CONCRETE NOTES:

1. All concrete work shall conform to ACI 318–Latest Edition.
2. Concrete strength at 28 days shall be:

   a) 3000 psi for footings.
   a) 3500 psi for frost walls & piers.
   b) 4000 psi for all interior slabs on grade.
   c) 4000 psi for all exterior slabs on grade w/ 5–7% air entrainment.
3. All concrete shall be air entrained per the specifications.
4. Concrete shall not be placed in water or on frozen ground.
5. Provide PVC sleeves where pipes pass through concrete walls or slabs.
6. Reinforcing bars shall conform to ASTM A615 Grade 60 deformed bars, and shall be detailed, fabricated and erected in accordance with ACI 315–Latest edition.
7. Welded wire fabric is not accepted in place of fiber reinforcing.
8. Fiber reinforced concrete shall conform to ASTM C–1116.
9. Complete shop drawings and schedules of all reinforcing steel shall be prepared by the contractor and submitted to the engineer for review prior to commencement of that portion of the work. All accessories must be shown on the shop drawings. Submit (4) blue line prints and (1) reproducible (sepia) to the Architect.
10. Splices of reinforcing bars shall be in accordance with ACI 318.
11. Concrete finishes: See specifications and Architectural drawings for applicable finishes.
12. Anchor bolts shall conform to ASTM A307 unless noted otherwise on plan.
13. Provide control/construction joints in foundation walls at a maximum spacing of 15 ft. from any corner or 30 ft. along length of wall. At control joints, discontinue every other horizontal bar. At construction joints all reinforcing shall be continuous through the joint.
14. The general contractor shall be responsible for coordination of:

    a. Door bondout locations, slab depression & other required bondouts. Coordinate location of bondouts with Architectural, Mechanical & Plumbing, and Electrical vendors as necessary to properly install each specific item.
15. Provide slab control joints cut or tooled to 1" deep in 4" thick slabs (or 1/3 slab thickness otherwise) at 225 s.f. intervals. (15'x15' maximum)

FOUNDATION NOTES:

1. Foundations have been designed with a presumptive soil bearing capacity of 2 KSF to be verified in the field.
2. Interior spread footings and exterior strip footings shall be founded on compacted structural fill or native soils.
3. Exterior strip and spread footings shall be founded a minimum of 4'–6" below finished grade.
4. Slabs on grade shall bear on a minimum of 8" of compacted structural fill overlaid with 4" sand. If loose or undesirable fills are encountered at the slab subgrade level, they shall be over excavated to the surface of the natural soil and replaced with structural fill. Refer to drawings and specifications for vapor barrier requirements.
5. Structural fill shall be used at all locations below footings and slabs and adjacent to the foundation walls. Prior to placement of structural fill, remove all topsoil and other unsuitable material. Compacted structural fill shall consist of clean granular material free of organics, loam, trash, snow, ice, frozen soil or any other objectionable material. It shall be well graded within the following limits:

SCREEN OR SIEVE SIZE	PERCENT FINER BY WEIGHT
6 INCH	100
3 INCH	70–100
NO. 4	35–70
NO. 40	5–35
NO. 200	0–5

6. Structural fill beneath slabs shall be placed in layers not exceeding 6 inches in loose measure and compacted by self–propelled compaction equipment at approximate optimum moisture content to a dry density of at least 95% of the maximum in place dry density as determined by the modified proctor test (ASTM D–1557).
7. Underdrains shall be placed as shown on the site drawings. Underdrains shall be installed to positively drain to a suitable discharge point away from the structure. Refer to site drawings for additional information.
8. Exterior concrete slabs on grade, shall be underlain by at least 3 feet of structural fill meeting gradation and compaction requirements noted above.
9. Backfill both sides of foundation walls simultaniously.

GENERAL NOTES:

1. The notes on the drawings are not intended to replace specifications. See specifications for requirements in addition to general notes.
2. Structural drawings shall be used in conjunction with job specifications and architectural, mechanical, electrical, plumbing, and site drawings. Consult these drawings for locations and dimensions of openings, chases, inserts, reglets, sleeves, depressions, and other details not shown on structural drawings.
3. All dimensions and conditions must be verified in the field. Any discrepancies shall be brought to the attention of the engineer before proceeding with the affected part of the work.
4. Do not scale plans.
5. Sections and details shown on any structural drawings shall be considered typical for similar conditions.
6. All propietary products shall be installed in accordance with the manufacturers written instructions.
7. The structure is designed to be self supporting and stable after the erection is complete. It is the contractor's sole responsibility to determine erection procedures and sequencing to ensure the safety of the building and its components during erection. This includes the addition of necessary shoring, sheeting temporary bracing, guys or tiedowns. Such material completion of the project.
8. All applicable federal, state, and municipal regulations shall be followed, including the federal department of labor occupational safety and health act.

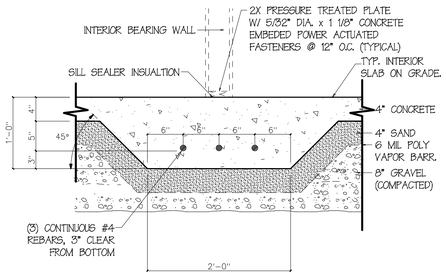
LEDGE/BEDROCK NOTES:

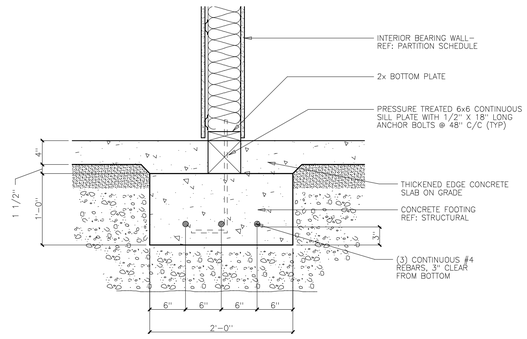
Acceptable alterative direct Ledge/Bedrock bearing foundation sytem in locations where bearing can not be achieved as per Item 1 (as indicated below), provide ledge bearing system as per Item 2 or Item 3 as indicated below.

1.) Soil Bearing System: A 1'–8" wide concrete footing and 8" concrete wall as shown on the design drawings shall bear on undisturbed native soils or compacted structural fill, (in an overexcavated or overblasted area).

2.) Ledge/Bedrock Bearing System: A concrete leveling pad (3" thick min.) shall bear on unfractured ledge with an 8" concrete wall above as shown on the design drawings anchored to ledge/bedrock with #4 x 3'–0" long reinforcing bars at 36" on center at the center of the wall. The Reinforcing bars shall be drilled and grouted 8" into ledge/bedrock. Where this system is combined with Item 1 System, a transition zone will be required consisting of structural fill or 3/8" crushed stone bearing at least 20 feet long in increasing thickness away from ledge/bedrock supported portion of the wall. The fill shall be at least 2.5 times the width of the footing, (4'–2" wide).

3.) Insulated Foundation System: A 1'–8" wide footing and 8" wall as shown on the design drawings similar to Item 1 System except the top of footing is required to be 1'–4" (minimum) below finish grade. A layer of 4" thick rigid insulation (DOW SM or approved equal) shall be installed on top of the footing at the exterior face of the wall 4'–0" wide at any area that does not have ample frost protection.





2 NOTES

SCALE: NONE

REFERENCE:

3 TYPICAL CONCRETE HAUNCH DETAIL

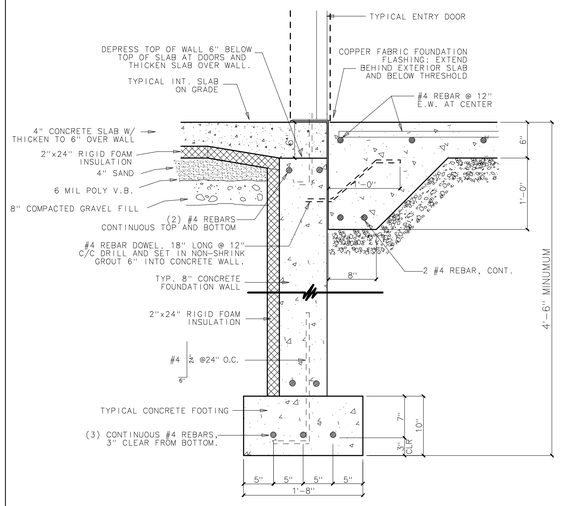
SCALE: 1" = 1'-0"

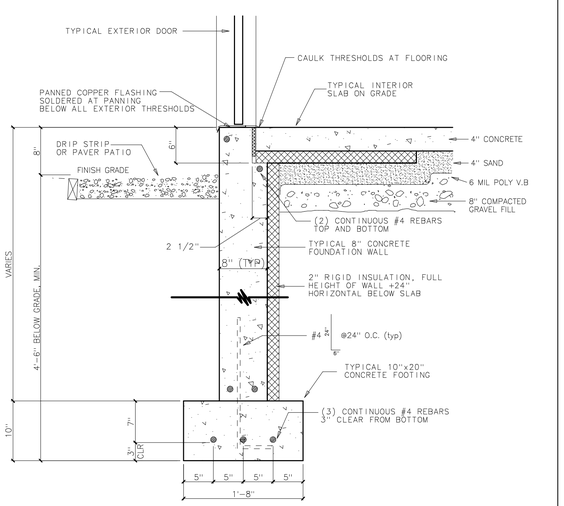
REFERENCE: See Detail 4 for cold weather alternate.

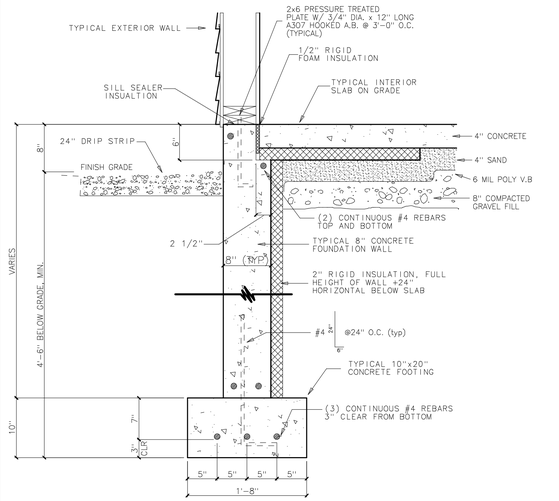
4 ALTERNATE HAUNCH DETAIL

SCALE: 1" = 1'-0"

REFERENCE: See detail 2 for primary detail.







6 EXT. SLAB DETAIL AT PORCH & DOORS

SCALE: 1" = 1'-0"

REFERENCE: F1.1, F1.2, F1.3

7 TYP. FLASHING @ EXTERIOR DOOR STEP

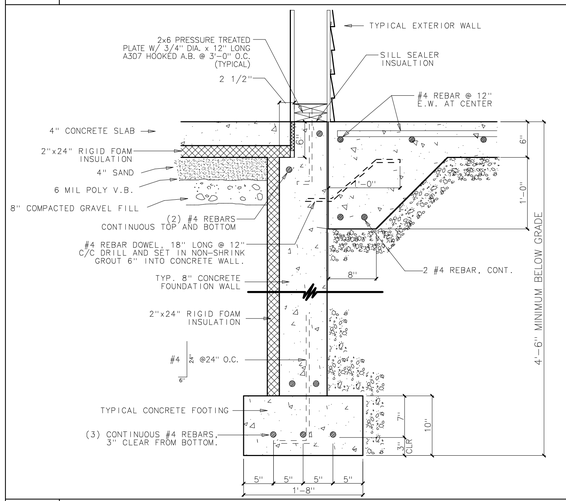
SCALE: 1" = 1'-0"

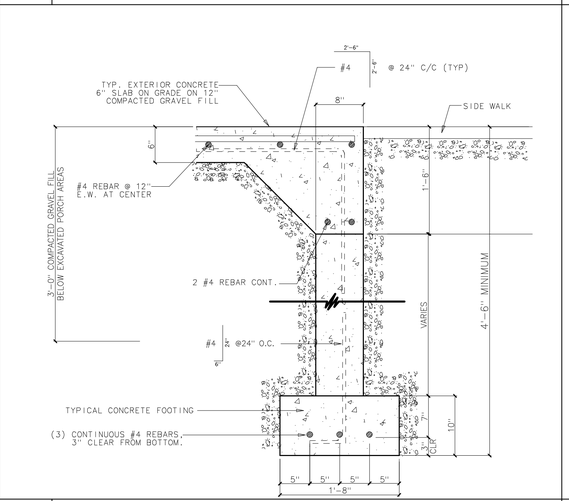
REFERENCE: F1.1 - F1.4

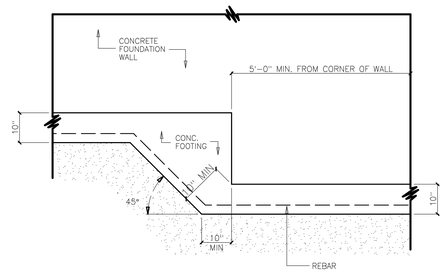
8 TYP. FROST WALL

SCALE: 1" = 1'-0"

REFERENCE: F1.1, F1.2, F1.3







10 EXT. SLAB DETAIL @ TYP WALL SECT

SCALE: 1" = 1'-0"

REFERENCE: F1.1, F1.2, F1.3

11 EXT. SLAB DETAIL @ FROST WALL

SCALE: 1" = 1'-0"

REFERENCE: F1.1, F1.2, F1.3

12 STEP FOOTING PROPORTIONS

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

REFERENCE: (WHERE REQUIRED BY SOILS)

CWS Architects
Architecture
Space Planning
Value Design
434 Cumberland Avenue
Portland, ME 04101
Phone: (207)774–4441
Fax: (207)774–4016
www.CWSarch.com

Owner:

YALE COURT L.P.

C/O
Yale Court Development Company, LLC
Portland, ME

Contractor:

YALE COURT APARTMENTS

YALE STREET
PORTLAND, MAINE

Project No: 02.405 YSA

Drawing Title:

FOUNDATION DETAILS

Scale: AS NOTED
Date: January 29, 2003
Revisions:

Drawing Number:

F1.4