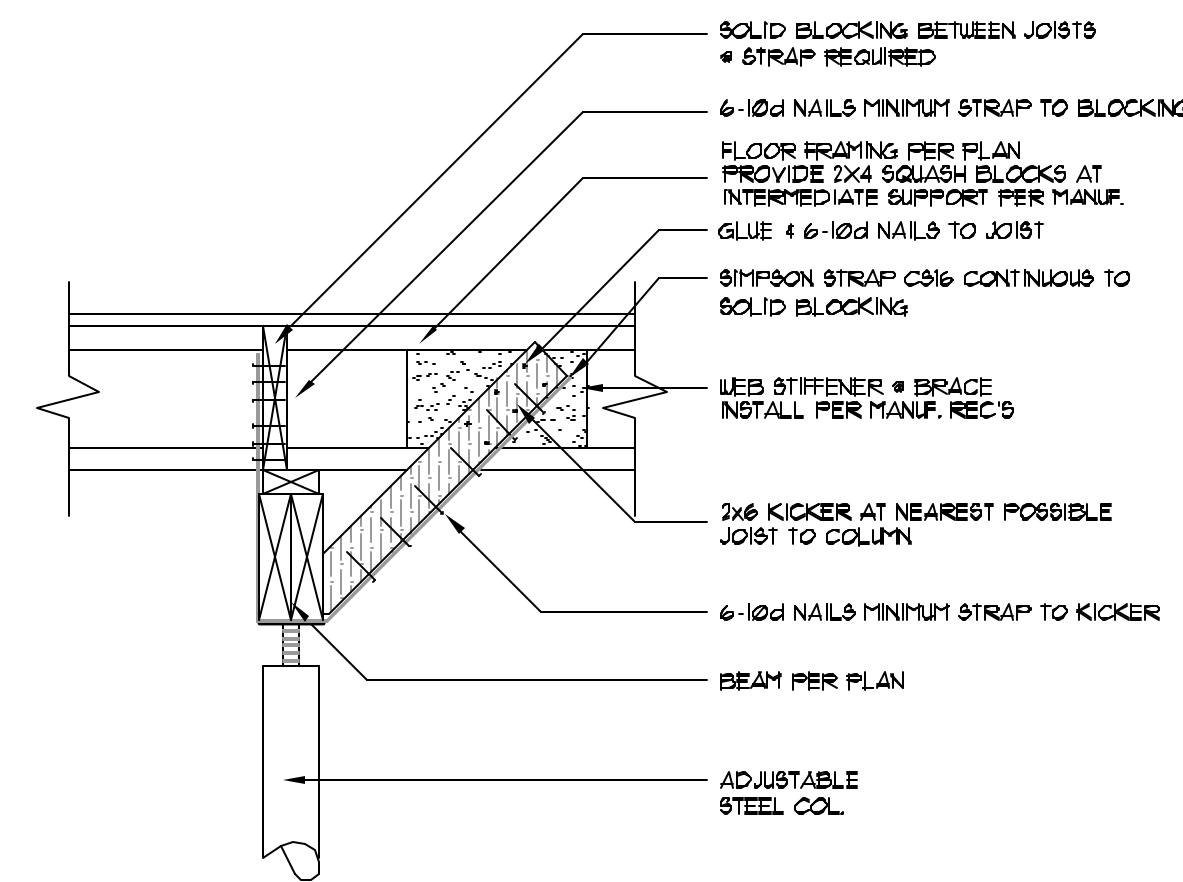


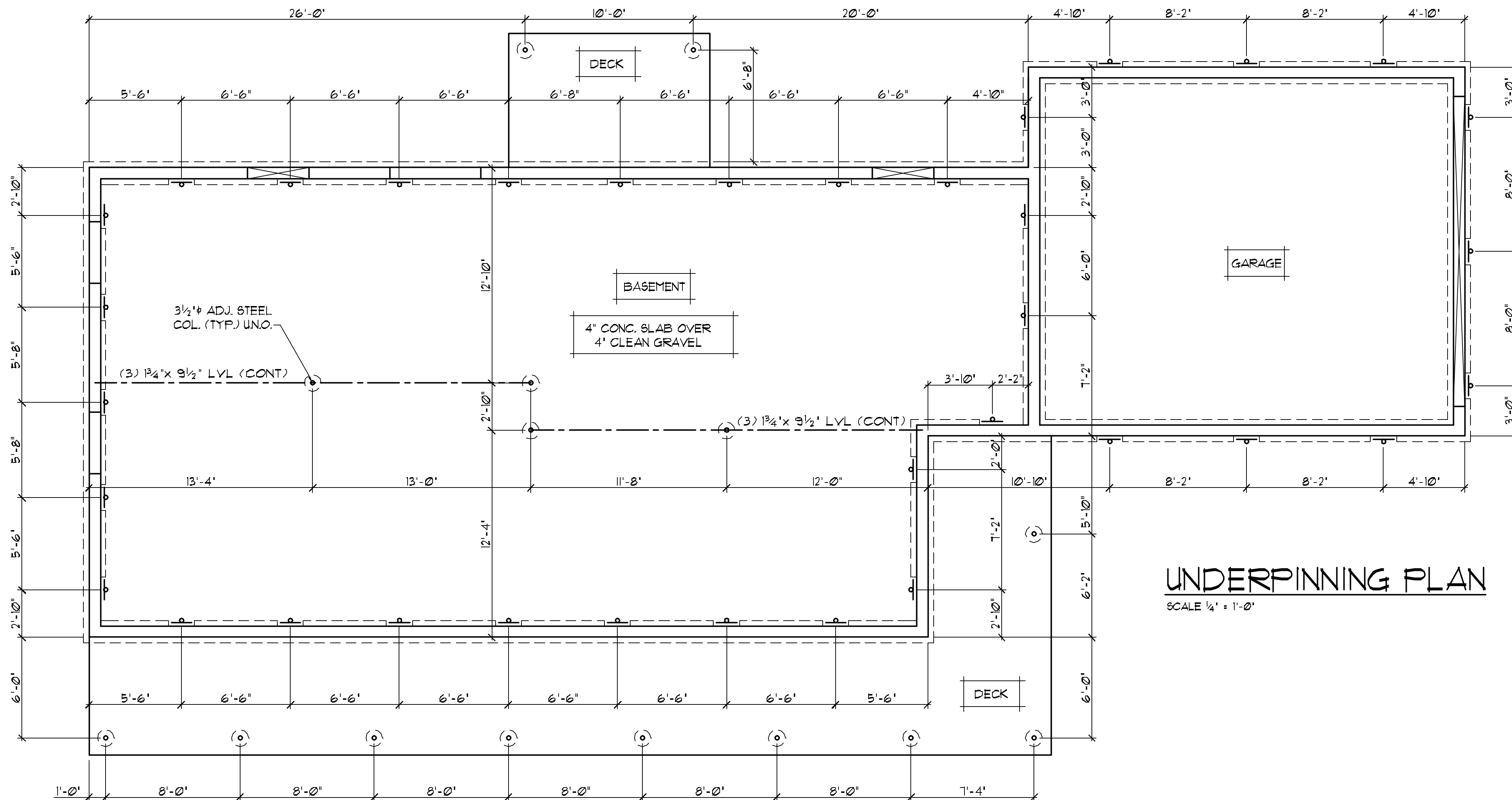
Guide Construction Sequence:

- 1) Locate and clear underground utilities.
- 2) Remove basement slab to facilitate work.
- 3) Chip footing and install steel piling brackets.
- 4) Install and load test each push pier individually per Gen. Notes.
- 5) Using all piers simultaneously, lift and re-level house to the extent contractor deems possible without additional damage.
- 6) Lock-off push piers.
- 7) Install temporary bearing walls and remove existing beams.
- 8) Install steel columns and new drop beams per plan.
- 9) Remove temporary bearing walls.
- 10) Replace previously removed basement slab.
- 11) Install lateral beam braces near each column location (4 places).
- 12) Remove temporary bracing and clean-up site.
- 13) Replace any and all disturbed finishes.
- 14) Patch cracks, paint, adjust windows and doors, and perform other cosmetic repairs as directed by homeowner and agreed upon.



BRACE @ WF BEAMS & STEEL COLUMNS

STEEL PUSH PIER SCHEDULE					
SYMBOL	QUANTITY	DESIGN CAPACITY	MIN. LENGTH	BRACKET CONNECTION	NOTES
—	36	28 KIP8	30' (FT)	PER MANUFACTURER	LOAD TEST EACH PIER PER GENERAL NOTES
o	17	20 KIP8	30' (FT)	PER MANUFACTURER	LOAD TEST EACH PIER PER GENERAL NOTES



UNDERPINNING PLAN

SCALE 1/4" = 1'-0"

General Notes:

1. Codes:

This plan was prepared based on the 2003 I-Codes with local amendments and portions of the most recent versions of ACI 318, ACI 308R, AISC Allowable Stress Design ninth edition, and the NDS for wood construction.

2. Loads:

This plan is based upon the following load parameters:

Roof: Live Load + 30 psf

Floor: Live Load + 40 psf

Basement: Zone 1

Soils report by: TERRACON 92055031, Date: 03-09-05

All push piers to be individually load tested per Gen. Note No. 5

Footing sizes based on reduced bearing capacity given in original geotechnical report.

3. Materials:

This plan is based upon the following material properties:

Concrete: Concrete shall contain Type II cement, 6% w/w air entrainment, and a minimum 28 day compressive strength of 3000 psi for structural concrete, and 3500 psi for interior or exterior slabs on grade.

Reinforcing: Reinforcing shall be deformed grade 60 steel unless noted otherwise (UNO) on the plan and shall conform to ASTM A63. Minimum concrete cover shall be 2" (in) UNO on the plan. Overlaps shall be 40 bar diameters but not less than 24" (in). Detail all reinforcing bars in accordance to the ACI detailing manual and ACI codes, latest edition. All foundation wall reinforcement should be welded in place. Slab and footing reinforcement shall utilize chairs or other acceptable methods to achieve the required cross section location.

Steel: Structural Steel Beams shall conform to ASTM A992 (fy=50 ksi). 3" (in) adjustable steel columns shall be 1.6A or better and rated for a safe allowable load of not less than 14 kips for columns up to 8'-0" in height, and 12.5 kips for columns up to 9'-0" in height. 3 1/2" (in) adjustable steel columns shall be schedule 40 and rated for a safe allowable load of not less than 26 kips for columns up to 10'-0" in height. All adjustable steel columns shall have 1/2" (in) of thread exposed.

Wood: All dimensional lumber shall be Hem Fir #2 or better unless noted on the plan. All Laminated Veneer Lumber shall have an allowable flexural stress $F_b = 2400$ psi and Modulus of Elasticity of $E = 1.8 \times 10^6$ psi or better. Glued Laminated Lumber shall have an allowable flexural stress $F_b = 2400$ psi and Modulus of Elasticity of $E = 1.8 \times 10^6$ psi or better.

Fasteners and connectors: All fasteners and connectors in contact with pressure treated lumber shall be 304 stainless steel.

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EXAMPLE PREPARED BY:
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 F: (970) 472-6256
 E: info@secureengineer.com

SECURE
 FOUNDATIONS & STRUCTURES, INC.

RESIDENTIAL REPAIR

NO. DATE
 REVISION/ISSUE
 A
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RESIDENTIAL REPAIR

RESIDENTIAL REPAIR

RESIDENTIAL REPAIR

RESIDENTIAL REPAIR

EXAMPLE 2

DATE: 08-08-05
 AS SHOWN