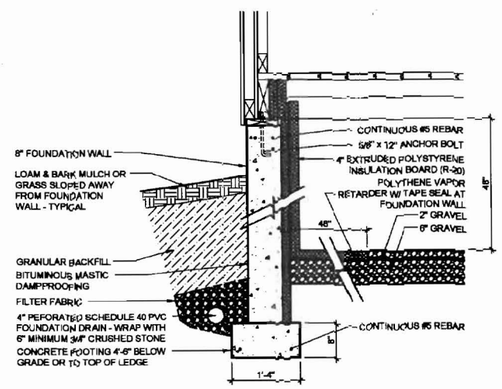
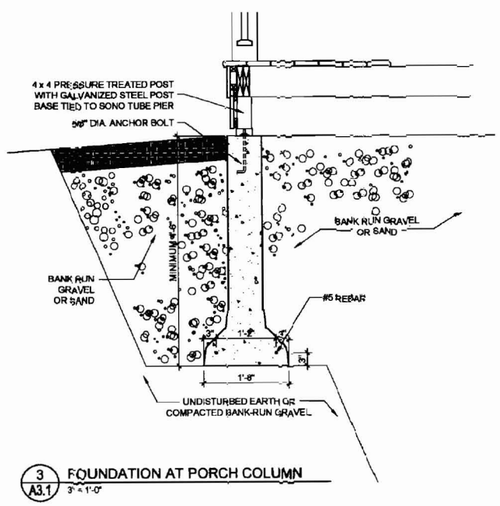
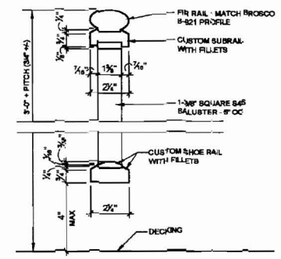


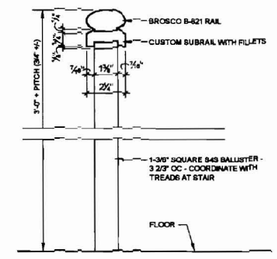
2 A3.1 TYP. FOUNDATION DETAIL
3" = 1'-0"



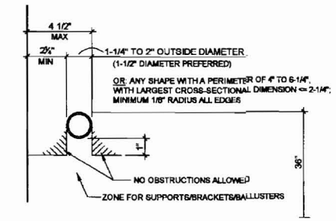
3 A3.1 FOUNDATION AT PORCH COLUMN
3" = 1'-0"



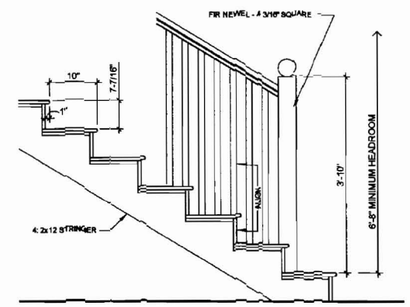
6 A3.1 TYP. EXTERIOR GUARD DETAIL
3" = 1'-0"



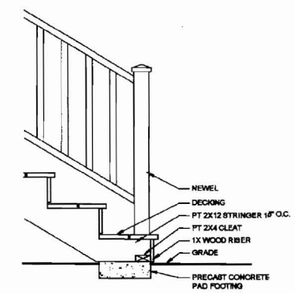
7 A3.1 TYP. INTERIOR GUARD DETAIL
3" = 1'-0"



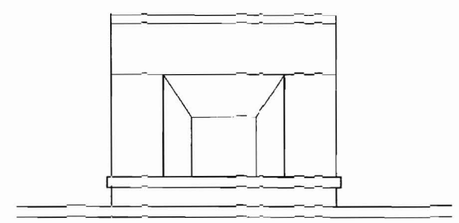
8 A3.1 TYP. HANDRAIL DETAIL
3" = 1'-0"



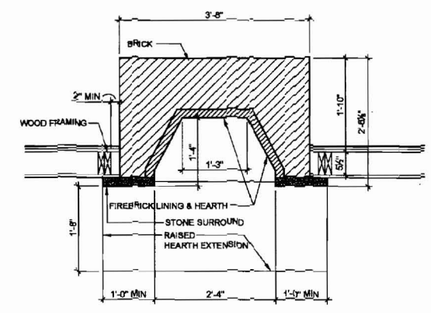
9 A3.1 TYPICAL STAIR DETAIL
3/4" = 1'-0"



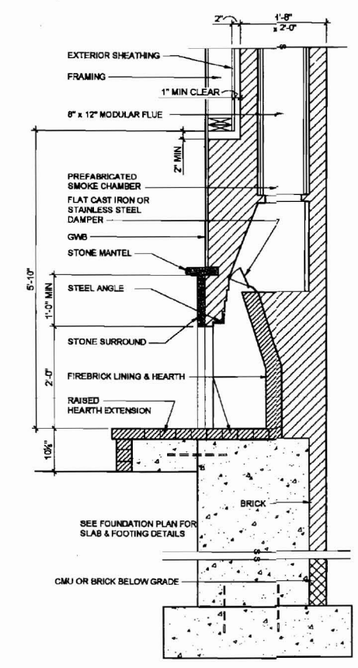
10 A3.1 TYPICAL PORCH STAIR DETAIL
3/4" = 1'-0"



11 A3.1 FIREPLACE ELEVATION
3/4" = 1'-0"



12 A3.1 FIREPLACE PLAN
3/4" = 1'-0"



13 A3.1 FIREPLACE SECTION
3/4" = 1'-0"

REGISTERED ARCHITECT T. SCOTT TEAS NO. 2000 MAINE

GLICKMAN COTTAGE

LOT # 4
GREAT DIAMOND ISLAND
PORTLAND, MAINE

TFH ARCHITECTS
100 COMMERCIAL STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:

REVISIONS:

DATE:	05/21/07
PROJECT No.	0617
DRAWN BY:	SA / RJS
CHECKED BY:	TST
SCALE:	AS NOTED

SHEET TITLE:
Details

A3.1

GENERAL NOTES:
GENERAL:

1. ALL WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:

- "INTERNATIONAL RESIDENTIAL CODE" - 2003 EDITION.
- "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" - ASCE 7-98.
- "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" - ACI 301-99.
- "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" - ACI 318-99.
- "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - AF&PA NDS-97.

2. ALL CONTRACTORS SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS RELATED TO THIS PROJECT. DISCREPANCIES SHALL BE BROUGHT TO THE ATTEN. ION OF THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED WORK. ANY CHANGES OR SUBSTITUTIONS OF MATERIALS OR DETAILS FROM THOSE INDICATED ON THE CONTRACT DOCUMENTS MAY BE MADE ONLY WITH PRIOR APPROVAL OF THE PROJECT ENGINEER.

3. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, COORDINATION OF OTHER TRADES AND THE TECHNIQUES TO PRODUCE A SOUND AND QUALITY PROJECT.

4. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL JOB SAFETY DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHEETING, SHORING, AND GUYING STRUCTURES, BARRIERS AND SIGNAGE.

5. ALL DETAILS AND NOTES SHOWN ON THE CONTRACT DOCUMENTS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE.

6. NO MAIN FRAMING OR STRUCTURAL MEMBERS ARE TO BE MODIFIED, ALTERED, OR CUT WITHOUT THE APPROVAL OF THE PROJECT ENGINEER.

7. REFER TO OWNER'S ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

STRUCTURAL LOADS:

1. LIVE LOADS
   - PER INTERNATIONAL RESIDENTAIL CODE - 2003 EDITION
   - LIVING SPACE.....40 PSF
   - ATTICS AND SLEEPING AREAS.....30 PSF
   - ATTICS W/ LIMITED STORAGE.....20 PSF
   - ATTICS W/ NO STORAGE.....10 PSF

2. WIND LOADS
   PER INTERNATIONAL RESIDENTIAL CODE - 2003 EDITION AND MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES - ASCE 7-98
   - EXPOSURE.....C
   - BASIC WIND SPEED.....100 MPH

3. SNOW LOADS
   PER INTERNATIONAL RESIDENTIAL CODE - 2003 EDITION AND MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES - ASCE 7-98
   - EXPOSURE.....B
   - GROUND SNOW LOAD.....50 PSF
   - FLAT ROOF SNOW LOAD.....38.5 PSF
     (ADDITIONAL ALLOWANCES FOR DRIFTING AND SLIDING SNOW)
   - UNBALANCED SNOW LOAD.....57.8 PSF
     (LEEWARD SIDE, WINDWARD SIDE IS CONSIDERED FREE OF SNOW)

FOUNDATIONS:

1. FOUNDATION DESIGN IS BASED ON AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 3000 PSF. VARYING CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO WORK BEING CARRIED OUT. IT IS RECOMMENDED THAT THE OWNER HIRE A CONSULTANT TO PERFORM SOIL BORINGS AND ASSOCIATED TESTING TO VERIFY THE ASSUMED VALUES. THE CONTRACTOR OR OWNER SHALL ASSUME ALL RESPONSIBILITY IF A GEOTECHNICAL ENGINEER IS NOT RETAINED.

2. FOUNDATIONS SHALL BE FOUNDED ON NATURALLY UNDISTURBED SOIL OR CONTROLLED STRUCTURAL FILL HAVING AN ALLOWABLE BEARING CAPACITY OF 3000 PSF.

3. MAINTAIN CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER DURING CONSTRUCTION SUCH THAT FOUNDATION WORK IS IN DRY AND UNDISTURBED SUBGRADE MATERIAL, AS APPLICABLE.

4. ALL FOOTINGS EXPOSED TO FROST TO BE PLACED AT A MINIMUM DEPTH OF 4'-0" BELOW FINISH GRADE. SEE PLANS AND ELEVATIONS FOR THE ESTIMATED BOTTOM OF FOOTING ELEVATION. ANY DISCREPENCIES OR ADJUSTMENTS TO THE FOOTING ELEVATIONS TO BE BROUGHT TO THE PROJECT ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

5. ALL FOOTINGS SHALL BE CENTERED UNDER SUPPORTED STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

6. PROVIDE TEMPORARY OR PERMANENT SUPPORTS, SHORING, SHEETING OR BRACING SO THAT NO HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OCCURS IN THE STRUCTURE OR ITS SURROUNDINGS.

7. BACKFILL THE EXCAVATION WITH APPROVED GRANULAR MATERIAL PLACED IN 6 INCH LIFTS AND COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT, AS DEFINED BY ASTM D1557, METHOD D AFTER BOTTOM OF EXCAVATION HAS BEEN APPROVED BY THE PROJECT ENGINEER.

CONCRETE NOTES:

1. CONCRETE WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:

- "INTERNATIONAL BUILDING CODE" - 2003 EDITION.
- "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" - ACI 301-99.
- "COLD WEATHER CONCRETING" - ACI 306-99.
- "DETAILING REINFORCING STEEL" - ACI 315-99.
- "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" - ACI 318-99.
- "BUILDING CODE REQUIREMENTS FOR PLAIN CONCRETE" - ACI 322-99.
- "FORMWORK" - ACI 347-99.

2. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 4000 PSI AFTER 28 DAYS WITH A SLUMP SHALL OF 4" TO 6" AND IN ACCORDANCE WITH ASTM C143.

3. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60 EXCEPT TIES AND STIRRUPS MAY BE GRADE 40. WELDED WIRE FABRIC (WWF) SHALL BE SHEETS ONLY, IN ACCORDANCE WITH ASTM A185. LAP TWO SQUARES AT ALL JOINTS AND TIE AT 3'-0" ON CENTER.

4. CEMENT MIXTURE FOR CONCRETE SHALL CONTAIN TYPE II CEMENT CONFORMING WITH ASTM-C 150. THE WATER CEMENT RATIO SHALL NOT EXCEED 0.45.

5. AGGRESSATE SHALL BE SOUND AND CONFORM TO THE PROVISIONS OF ASTM C33. COARSE AGGRESGATE SIZE SHALL NOT EXCEED ¾". (NO. 67)

6. PLACING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 304-99 AND SHALL BE A CONTINUOUS OPERATION AVOIDING ANY HORIZONTAL JOINTS. FORMWORK SHALL BE SMOOTH PLYWOOD FORMS FOR EXPOSED SLABS OR VERTICAL SURFACES. BOARD FORMS FOR FOOTINGS OR UNEXPOSED CONCRETE SURFACES. NO EARTH FORMS SHALL BE PERMITTED. ALL CONCRETE SHALL BE VIBRATED.

7. PLACE REINFORCING USING STANDARD BAR SUPPORTS TO PROVIDE PROPER CLEARANCE AND PREVENT DISPLACEMENT DURING CONCRETE OPERATIONS. LAP CONTINUOUS BARS 40 DIAMETERS.

8. REINFORCING BARS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE CRSI "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS".

9. PROPERLY BRACE AND SHORE FORMWORK TO MAINTAIN ALIGNMENT AND TOLERANCES IN ACCORDANCE WITH ACI 347-99.

10. PROVIDE TWO #5 BARS EACH SIDE OF ALL OPENINGS IN WALLS AND SLABS. BARS TO EXTEND 24" BEYOND EDGE OF OPENINGS. (FOR SIZE AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS).

11. MINIMUM CONCRETE COVER REQUIREMENTS OVER REINFORCING STEEL ARE AS FOLLOWS:

- FORMED CONCRETE EXPOSED TO EARTH, WEATHER, OR WATER - 2"
- UNFORMED CONCRETE PLACED AGAINST THE EARTH - 3"
- UNFORMED CONCRETE PLACED AGAINST VAPOR BARRIER - 2"
- SLABS ON GRADE - 1" FROM TOP

12. DETAILS NOT SHOWN ON DRAWINGS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL (ACI 315-99).

13. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER 48 HOURS IN ADVANCE OF CONCRETE PLACEMENT SO THAT THE FORMWORK AND REINFORCING MAY BE INSPECTED PRIOR TO BEING COVERED.

14. CONSULT PROJECT OWNER FOR SURFACE FINISHES REQUIRED FOR CONCRETE SLAB.

15. MOISTOP UNDERSLAB VAPOR BARRIER SHALL BE AS MANUFACTURED BY FORTIFIBER OR EQUAL CONSISTING OF 2 LAYERS OF EXTRUDED POLYETHYLENE WITH A MEMBRANE OF KRAFT AND GLASS REINFORCING STEEL. SEAMS SHALL BE OVERLAPPED A MINIMUM OF 6" AND TAPED WITH MOISTOP VAPOR BARRIER TAPE OR EQUAL AS REQ'D.

16. QUALITY CONTROL SPECIFICATIONS ARE AS FOLLOWS:
   - CONTRACTOR SHALL MAKE PROVISIONS TO HAVE FOUR CYLINDERS CAST FOR EACH 50 CUBIC YARDS OR FOR ANY ONE DAYS OPERATION.
   - TESTING LABORATORY SHALL BE RESPONSIBLE FOR MAKING AND CURING SPECIMENS IN CONFORMANCE TO ASTM C31 AND TESTING SPECIMENS IN ACCORDANCE WITH ASTM C39.
   - ALL TESTING ASSOCIATED WITH CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF "INTERNATIONAL BUILDING CODE" - 2003 EDITION.
   - THE COSTS OF ALL TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE OWNER.

WOOD FRAMING:

1. ALL WOOD FRAMING SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:

- "INTERNATIONAL BUILDING CODE" - 2003 EDITION
- "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - AF&PA NDS-1997

2. ALL FRAMING MEMBERS SHALL BE No.1 / No. 2 OR BETTER SPRUCE-PINE-FIR WITH A MAXIMUM MOISTURE CONTENT OF 19% UNLESS NOTED OTHERWISE.
   - BASE DESIGN VALUES:
     Fb=875 (1,000 REF.) PSI, Fv=70 PSI, E=1,400 KSI

3. ALL LUMBER AND PLYWOOD SHALL BE GRADE-STAMPED BY THE APPROPRIATE MANUFACTURER'S ASSOCIATION FOR THE APPROPRIATE USE.

   - ROOF: 15/32" SQUARE EDGE PLYWOOD W/ FRAMING CLIPS
   - FLOORS: 23/32" TONGUE & GROOVE PLYWOOD
   - WALLS: 15/32" PLYWOOD

4. ROOF AND WALL SHEATHING SHALL COMPLY WITH THE FOLLOWING:
   - APA RATED SHEATHING, EXPOSURE 1 OR 2
   - ROOF SHEATHING SHALL HAVE A 40/20 SPAN RATING
   - ROOF SHEATHING SHALL HAVE (1) PANEL EDGE CLIP BETWEEN EACH SUPPORT
   - A 1/8" EXPANSION GAP SHALL BE LEFT BETWEEN ALL PANELS AS REQUIRED BY APA
   - SHEETS SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTING MEMBERS

5. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESSURE TREATED (PT) WITH A CCA-C 0.40 PROCESS.

6. ALL FRAMING SHALL BE PLUMB, TRUE, AND ADEQUATELY BRACED SUCH THAT THE STRUCTURE IS RIGID AND BEARS FULLY WITHOUT THE USE OF SHIMS.

7. SPIKE TOGETHER ALL FRAMING MEMBERS WHICH ARE BUILT UP WITH 16d NAILS AT 16" O.C. MAX. UNLESS NOTED OTHERWISE. PROVIDE PLYWOOD FILLERS BETWEEN 2x MEMBERS TO MATCH WALL THICKNESS.

8. PROVIDE A MINIMUM OF TWO 2x STUDS AT THE END OF ALL BUILT-UP 2x BEAMS AND LVL BEAMS, UNLESS NOTED OTHERWISE. (FOR SPANS 6'-0" OR GREATER)

9. CORNERS OF EXTERIOR WALLS SHALL HAVE A MINIMUM OF (3) 2x STUDS.

10. PROVIDE SOLID BLOCKING UNDER ALL CONCENTRATED LOADS. PROVIDE CONTINUITY TO TOP OF FOUNDATION WALL OR FOOTING.

11. PROVIDE A DOUBLE TOP PLATE FOR ALL EXTERIOR WALLS W/ SPLICES STAGGERED BY 4'-0" MIN.

12. NON-STRUCTURAL INTERIOR WALLS SHALL BE CONSTRUCTED W/ 2x4 STUDS.

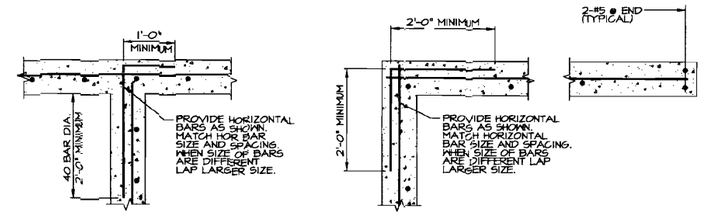
13. ENGINEERED LUMBER PRODUCTS SHALL BE MANUFACTURED BY BOISE CASCADE OR APPROVED EQUAL, INCLUDING ALL BCI JOISTS AND LVL's. ALL BOISE CASCADE PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS AND STANDARD DETAILS AS PUBLISHED BY BOISE CASCADE.
   - BASE DESIGN VALUES:
     - 1¾" WIDE VERSA-LAM BEAMS GRADE 3100 Fb SP
       Fb=3,100 PSI, Fv=240 PSI, E=2,000 KSI
     - 3½" AND WIDER VERSA-LAM BEAMS GRADE 3080 Fb DF
       Fb=3,080 PSI, Fv=285 PSI, E=2,000 KSI
     - VERSA-LAM COLUMNS GRADE 2200 Fb DF
       Fb=2,200 PSI, Fc⊥=3,000 PSI, E=1,800 KSI

14. FASTENERS SHALL COMPLY WITH THE FOLLOWING:
   - NAILS SHALL BE COMMON WIRE NAILS, GALVANIZED @ EXPOSED FRAMING
   - BOLTS, NUTS AND WASHERS SHALL BE ASTM A-307, HOT DIP GALVANIZED AT EXTERIOR EXPOSED FRAMING CONFORMING TO ASTM A153
   - METAL CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL
   - STAINLESS STEEL NAILS FOR ATTACHING EXTERIOR TRIM AND SIDING
   - ALL WOOD MEMBERS TO BE NAILED IN ACCORDANCE WITH THE "INTERNATIONAL BUILDING CODE" - 2003 EDITION - TABLE 2304.9.1

15. PLYWOOD SHALL BE NAILED AT 6" OC AT ALL JOINTS AND EDGES & AT 10" OC AT OTHER SUPPORTS. PLYWOOD SUB-FLOORS SHALL BE GLUED TO JOISTS, BEFORE NAILING WITH CONSTRUCTION ADHESIVE.

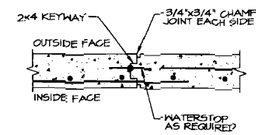
16. LIGHTWEIGHT RESIDENTIAL LALLY COLUMNS - 4" OUTER DIAMETER 16 GAGE STEEL PIPE CONFORMING TO ASTM A513 FILLED WITH CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. (UNLESS OTHERWISE NOTED.)

17. DOUBLE JOISTS SHALL BE PROVIDED DIRECTLY UNDER PARALLEL PARTITION WALLS.

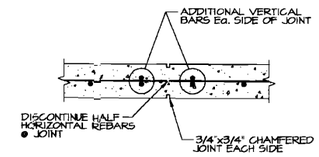


INTERSECTION DETAIL — CORNER DETAIL — END WALL DETAIL

TYPICAL CONCRETE WALL DETAIL WITH SINGLE LAYER REINFORCING

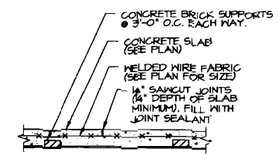


CONSTRUCTION JOINT AT CONCRETE WALL

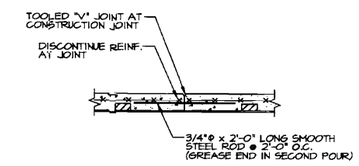


CONTROL JOINT W/ SINGLE REINFORCING AT CONCRETE WALL

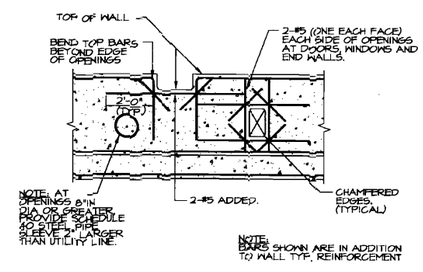
MAXIMUM SPACING IS 24'-0"



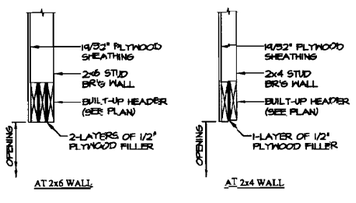
TYPICAL CONCRETE SLAB CONTROL JOINT DETAIL



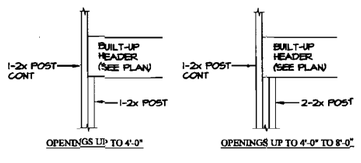
TYPICAL CONCRETE SLAB CONTRUCTION JOINT DETAIL



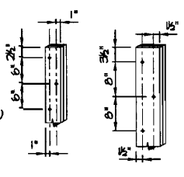
TYPICAL ADDITIONAL REINFORCING AT OPENINGS AND BREAKS IN CONCRETE WALLS



TYPICAL BUILT-UP HEADER



TYPICAL POST @ BUILT-UP HEADER



2-2x4
ONE ROW 10d COMMON WIRE NAILS
3-2x4
ONE ROW 30d COMMON WIRE NAILS (STAGGERED) OR SIMPSON ¼"x4½"SDS STRONG DRIVE SCREWS

2-2x6
TWO ROWS 10d COMMON WIRE NAILS
3-2x6
TWO ROWS 30d COMMON WIRE NAILS (STAGGERED) OR SIMPSON ¼"x4½"SDS STRONG DRIVE SCREWS

TYPICAL BUILT-UP POST

REV.	DATE	DESCRIPTION	CHK
-	-	-	

REVISION HISTORY

ROSS ENGINEERING
Civil/Structural Engineering & Surveying
909 Islington St
Portsmouth, NH 03801
(603) 433-7560

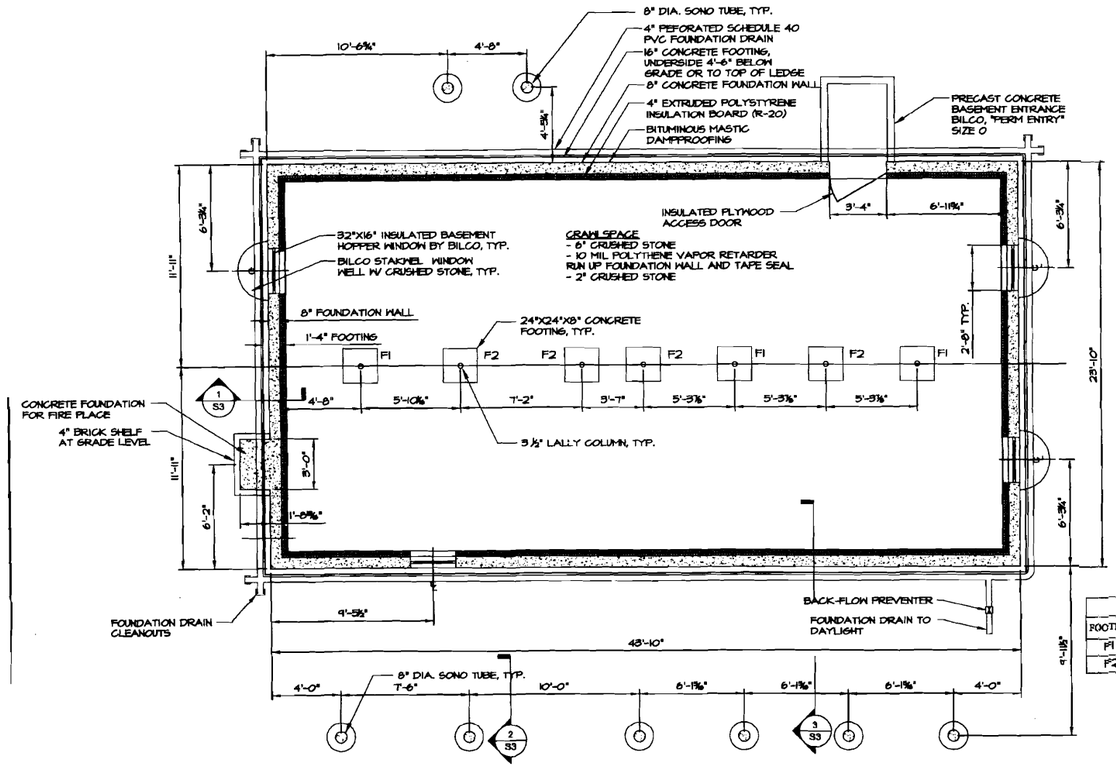
GLICKMAN COTTAGE
LOT #4
GREAT DIAMOND ISLAND
YORK MAINE

PREPARED FOR:
MAINE ISLAND COTTAGE
GLEN RUESSNICK
PO BOX 250
KITTERY, ME 03904

DESIGNED BY:	
ILB	05/16/2007
DRAFTED BY:	
ILB	05/16/2007
CHECKED BY:	
AR	05/16/2007

STATE OF MAINE — R. Alan Ross — 10109 — LICENSED PROFESSIONAL ENGINEER

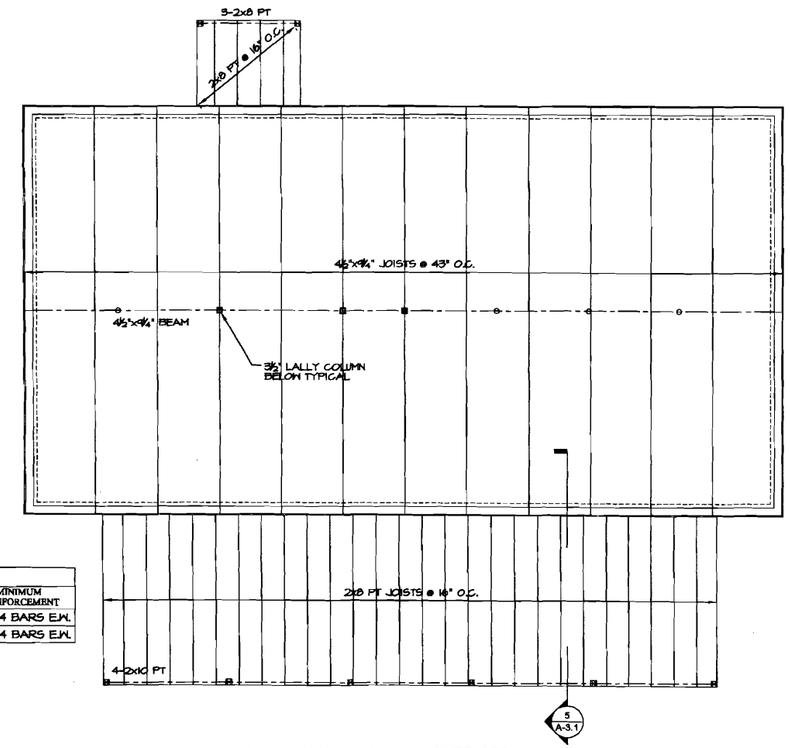
JOB #:	07-013
SCALE:	AS NOTED
SHEET:	1 OF 3
DRAWING:	S1



FOUNDATION PLAN

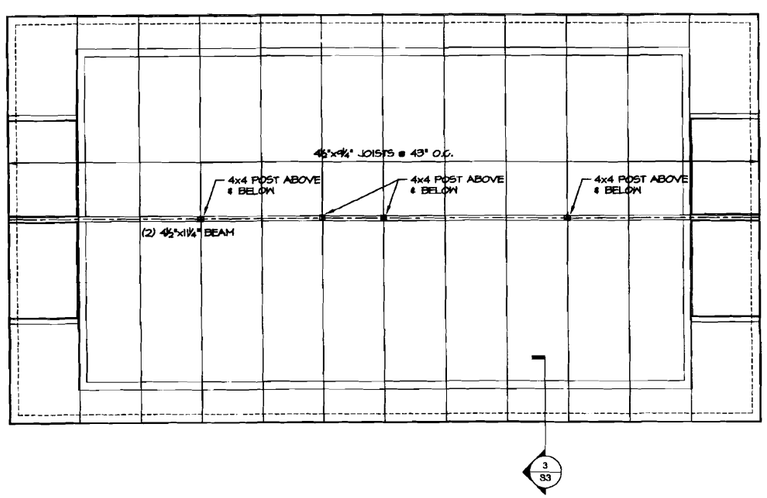
Scale : ¼"=1'-0"

FOOTING SCHEDULE			
FOOTING	SIZE	THICKNESS	MINIMUM REINFORCEMENT
F1	2'-0" x 2'-0"	12"	(3) #4 BARS E.W.
F2	2'-6" x 2'-6"	12"	(4) #4 BARS E.W.



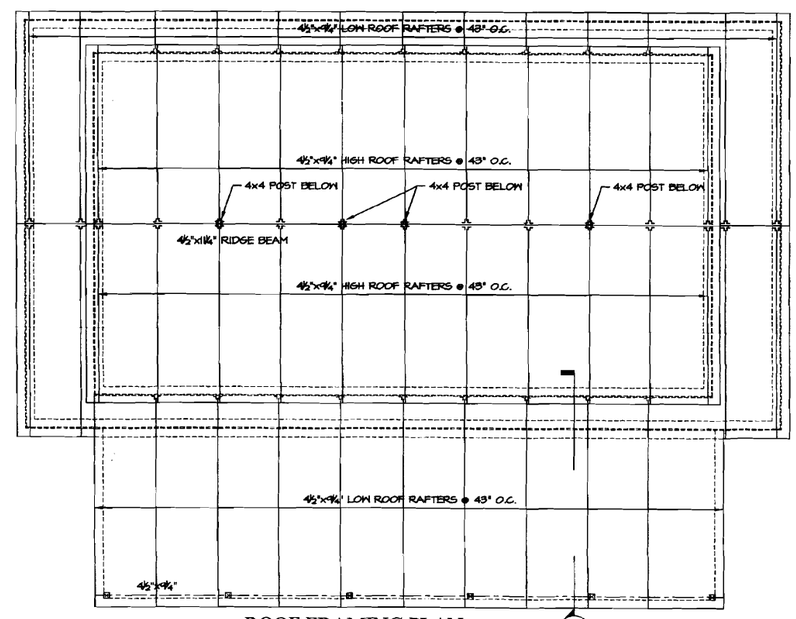
1st FLOOR FRAMING PLAN

Scale : ¼"=1'-0"



2nd FLOOR FRAMING PLAN

Scale : ¼"=1'-0"



ROOF FRAMING PLAN

Scale : ¼"=1'-0"

REVISION HISTORY			
REV	DATE	DESCRIPTION	CHK
-	-	-	

ROSS ENGINEERING
Civil/Structural Engineering & Surveying
909 Islington St.
Portsmouth, NH 03801
(603) 433-7560

GLICKMAN COTTAGE
LOT #4
GREAT DIAMOND ISLAND
YORK MAINE

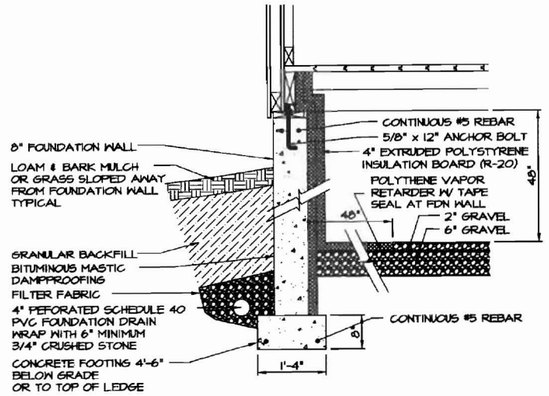
PREPARED FOR:
MAINE ISLAND COTTAGE
GLEN RUESSNICK
PO BOX 250
KITTERY, ME 03904

DESIGNED BY: ILB 05/16/2007
DRAFTED BY: ILB 05/16/2007
CHECKED BY: AR 05/16/2007

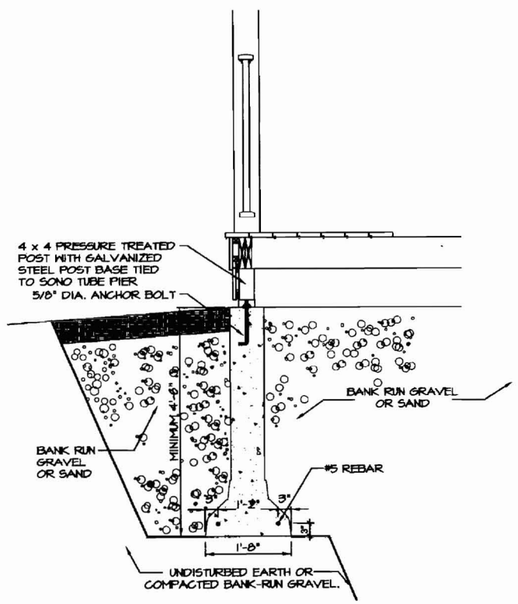
STATE OF MAINE
R. Alan Ross
10100
LICENSED
PROFESSIONAL ENGINEER

JOB #: 07-013
SCALE: AS NOTED
SHEET: 2 OF 3
DRAWING:

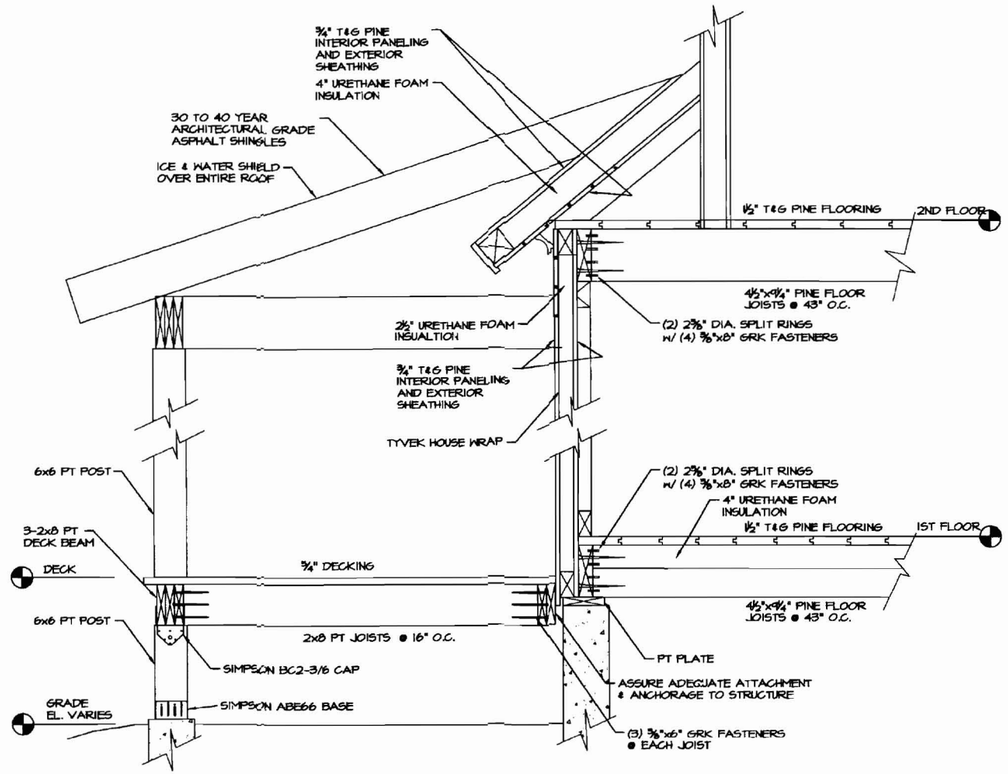
S2



SECTION 1/S2
Scale: 3/4"=1'-0"



SECTION 2/S2
Scale: 3/4"=1'-0"



SECTION 3/S2
Scale: 1"=1'-0"

REVISION HISTORY			
REV	DATE	DESCRIPTION	CHK
-	-	-	

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STATE OF MAINE
R. Alan Ross
10108
LICENSED
PROFESSIONAL ENGINEER

JOB #:	07-013
SCALE:	AS NOTED
SHEET:	3 OF 3
DRAWING:	S3