

STRUCTURAL NOTES:

CODE: Comply with the 2003 International Residential Code.

DESIGN LOADS:

Dead Loads: Roof = 15.0 psf, Floor = 10.0 psf.
 Live Loads: Roof = 45.0 psf (Plus Drift), Floor = 40.0 psf.
 Wind Load: Building = 31.0 psf

FOUNDATIONS:

- Bear footings on firm, undisturbed dense native soil at 4'-0" minimum below lowest adjacent finish or natural grade, which ever is lower.
- Assumed soil bearing pressure = 2,000 psf.
- Place foundation concrete only on clean, firm, dry bearing material.
- Engineer shall be notified if stone ledge or marine clay is found during excavation.

CONCRETE:

- Concrete regular weight (144 pcf) with Type II cement per ASTM C150, aggregate per ASTM C33, and potable water. No fly-ash permitted in floor slab. Aggregate size = 1" maximum for footings and slab. Minimum compressive strength = 3000 psi for foundations and slab on grade and 4,000 psi for exterior slabs and sidewalks.

REINFORCING:

- ASTM A 615-S1, Grade 60 except #2 and #3 bars ASTM A615-S1: Grade 40.
- Lap splices in concrete: 42 bar diameters.
- Provide bent corner reinforcing to match and lap with horizontal reinforcing at corners and intersections of walls and footings.

STEEL:

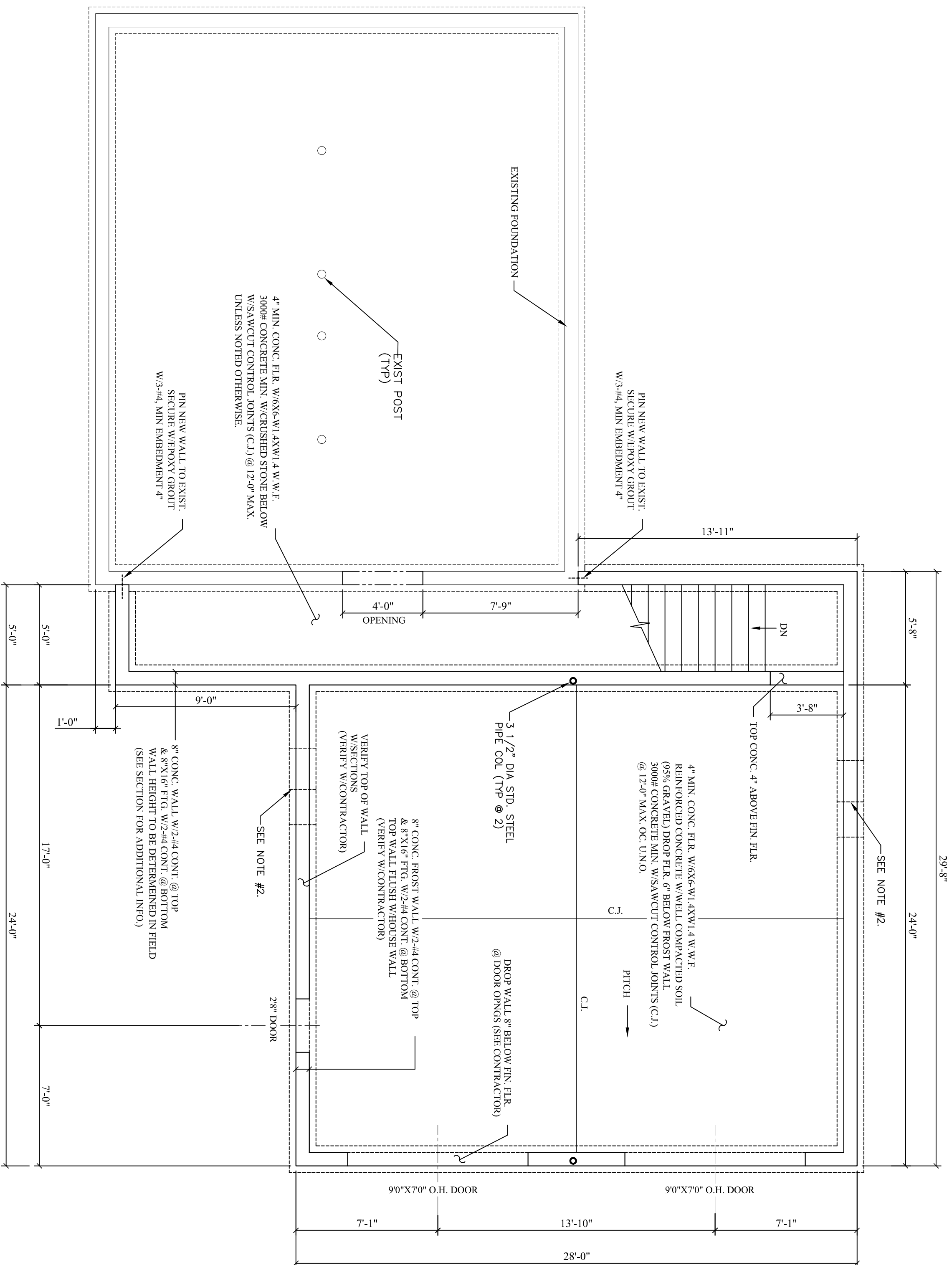
- Rolled sections and plates: ASTM A-36, Fy = 36 ksi.
- Steel Pipe Column: (not lally columns) ASTM A-36, Fy = 36 ksi.
- Bolts and plain anchors: ASTM A 307.

WOOD:

- General:
 - Each piece of lumber shall be "S-DRY" and bear the grade stamp of a grading rules agency approved by the American Lumber Standards Committee.
 - Double up studs at jambs and under beams.
 - Do not notch or drill joists, beams or load bearing studs without approval.
- Connections:
 - Nail roof plywood with 8d common at 6" o.c. at all edges and boundary members and 10" o.c. at intermediate supports.
 - Glue floor plywood to all framing members and nail with 8d common at 6" o.c. at all plywood edges and boundary members and 10" o.c. at intermediate supports.
 - Nail wall plywood with 10d common nails at 6" o.c. at all edges and boundary members and 12" o.c. at intermediate supports.
- Structural Sawn Lumber:
 - 2 x 6 Inrt 2 x 14 joists: Spruce Pine Fir No. 2 with Fb (repetitive) = 1200 p.s.i.
 - Studs: Spruce Pine Fir No. 2 with Fb (repetitive) = 1200 p.s.i.
 - Laminated Veneer Lumber (LVL): Fb = 2800 psi, Fv = 285 psi, E = 2,000 ksi
- Plywood:
 - Roof Sheathing: C-D INT-APA (PSL-94) with exterior glue: 1/2" with Identification Index 48/24. Lay up with face grain perpendicular to supports. Stagger joints. Each plywood piece to be continuous over a minimum of two spans with a minimum width of 1'-0" unless blocking is provided at all joints.
 - Sub-flooring: C-D INT-APA (PSL-94) with exterior glue: 3/4" with Identification Index 48/24. Lay up with face grain perpendicular to supports. Stagger joints. Each plywood piece to be continuous over a minimum of two spans with a minimum width of 1'-0" unless blocking is provided at all joints.
 - Wall Sheathing: C-D INT-APA (PSL-74) with exterior glue, 1/2" with Identification Index 24/0. All panel edges backed with 2" nominal or wider framing.

SUPPLEMENTARY NOTES:

- Verify all dimensions and conditions in field and with architectural drawings prior to starting work. Notify the Engineer of any discrepancies or inconsistencies.
- Provide all necessary temporary bracing, shoring, guying or other means to avoid excessive stresses and to hold structural elements in place during construction.



FOUNDATION PLAN

FOUNDATION NOTES:

- See structural notes, sheet S-1.
- Step footings as required to achieve recommended footing frost depth.
- Saw cut slab joints within 6 hours of slab pour.
- Do Not backfill full height basement walls until first floor framing is complete.
- See architectural drawings for dimensions not shown.



ENGINEERING DESIGN PROFESSIONALS
Consulting Engineers
 P.O. BOX 575, FREEPORT, MAINE 04032 (207) 865-9505

GARAGE ADDITION
 214 Eastern Promenade * Portland, Maine
FOUNDATION PLAN

DESIGNED BY:
 Larry Wichroski, P.E.

DRAWN BY:
 LAW

JOB NO.:
 03706

DATE:
 10-18-06

REVISIONS:
 11-01-06

SHEET:
S-1
 of 5