Job	Truss	Truss Type	Qty	Ply	Jim Flynn R35082239
TM-07819	A02	SPECIAL TRUSS	5	1	Job Reference (optional)

PRECISION TRUSS & LUMBER, INC., CLACKAMAS,OR. 97015 — 7.250 s Aug 25 2011 MiTek Industries, Inc. Thu Aug 30 14:23:29 2012 Page 1

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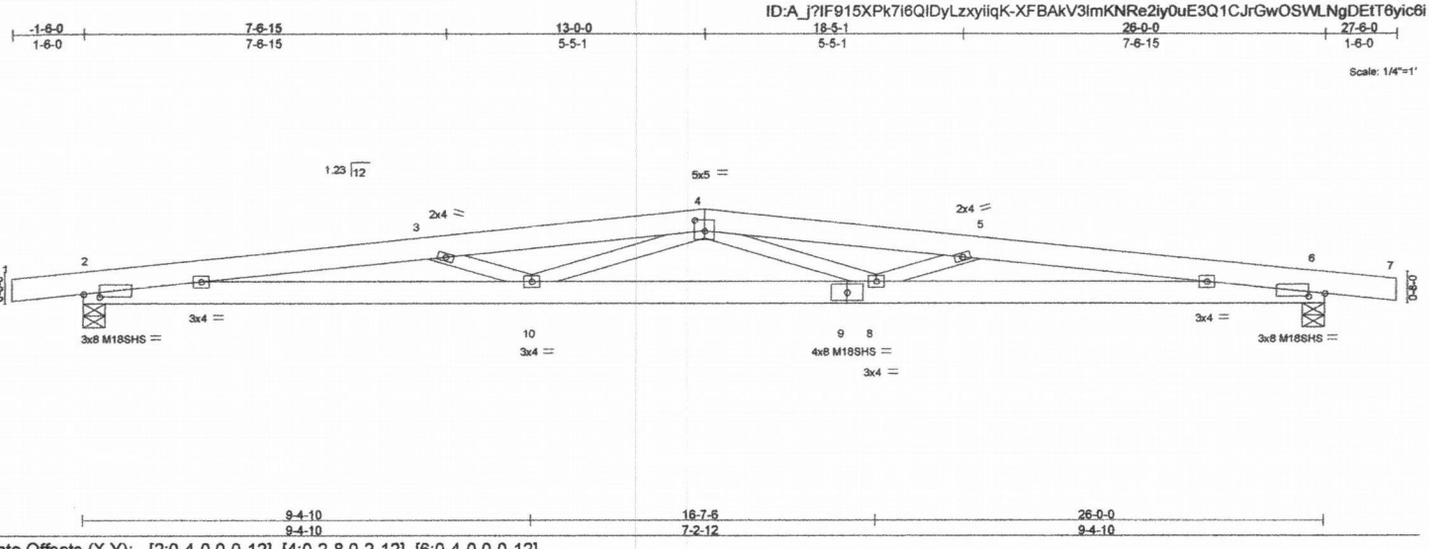

Plate Offsets (X,Y): [2:0-4-0,0-0-12], [4:0-2-8,0-2-12], [6:0-4-0,0-0-12]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plates Increase	1.15	TC	0.29	Vert(LL)	-0.41	8-10	>752	240	MT20	220/195
TCDL	10.0	Lumber Increase	1.15	BC	0.46	Vert(TL)	-1.06	8-10	>289	180	M18SHS	220/195
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(TL)	0.13	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 134 lb	FT = 0%

LUMBER
TOP CHORD 2 X 6 DF 2500F 2.2E
BOT CHORD 2 X 6 DF 2500F 2.2E
WEBS 2 x 4 DF Std G

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1270/0-5-8 (min. 0-1-8), 6=1270/0-5-8 (min. 0-1-8)
Max Horz 2=18(LC 5)
Max Uplift2=-240(LC 3), 6=-240(LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5617/720, 3-4=-5336/497, 4-5=-5336/498, 5-6=-5617/721
BOT CHORD 2-10=-711/5526, 9-10=-469/4695, 8-9=-469/4695, 6-8=-695/5526
WEBS 4-8=-1/813, 5-8=-422/264, 4-10=-1/813, 3-10=-422/264

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) A plate rating reduction of 20% has been applied for the green lumber members.
7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Digital Signature
EXPIRATION DATE: 06/30/14

August 31,2012

MiTek
7777 Greenback Lane, Suite 109
Citrus Heights, CA, 95610

Jcb	Truss	Truss Type	Qty	Ply	Jim Flynn
TM-07819	A01	GABLE	2	1	R35082238
					Job Reference (optional)

PRECISION TRUSS & LUMBER, INC., CLACKAMAS,OR. 97015 — 7.250 s Aug 25 2011 MiTek Industries, Inc. Thu Aug 30 14:23:27 2012 Page 1

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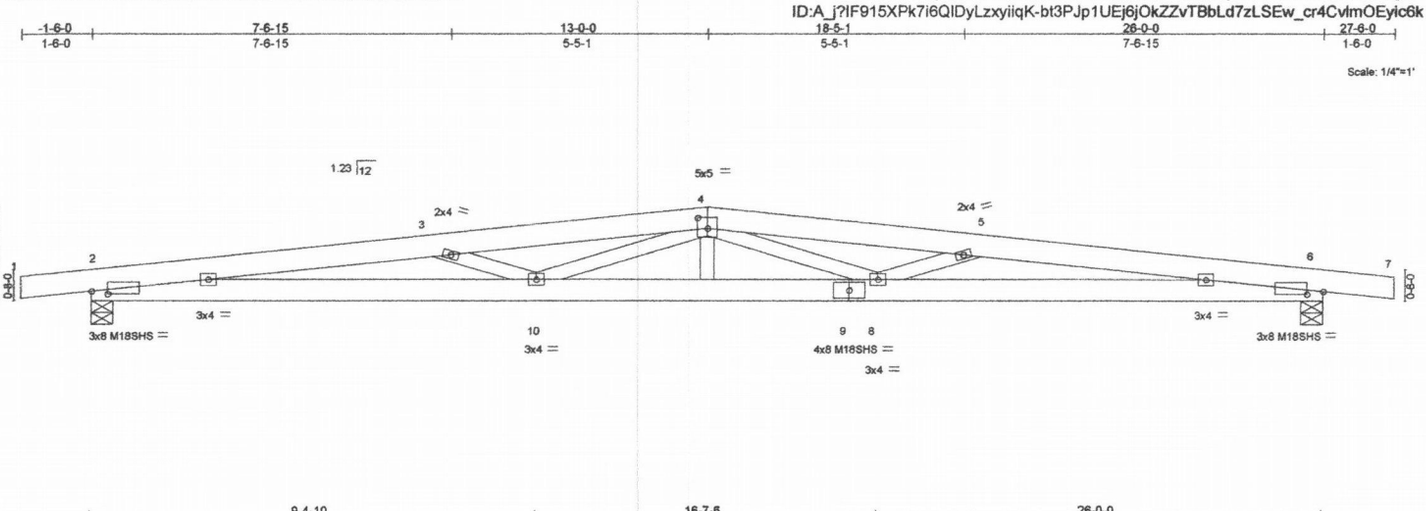


Plate Offsets (X,Y): [2:0-4-0,0-0-12], [4:0-2-8,0-2-12], [6:0-4-0,0-0-12]

LOADING (psf)		SPACING 2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plates Increase	1.15	TC	0.29	Vert(LL)	-0.41	8-10	>752	240	MT20	220/195
TCDL	10.0	Lumber Increase	1.15	BC	0.46	Vert(TL)	-1.06	8-10	>289	180	M18SHS	220/195
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(TL)	0.13	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 135 lb	FT = 0%

LUMBER
TOP CHORD 2 X 6 DF 2500F 2.2E
BOT CHORD 2 X 6 DF 2500F 2.2E
WEBS 2 x 4 DF Std G
OTHERS 2 x 4 DF Std G

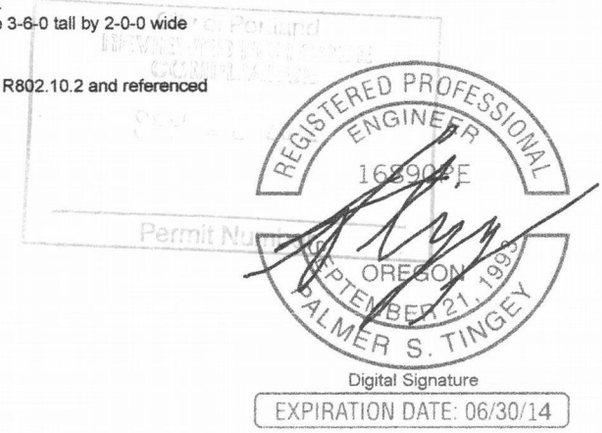
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1270/0-5-8 (min. 0-1-8), 6=1270/0-5-8 (min. 0-1-8)
Max Horz 2=18(LC 5)
Max Uplift2=-240(LC 3), 6=-240(LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5617/720, 3-4=-5336/497, 4-5=-5336/498, 5-6=-5617/721
BOT CHORD 2-10=-711/5526, 9-10=-469/4695, 8-9=-469/4695, 6-8=-695/5526
WEBS 4-8=-1/813, 5-8=-422/264, 4-10=-1/813, 3-10=-422/264

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1-2002.
4) All plates are MT20 plates unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) A plate rating reduction of 20% has been applied for the green lumber members.
9) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Digital Signature
EXPIRATION DATE: 06/30/14

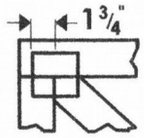
August 31,2012

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 781 N. Lee Street, Suite 312, Alexandria, VA 22314.
If Southern Pine (SP or SPp) lumber is specified, the design values are those effective 06/01/2012 by ALSC or proposed by SPIB.

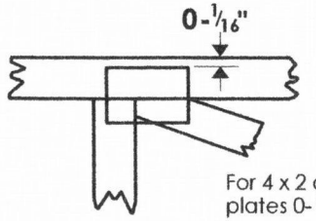
MiTek
7777 Greenback Lane, Suite 109
Citrus Heights, CA, 95610

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

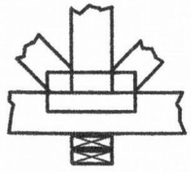
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

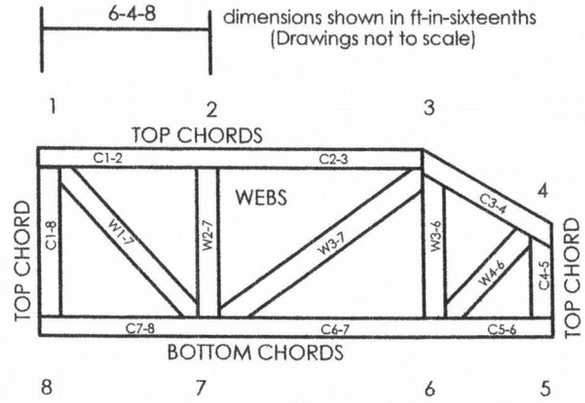


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Southern Pine lumber designations are as follows:

SYP represents current/old values as published by AWC in the 2005/2012 NDS
SPp represents SPIB proposed values as provided in SPIB submittal to ALSC dated Sept 15, 2011
SP represents ALSC approved/new values with effective date of June 1, 2012 (2x4 No 2 and lower grades and smaller sizes), and all MSR/MEL grades

MiTek®

MiTek Engineering Reference Sheet: MII-7473 rev. 01/18/2012

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

NOTE OF AREA:

FRONT ELEVATION AREA BEFORE ELEVATION.

EXISTING OPENING AREA:
FRONT DOOR 21'
MAIN FLOOR WINDOW 25'
ATTIC WINDOW 14'
TOTAL OPENING AREA 60'

NEW ELEVATION AREA'
325' SQ x .15 OR % = 78.75'

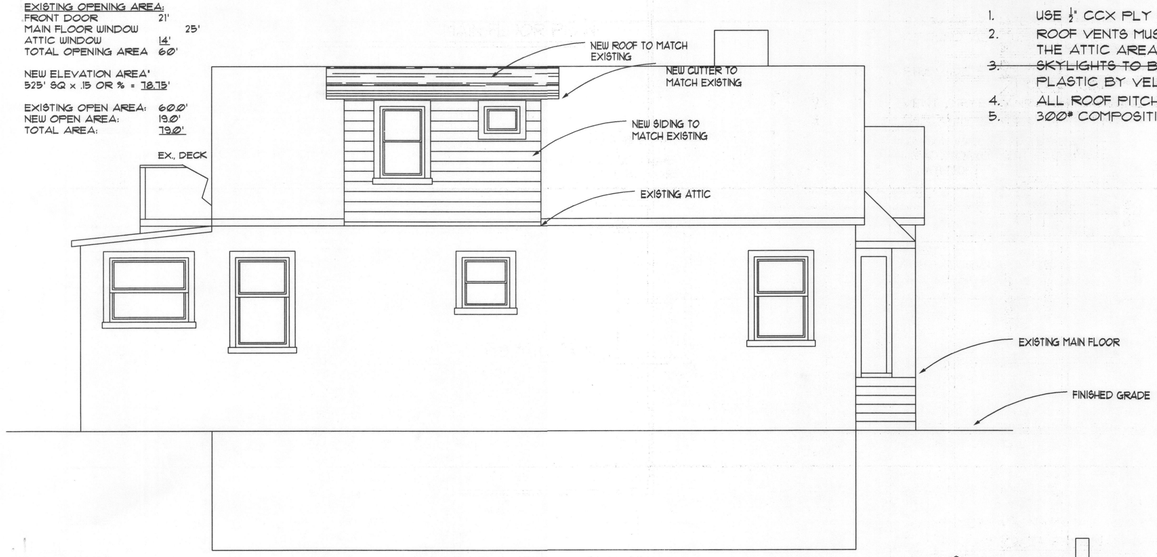
EXISTING OPEN AREA: 60.0'
NEW OPEN AREA: 19.0'
TOTAL AREA: 79.0'

ROOF PLAN

1. USE ½" CCX PLY @ ALL EXPOSED EAVES.
2. ROOF VENTS MUST HAVE AN AREA EQUAL TO 1/150 OF THE ATTIC AREA
3. ~~SKYLIGHTS TO BE DOUBLE DOMED~~ PLASTIC BY VELEX OR EQUAL.
4. ALL ROOF PITCH ARE 3/12 UNLESS NOTED.
5. 300# COMPOSITION SHINGLES OVER 15# FELT.

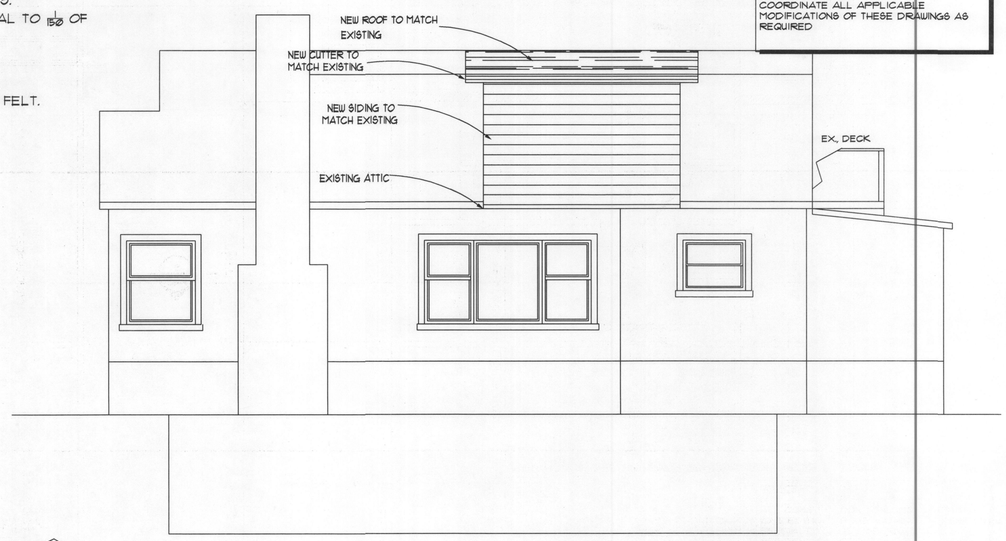
NOTICE

ALL CONSTRUCTION TO COMPLY WITH THE 2010 EDITION OF THE WASHINGTON RESIDENTIAL SPECIALTY CODE / INTERNATIONAL RESIDENTIAL CODE WITH THE WASHINGTON AMENDMENTS AND WASHINGTON RESIDENTIAL ENERGY EFFICIENCY (CHAPTER 11). COORDINATE ALL APPLICABLE MODIFICATIONS OF THESE DRAWINGS AS REQUIRED



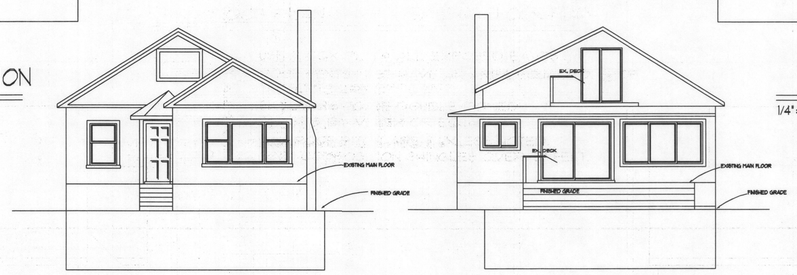
NEW LEFT ELEVATION

1/4"=1'-0"



NEW RIGHT ELEVATION

1/4"=1'-0"

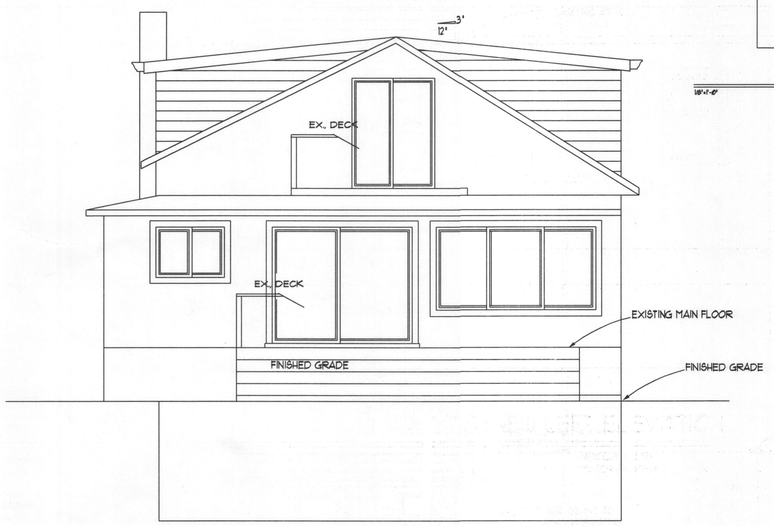


EXISTING FRONT ELEVATION

1/8"=1'-0"

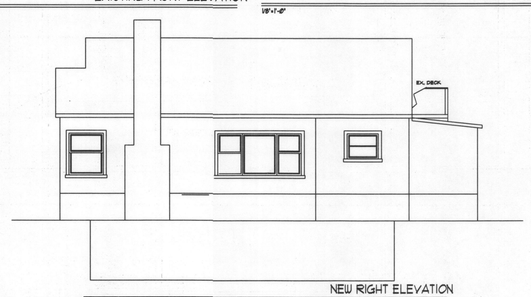
NEW REAR ELEVATION

1/8"=1'-0"



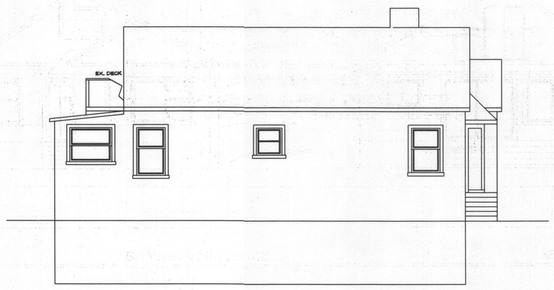
NEW REAR ELEVATION

1/4"=1'-0"



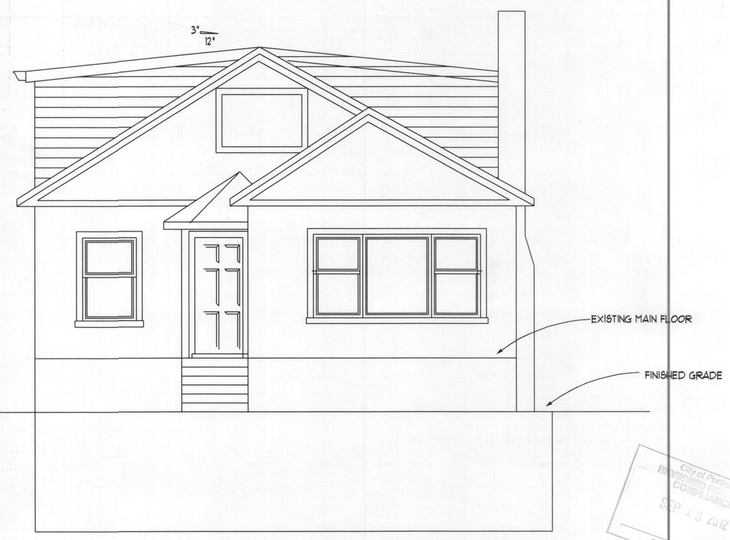
NEW RIGHT ELEVATION

1/4"=1'-0"



NEW LEFT ELEVATION

1/8"=1'-0"



EXISTING FRONT ELEVATION

1/4"=1'-0"

City of Portland
Bureau of
Development Services
By SJS Date 9/13/12
Approved by
Planning and Zoning Review

City of Portland
RECEIVED
COMPLIANCE
Sep 13 2012
Permit Number

Drafting & Design
Custom Plans
Remodels
Site plans
Permit Management

503.515.6495 OFFICE
5531 SW Buddington St.
Portland OR 97219
mikewmontgomery@gmail.com

Patryk & Cynthia Lech
3528 NE Hancock St.
PORTLAND OR 97212

12-134160 RS

ELEVATION PLAN

DATE 09/06/12 rev	
SCALE 1/4" - 1'0"	PROJ. NO 01
DRAWN mum	CHECKED pb

EL

1 of 5

NOTES:

1. ALL FRAMING LUMBER TO BE DFL #2 MIN.
2. FRAME ALL EXTERIOR WALLS W/ 2 X 6 STUDS @ 16" O.C.
3. ALL EXTERIOR HEADERS TO (2) 2X12 DFL #2 UNLESS NOTED W/2" RIGID INSULATION BACKING & 2 X BOTTOM NAILER.
4. ALL INTERIOR HEADERS TO BE 4 X 6 UNLESS NOTED.
5. ALL METAL CONNECTIONS TO BE SIMPSON CO. OR EQUAL.
6. USE 6 X 6 POST W/ECC66 CAP TO POST & CC66 BASE AT REAR BALCONY.
7. BLOCK ALL WALLS OVER 10'-0" HIGH AT MID HEIGHT.

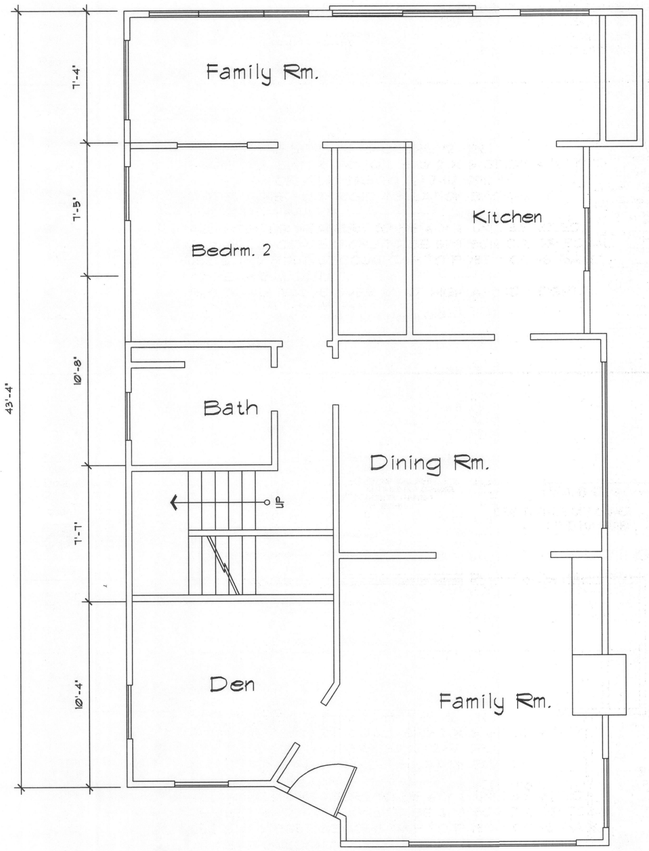
GENERAL NOTES:

1. ALL CONSTRUCTION TO BE IN COMPLIANCE W/ THE 2008 IRC.
2. CONTRACTOR & ALL SUBCONTRACTORS TO VERIFY ALL DIMENSIONS BEFORE ORDERING OR INSTALLING MATERIALS.
3. INSTALL ALL MATERIALS PER THE MANUF. SPECIFICATIONS.
4. ALL PENETRATIONS IN THE TOP OR BOTTOM PLATES FOR PLUMBING OR ELECTRICAL RUNS TO BE SEALED.
5. PROVIDE ½" WATER RESISTANT GYPSUM BD. AROUND ALL TUBS, MODULAR SHOWERS, & SPAS.
6. PROVIDE ¼" COLD WATER LINE TO REF..
7. VENT DRYER AND ALL FANS TO OUTSIDE AIR THROUGH VENTS W/ DAMPERS.
8. INSULATE THE WATER HEATER TO R-11. GAS W.H. TO BE ON 18" HIGH PLATFORM.

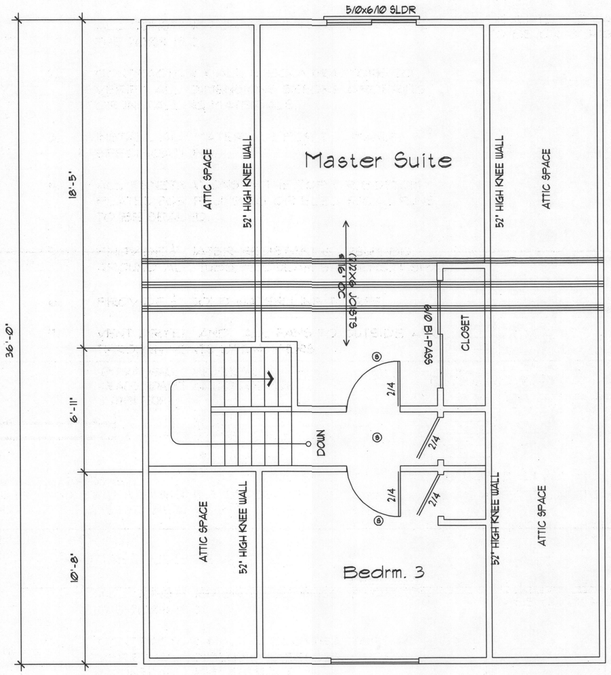
SIMPL HOME DESIGNS ASSUMES NO RESPONSIBILITY FOR THE ACCURACY / VALIDITY OF CONTRACTOR / OWNER SUPPLIED INFORMATION. THE CONTRACTOR / OWNER IS RESPONSIBLE TO CHECK THE PLANS, EXISTING SITE CONDITION, DIMENSIONS, AND TO NOTIFY THE DESIGNER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION. DISCREPANCIES MAY RESULT IN ADDITIONAL COST TO THE OWNER.

EXISTING WALLS TO REMAIN
DASH — FURR OUT WALLS
ANSI37 — DEMO WALLS TO REMAIN
ANSI31 — NEW INTERIOR WALL
CROSS — COMMON USE SPACE

A / C6-4

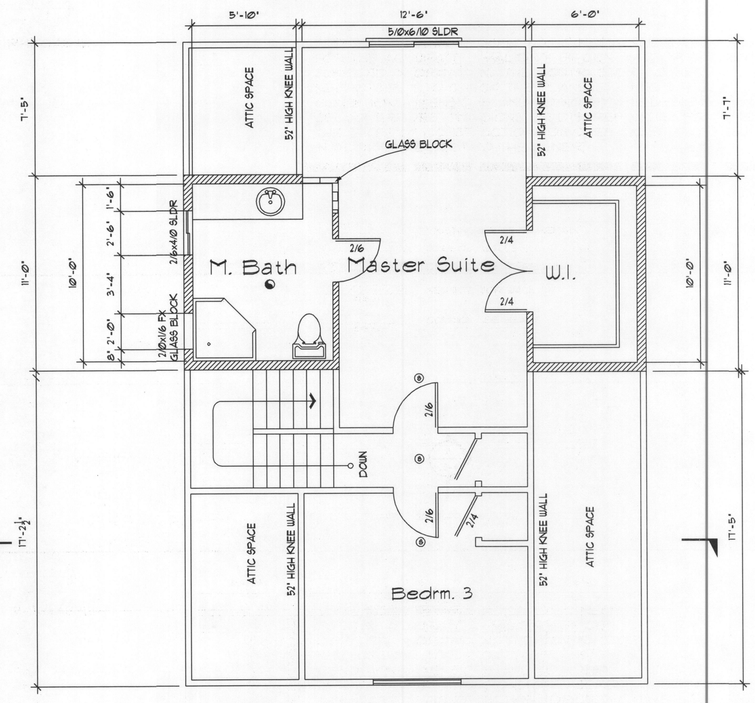


MAIN FLOOR PLAN
1/4"=1'-0"



EXISTING FLOOR PLAN
1/4"=1'-0"

- (S) SMOKE DETECTOR, PERMANENTLY WIRED
- (F) 5-MIN. AIR EXCHANGE FAN
- ATTIC ACCESS/ CRAWL ACCESS MINIMUM 22"x30"
- (CO) CARBON MONOXIDE ALARM (1 PER FLOOR)



BATH ADDITION FLOOR PLAN
1/4"=1'-0"

City of Portland
REVIEWED FOR CODE COMPLIANCE
SEP 13 2012
Permit Number

Drafting & Design
Custom Plans
Remodels
Site plans
Permit Management
503.515.6495 OFFICE
5531 SW Buddington St.
Portland OR 97219
mikewmontgomery@gmail.com

Patryk & Cynthia Lech
3528 NE Hancock St.
PORTLAND OR 97212

FLOOR PLAN(S)

DATE 08/30/06/12 rev	
SCALE 1/4" - 1'0"	PROJ. NO c1
DRAWN mwm	CHECKED pb

FP
2 of 5

ROOF GENERAL NOTES

1. ROOF FRAMING = MANUF. TRUSSES at 24"oc UNLESS NOTED OTHERWISE.
2. ROOF SHTH. = 7/16" OSB (24/0) OR APA RATED SHTH. W/ STAPLES OR 8d at 6"oc AT ALL EDGES AND 12"oc AT FIELD.
3. PROVIDE BIRD BLOCKING W/ 2 x 12 SCREENED VENTS at 6'-0"oc (EA. ONE AT VAULTS).
4. VERIFY AND COORDINATE ALL DIMENSIONS WITH FLOOR PLANS.
5. FOR ROOF PITCH REFER TO ROOF PLAN.
6. 12" RAKE AND 24" EAVE OVERHANGS UNLESS NOTED OTHERWISE.
7. ALL EXTERIOR DOOR AND WINDOW HEADERS TO BE 4 x 10 #2 D.F. UNLESS NOTED OTHERWISE.
8. TRUSS MANUF. TO ENGINEER AND SUPPLY ALL TRUSS HANGERS.
9. TRUSS MANUF. TO PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION.
10. ROOF SHTH. TO BE STAPLED OR NAILED at 4"oc TO ALL TRUSSES DESIGNATED AS DRAG STRUTS.
11. TRUSS MANUF. TO DESIGN FOR DRIFT LOADS AS SHOWN ON PLANS
12. PROVIDE FLASHING AND COUNTER FLASHING AT CHIMNEYS AND AT VERTICAL PLANES.

SPECIFICATIONS

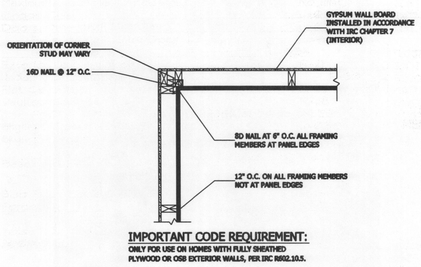
BUILDING COMPONENTS	PATH 1
Maximum Allowable Window Area	No limit
Window Class	U=0.35
Doors, Other than Main Entry	U=0.20
Exterior Main Entry Door (maximum 28' s.f	U=0.54
Exterior Wall Insulation	R-21
Underfloor Insulation	R-30
Flat Ceilings	R-38
Vaulted Ceilings	R-38
Skylight Class	U=0.50
Skylight Area	¢2%
Basements Walls (that DO NOT extend more than 24" About Grade)	R-15
Slab Floor Edge Insulation	R-15
Forced Air Duct Insulation	R-8

Taken from Table N1101.1 (1) of the 2008 O.R.S.C.

Table N1101.1(2) Additional Measures:

(1) High efficiency HVAC system:
Gas-fired furnace or boiler with min. AFUE of 90%, or
Air-source heat pump with min. HSPF of 8.5 or
Closed-loop ground source heat pump with min. COP of 3.0

Wood structural panel sheathing shall be installed at corners in accordance with figure R602.10.3 (1). refer to details on page (NO)



IMPORTANT CODE REQUIREMENT:
ONLY FOR USE ON HOMES WITH FULLY SHEATHED PLYWOOD OR OSB EXTERIOR WALLS, PER IRC R602.10.5.

INSIDE CORNER 3 NO
SEE 2005 ORSC SECT. R602.10.11
(NTS)

ROOF FRAMING SUPPORT PLAN

ROOF FRAMING NOTES:

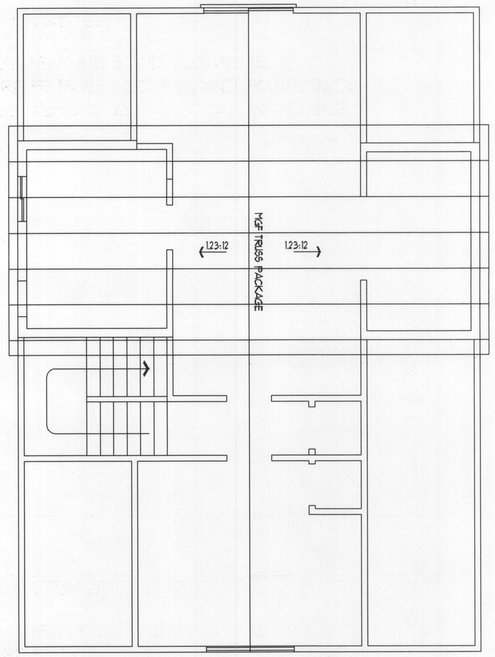
1. ALL HEADERS TO BE SUPPORTED BY 2 X 6 TRIMMERS AND KING STUD UNLESS OTHERWISE NOTES.
2. STRUTS SHALL NOT BE SMALLER THAN 2 X 4 MEMBERS. THE UNBRACED LENGTH OF STRUTS SHALL NOT EXCEED 8' & THE MINIMUM SLOPE OF THE STRUTS SHALL NOT BE LESS THAN 45 DEGREES FROM THE HORIZONTAL.
3. EXTEND INTERIOR BEARING WALLS THROUGH TO RAFT. USE 2 X 4 @ 24" O.C. MAX. @ 45 DEGREES MAX.
4. ALL HIPS, RIDGES & VALLEYS TO BE 2 X 10 UNLESS NOTED.
5. ALL RAFTERS TO BE 2X8 DFL #2 @ 24" O.C. UNLESS NOTED.

ROOF PLAN

1. USE ½" CCX PLY @ ALL EXPOSED EAVES.
2. ROOF VENTS MUST HAVE AN AREA EQUAL TO 1/150 OF THE ATTIC AREA
3. SKYLIGHTS TO BE DOUBLE DOMED PLASTIC BY VELEX OR EQUAL.
4. ALL ROOF PITCH ARE 5/12 UNLESS NOTED.
5. 300# COMPOSITION SHINGLES OVER 15# FELT.

VERIFICATION NOTES:

VERIFY ALL BEAM SIZES AND LOCATIONS.
VERIFY GIRDER TRUSS LOCATION AND POINT LOADS.
VERIFY ALL THE FOOTING PAD LOCATION AND SIZE.



ROOF FRAMING PLAN
1/4"=1'-0"

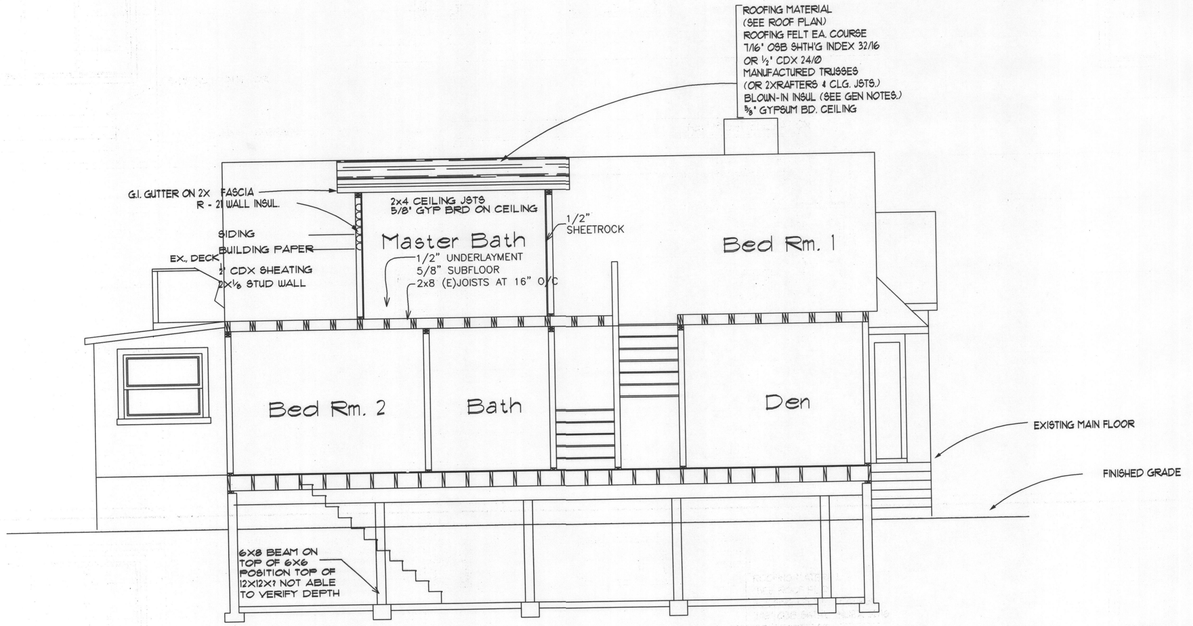
Drafting & Design
Custom Plans
Remodels
Site plans
Permit Management
503.515.6495 OFFICE
1420 SW Mitchell St.
Portland OR 97239
mikem@cspermits.biz

Patryk & Cynthia Lech
3528 NE Hancock St.
PORTLAND OR 97212

FRAMING PLAN

DATE 09/06/12 rev	
SCALE 1/4" = 1'0"	PROJ. NO ci
DRAWN mwm	CHECKED pb

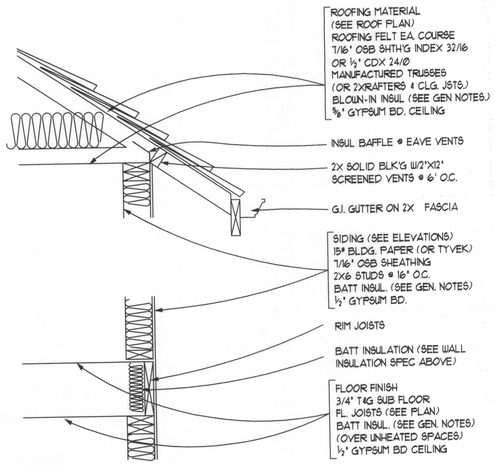
FR

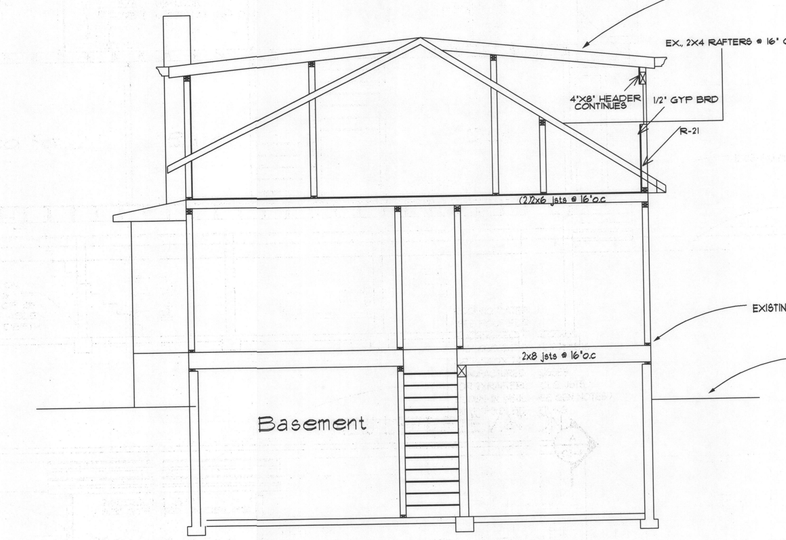


NEW LEFT ELEVATION

A CS-4

1/4"=1'-0"





NEW REAR ELEVATION

B CS-4

1/4"=1'-0"

Drafting & Design
Custom Plans
Remodels
Site plans
Permit Management

503.515.6495 OFFICE
5531 SW Buddington St.
Portland OR 97219
mikewmontgomery@gmail.com

Patryk & Cynthia Lech
3528 NE Hancock St.
PORTLAND OR 97212

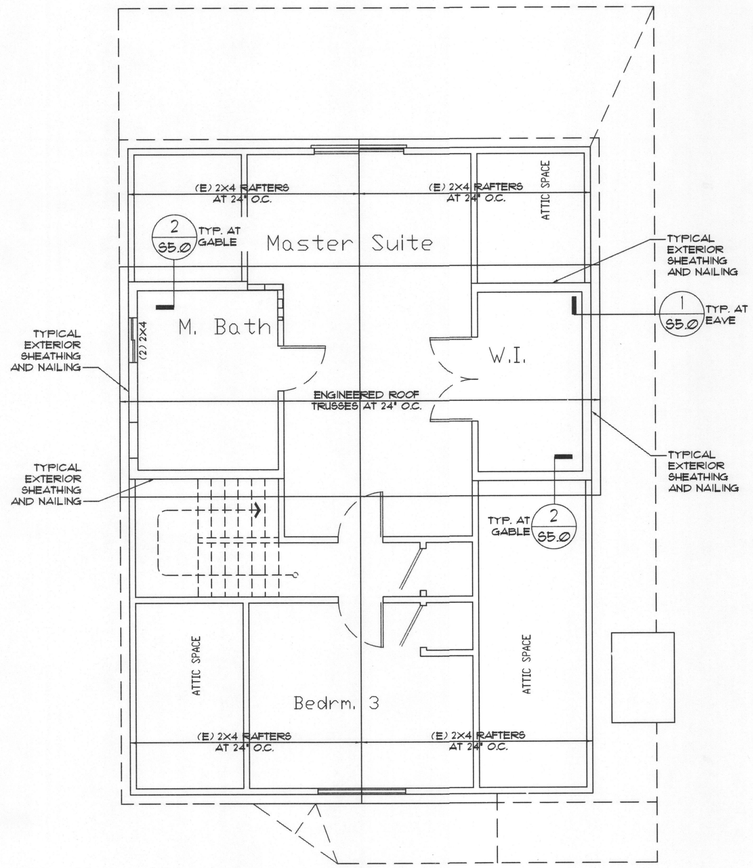
City of Portland
REVIEWED FOR CODE COMPLIANCE
SEP 12 2012
Permit Number

CROSS SECTIONS

DATE 09/06/12 rev	
SCALE 1/4" - 1'0"	PROJ. NO c1
DRAWN mwm	CHECKED pb

CS

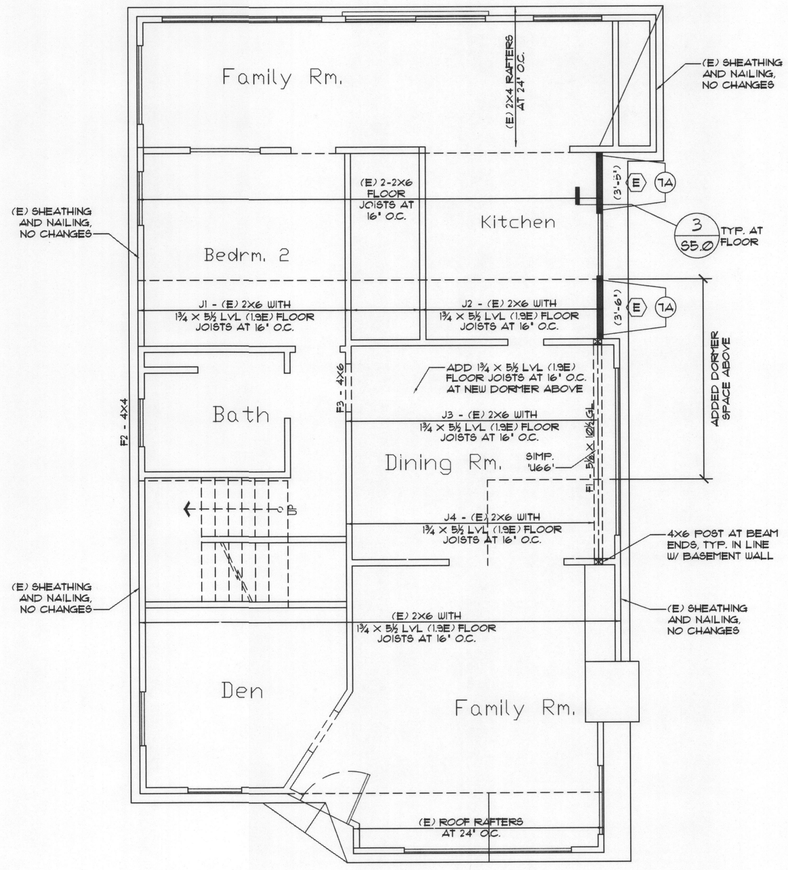
4 of 5



A UPPER FLR SHEARWALL PLAN

S1.0 SCALE = 1/4" = 1'-0"

NOTE: SEE ARCHITECTURAL SHEETS FOR INFORMATION NOT SHOWN.



NOTE: WHERE SHEARWALLS ARE LABELED ON PLANS AT EXISTING CONDITIONS, INSTALL ADDITIONAL SILL PLATE ANCHORS AS REQUIRED PER SHEARWALL SCHEDULE OR WITH A36 THRD'D RODS DRILLED AND INSTALLED 6" MIN. INTO EXISTING CONCRETE STEMWALLS WITH SIMPSON 'SET-XP' EPOXY (SPECIAL INSPECTION OF INSTALLATION IS NOT REQUIRED).

B MAIN FLOOR SHEARWALL PLAN

S1.0 SCALE = 1/4" = 1'-0"

NOTE: SEE ARCHITECTURAL SHEETS FOR INFORMATION NOT SHOWN.

DESIGN CRITERIA
WIND SPEED & EXPOSURE 95 MPH B
SEISMIC DESIGN CATEGORY D
ZIP CODE: 97212, Ss: 0.971 Fa: 1.12

TYP. DIMENSIONS FOR STD. COMMON NAILS						
NAIL DIMENSION	PENNYWEIGHT					
	6d	8d	10d	16d	20d	
LENGTH	2"	2 1/2"	3"	3 1/2"	4"	
DIAMETER	.113"	.131"	.148"	.162"	.192"	
HEAD DIAMETER	.266"	.281"	.312"	.344"	.406"	

Values have been taken from Appendix L of the 2005 National Design Specification for Wood Construction by the American Forest & Paper Association

PLYWOOD SHEARWALL SCHEDULE (SEE NOTES 1-3)						
PANEL TYPE	MIN. PANEL SHEATHING THICKNESS	PANEL EDGE NAILING	⅝" DIAM. SILL J-BOLT SPACING ("T" EMBED)	16d NAIL SPACING AT SILL PLATES	SHEARWALL CAPACITY (PLF)	NOTES
TYP.	7/16"	8d @ 6" O.C.	48" O.C.	16" O.C.	200	
(D)	7/16"	8d @ 6" O.C.	48" O.C.	8" O.C.	260	
(E)	7/16"	8d @ 4" O.C.	36" O.C.	4" O.C.	350	
(F)	7/16"	8d @ 3" O.C.	14" O.C.	4" O.C.	490	SEE NOTE 4
(G)	7/16"	10d @ 3" O.C.	16" O.C.	3" O.C.	600	SEE NOTE 4
(H)	7/16"	10d @ 2" O.C.	16" O.C.	2" O.C.	710	SEE NOTES 4,5

NOTES:

1) Sheathing, all-veneer plywood, plywood siding, except Group 5 Species. Minimum nailing shall be 8d nails @ 6" o.c. at panel edges and 12" o.c. in the field of the panel, U.N.O. All Nails to be 'Common' or 'Galvanized Box' type nails. Galvanized nails shall be hot-dipped or tumbled.
2) All panel edges backed with 2x or wider framing using Douglas Fir-Larch No.2 or better lumber. Panels may be installed either horizontally or vertically. 2x stud spacing shall not exceed 16" o.c. At shearwalls with sheathing each side, studs must be 2x6 min. All anchor bolts shall have a minimum 3" x 3" x 1/4" thick plate washers.
3) Shearwall panel edge nailing shall be installed at shearwall end stud(s) where holdown is attached. If holdown requires multiple studs then install 1/2 panel edge nailing to each stud. Face nail multiple studs at holdowns together with 16d nails @ 12" o.c. minimum, U.N.O.
4) At these panels only, all framing at adjoining panel edges shall be 3" nominal or wider.
5) At these panels only, foundation sill plates shall not be less than a single 3" nominal member and nails should be staggered when spaced at 2" o.c. Use 20d common nails in place of 16d nails specified in shearwall schedule.

SHEARWALL HOLDOWN SCHEDULE (SEE NOTES 1-3)			
HOLDOWN TYPE	SIMPSON BRAND OR EQUIVALENT	HOLDOWN CAPACITY (LBS)	INSTALLATION NOTES
(1)	MSTA24	900	Install strap across floor line into face of 2x stud with (5) 16d common nails each end of strap. Install equal lengths of strap above and below floor joist.
(2)	MSTA36	1400	Install strap across floor line into face of 2x stud with (5) 16d common nails each end of strap. Install equal lengths of strap above and below floor joist.
(7A)	HDU2	3075	Center holdown with 4x or Dbl 2x studs (min) and attach to stud's with (6) Simpson 1/4" x 2 1/2" SDS Screws. (Attach Dbl 2x together with 16d common nails @ 4.5" o.c.) Install 5/8" A36 thrd'd rod 18" minimum into existing concrete with Simpson 'SET-XP' epoxy (Special inspection of anchor installation is required.)

NOTES:

1) Anchor bolts shall be A307 or Std. J-bolt or Headed bolt (ASTM A36 threaded rod with double nut and washer may be substituted). Center holdown on stud(s) (minimum 3" from edge of concrete)
2) All studs at where holdowns attach shall be Douglas Fir-Larch or lumber with equivalent specific gravity.
3) Holdowns at corners shall attach to corner studs. Holdowns away from corners shall attach to door or window jamb full height studs. Holdowns must attach to studs receiving shear panel edge nailing. See Shearwall Schedule or Holdown Installation Notes for all other information.

ROOF SHEATHING REQUIREMENTS:

INSTALL 15/32" APA RATED CDX PLYWOOD (OR APA RATED ORIENTED STRAND BOARD) WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OF THE PANEL. INSTALL PANEL EDGE NAILING INTO BLOCKING AT ALL EXTERIOR WALLS AND INTERIOR SHEARWALLS.

FLOOR SHEATHING REQUIREMENTS:

INSTALL 3/4" APA RATED CDX PLYWOOD (OR APA RATED ORIENTED STRAND BOARD) WITH 10d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OF THE PANEL. BLOCK ALL PANEL EDGES. ALL JOINTS SHALL OCCUR ON A COMMON MEMBER. INSTALL PANEL EDGE NAILING INTO BLOCKING AT ALL SHEARWALLS.

EXT. PLYWOOD WALL SHEATHING REQUIREMENTS:

INSTALL 7/16" APA RATED CDX PLYWOOD (OR APA RATED ORIENTED STRAND BOARD) WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OF THE PANEL. BLOCK ALL PANEL EDGES. ALL JOINTS SHALL OCCUR ON A COMMON MEMBER.

ROOF/FLOOR FRAMING NOTES:

1) STUD BEARING WALLS ARE 2X6 DFL#2 STUDS @ 16" O.C., U.N.O.
2) SAWN LUMBER MEMBERS TO BE DOUGLAS FIR LARCH #2 GRADE, U.N.O.
3) PARALLAM BEAMS (PSL) ARE TO BE TRUS6 JOIST MACMILLAN (2.0E).
4) MICROLLAM BEAMS (LVL) ARE TO BE TRUS6 JOIST MACMILLAN (1.9E).
5) USE 4X6 DFL#1 MIN. AT HEADER LOCATIONS, U.N.O.
6) USE DBL STUD MIN. BENEATH BEAM/HEADER ENDS, U.N.O.

REGISTERED PROFESSIONAL ENGINEER
58003
9.11.12
OREGON
MAY 13, 2005
SEAN M. RAMSTEAD
Expires 12/31/2012

REVISIONS:
1 MISC. PLAN REVISIONS (8-21-12)
2 MISC. PLAN REVISIONS (9-11-12)
3
4

WEST COAST ENGINEERING, PC
STRUCTURAL ENGINEERING
13224 SE Comanche Court
Clackamas, OR 97015
503-557-1600 (O)
503-557-1607 (F)
503-680-5784 (M)
wce@comcast.net

PROJECT NAME:
LECH RESIDENCE ADDN

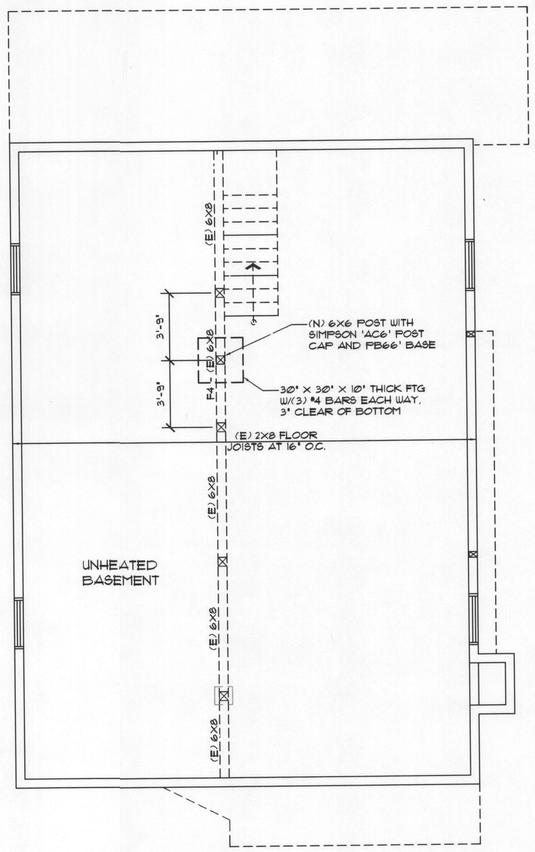
PROJECT LOCATION:
3528 NE HANCOCK ST
PORTLAND, OR 97212

PROJECT NO.
W12-148

DATE: 8-2-12

DRAWN BY: SMR

DWG NO.
S1.0



CONCRETE FOUNDATION:

1) MIN. 28 DAY CONCRETE COMPRESSIVE STRENGTH = 3000 PSI
2) REINFORCING TO BE ASTM A615, GRADE 60

A / S1.1 BASEMENT SHEARWALL PLAN

SCALE = 1/4" = 1'-0"

NOTE: SEE ARCHITECTURAL SHEETS FOR INFORMATION NOT SHOWN.

DESIGN CRITERIA

WIND SPEED & EXPOSURE 95 MPH B
SEISMIC DESIGN CATEGORY D
ZIP CODE: 97212, Ss: 0.971 Fa: 1.112

TYP. DIMENSIONS FOR STD. COMMON NAILS

NAIL DIMENSION	PENNYWEIGHT				
	6d	8d	10d	16d	20d
LENGTH	2"	2 1/2"	3"	3 1/2"	4"
DIAMETER	.113"	.131"	.148"	.162"	.192"
HEAD DIAMETER	.266"	.281"	.312"	.344"	.406"

Values have been taken from Appendix L of the 2005 National Design Specification for Wood Construction by the American Forest & Paper Association

PLYWOOD SHEARWALL SCHEDULE (SEE NOTES 1-3)

PANEL TYPE	MIN. PANEL SHEATHING THICKNESS	PANEL EDGE NAILING	5/8" DIAM. SILL J-BOLT SPACING (7" EMBED.)	16d NAIL SPACING AT SILL PLATES	SHEARWALL CAPACITY (PLF.)	NOTES
TYP.	7/16"	8d @ 6" O.C.	48" O.C.	16" O.C.	200	
(D)	7/16"	8d @ 6" O.C.	48" O.C.	8" O.C.	260	
(E)	7/16"	8d @ 4" O.C.	36" O.C.	4" O.C.	350	
(F)	7/16"	8d @ 3" O.C.	14" O.C.	4" O.C.	490	SEE NOTE 4
(G)	7/16"	10d @ 3" O.C.	10" O.C.	3" O.C.	600	SEE NOTE 4
(H)	7/16"	10d @ 2" O.C.	16" O.C.	2" O.C.	770	SEE NOTES 4,5

NOTES:

1) Sheathing, all-veneer plywood, plywood siding, except Group 5 Species. Minimum nailing shall be 8d nails @ 6" o.c. at panel edges and 12" o.c. in the field of the panel, U.N.O. All Nails to be 'Common' or 'Galvanized Box' type nails. Galvanized nails shall be hot-dipped or tumbled.
2) All panel edges backed with 2x or wider framing using Douglas Fir-Larch No.2 or better lumber. Panels may be installed either horizontally or vertically. 2x stud spacing shall not exceed 16" o.c. At shearwalls with sheathing each side, studs must be 2x6 min. All anchor bolts shall have a minimum 3" x 3" x 1/4" thick plate washers.
3) Shearwall panel edge nailing shall be installed at shearwall end stud(s) where holdown is attached. If holdown requires multiple studs then install 1/2 panel edge nailing to each stud. Face nail multiple studs at holdowns together with 16d nails @ 12" o.c. minimum, U.N.O.
4) At these panels only, all framing at adjoining panel edges shall be 3" nominal or wider.
5) At these panels only, foundation sill plates shall not be less than a single 3" nominal member and nails should be staggered when spaced at 2" o.c. Use 20d common nails in place of 16d nails specified in shearwall schedule.

SHEARWALL HOLDOWN SCHEDULE (SEE NOTES 1-3)

HOLDOWN TYPE	SIMPSON BRAND OR EQUIVALENT	HOLDOWN CAPACITY (LBS)	INSTALLATION NOTES
(1)	MSTA24	900	Install strap across floor line into face of 2x stud with (5) 10d common nails each end of strap. Install equal lengths of strap above and below floor joist.
(2)	MSTA36	1400	Install strap across floor line into face of 2x stud with (9) 10d common nails each end of strap. Install equal lengths of strap above and below floor joist.
(1A)	HDU2	3075	Center holdown with 4x or Dbl 2x studs (min.) and attach to stud(s) with (6) Simpson 1/4" x 2 1/2" SDS Screws. (Attach Dbl 2x together with 16d common nails @ 4.5" o.c.) Install 5/8" A36 threfld rod 18" minimum into existing concrete with Simpson "SET-XP" epoxy (Special inspection of anchor installation is required).

NOTES:

1) Anchor bolts shall be A307 or Std. J-bolt or Headed bolt (ASTM A36 threaded rod with double nut and washer may be substituted). Center holdown on stud(s) (minimum 3" from edge of concrete)
2) All studs at where holdowns attach shall be Douglas Fir-Larch or lumber with equivalent specific gravity.
3) Holdowns at corners shall attach to corner studs. Holdowns away from corners shall attach to door or window jamb full height studs. Holdowns must attach to studs receiving shear panel edge nailing. See Shearwall Schedule or Holdown Installation Notes for all other information.

ROOF SHEATHING REQUIREMENTS:

INSTALL 15/32" APA RATED CDX PLYWOOD (OR APA RATED ORIENTED STRAND BOARD) WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OF THE PANEL. INSTALL PANEL EDGE NAILING INTO BLOCKING AT ALL EXTERIOR WALLS AND INTERIOR SHEARWALLS.

FLOOR SHEATHING REQUIREMENTS:

INSTALL 3/4" APA RATED CDX PLYWOOD (OR APA RATED ORIENTED STRAND BOARD) WITH 10d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OF THE PANEL. BLOCK ALL PANEL EDGES. ALL JOINTS SHALL OCCUR ON A COMMON MEMBER. INSTALL PANEL EDGE NAILING INTO BLOCKING AT ALL SHEARWALLS.

EXT. PLYWOOD WALL SHEATHING REQUIREMENTS:

INSTALL 7/16" APA RATED CDX PLYWOOD (OR APA RATED ORIENTED STRAND BOARD) WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OF THE PANEL. BLOCK ALL PANEL EDGES. ALL JOINTS SHALL OCCUR ON A COMMON MEMBER.

ROOF/FLOOR FRAMING NOTES:

1) STUD BEARING WALLS ARE 2X6 DFL#2 STUDS @ 16" O.C., U.N.O.
2) SAWN LUMBER MEMBERS TO BE DOUGLAS FIR LARCH #2 GRADE, U.N.O.
3) PARALLAM BEAMS (PSL) ARE TO BE TRUS6 JOIST MACMILLAN (2.0E)
4) MICROLLAM BEAMS (LVL) ARE TO BE TRUS6 JOIST MACMILLAN (1.9E).
5) USE 4X6 DFL#2 MIN. AT HEADER LOCATIONS, U.N.O.
6) USE DBL STUD MIN. BENEATH BEAM/HEADER ENDS, U.N.O.

REGISTERED PROFESSIONAL ENGINEER
56003
9-11-12
OREGON
MAY 13, 2005
SEAN M. RAMSTEAD
Expires 12/31/2012

REVISIONS:
1 MISC. PLAN REVISIONS (9-11-12)

WEST COAST ENGINEERING, PC
STRUCTURAL ENGINEERING
13224 SE Comanche Court
Clackamas, OR 97015
503-557-1600 (O)
503-557-1607 (F)
503-680-5784 (M)
wce@comcast.net

PROJECT NAME: LECH RESIDENCE ADDN

PROJECT LOCATION: 3528 NE HANCOCK ST PORTLAND, OR 97212

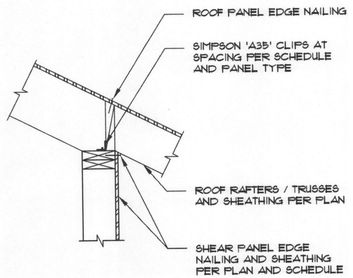
PROJECT NO. W12-148

DATE: 8-21-12

DRAWN BY: SMR

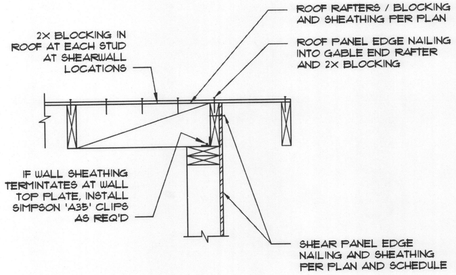
DWG NO. S1.1

ROOF SHEAR TRANSFER NAILING SCHEDULE		
PANEL TYPE	ROOF PANEL EDGE NAILING	SIMPSON 'A35' CLIPS
TYP.	8d @ 6" O.C.	40" O.C.
(D)	8d @ 4" O.C.	32" O.C.
(E)	8d @ 3" O.C.	24" O.C.
(F)	10d @ 3" O.C.	15" O.C.
(G)	10d @ 2½" O.C.	12" O.C.
(H)	10d @ 2" O.C.	9" O.C.



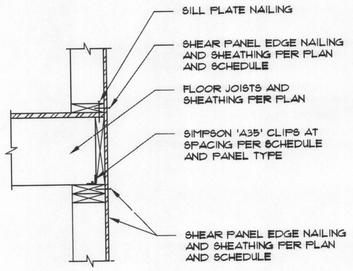
1 S5.0 SHEAR TRANSFER AT RF
SCALE = 1" = 1'-0"

ROOF SHEAR TRANSFER NAILING SCHEDULE		
PANEL TYPE	ROOF PANEL EDGE NAILING	SIMPSON 'A35' CLIPS
TYP.	8d @ 6" O.C.	40" O.C.
(D)	8d @ 4" O.C.	32" O.C.
(E)	8d @ 3" O.C.	24" O.C.
(F)	10d @ 3" O.C.	15" O.C.
(G)	10d @ 2½" O.C.	12" O.C.
(H)	10d @ 2" O.C.	9" O.C.



2 S5.0 SHEAR TRANSFER AT RF
SCALE = 1" = 1'-0"

FLOOR SHEAR TRANSFER NAILING SCHEDULE		
PANEL TYPE	SILL PLATE NAILING	SIMPSON 'A35' CLIPS
TYP.	16d @ 12" O.C.	40" O.C.
(D)	16d @ 10" O.C.	32" O.C.
(E)	16d @ 6" O.C.	22" O.C.
(F)	16d @ 4" O.C.	16" O.C.
(G)	16d @ 4" O.C.	12" O.C.
(H)	SIMPSON 'SDS ¼ x 4½ @ 7½" O.C.	SIMP 'LTP4' @ 9" O.C.



3 S5.0 SHEAR TRANSFER AT FLR
SCALE = 1/2" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
58003
OREGON
MAY 13, 2005
SEAN M. RAMSTEAD
Expires 12/31/2012

WEST COAST ENGINEERING, PC
STRUCTURAL ENGINEERING
13224 SE Comanche Court
Clackamas, OR 97015
503-557-1600 (O)
503-557-1607 (F)
503-680-5784 (M)
wce@comcast.net

REVISIONS:
1 MISC. PLAN REVISIONS (8-21-12)
2 MISC. PLAN REVISIONS (9-11-12)
3
4

PROJECT NAME:
LECH RESIDENCE ADDN

PROJECT LOCATION:
3528 NE HANCOCK ST
PORTLAND, OR 97212

PROJECT NO.
W12-148

DATE: 8-2-12
DRAWN BY: SMR

DWG NO.
S5.0