

Addition/Alteration

to Existing

Single Family Residence

for

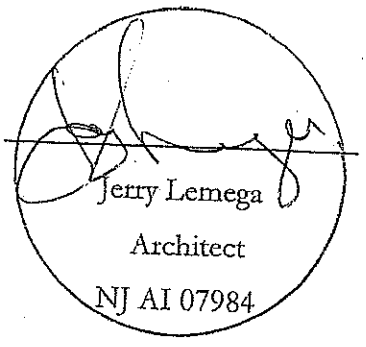
Mr. & Mrs. U. Pervesnik

193 Tennent Road

Marlboro

Monmouth County

New Jersey 07746



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Pervesnik Addition c 2020

General Notes

The Contractor's performance and execution of all aspects of the work will be in accordance to all local, state, and federal regulations, ordinances, and codes, specifically within the Township of Marlboro, Monmouth County, New Jersey.

The execution of all divisions of labor necessary to complete the work will be conducted in the highest standards of the trades involved, and be of the highest quality.

The Contractor will furnish and maintain all necessary insurance against property damage and liability to protect the Owner, his property, the Contractor and his employees, Subcontractors and their employees, during the course of the construction.

At the completion of the project the Contractor will remove all stains, marks, dirt, and so forth from all finished surfaces, clean all fixtures, glass, floors, hardware, and appliances, and leave the finished work in a clean and acceptable condition.

The Contractor will guarantee all materials and workmanship against defects and failure for a period of one year from date of completion.

The Contractor will include in the Contract all payments for permits and inspections required by local, state, and federal governing bodies, in order to complete the work.

During the course of the work, any areas disturbed not within the scope of the Contract Documents during the execution of the work will be restored to its original as new condition.

All errors, substitutions, and omissions, adaptations, or conditions which do not coincide with the Contract Documents; measurements, dimensions, materials, and site conditions included, and the work involved, will be brought to the attention of the Architect immediately. Such conditions as they affect the project must be inspected and approved by the Architect, before work may continue.

Architect is not responsible for any existing conditions concerning asbestos, lead paint, radon, or unforeseen structural deficiencies uncovered during the course of the work.

Sitework

All excavated materials will be stored in an area on the site subject to the Owner's approval for later use as backfill and regrading. Seed disturbed lawn areas to match existing grass.

Install 4 inch diameter perforated subsoil footing drain if required. Install leader boots for gutter runoff attached to subsoil drains emptying to daylight or sump/drainage pit, sized as required or splashblocks as mandated by municipality..

Tamp/compact all backfill and underslab areas.

Demolition

All materials designated for demolition or removal will be carted away at the end of the working day or stored in a safe and orderly manner before removal from the site, under the Owner's direction. All materials on the site are considered the Owner's property until released by the Owner for removal.

Concrete

All concrete shall cure to 3000 psi at 28 days according to current ACI standards for reinforced concrete. Maximum permissible water-cement ratio by weight shall be .51 for non air-entrained concrete; .40 for air-entrained concrete; 1-3" maximum slump range; 1" maximum aggregate size.

All exterior concrete shall be air-entrained. Allow 7 day curing before loading footings. Exposed exterior concrete shall have broom finish and exposed interior concrete to have smooth trowel finish.

No admixtures, additives, or anti-freeze shall be allowed; work must be carried out with temperature range above 40 degrees Fahrenheit, day and night for seven day period, initial cure; cover and protect against moisture loss, cold and extreme heat. All footings must be formed and rest on undisturbed earth 2000 psf minimum bearing capacity.

Masonry

Mortar for brick and concrete block shall be type S, in conformance to ASTM Standard C=270 (1800 psi @ 28 days); cement for mortar shall be Portland conforming to ASTM C-150, type 1; hydrated lime shall be Type S Mason's Lime.

Cement mortar parge shall be (2) two coat application, ½" thick; mix (1) part portland cement to (3) part sand, applied after (7) day initial curing of foundation wall, dampen wall before each coat. Apply mastic coat below finished grade.

Concrete masonry units shall be hollow load bearing, with minimum compressive strength @ 800 psi (ASTM C-90 N-I).

All work must be carried out with temperature range above 40 degrees fahrenheit, day and night, for (7) seven day period initial cure.

Metals

Steel reinforcing shall be standard deformed bars per ASTM A615 Grade 60 & anchor bolts shall conform to A36 specifications with 3 inch minimum concrete cover. Use spacers and wire ties to insure proper position of bars during concrete placement. Lap splice 30 inch minimum. Place anchor bolts before concrete cures.

All metal plate connectors and fasteners shall be commercially fabricated, galvanized, according to ASTM A-526, steel bolts and washers shall conform to ASTM A-307.

Flashings at corners, windows, roof intersections and penetrations, skylights, etc. shall be 24 gage aluminum, natural finish.

Wood

All rough framing shall be in accordance to the latest Timber Construction Standards, AITC Specifications, DOC PS 20-99 or American Softwood Lumber Standards, whichever are more restrictive.

Joists, studs, and rafters shall be #2 Douglas Fir-Larch (825 fb) or better. Structural headers, girders, columns and spandrels shall be #1 DF-L (1050 fb) or better.

Plywood sheathing shall be ½" CD exterior glue, Exposure I, APA trademark. Install wall sheathing full (8) foot vertical dimension, no horizontal joint unless blocked. Provide 1 x 3 cross bridging 8'-0" o.c. for all joists. Double joists under walls above. Provide solid blocking under all posts & column pointloads to foundation.

Plywood sheathing shall be ½" CD exterior glue, Exposure I, APA trademark. Plywood floor sheathing shall be ¾" tongue & groove Sturdi-flor CD Exposure I, glued & screwed to joists.

All lumber in contact with masonry and/or exposed, shall be pressure treated, rated for application.

Refer to NJIRC 2018 Table R602.3(1) for fastener schedule.

All engineered lumber girders shall be 2.0 E Parallam PSL or similar product, installed in strict accordance with Manufacturer's specifications and guidelines. Contractor shall submit documentation to Owner.

Thermal & Moisture Control

Exterior framed walls and ceiling spaces to have full thickness mineral wool batt insulation.

Exterior foundation wall to have 2 inch rigid insulation full height of wall (interior); two (2) coat ½" thick cement mortar parging with cove base on exterior.

Exposed insulation shall meet fire code restrictions of IRC NJ 2018.

Roof and soffit to have continuous soffit and ridge/hip vents.

Flash and calk sill plates, exterior wall and roof penetrations, wall intersections, door and window sills and fins, with sill end dams.

Doors and windows as selected by Owner installed in accordance to Manufacturer's Specifications.

Provide and install all metal gutters and leaders, attached to pvc subsoil drains or splash pans as indicated on plans.

Finish

New Rooms and Closets shall be finished with ½" gypsum wallboard on all interior walls and ceilings with (3) coat tape and spackle finish, sanded between coats; paint color as selected by Owner, (2) coat latex primer with latex finish coat. Bathrooms shall have ½" water resistant gypsum board walls and ceilings, paint finish.

Shower and tub shall have thinset ceramic tile walls over waterproof crack resistant membrane minimum 7 feet hi on ½ " cement board. Bathroom floors to have thinset ceramic tile over waterproof crack resistant membrane, on ½ " cement board. Shower pan shall have waterproof liner with minimum 4 inch curb.

Provide and install new T & G hardwood floor on first and second floors with wood base except as noted.

Woodwork

Interior wood base, trim, casings and moldings style and finishes as selected by Owner..

HVAC

Provide new attic mounted HVAC unit and condenser as selected by Owner. Reinforce framing as required. Locate exterior condenser and venting as directed by Owner. Provide Duct layout for Owner's approval.

Electrical

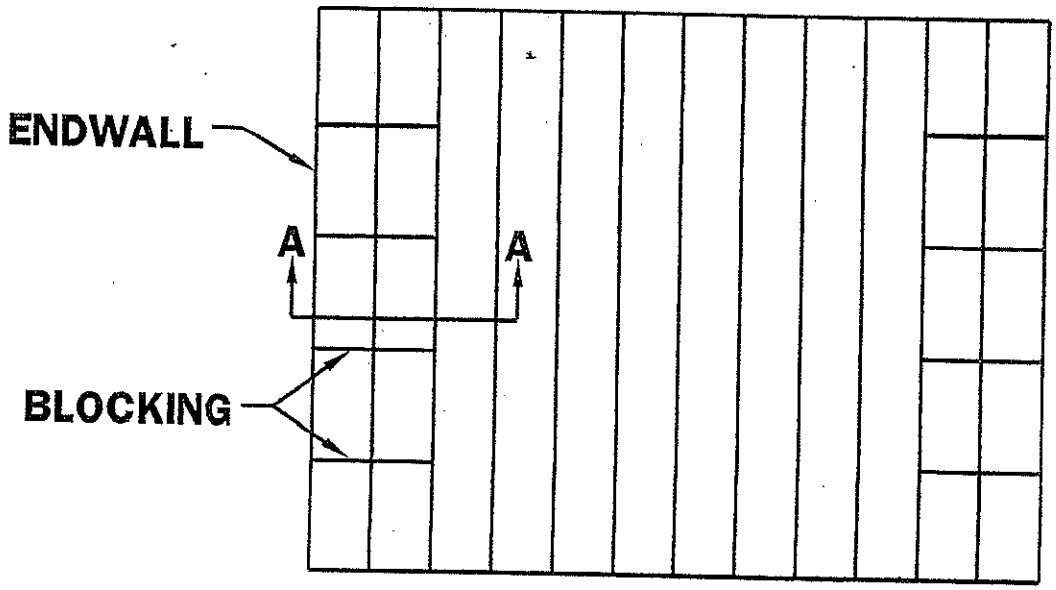
Electrical Contractor shall inspect existing service and equipment to determine adequacy of capacity for addition and provide wiring/riser diagram for permit approval and install new outlets, fixtures & switches as per plan. Contractor to designate all switches, fuses, circuits, and fixtures subject to Owner's approval. Install all fixtures as provided by Owner.

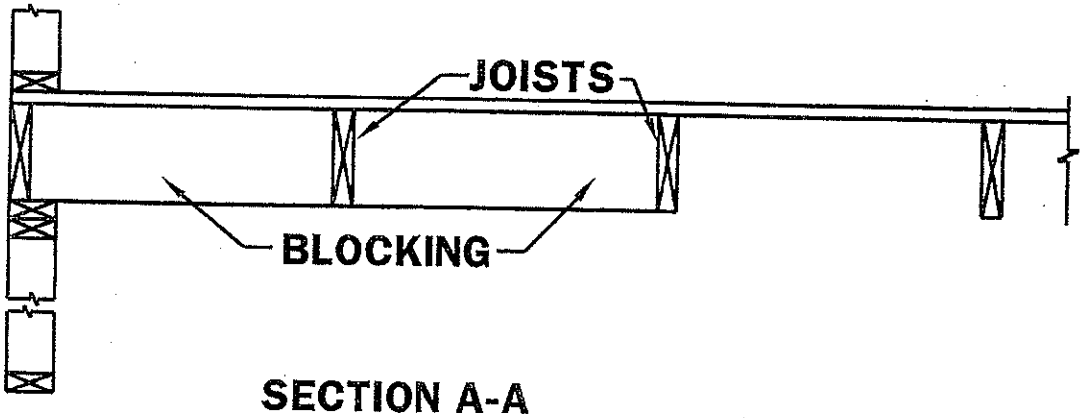
Plumbing

Contractor to inspect existing system and provide riser diagram for new connections to new fixtures.

Provide and install complete (3) water closets, (3) lavatories, (2) showers, (1) kitchen sink, (1) dishwasher, (1) washer, (1) dryer, (2) frostproof hosebib, (1) hwh with drip pan. Provide riser diagram for permit approval.

Figure 2.3 Endwall Blocking Detail





SECTION A-A

Figure 2.2c Typical Wind Uplift Connections

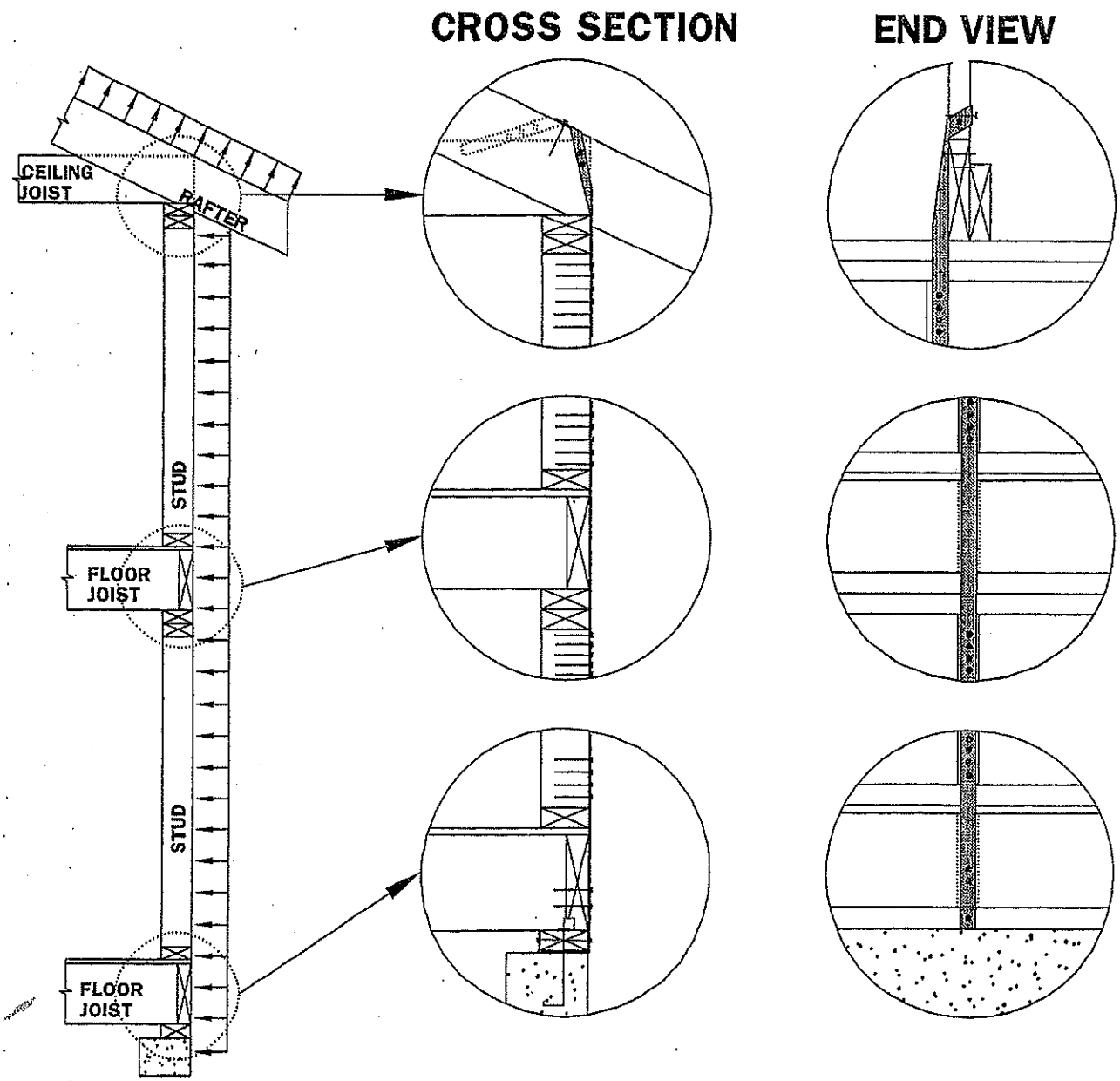


Figure 2.2a Typical Lateral Framing Connections

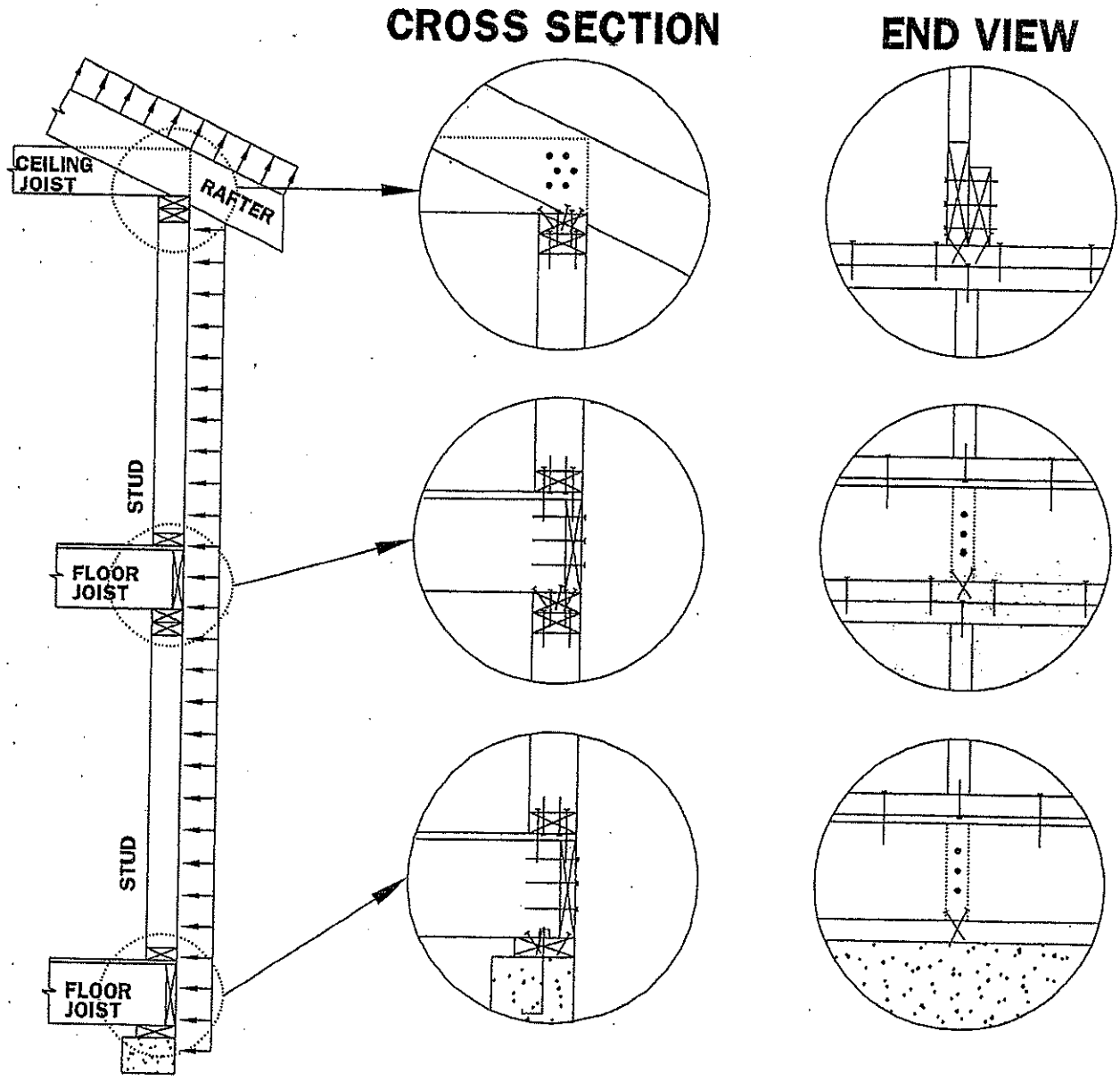
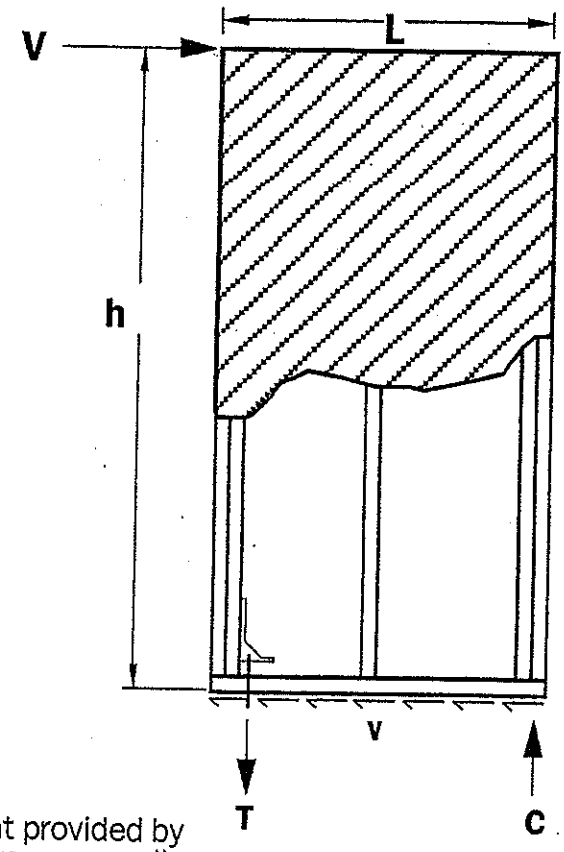


Figure 2.2d Overturning Detail



Tension End
Overturning restraint provided by dead load from above, perp. walls, or mechanical anchorage in accordance with 2.2.4

Compression End
Compression force is resisted by stud end bearing on plate

V	=	Shear force (lbs.)
L	=	Length (ft.)
h	=	Height (ft.)
v	=	Required unit shear capacity (plf)
C	=	Compression force in end member (lbs.)
T	=	Tension force in end member Required holddown capacity (lbs.)

$v = V/L$

$T = v \cdot h$

TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a,b,c,d]	SPACING OF FASTENERS
Joist to sill or girder, toe nail	3-8d	—
1″ × 6″ subfloor or less to each joist, face nail	2-8d 2 staples, $1^3/_4$	— —
2″ subfloor to joist or girder, blind and face nail	2-16d	—
Sole plate to joist or blocking, face nail	16d	16″ o.c.
Top or sole plate to stud, end nail	2-16d	—
Stud to sole plate, toe nail	3-8d or 2-16d	—
Double studs, face nail	10d	24″ o.c.
Double top plates, face nail	10d	24″ o.c.
Sole plate to joist or blocking at braced wall panels	3-16d	16″ o.c.
Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	8-16d	—
Blocking between joists or rafters to top plate, toe nail	3-8d	—
Rim joist to top plate, toe nail	8d	6″ o.c.
Top plates, laps at corners and intersections, face nail	2-10d	—
Built-up header, two pieces with $^1/_2$″ spacer	16d	16″ o.c. along each edge
Continued header, two pieces	16d	16″ o.c. along each edge
Ceiling joists to plate, toe nail	3-8d	—
Continuous header to stud, toe nail	4-8d	—
Ceiling joist, laps over partitions, face nail	3-10d	—
Ceiling joist to parallel rafters, face nail	3-10d	—
Rafter to plate, toe nail	2-16d	—
1″ brace to each stud and plate, face nail	2-8d 2 staples, $1^3/_4$	— —
1″ × 6″ sheathing to each bearing, face nail	2-8d 2 staples, $1^3/_4$	— —
1″ × 8″ sheathing to each bearing, face nail	2-8d 3 staples, $1^3/_4$	— —
Wider than 1″ × 8″ sheathing to each bearing, face nail	3-8d 4 staples, $1^3/_4$	— —
Built-up corner studs	10d	24″o.c.
Built-up girders and beams, 2-inch lumber layers	10d	Nail each layer as follows: 32″ o.c. at top and bottom and staggered. Two nails at ends and at each splice.
2″ planks	2-16d	At each bearing
Roof rafters to ridge, valley or hip rafters: toe nail face nail	 4-16d 3-16d	 — —
Rafter ties to rafters, face	3-8d	—
Wood structural panels, subfloor, roof and wall sheathing to framing, and particleboard wall sheathing to framing		
$^5/_{16}$-$^1/_2$	6d common nail (subfloor, wall) 8d common nail (roof)[f]	6	12[g]
$^{19}/_{32}$-1	8d common nail	6	12[g]
$1^1/_8$-$1^1/_4$	10d common nail or 8d deformed nail	6	12

(continued)

Written Statement

We are seeking a Side Yard, Front Yard, Building Coverage and Lot Coverage Variances for the house located at 193 Tennent Road in Morganville NJ

The property is in the LC Zone and is approximately 1.1 acres, which greatly undersized from the requirements for a 5-acre lot, which is required.

The variances requested are considered a hardship since the house is currently located in the front and side setback and cannot be moved, which are not being made worse. The existing house and impervious area also exceed the amounts permitted currently and the areas are being increased slightly.

Since the house is currently situated on the site where it encroaches in the setback and is not making the condition worse and because a drywell is being added to capture any additional water runoff created the coverage increase the variances requested will not be detrimental to the Master Plan of the Town of Morganville.

Site Evaluation and Drainage Calculations – 193 Tennent Road, Morganville, NJ

Existing Site Area = 47,916 Square Feet

New Roof Area – 860 Square Feet

Therefore, the Catchment Area of the new drywell should me a minimum of 860 sq. ft.

Required Storage Volume

Required Storage Volume (V.r) = (2" Rain / 12 x New Impervious)

V.r = 2/12 x 860 sq. ft. = 143 CF

V.r = 143 CF x 7.48 Gal/CF = 1,070 Gal.

Provided Storage Volume

Pit - V.pits = (1) 1,000-gallon seepage pit = 130 CF

Stone - V.stone = 8.00' x 8.00' x 6.75' = 432 CF – 130 CF = 302 CF x .4 = 120.8 CF

V.Pits + V.Stone = 250.8 CF

V.Storage = 199.6 CF X 7.48 Gal/CF = 1,876 Gal.

Design Safety Factor 1,876 Gal / 1,070 Gal = 1.30 x 100% = 175%

System designed is 175% of required volume.

Prepared by:

Robert DePippa, AIA
NJ License # 15848

ZONING ANALYSIS 193 TENNENT RD				LC -ZONE
ITEM	PERMITTED	EXIST	PROPOSED	REMARKS
LOT AREA	5 ACRES	1.1 ACRES	1.1 ACRES	EXISTING NON CONFORMING
LOT WIDTH	400 FT	220.44 FT	200.44 FT	EXISTING NON CONFORMING
LOT DEPTH	500 FT	324 FT	324 FT	EXISTING NON CONFORMING
FRONT YARD PRINCIPAL	75 FT	72.1 FT	72.1 FT	EXISTING NON CONFORMING
FRONT YARD ACCESSORY	100 FT	66.0 FT	63.0 FT	VARIANCE
REAR YARD	40 FT	80 FT	80 FT	CONFORMS
SIDE YARD - EACH	75 FT	24.6 FT / 156 FT	24.6 FT/ 156 FT	VARIANCE
HEIGHT	35 FT	17 FT	27 FT%	CONFORMS
BUILDING COVERAGE-PRINCIPAL	2.00%	2.95%	3.50%	VARIANCE
LOT COVERAGE	5.00%	7.98%	8.54%	VARIANCE