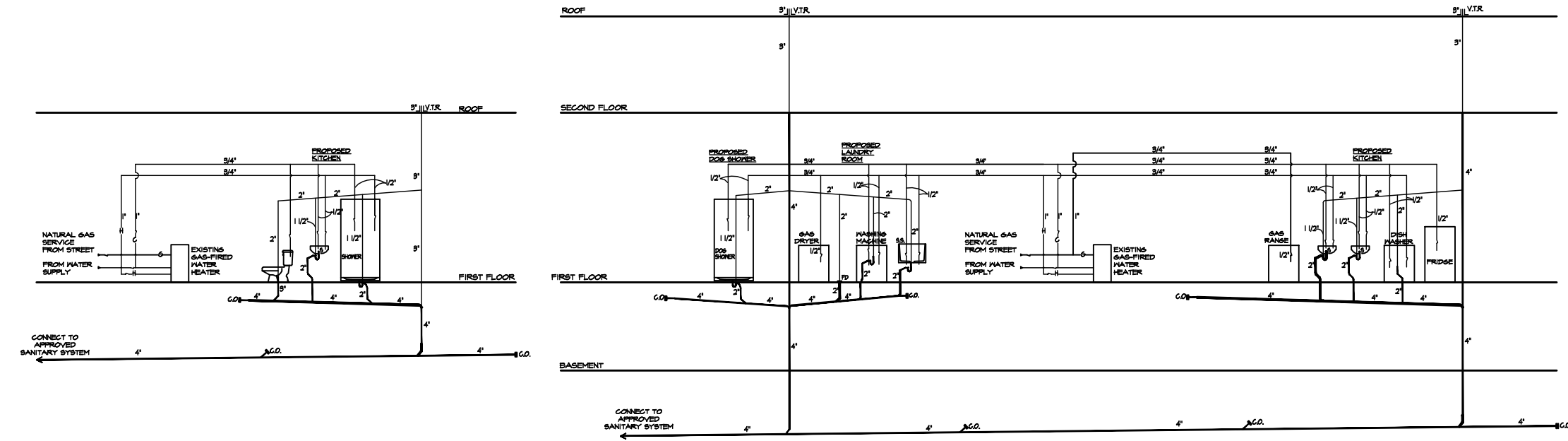


JOYCE / SZERLIP RESIDENCE

**55 STATE PARK ROAD
CHESTER,
NJ 07930**

- PLUMBING NOTES**
1. ALL WORK AS NOTED
 2. ALL SUPPLIES AS NOTED
 3. INSULATE
 4. PVC ROOF TOWARD PLUMBING
 5. CONTRACTOR PROVIDE INFORMATION
 6. PROVIDE SIGNERS
 7. PLUMBING DRAFTING
 8. ALL PLUMBING AND LOCAL RADON MEASUREMENT FOR EVER PVC THROUGH CONCERN REQUIREMENTS
 9. ALL WORK IN 9' SQUARE
- NOTE:**
- PLUMBING/ALL VENTILATORS, ETC.



**01 PLUMBING RISER DIAGRAM
SCALE: NTS**

GENERAL NOTES AND SPECIFICATIONS:

1. All codes having jurisdiction shall be strictly observed through the construction of the project. All applicable state and local building zoning, electrical, mechanical, plumbing, and fire codes shall be adhered to.
2. All work that is either implied or reasonably inferable from the contract documents, drawings, and specifications, shall be the responsibility of the contractor. All work performed shall include all fittings, trim and other apparatus normally deemed to be part of the completed installation within the definitions of normal industry standards.
3. Details and sections on the drawings are shown at specific locations and are intended to show general construction throughout. Details noted "typical" imply that all conditions are to be treated similarly. Modifications to be made by the Contractor will be required to accommodate minor variations.
4. All drawings shall be fully coordinated by the contractor to verify all dimensions, locate depressed slabs, slopes, drains, outlets, recess, bolt settings, sleeves, etc.
5. The contractor shall verify and protect all service lines and existing site area from deterioration and damage.
6. The Architect shall not be responsible for locating and identify all subsurface utility lines, pool piping etc. and reroute, cap, or terminate same as required.
7. The contractor shall obtain all necessary permits.
8. The contractor shall bring errors and omissions which may occur in the Contract Documents to the attention of the Architect in writing and written instructions shall be obtained from the Architect prior to proceeding with work. The contractor will be responsible for the results of any errors, discrepancies, or omissions in the Contract Documents, of which the contractor failed to notify the Architect before construction and/or fabrication of the work.
9. The contractor(s) shall verify all dimensions and job conditions at the job site sufficiently in advance of work to be performed to assure the orderly progress of the work. All dimensions are nominal. Finished dimensions will vary in actual construction.
10. Contractors shall maintain the premises clean and free of trash, debris, and shall protect all adjacent work from damage, staining, etc. All fixtures, equipment, glassing, floors, etc. shall be left clean and ready for occupancy upon completion of the project.
11. Shop drawings are required for structural, mechanical, electrical, and specialized construction. Shop drawings shall be submitted to the Architect for review for conformance with the design concept of the work. In areas where the drawings do not address methodology the contractor is bound to perform in strict compliance with the manufacturer's specifications and/or recommendations.
12. All codes, trade standards, and manufacturer's instructions referenced in the Contract Documents shall be of their latest edition.
13. All materials, equipment, fixtures, etc. shall be installed in strict compliance with the manufacturer's instructions.

NEW JERSEY ENERGY CODE:

1. All work, equipment, fixtures, devices, installations, etc. shall comply with the New Jersey Small Dwelling Energy Subcode Compliance Manual.
2. Air Leakage: The requirements of the section shall apply only to those locations separating ambient conditions from the interior space that are heated or mechanically cooled and are not applicable to separation of interior spaces from each other. Standard compliance with the criteria for air leakage and testing for rate of air leakage through exterior windows, curtain wall and doors. Acceptance Criteria: The air infiltration rate for windows shall not exceed (3) cfm per foot of each crack. The air infiltration rate for sliding glass shall not exceed (5) cfm per foot of door area. The air infiltration rate for swing doors shall not exceed (25) cfm per square foot of door area. (Pre-hung doors only)

5. Caulking and Sealants: Exterior joints, around windows and door frames, between wall and foundation, between wall and roof, between wall panels, all penetrations or utility service entry and all other openings in the exterior envelope shall be caulked, weatherstripped, or otherwise sealed.

6. Illumination Level Criteria:

- a. Spaces in private residences, other than kitchens, bathrooms, and laundry areas are exempt from any criteria.
- b. For Kitchens, bathrooms, and laundry areas, the allowable power budget is determined in accordance with attachment A of the Small Dwelling Energy Subcode Compliance Manual.
- c. Laundry in private residences occupying a space separate from the bathroom or kitchen shall have a power budget of 100W.

SITEWORK:

1. Remove existing trees and shrubbery as required. Extreme caution shall be exercised to locate and identify all subsurface utility lines, pool piping etc. and reroute, cap, or terminate same as required.
2. The presumptive soil bearing capacity is 3000 pcf on undisturbed virgin soil. All concrete footings shall bear on undisturbed soil or engineered fill.
3. All backfill at structures, slabs, steps, and pavements shall be clean granular fill. Place in 8" layers and compact to 95% maximum dry density.
4. All slabs on grade shall bear on firm soil capable of supporting all anticipated loads.
5. Backfill shall be brought up equally on each side of walls.
6. Do not backfill until walls have sufficiently cured and super structure is fully erected, placed and anchored to foundation.
7. Where a hydrostatic pressure condition does not exist, damp-proofing in the form of bituminous material coating shall be applied to the foundation walls. Where a hydrostatic condition does exist, waterproofing shall consist of two-ply hot mopped felt, not less than 6-mil polyvinyl chloride, 40 mil polymer modified asphalt or other approved methods or materials capable of bridging nonstructural cracks. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's instructions.
8. All leaders are to be piped away with solid PVC. Run to daylight or connect to existing sub-surface drainage system.

CONCRETE:

1. All concrete shall comply with the requirements of the ACI Building Code (ACI 308) Building Code Requirements for Reinforced Concrete.
2. All concrete shall be ready-mix and have minimum compressive strength of 3000 psi at 28 days. Exterior concrete shall have 5% air-entrainment.
3. All reinforcing steel shall conform to ASTM-A618 grade 60, deformed wire fabric (WFB) shall be 6 x 6 10/10 and conform with ASTM A-188.
4. WFB shall be suspended to settle in midway in the concrete slab. Lap all WFB a minimum 6". Concrete cover of steel reinforcement shall be 5".
5. Anchor bolts shall be a minimum 1/2" diameter and 24" long. The bolts shall be embedded in foundations to a depth of 6" in poured concrete, and not less than 12" in grouted unit masonry. There shall be a minimum of two anchor bolts per section of plate and anchor bolts shall be placed 12" min. from the end of the main section of plate with intermediate bolts spaced a maximum 6" on center.
6. Concrete slabs shall be kept moist after pouring for a period of 2 days minimum.
7. All footing excavations shall be hand finished.

MASONRY:

1. All masonry work shall conform to the specification of the National Concrete Institute.
2. All hollow load bearing block shall conform to ASTM C40. All solid block shall conform to CM-8. All CMU's shall be laid in a full bed of mortar, utilizing running bond.
3. Fill CMU cells with solid concrete or grout at all units to receive anchors, directly below bearing locations, below grade, etc. and wherever else indicated.
4. Mortar and grout shall meet requirements of ASTM C270. Type M mortar shall be used for exterior walls, above and below grade.
5. Grout shall be a high slump mix in accordance with ASTM C-716, having a minimum compressive strength of 5000psi.
6. Provide hot dipped galvanized true type horizontal joint reinforcement (MIN #1 gauge) at 16" on center vertically (or as indicated on the Drawings) in all masonry walls.

GENERAL:

1. All wood and wood construction shall comply with:
 - a. American Institute of Timber Construction
 - b. National Forest Products Assoc.-Design Spec. for Wood
 - c. American Plywood Association
 - d. American Wood Preservers Association
2. All structural lumber (joists, rafters 2 x 6 or larger) shall be Doug-Fir Larch #2 (minimum) stress grade lumber. E=1,400,000 psi Fv=1450 psi Fv=75 psi F=425 psi
3. All 2x4 or 2x6 nail stud lumber shall be Doug-Fir Larch construction grade (minimum) lumber. E=1,200,000 psi Fv=425 psi
4. All structural lumber shall be stamped in accordance with the American Institute of Timber's "Construction Manual".
5. All exterior structural lumber shall be pressure treated Doug-Fir or Southern Yellow Pine. Treated lumber shall bear APFA marking. All treated lumber shall be 25 pounds cubic foot, % (minimum), of wood (minimum). All lumber shall be kiln dried to a moisture content of 18% maximum.
6. All Micro-Lam (ML), Parallel (PSL) and 1 1/4" Timberstrand Rim Board (LSB) shall be as engineered and manufactured by Timber-Joint Corp. or approved equal. The allowable design stresses for Micro-Lam beams are as follows: ML: E=1,400,000 psi Fv=2,800 psi Fv=285 psi PSL: E=2,000,000 psi Fv=2,400 psi Fv=240 psi
7. All wood I-joists are to be TJI pro series manufactured by Timber-Joint Corp. (series vary see plans).
8. For all wood I-joist floors 1 1/4" (the floor depth) Timberstrand Rim Board is to be installed. For all hole cuts in beams I-joists and for all details see manuf. specs, typ.
9. All substitutions by different manuf. for all engineered lumber must maintain equal or greater design properties. It is the responsibility of the contractor to verify and coordinate.
10. THE DESIGN LOADS for framing members are as follows (unless other rise noted):

Floor	LL=40 psf (Living space)
DL=10 psf	LL=80 psf (Living space)
	LL=80 psf (Sleeping space)
	DL=10 psf (Sleeping space)
Stair landing platforms	LL=60 psf
Exterior balconies and decks	LL=60 psf
Wind load=25 psf	Atic Floor=20 psf
11. Double floor joists under all interior partitions running parallel to framing when using dimensional lumber or manufactured floor joists. Double joists under kitchen & all tubs in bathrooms.
12. Roof sheathing to be 5/8" cdx plywood # installed in compliance with APA requirements.

13. Floor sheathing to be 5/4" T&E interior/exterior plywood #2/24. Provide continuous construction adhesive bead at top of floor joists and nailed as per BOCA.

14. Nail sheathing to be 1/2" and installed in compliance with APA requirements.

15. Cementitious backer board (1/2") shall be installed at all wall locations to receive ceramic tile finish and throughout bathrooms.

16. Provide structural sheathing at all sides of corners for corner bracing.

17. Provide freestapping and draftstopping to cut all concealed draft openings (horizontal and vertical) and to form an effective fire barrier between stories and floor/ceiling assemblies.

18. All headers and trimmers shall consist of double trimmers. Provide solid blocking in all floors for solid bearing for all posts above.

19. Bridging shall be 3/4" x 3" spruce at 8'-0" o.c. max. for dimensional lumber. All engineered lumber bridging to be installed as per manuf. specs.

ELECTRICAL:

1. The Contractor shall provide all labor, materials and equipment necessary to install wiring, related fixtures, electric heat elements, and controls. All work shall be in conformance with the National Electric Code latest edition. Terminal hook-up is required at all fixtures, appliances, motors, fans and controls.

2. Electrical system layouts are diagrammatic, location of the outlets and the equipment is approximate. Exact routing of wiring, locations of outlets and fixtures shall be governed by structural conditions. Wiring for equipment requiring maintenance and inspection shall be readily accessible.

3. Any wiring located within planting areas shall be placed a minimum 18" below grade finish.

4. All electrical equipment, breakers, and time clock controls shall be properly labeled.

5. The Contractor shall assess existing service and determine suitability.

6. Appliance circuits shall be separate 20 amp with #12 AWG copper conductors.

7. Materials and equipment shall be new and by listed UL manufacturers.

8. Verify and locate all receptacles prior to the installation of drywall.

9. Install all receptacles at 1'-0" to center the above finished floor unless otherwise noted or to match existing.

10. Install light switches at 3'-6" to center the above finished floor unless otherwise noted, or to match existing.

11. All switched receptacles shall be 1/2 hot.

12. Provide GFI and WFI/GFI outlets as indicated and required.

13. All fixtures and equipment installed outdoors and exposed to weather shall be weatherproof.

14. Install receptacles in kitchen and bathrooms above work top unless otherwise noted. Provide dedicated outlet for microwave.

15. Provide light fixtures per owner's selection.

16. Install approved single station smoke detectors continuously powered by the electrical distribution panel in accordance with all applicable codes. Only detectors with UL listing are to be used. All detectors are to be wired in series. Detectors are to have battery backup capabilities.

THERMAL AND MOISTURE PROTECTION:

1. The American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) Handbook of Fundamentals shall govern.
2. Install flashing and sheetmetal in compliance with the "Architectural Sheetmetal Manual" by SMAGNA.
3. Aluminum flashing shall conform to ASTM B-204, and be .016" thick (minimum).
4. Galvanized Steel Flashing shall conform to ASTM AZ-526, 20% copper, 26 gage (D7H). ASTM A-525, designation #50 hot dipped.
5. Backsight flashings with bituminous paint where specified to be in contact with cementitious materials or dissimilar metals.
6. Roof valley flashing shall be provided of not less than No. 26 galvanized sheet gauge corrosion resistant metal and shall extend at least 1" from the center line each way. Sections of flashings will have an end lap of 4" (minimum).
7. Provide fiberglass roofing as mfr'd. by "All Deck" or approved equal on stair treads and balcony decks. Prior to installation, verify that plywood substrate has min. pitch of 1/8" per foot. Fasten copper drip edge and install fiberglass and resin over copper and cut edges clean. Seal all exposed edges as required.
8. Install type 15 lb. felt under exterior trim. Apply so as to form a weathertight membrane. Overlap each course below a minimum 2" at horizontal joints and 6" at vertical joints.
9. Install ice & water shield at roof eaves as shown on drawings and as per BOCA code. Install 8'-0" in each direction at all valleys, typ.
10. Provide and install 4'-12" thick (min) kraft faced glass fiber batt insulation with a value of R-30 in roof/ceilings cavities.
11. Provide and install full-width kraft faced glass fiber batt insulation with a value of R-19 for 2x4's and R-14 for 2x6's and 2x8's in all exterior walls.
12. Provide and install batt insulation at window sash spaces and seal with expanding foam/caulk.
13. Provide flashing underlayment, ridge caps, edge tiles, etc. as required and as specified by manufacturer.

DOORS, WINDOWS AND GLASS:

1. All windows and exterior doors shall be selected by owner architect. Verify all unit numbers and dims prior to ordering.

2. Supplier/manufacturer to coordinate all architectural plans and elevations and to verify all sizes and angles. It is the responsibility of the window supplier / manufacturer to notify architect immediately of any and all discrepancies and conflicts.

3. Glazing in locations which may be subject to human impact such as frameless glass doors, glass entrance and exit doors, fixed glass panels, sliding glass doors, shower doors, tub enclosures and storm doors shall meet the requirements set forth in 2006 IRC NJ EDITION.

4. All doors and windows opening to the exterior or to the unconditioned space shall be fully weatherstripped, gasketed or otherwise treated to limit air infiltration. All manufactured windows and sliding glass doors shall meet the air infiltration standards of ASTM E288-78.

5. A weatherproof threshold is required at all exterior swing type doors.

6. All exterior doors and windows shall be wood with insulating glass seal about entire perimeter.

7. All interior doors shall be paint/stain grade wood. Slides, rails and panel design and profiles shall match existing unless otherwise specified. Sizes shall be as scheduled on Drawings.

8. Provide shop drawings for all interior and exterior doors and windows for approval by Architect prior to fabrication.

9. Provide and install wood screen doors at all new exterior door locations. In addition, provide new wood screen doors at existing front door and rear vestibule door locations. Screen doors shall be paint grade poplar. Provide sample for approval prior to fabrication.

10. Verify existing hardware relocation instructions if any with Owner. All other new hardware shall match existing. Verify keying instructions with Owner.

FINISHES:

1. Provide and install gypsum wallboard in accordance with "American Standard Specifications for the Application and Finishing of Gypsum Wallboard". See plans and specifications for thickness and layers.
2. Application of paint or other coating shall be in strict accordance with the manufacturer's direction.
3. All surfaces shall be clean and free of debris prior to finishing.
4. All applications shall be in a workmanlike manner, providing a smooth surface.
5. Provide ceramic tile and accessories complying with the Tile Council of America specification (TCA).
6. Install ceramic tile in accordance with recommendations contained within the Tile Council of America's "Handbook of Ceramic Tile Installation".
7. All interior trim to match existing or as indicated on the Drawings.

SPECIALTIES:

1. Provide kitchen and bath accessories, hardware, and misc. items per owner's selection and specifications.
2. Factory built gas fireplaces and flues shall be installed in accordance with NFPA 211, UL and manufacturer's specifications.

MECHANICAL:

1. Contractor shall provide all labor and materials and equipment necessary to install all heating and ventilating systems. All work shall be in conformance with the state and local codes and ordinances.

2. HVAC system shall be upgraded as required on a Design/Bid basis. The Contractor shall provide drawings of the proposed work prior to the installation for the architect's review with regards to conformance to the design concept as well as to the subject agency for review.

3. The Contractor shall check all safety device operation prior to system activation.

4. System shall be placed in operation for a sufficient time to verify satisfactory performance in all modes.

PLUMBING:

1. The Contractor shall provide all labor, materials and equipment necessary to install plumbing, related fixtures, floor drains, etc. All work shall be in compliance with the National Standard Plumbing Code. Terminal hookup and connections to all utilities is required.
2. The Contractor shall install and check all pressure reducing valves, popoff valves and other safety devices prior to operation of the systems.
3. Save and re-use existing plumbing fixtures, fittings, etc. as indicated on plans or as directed by Owner. Install in locations as directed by Owner.

REV.	DATE	ISSUE	REMARK
1	11.02.11	ISSUE	GENERAL REVISIONS

JOB #
SET: G

PLUMBING RISER DIAGRAM - GENERAL NOTES

ASSTS: [] HT: []

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P-01

**02 GENERAL NOTES
SCALE: NTC**