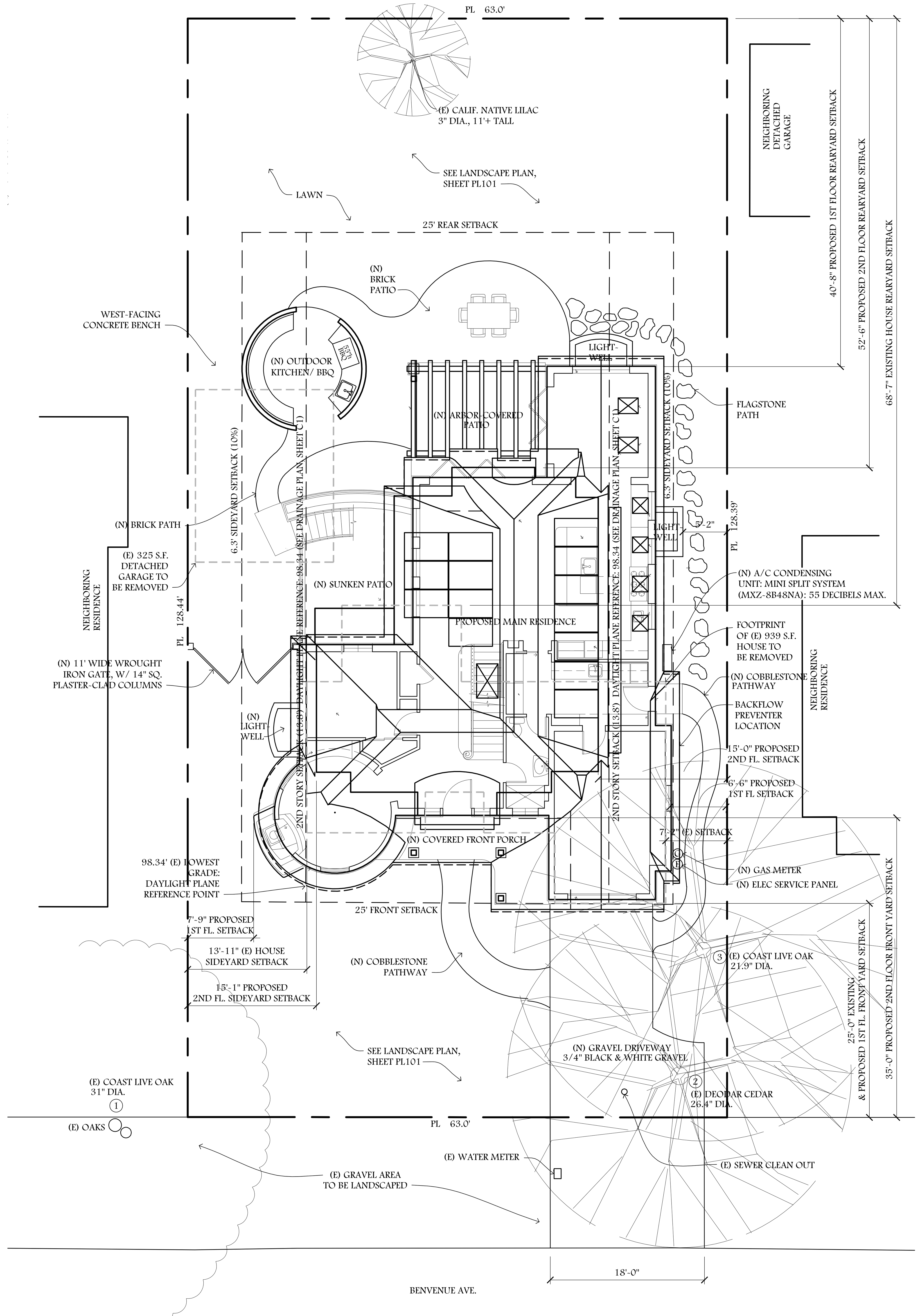


PROPOSED SITE PLAN
SCALE: 1 / 8" = 1'-0"

NORTH

GRAPHIC SCALE
8 0 4 8 16 32
(IN FEET)
1 inch = 8 ft.

A.P.No. 189-52-062
NOT A SURVEY!

SHEET INDEX

DRAWING DESCRIPTION	SHEET #
COVER SHEET / SITE PLAN/ TREE PROTECTION PLAN	A1
PROPOSED FLOOR PLANS, FIRST & SECOND LEVEL	A2
PROPOSED BASEMENT PLAN & ROOF PLAN	A3
PROPOSED EXTERIOR ELEVATIONS	A4
BUILDING SECTIONS	A5
WINDOW SCHEDULE & DETAILS	A6
GRADING AND DRAINAGE PLAN	C1
GRADING AND DRAINAGE DETAILS	C2
LANDSCAPE PLAN	PL101

EXISTING TREES

TREE #	SIZE	SPECIES	RETAINED?
1	31.0" DIA.	COASTAL LIVE OAK	YES
2	26.4" DIA.	DEODAR CEDAR	NO
3	21.9" DIA.	COASTAL LIVE OAK	NO

PROJECT SUMMARY TABLE

NET LOT AREA:	8106 square feet		
	Existing	Change in	Total Proposed
% OF FRONT YARD PAVING	N/A	N/A	54 sq. ft. (3.4%)
HABITABLE LIVING AREA: (includes habitable basement area)	939 square feet	1695 square feet	2634 square feet
NON-HABITABLE AREA:	364 square feet	1420 square feet	1784 square feet

	Existing	Proposed	Allowed/ Required
LOT COVERAGE: (Land area covered by all structures that are over 6 feet in height)	1303 square feet (16%)	2133 square feet (26%)	2431.8 square feet (30%)
FLOOR AREA:	House: 939 sq ft Garage: 325 sq ft Total: 1264 sq ft (15.6%)	1st Flr: 1789 sq ft 2nd Flr: 1026 sq ft Total: 2815 sq ft (34.7%)	2837.1 sq ft (35%)
SETBACKS: Front Rear Right side (1st/ 2nd) Left side (1st/ 2nd)	 25.0 feet 68.6 feet 7.17 feet 13.9 feet	 25.0 feet 40.9 feet 6.5 feet/ 15.0 feet 7.75 feet/ 15.1 feet	 25.0 feet 25.0 feet 6.3 feet/ 13.8 feet 6.3 feet/ 13.8 feet
HEIGHT:	13.17 feet	24.1 feet	27.0 feet

TREE PROTECTION RECOMMENDATIONS
(EXCERPTED FROM ARBORIST REPORT--SEE ATTACHED)

5.0 Tree Preservation Guidelines:
5.1 Fencing and other root zone protection is usually specified as a drip-line installation of 6-foot high chain link fence on galvanized drive posts, plus root zone wood chip mulch. However, due to the inevitable myriad project variables, alternatives are frequently allowed – but require careful strategies arranged with and signed off by the Project Arborist or City Arborist.
For this project, it is highly likely that all site trees must be removed/replaced, so only adjoining-overhanging trees need protecting ? and the property line fences would be the appropriate fencing this time.
Must be in place before demolition or any other project site work.
Though generally expected to extend to the dripline, here the TPF can be installed as close to that as possible.
One 24- to 36-inch opening or gate should be left for inspection access to each area.
Fence material is to be 6-foot-high chain link fence supported by 8-foot long, 2-inch diameter galvanized fence posts driven 2-feet into the soil.
Where no plant material root zone buffer is growing (e.g. ivy), a wood chip mulch is to be spread evenly to a 4-inch depth from the dripline to 6-inches from the base of the trunk. Taper to existing ground level at the base of the trunk with a slope of about 2:1.
Additional root zone areas requiring protection can be buffered as Project Arborist requires, e.g., if project scope changes. Commonly acceptable buffer materials often include wood chips, crushed rock, plywood, steel trench plates, and/or a combination of such materials. Consult Project Arborist for depth specifications (which vary depending on use of area and/or specific traffic).
Root zone areas to be protected may be modified by the Municipal Arborist or Project Arborist as plans develop.
5.2 Prohibited Acts & Admonishments/Requirements
5.2.1 No parking or vehicle traffic over any root zones, unless using buffers approved by Project Arborist or City Arborist.
5.2.2 Monitor root zone moisture and maintain as per above.
5.2.3 Have an ISA Certified Arborist repair any damage promptly.
5.2.4 No pouring or storage of fuel, oil, chemicals, or hazardous materials under any trees' foliage canopies or future plant materials' root zone areas.
5.2.5 No grade changes (cuts, fills, etc.) under these foliage crowns without prior Project Arborist approval. For instance, hand excavation and thinner base prep may be required in some root zone areas.
5.2.6 Any additional pruning required must be performed under arborist supervision – including root pruning – clean, smooth cuts with no breaking, scraping, shattering, or tearing of wood tissue and/or bark.
5.2.7 No storage of construction materials under any foliage canopy without prior Project Arborist or City Arborist approval.
5.2.8 No trenching within the critical root zone area. Consult Project Arborist before any trenching or root cutting beneath any tree's foliage canopy. It is best to route all
trenching out from under trees' driplines. Often trenches in root zones must be hand excavated to leave roots intact.
5.2.9 No clean out of trucks, tools, or other equipment over any essential root zone. Keep this debris outside of any existing or future root zone.
5.2.10 No attachment of signs or other construction apparatus to these trees.
5.3 Construction-time Maintenance
5.3.1 Monitor root zone moisture and maintain as per above (§4.1).
5.3.2 Maintain/repair tree protection fences and/or root zone mulch/buffer material.
5.3.3 Have a certified arborist promptly repair any damage to trees.
5.3.4 Develop the plan for follow-up care so, as the project closes, the care of the trees can be handed over for continuing management by the owner and/or landscape contractor.
5.4 Post-Construction Follow-Up
5.4.1 Monitor root zone moisture, especially during/following drought//dry seasons. [A dry season is any time more than 60 days elapse since significant rainfall (2-inches or less).]
5.4.2 Monitor root zone mulch (if used), maintain depth, and scarify (approximately once or twice annually) to break up compaction/matting.
5.4.3 Monitor for insect pests and diseases, especially insects with sucking/chewing mouthparts or boring insects (bark beetles)..
5.4.4 Inspect for structural safety before storm season and after severe weather events.
5.4.5 Follow California Oak Foundation guidelines as to not irrigating and/or planting water loving plant material within 10-feet of the trunks of mature trees.

PROJECT DATA

PROJECT ADDRESS: 542 Benvenue Ave., Los Altos, CA

ASSESSOR PARCEL NUMBER: 189-52-062

OCCUPANCY & ZONING: SINGLE FAMILY, R1-10

OWNERS: Jill & Will Woodford
542 Benvenue Ave.
Los Altos, CA 94024
Email: jillsw@hotmail.com
Phone: 650-941-1085

BUILDING DESIGNER: Madson Design
James N. Madson
528 Myra Way
San Francisco, CA 94127
Email: james@madsondesign.com
Phone: (415) 890-2884

CIVIL ENGINEER/ SURVEYOR: DMG Engineering, Inc.
Dylan Gonsalves
30 Oakvue Court
Pleasant Hill, CA 94523
Email: dmgengineering@sbcglobal.net
Phone: (925) 787-0463

LANDSCAPE DESIGNER: Sierra Watershed Progressive
Regina Hirsch
Email:
regina@sierrawatershedprogressive.com
Phone: (209) 732-0018

PROJECT SCOPE

NEW FOUR BEDROOM, THREE BATH HOME, WITH UNCONDITIONED BASEMENT AND ATTACHED ONE-CAR GARAGE. NEW OUTDOOR KITCHEN, HARDSCAPING AND LANDSCAPING.

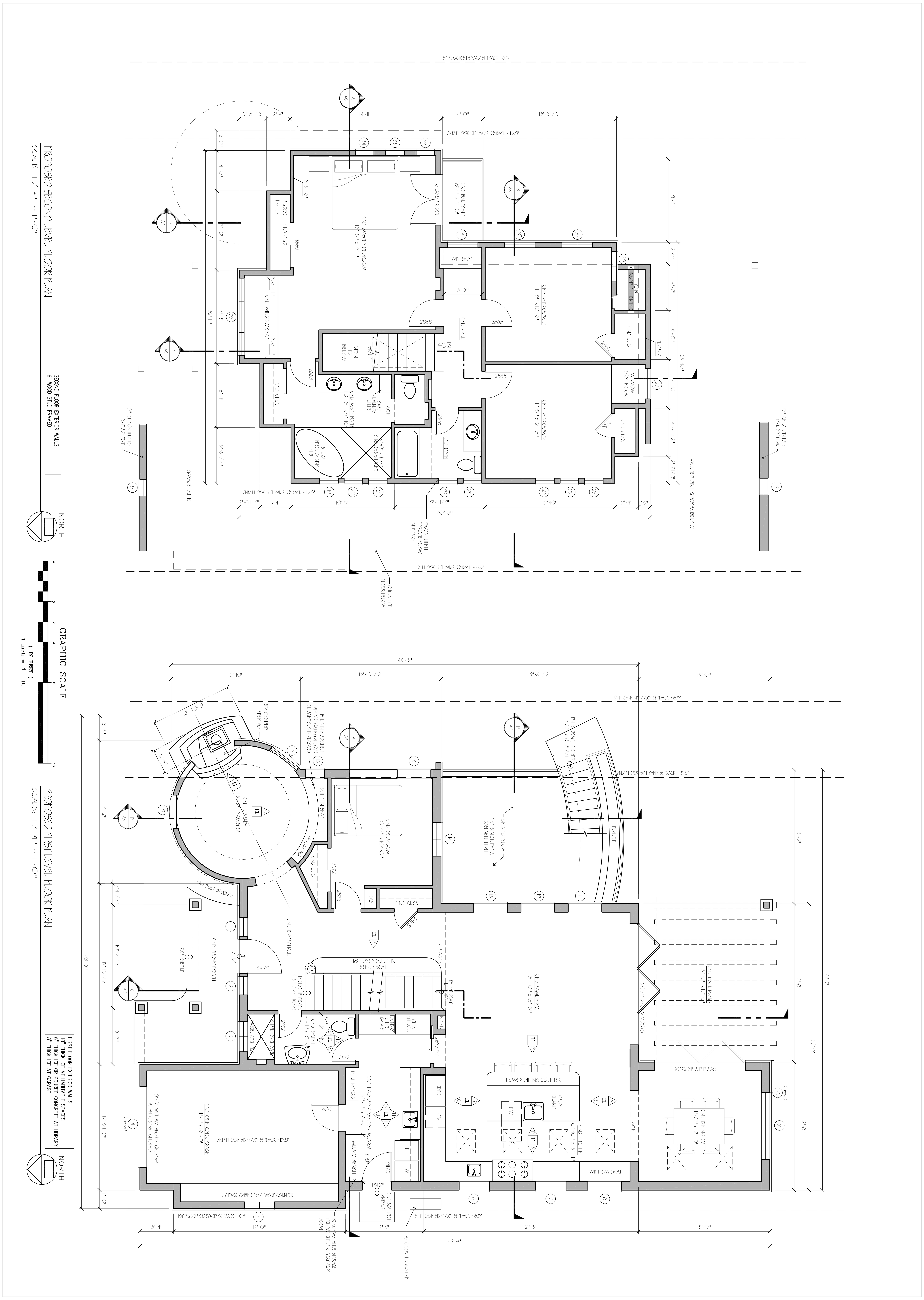
REVISIONS	BY

© Copyright 2014 Madson Design

WOODFORD
Residence
542 Benvenue Avenue, Los Altos, CA 94024

MADSON DESIGN
REMODELS · ADDITIONS · NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Office: 415-334-2291 * Cell: 916-996-3922 * Fax: 415-469-5437

DATE 4/25/14
SCALE AS_NOTED
DRAWN JNM
JOB
SHEET A1
OF SHEETS



WOODFORD

Residence

542 Benvenue Avenue, Los Altos, CA 94024

MADSON DESIGN
REMODELS · ADDITIONS · NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Phone: 415-890-2884 * Fax: 415-469-5437

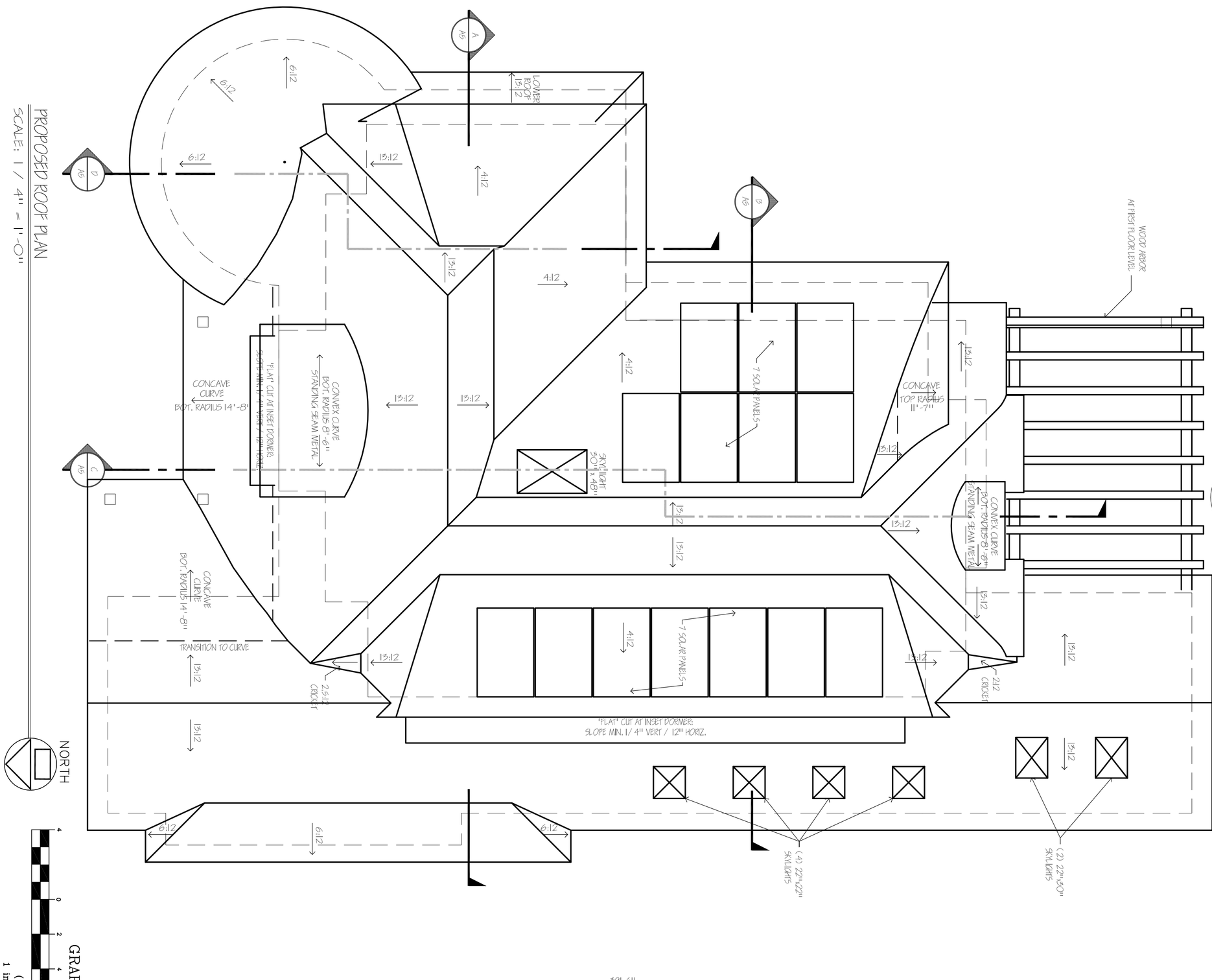
DATE 4/29/14
SCALE AS NOTED
DRAWN JNM
JOB
SHEET A2
OF SHEETS

© Copyright 2013 Madson Design

REVISIONS | BY

PROPOSED ROOF PLAN

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



GRAPHIC SCALE

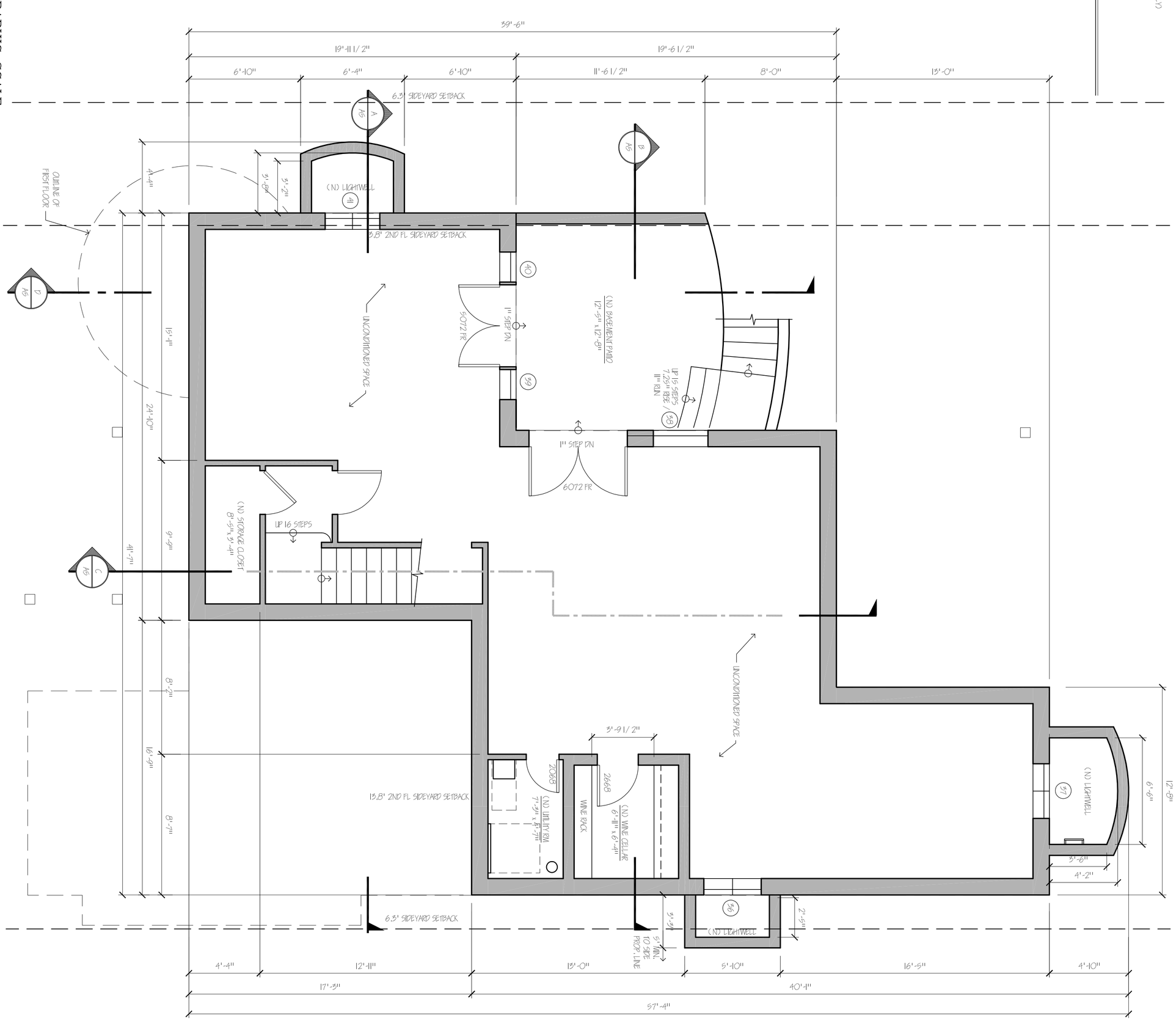
(IN FEET)

1 inch = 4 ft.

0 2 4 8 16

PROPOSED BASEMENT FLOOR PLAN

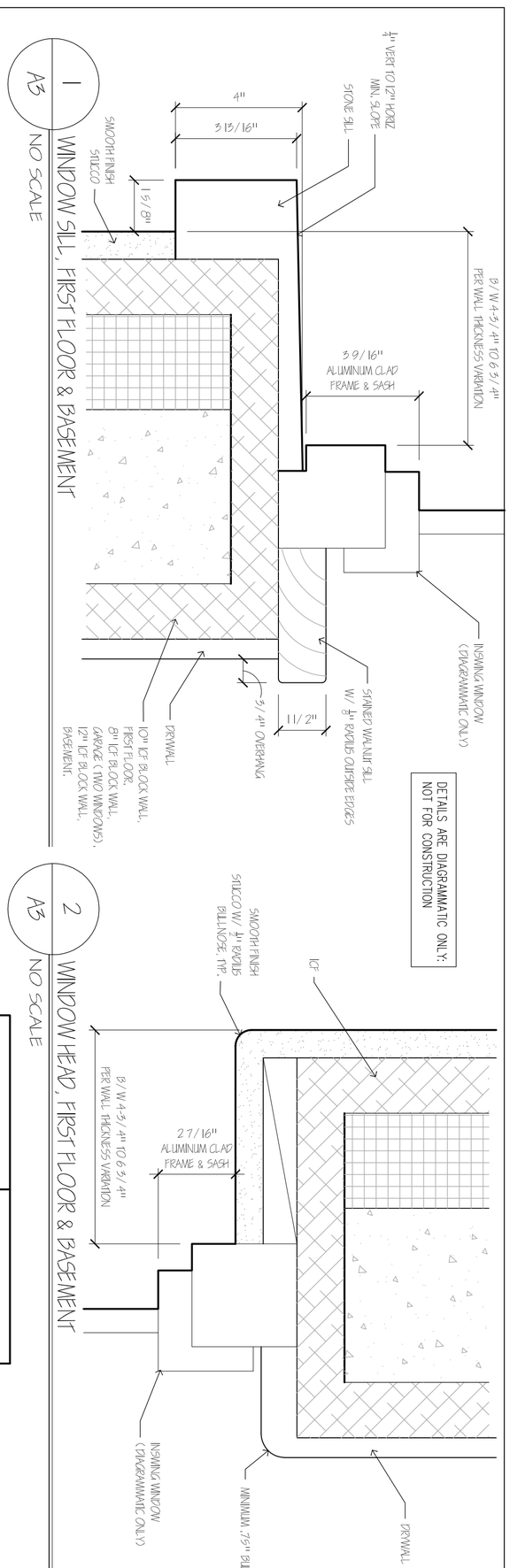
SCALE: 1 / 4" = 1'-0"



BASEMENT PERIMETER WALLS:
12" THICK ICF

1 A3 WINDOW SILL, FIRST FLOOR & BASEMENT

NO SCALE



DETAILS ARE DIAGRAMMATIC ONLY: NOT FOR CONSTRUCTION

2 A3 WINDOW HEAD, FIRST FLOOR & BASEMENT

NO SCALE

SHEET	A3
OF SHEETS	
JOB	
DRAWN	JNM
SCALE	AS NOTED
DATE	4/25/14

MADSON DESIGN
REMODELS - ADDITIONS - NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Phone: 415-890-2884 * Fax: 415-469-5437

WOODFORD

Residence

542 Benvenue Avenue, Los Altos, CA 94024

© Copyright 2013 Madson Design

REVISIONS	BY

WOODFORD

Residence

542 Benvenue Avenue, Los Altos, CA 94024

MADSON DESIGN
REMODELS · ADDITIONS · NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Phone: 415-890-2884 * Fax: 415-469-5437

DATE	4/29/14
SCALE	AS NOTED
DRAWN	JNM
JOB	
SHEET	A4
OF	SHEETS

© Copyright 2014 Madson Design

REVISIONS	BY

SHEET	A5
OF	SHEETS
JOB	
DRAWN	JNM
SCALE	AS NOTED
DATE	4/29/14

MADSON DESIGN
REMODELS · ADDITIONS · NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Phone: 415-890-2884 * Fax: 415-469-5437

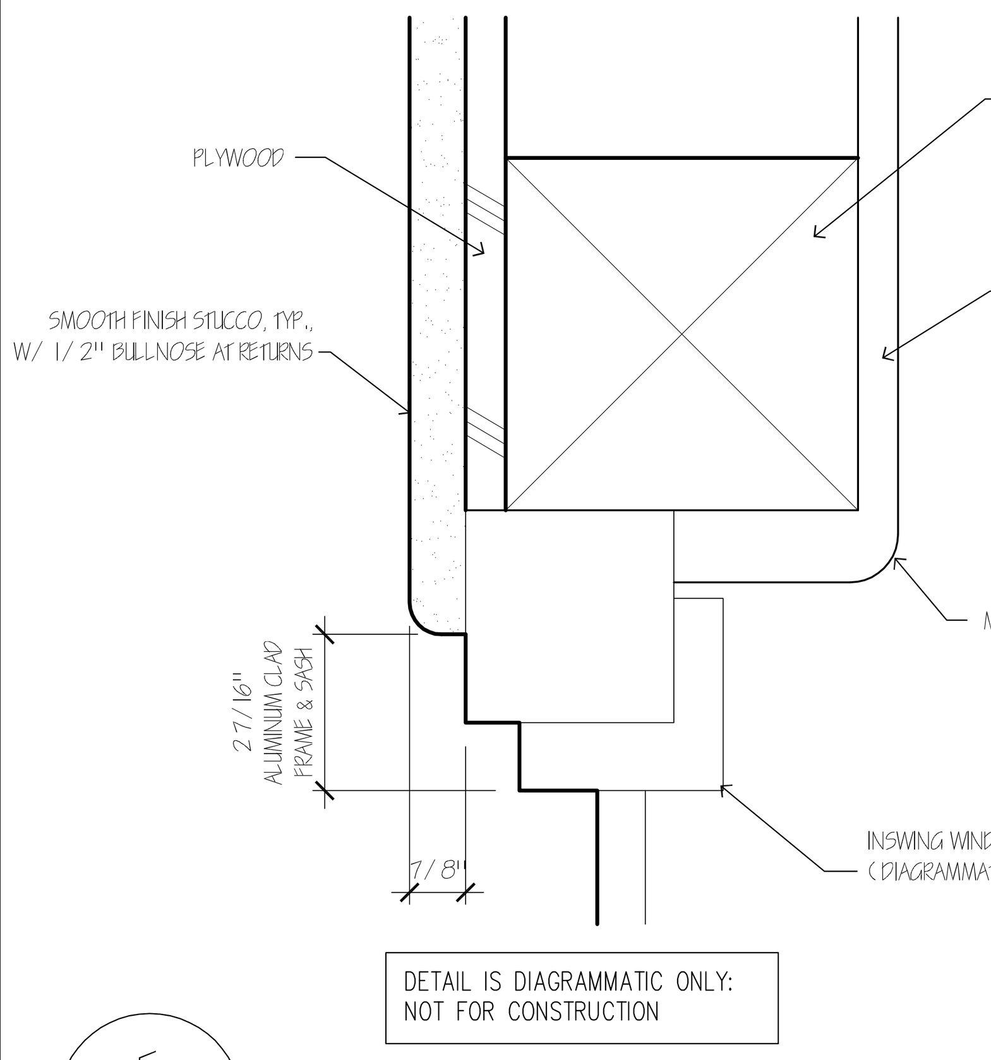
WOODFORD

Residence

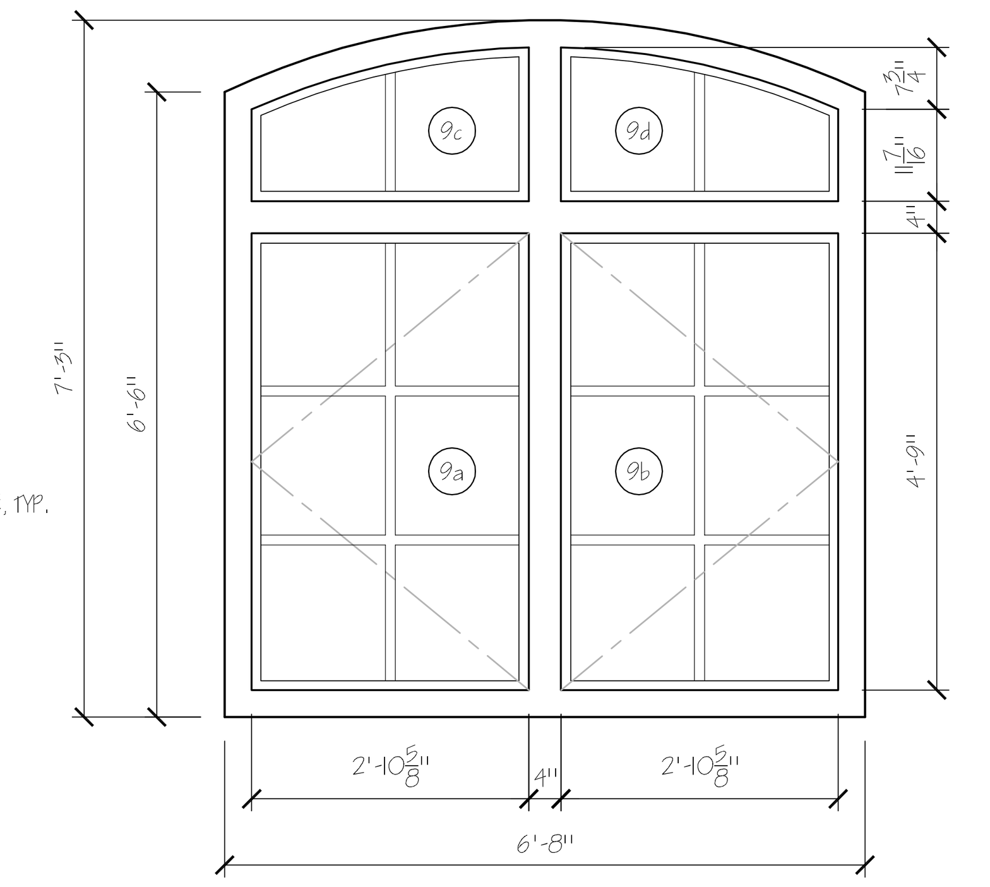
542 Benvenue Avenue, Los Altos, CA 94024

© Copyright 2013 Madson Design

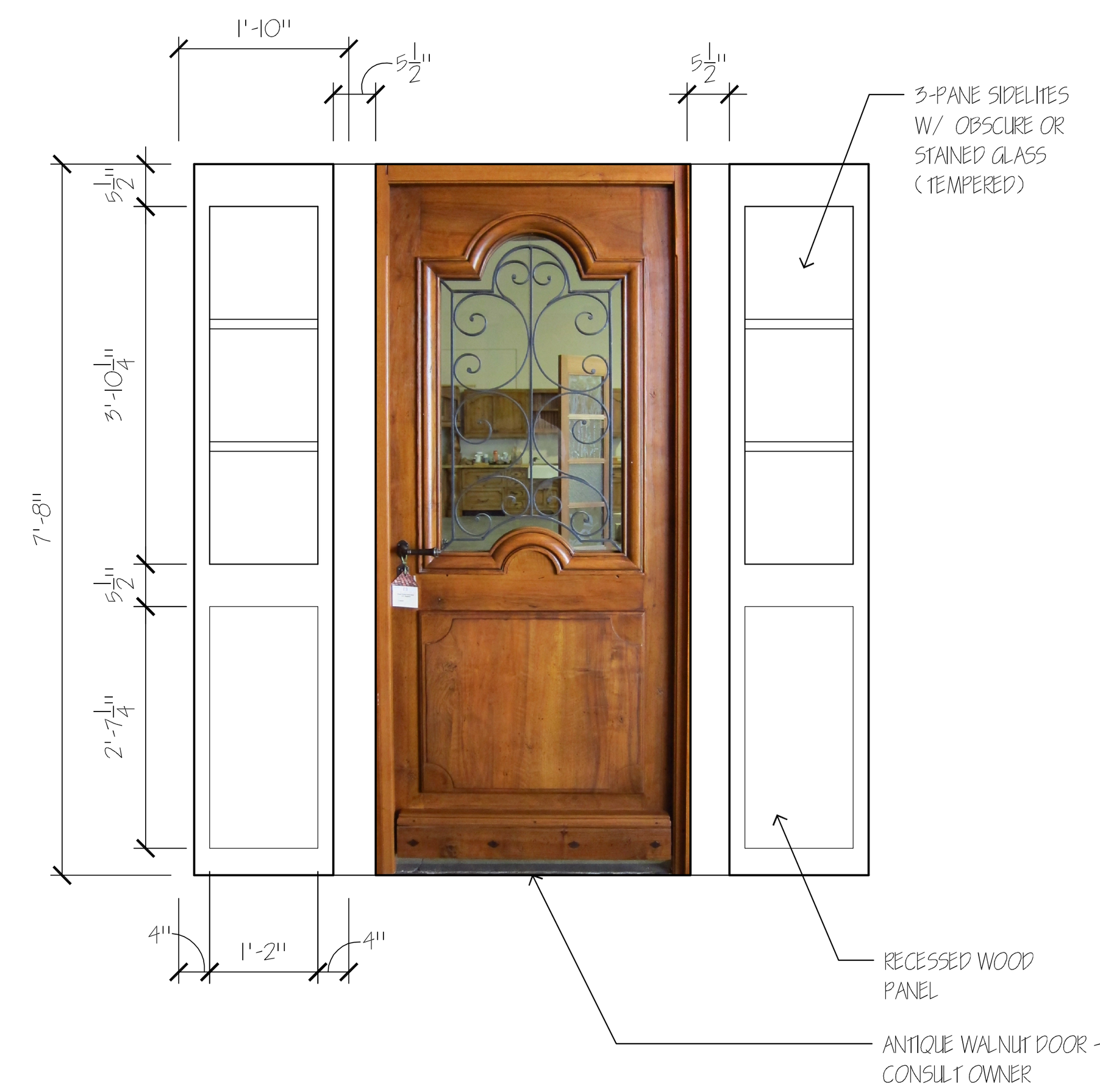
REVISIONS	BY



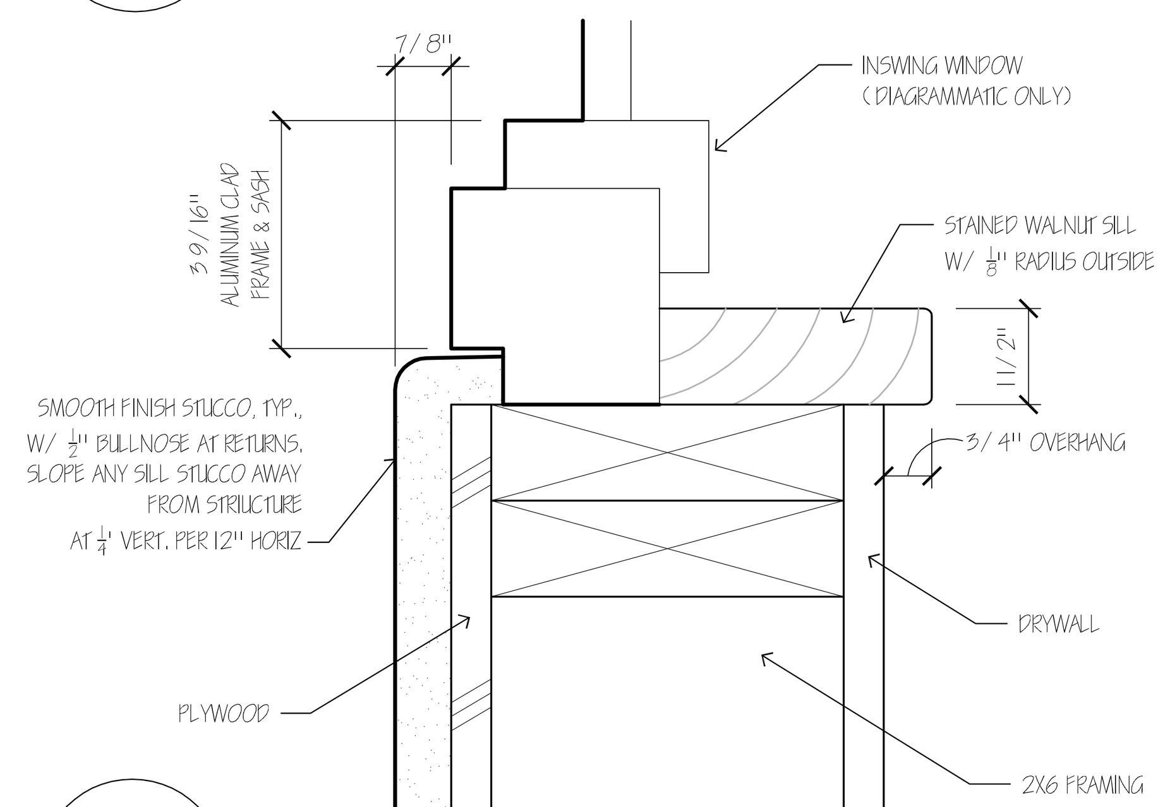
5 A6 WINDOW HEAD, SECOND FLOOR
SCALE: 1" = 1'-0"



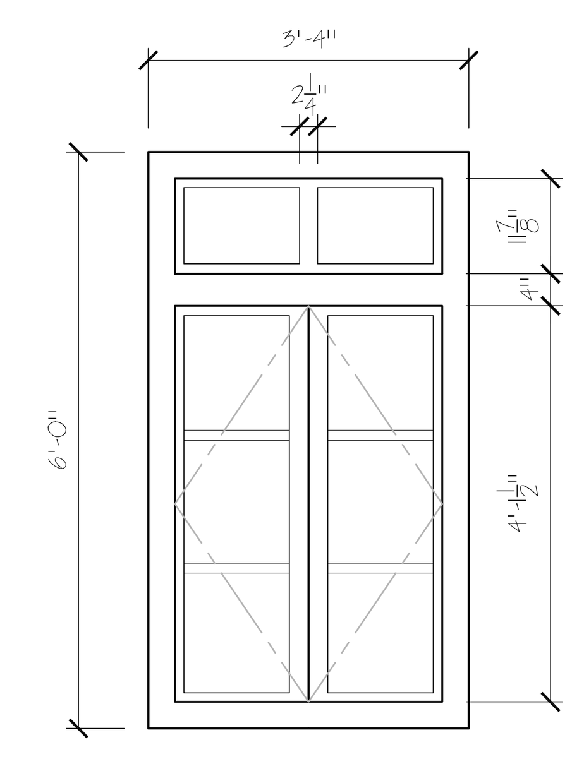
C DINING ROOM WINDOW
SCALE: 1/2" = 1'-0"



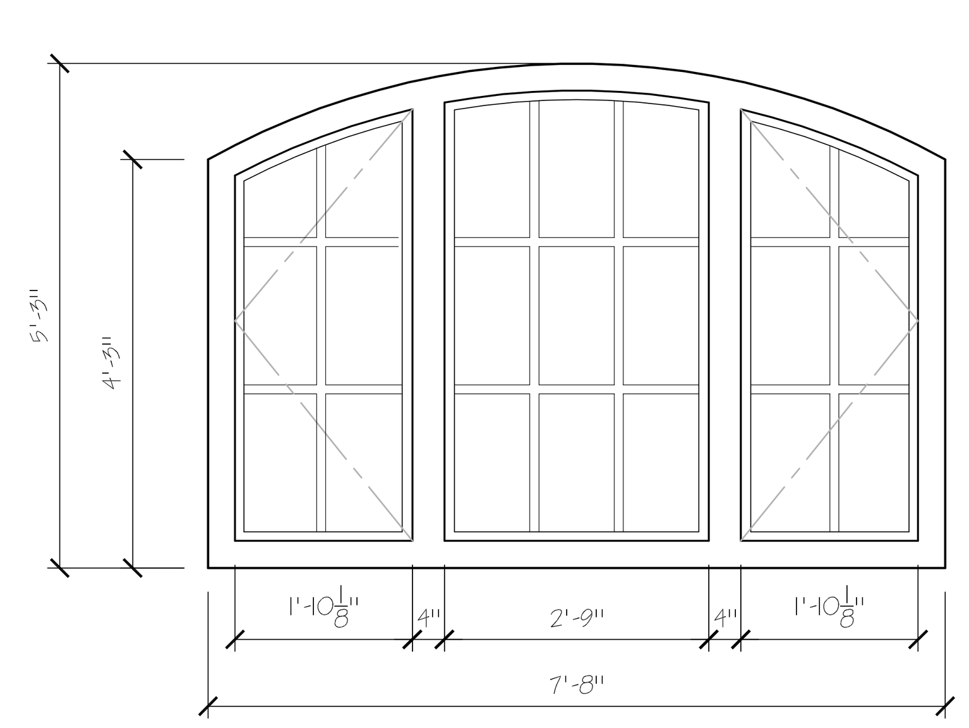
A FRONT ENTRY DOOR & SIDELITES
SCALE: 1/2" = 1'-0"



4 A6 WINDOW SILL, SECOND FLOOR
SCALE: 1" = 1'-0"



D LIBRARY WINDOW
SCALE: 1/2" = 1'-0"

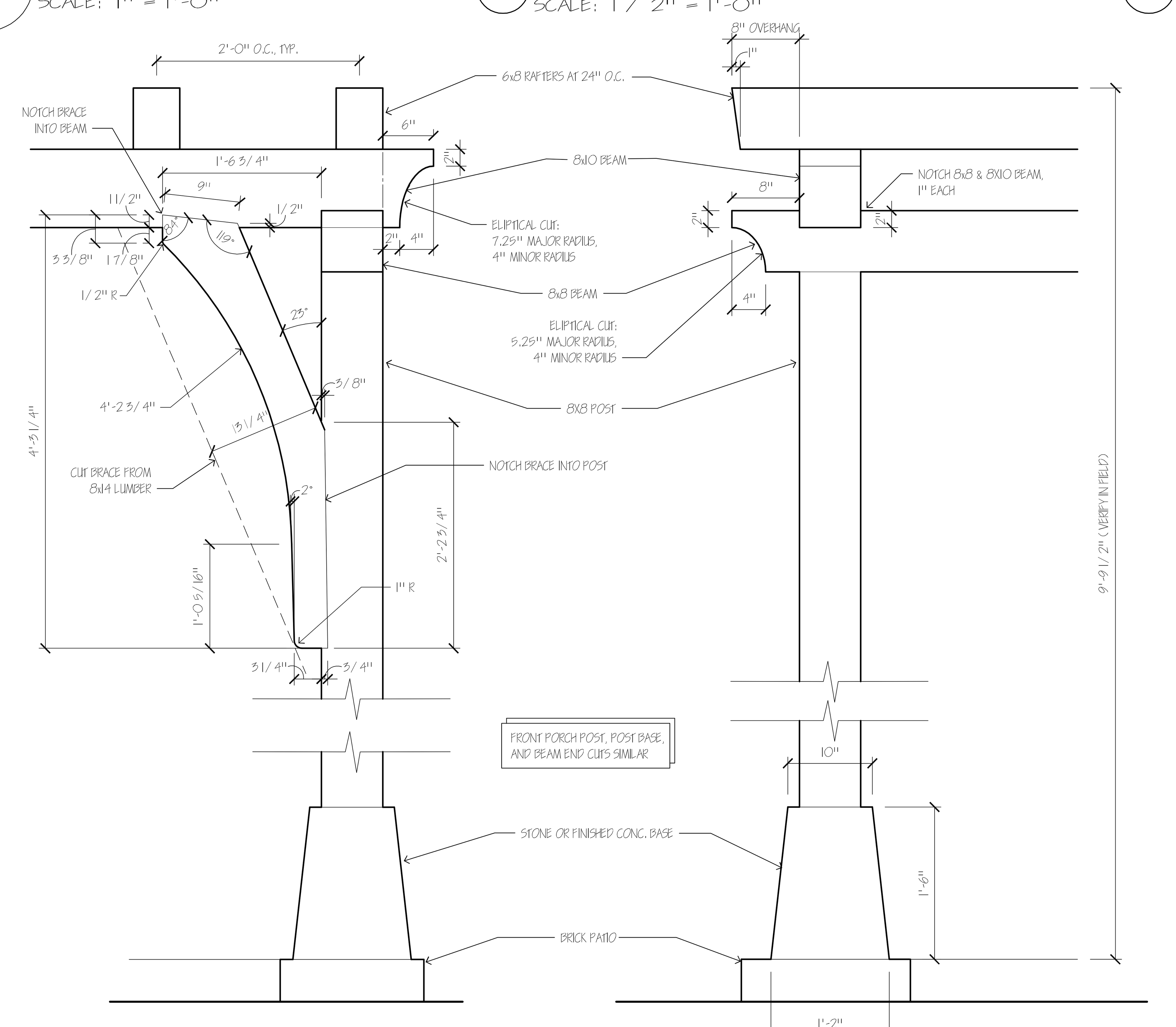


B MASTER BEDROOM FRONT DORMER WINDOW
SCALE: 1/2" = 1'-0"

WINDOW SCHEDULE

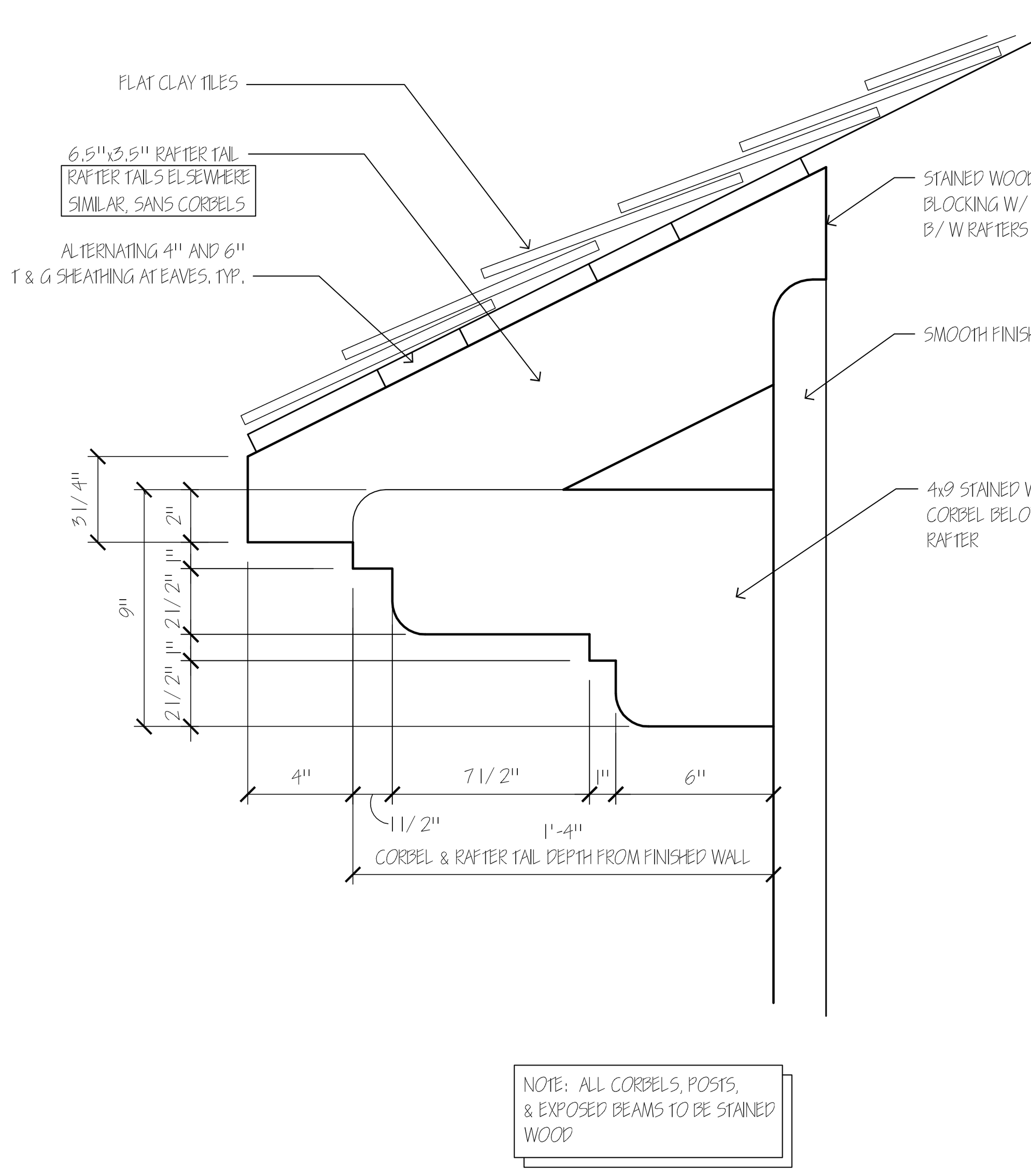
	DIMENSIONS	TYPE	HEADER HT.	TEMPERED	COMMENTS	ROOM	FLOOR
1	7'-8" x 1'-10"	FIXED	SEE DETAIL A, THIS SHEET	✓	SEE DETAIL A, THIS SHEET	FRONT ENTRY HALL	1ST FLOOR
2	7'-8" x 1'-10"						
3	3'-0" x 3'-9"	DOUBLE CASEMENT	7'-4"	✓	CAMBER: 3'-4" LEGS / 3'-9" APEX	BATH 1	
4	1'-8" x 3'-0"	FIXED	14'-2" (FROM MAIN F.F.)		CAMBER: 2'-8" LEGS / 3'-0" APEX. OBSCURE GLASS.	GARAGE	
5	3'-0" x 4'-3"	DOUBLE CASEMENT	7'-4" (FROM MAIN F.F.)				
6	3'-0" x 4'-3"	DOUBLE CASEMENT	7'-4"			KITCHEN	
7	3'-0" x 4'-3"	DOUBLE CASEMENT	7'-4"				
8	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"				
9a	SEE DETAIL C, THIS SHEET	CASEMENT	7'-2"		SEE DETAIL C, THIS SHEET	DINING ROOM	
9b		CASEMENT	7'-2"				
9c		FIXED TRANSOM	9'-2.5"				
9d		FIXED TRANSOM	9'-2.5"				
10	1'-8" x 3'-0"	FIXED	14'-3"		CAMBER: 2'-8" LEGS / 3'-0" APEX.		
11	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"			FAMILY ROOM	
12	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"				
13	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"				
14	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"			BEDROOM 1	
15	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"				
16	1'-10" x 4'-4"	FIXED	7'-4"		ART GLASS	LIBRARY	
17a	SEE DETAIL D, THIS SHEET	DOUBLE CASEMENT	7'-2"		SEE DETAIL D, THIS SHEET. TO BE INSTALLED IN CURVED WALL		
17b		FIXED TRANSOM	8'-9.25"				
18a	SEE DETAIL D, THIS SHEET	DOUBLE CASEMENT	7'-2"		SEE DETAIL D, THIS SHEET. TO BE INSTALLED IN CURVED WALL		
18b		FIXED TRANSOM	8'-9.25"				
19	1'-10" x 2'-4"	AWNING	7'-2"	✓		MASTER BATH	2ND FLOOR
20	1'-10" x 2'-4"	AWNING	7'-2"	✓			
21	1'-10" x 2'-4"	AWNING	7'-2"	✓			
22	1'-10" x 2'-4"	AWNING	7'-2"	✓		BATHROOM	
23	1'-10" x 2'-4"	AWNING	7'-2"	✓			
24	1'-10" x 2'-4"	AWNING	7'-2"			BEDROOM 3	
25	1'-10" x 2'-4"	AWNING	7'-2"				
26	1'-10" x 2'-4"	AWNING	7'-2"				
27	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-6"		EXPOSED WOOD LINTEL		
28	3'-0" x 3'-3"	DOUBLE CASEMENT	6'-8"			BEDROOM 2	
29	3'-0" x 4'-3"	DOUBLE CASEMENT	6'-8"				
30	3'-0" x 4'-3"	DOUBLE CASEMENT	6'-8"				
31	3'-0" x 4'-3"	DOUBLE CASEMENT	6'-8"			HALL	
32	1'-10" x 2'-4"	AWNING	7'-2"			MASTER BEDROOM	
33	1'-10" x 2'-4"	AWNING	7'-2"				
34	1'-10" x 2'-4"	AWNING	7'-2"				
35	SEE DETAIL B, THIS SHEET	CASEMENT & FIXED	7'-7"		SEE DETAIL B, THIS SHEET		
36	3'-6" x 2'-2"	AWNING	7'-4"	✓		STORAGE ROOM	BSMT
37	3'-4" x 4'-3"	DOUBLE CASEMENT	7'-4"	✓			
38	3'-4" x 4'-9"	DOUBLE CASEMENT	7'-4"	✓	EXPOSED WOOD LINTEL		
39	1'-10" x 7'-4"	FIXED	7'-4"	✓			
40	1'-10" x 7'-4"	FIXED	7'-4"	✓			
41	3'-4" x 4'-3"	DOUBLE CASEMENT	7'-4"	✓			

NOTES:

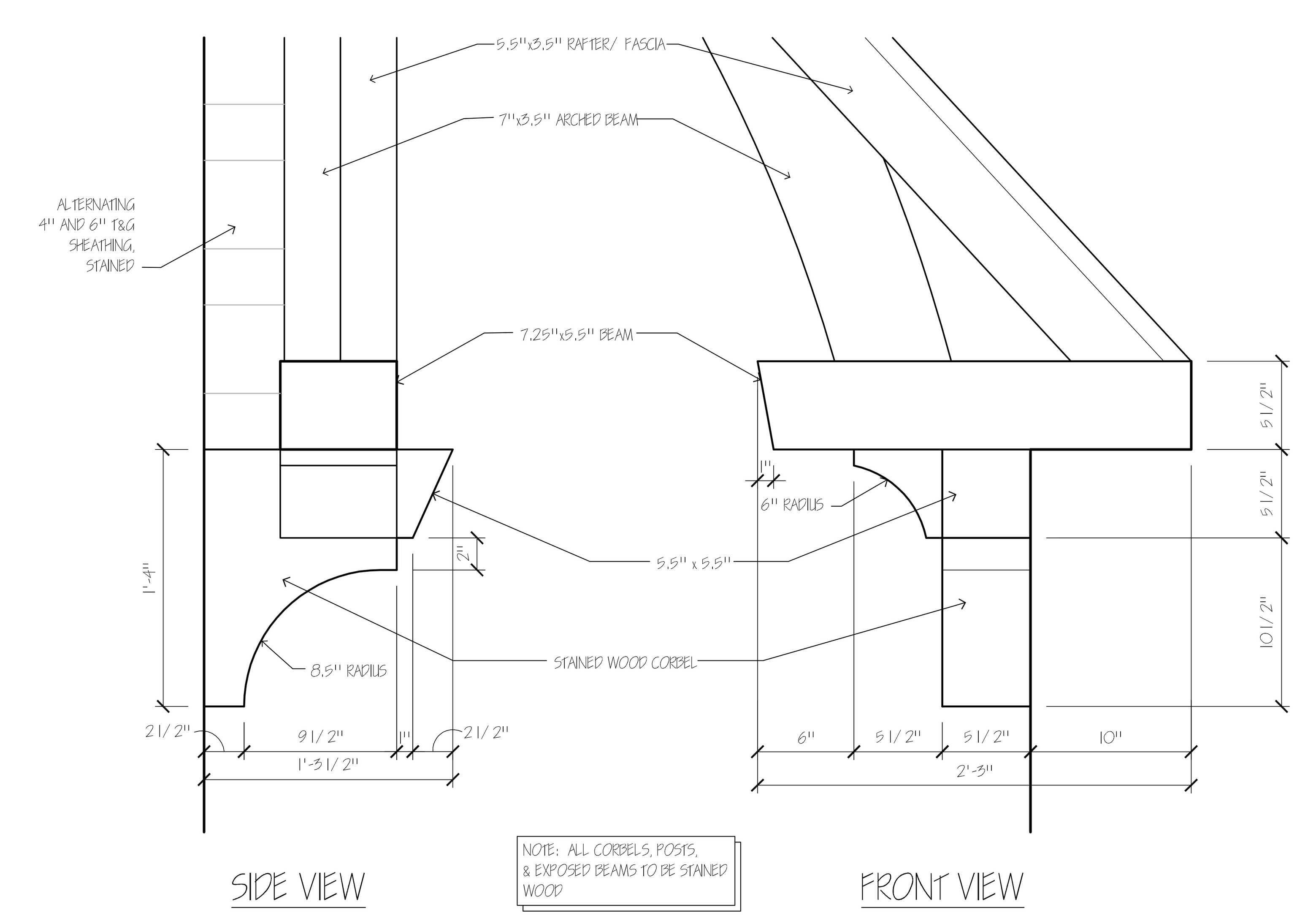


3 A6 ARBOR POST, BEAMS, AND BRACE DETAIL
SCALE: 1" = 1'-0"

GRAPHIC SCALE
(IN FEET)
1 inch = 4 ft.



2 A6 LIBRARY ROOM CORBELS & RAFTER TAILS
SCALE: 2" = 1'-0"



1 A6 GABLE PLATE CORBELS
SCALE: 1-1/2" = 1'-0"

WOODFORD
Residence
542 Benvenue Avenue, Los Altos, CA 94024

© Copyright 2013 Madson Design

MADSON DESIGN
REMODELS · ADDITIONS · NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Phone: 415-890-2884 * Fax: 415-469-5437

REVISIONS | BY

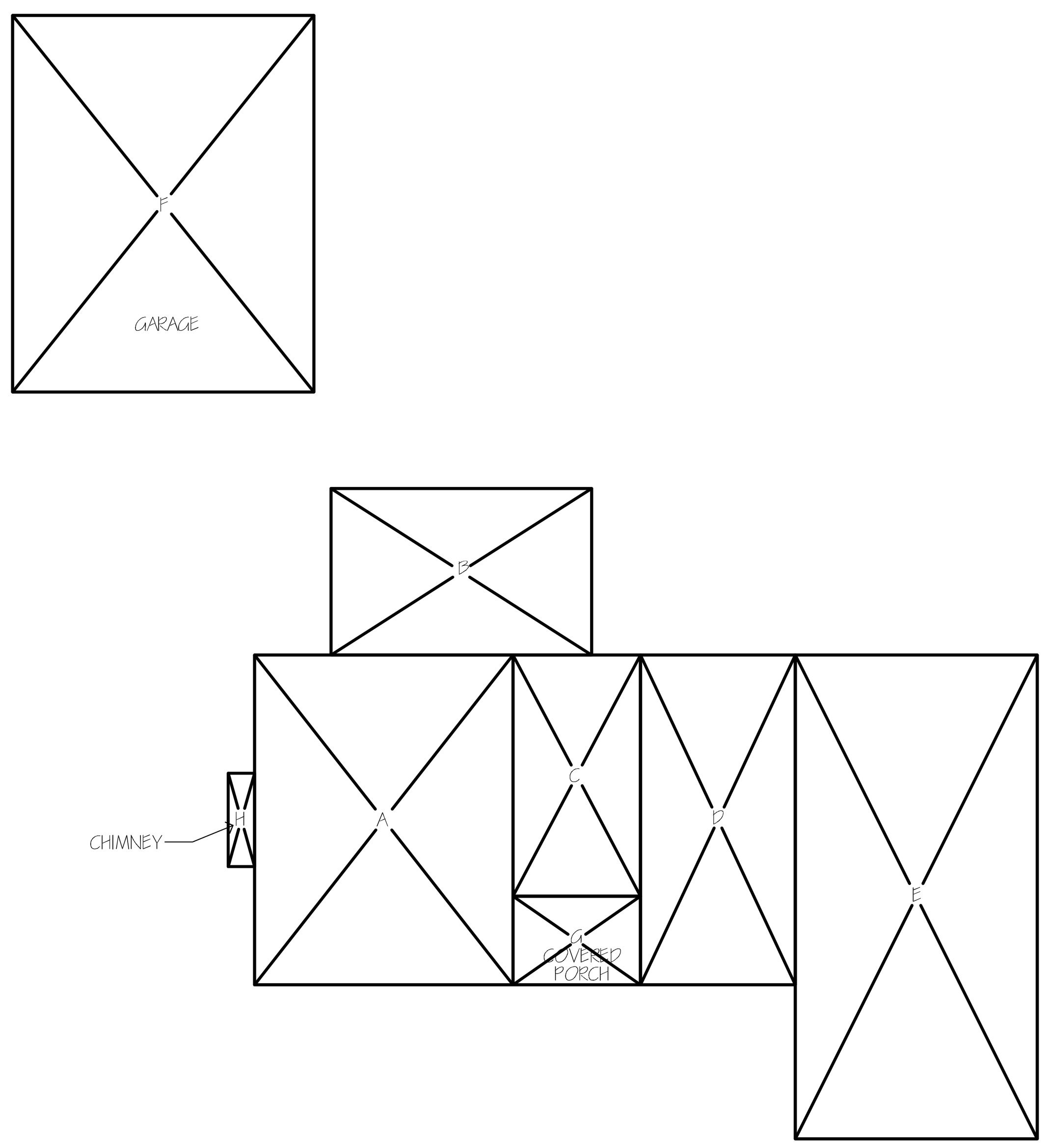
DATE 4/29/14
SCALE AS NOTED
DRAWN JNM
JOB
SHEET A6
OF SHEETS

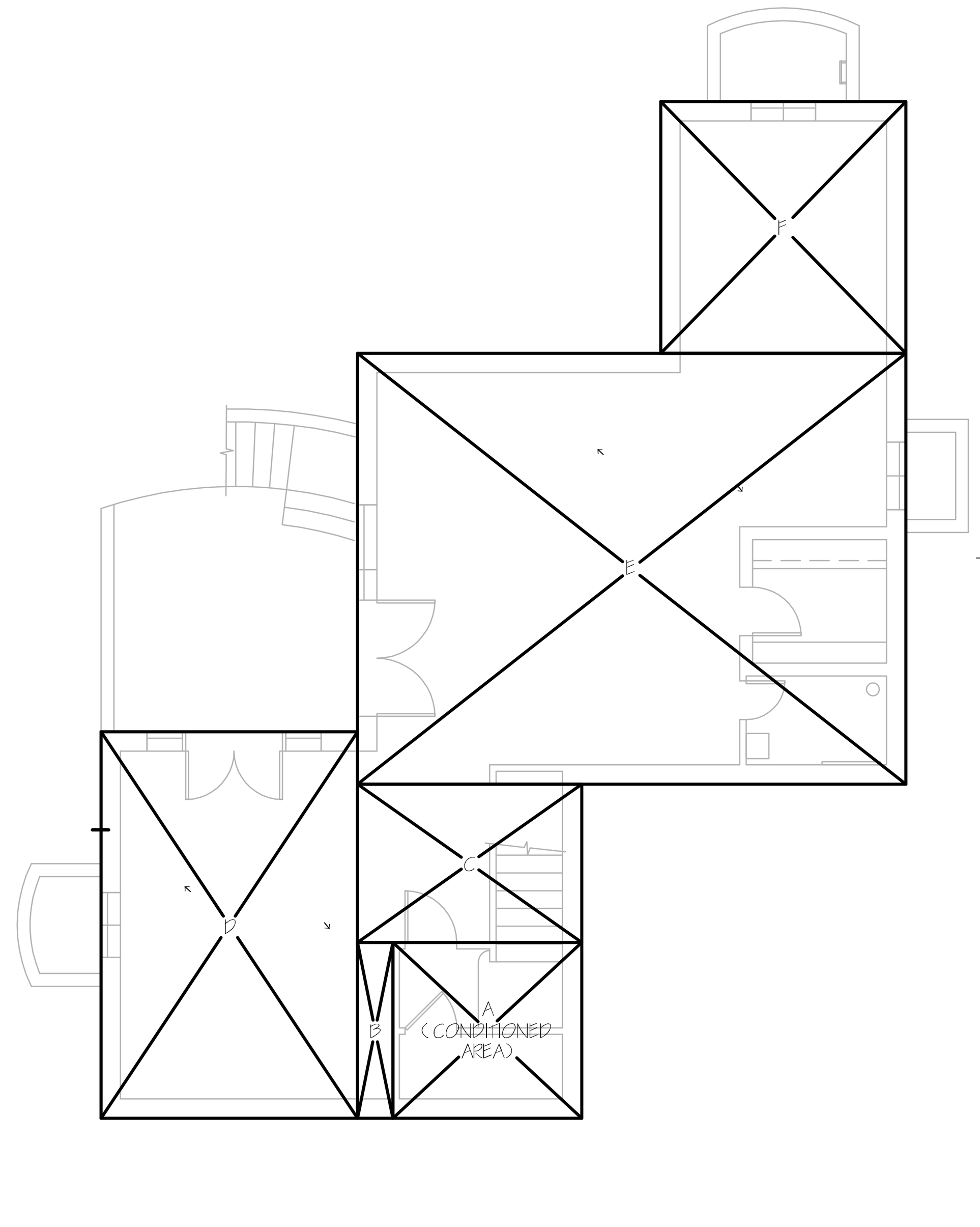
GRAPHIC SCALE

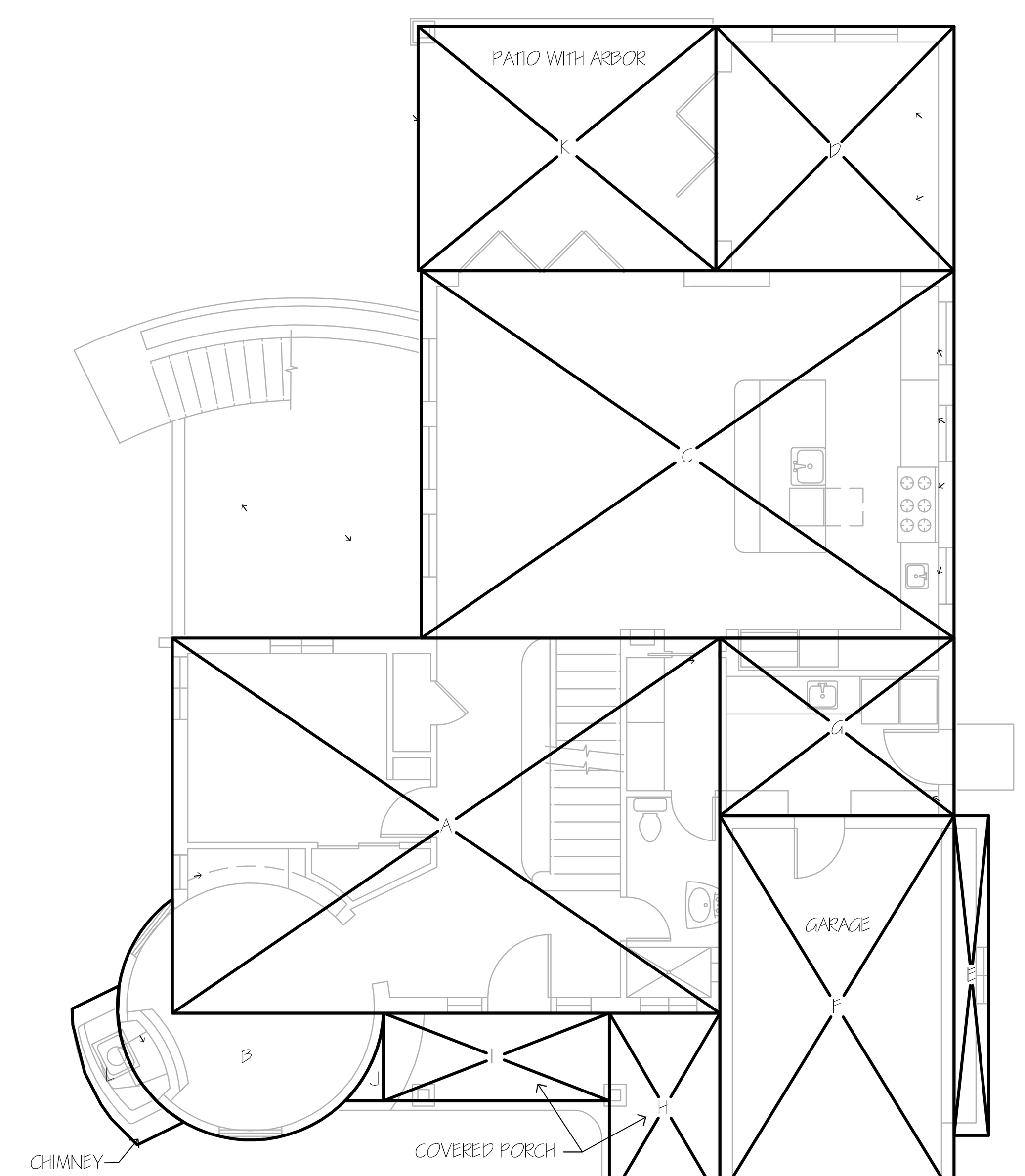
(IN FEET)
1 inch = 8 ft.

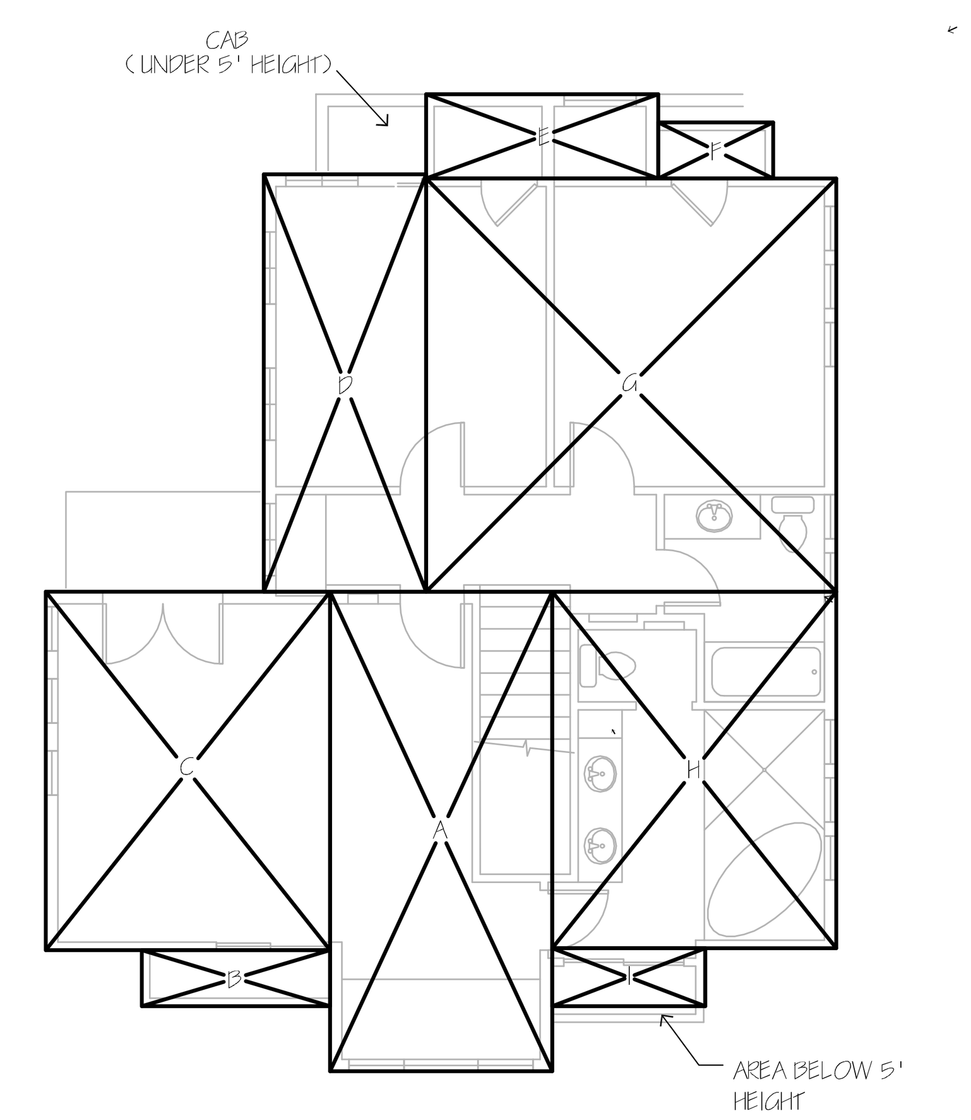
AREA ANALYSIS:

AREA ANALYSIS:	NEW
1st floor conditioned area	1519 s.f.
2nd floor conditioned area	1026 s.f.
Basement conditioned area	89 s.f.
Total habitable area:	2634 s.f.
Unconditioned Basement (total basement area 1259 s.f.) :	1170 s.f.
Attached garage:	270 s.f.
Covered front porch:	118 s.f.
Arbored back patio arbor	206 s.f.
Chimney	20 s.f.
Total non-habitable area:	1784 s.f.
Lot Coverage:	
First floor footprint:	1789 s.f.
Chimney	20 s.f.
Covered front porch:	118 s.f.
Arbored back patio arbor	206 s.f.
Total	2133 s.f.
Floor Area:	
Main residence total F.A.R (1789 + 1026) :	2815 s.f.
Existing structures to be demolished:	
Main house	939 s.f.
Detached garage	325 s.f.
Covered front porch:	32 s.f.
Chimney:	7 s.f.
Total	1303 s.f.









EXISTING FLOOR AREA AND COVERAGE CALCULATIONS		
SECTION	DIMENSIONS	AREA
A	13'-10" X 17'-8"	244
B	13'-11.5" X 8'-11"	124
C	6'-10" X 12'-11"	88
D	8'-3.5" X 17'-8"	147
E	12'-11.5" X 25'-11"	336
F	16'-1.5" X 20'-2"	325
	TOTAL FLOOR AREA =	1264 sq. ft.
G	6'-10" X 4'-9"	32
H	1'-5" X 5'-0"	7
	TOTAL COVERAGE =	1303 sq. ft.

EXISTING FLOOR AREA BLOCKOUT

SCALE: 1 / 8" = 1'-0"

NORTH

PROPOSED BASEMENT FLOOR AREA AND COVERAGE CALCULATIONS		
SECTION	DIMENSIONS	AREA
A	9'-9" X 9'-1"	89
B	1'-10" X 9'-1"	17
C	11'-7" X 8'-2"	94
D	13'-3" X 19'-11.5"	264
E	28'-4" X 22'-3"	630
F	12'-8" X 13'-0"	165
	TOTAL AREA =	1259 sq. ft.

PROPOSED BASEMENT FLOOR AREA BLOCKOUT

SCALE: 1 / 8" = 1'-0"

NORTH

PROPOSED FIRST LEVEL FLOOR AREA AND COVERAGE CALCULATIONS		
SECTION	DIMENSIONS	AREA
A	29'-1.5" X 19'-11.5"	581
B	14'-2" X 6'-1"	87
C	28'-4" X 19'-6.5"	554
D	12'-8" X 13'-0"	165
E	1'-10" X 17'-0"	31
F	12'-5.5" X 20'-4"	253
G	12'-5.5" X 9'-5.5"	118
	TOTAL FLOOR AREA =	1789 sq. ft.
H	5'-10.5" X 10'-0"	59
I	12'-0" X 4'-8"	56
J	2'-1" X 4'-8"	3
K	15'-10" X 13'-0"	206
L	2'-9" X 8'-0"	20
	TOTAL COVERAGE =	2133 sq. ft.

PROPOSED FIRST FLOOR AREA BLOCKOUT

SCALE: 1 / 8" = 1'-0"

NORTH

PROPOSED SECOND LEVEL FLOOR AREA AND COVERAGE CALCULATIONS		
SECTION	DIMENSIONS	AREA
A	9'-3" X 19'-11.5"	185
B	7'-10" X 2'-4"	18
C	11'-10" X 14'-11"	176
D	6'-9" X 17'-4.5"	117
E	9'-8" X 3'-6"	34
F	4'-9.5" X 2'-4"	11
G	17'-1" X 17'-2.5"	294
H	11'-10" X 14'-10"	176
I	6'-4.5" X 2'-5"	15
	TOTAL FLOOR AREA =	1026 sq. ft.

PROPOSED SECOND FLOOR AREA BLOCKOUT

SCALE: 1 / 8" = 1'-0"

NORTH

REVISIONS	BY
1 12/2/13	JM

© Copyright 2013 Madson Design

WOODFORD

Residence

542 Benvenue Avenue, Los Altos, CA 94024

MADSON DESIGN
REMODELS - ADDITIONS - NEW HOMES
James N. Madson
www.MadsonDesign.com
Email: james@madsondesign.com
528 Myra Way, San Francisco, CA 94127
Phone: 415-890-2884 * Fax: 415-469-5437

DATE 4/25/14
SCALE AS NOTED
DRAWN JNM
JOB
SHEET B1
OF SHEETS

GRADING/DRAINAGE PLAN

542 BENVENUE AVENUE
CITY OF LOS ALTOS

SANTA CLARA COUNTY – CALIFORNIA

SCALE: 1" = 8' JULY 2013

GRAPHIC SCALE

8 0 4 8 16 32

(IN FEET)
1 inch = 8 ft.

LEGEND:

AC	ASPHALT
BC	BUILDING CORNER
CC	CONCRETE
DWY	DRIVEWAY
FC	FENCE CORNER
FF	FINISH FLOOR
FH	FIRE HYDRANT
FNC	FENCE
G	GROUND
LG	LIP OF GUTTER
SSMH	SANITARY SEWER MANHOLE
TRC	TOP OF ROLL CURB
WM	WATER METER
X 100.00	EX SPOT ELEVATION
X 100.00	PR SPOT ELEVATION
→	DRAINAGE DIRECTION

OWNER:

WILL AND JILL WOODFORD
542 BENVENUE AVENUE
LOS ALTOS, CA 94024

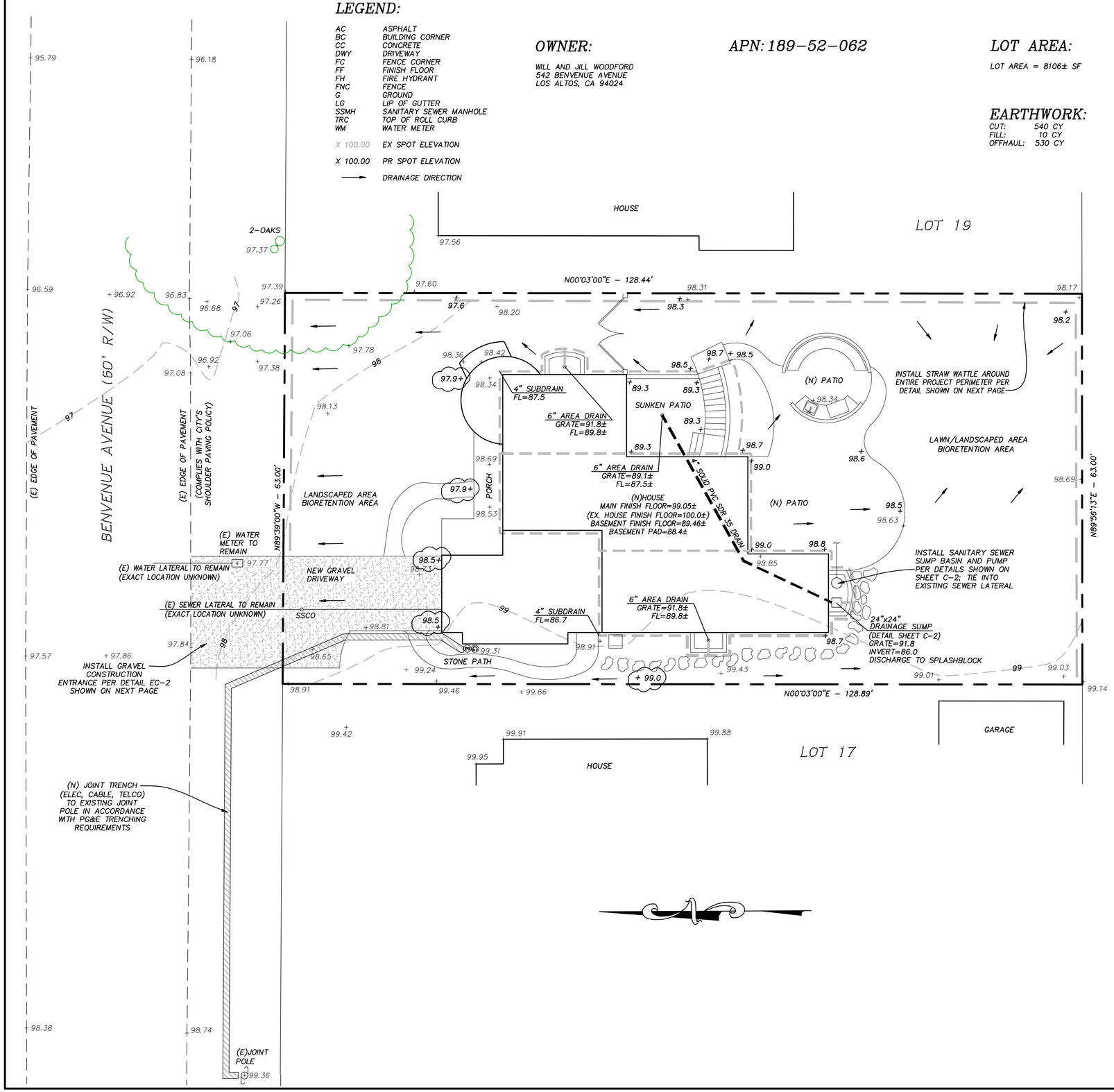
APN: 189-52-062

LOT AREA:

LOT AREA = 8106± SF

EARTHWORK:

CUT:	540 CY
FILL:	10 CY
OFFHAUL:	530 CY



NOTES:

1. ALL DRAINAGE IS TO BE CONVEYED TO THE STREET SURROUNDING THE PARCEL IN A NON CONCENTRATED SHEET FLOW FORM, USING BIO-FILTRATION WHERE AVAILABLE. IF NECESSARY A FILTRATION TRENCH (DETAIL SHOWN BELOW) CAN BE CONSTRUCTED ALONG THE NORTHERLY PROPERTY LINE OF THE PARCEL.
2. PLACE SPLASH BLOCKS (MINIMUM LENGTH 2') AT ALL DOWNSPOUT LOCATIONS AND CONVEY WATER TOWARDS THE STREET AS DESCRIBED IN NOTE 1.
3. ALL SOIL EXPOSED DURING GRADING SHALL BE SEEDED WITH GRASS AND/OR PLANTED WITH OTHER VEGETATION AT THE COMPLETION OF THE PROJECT.
4. IF ANY SOIL IS TRACKED INTO ANY PUBLIC RIGHT OF WAY, IT MUST BE REMOVED BY THE END OF THAT SAME BUSINESS DAY.
5. APPROPRIATE MEASURES SHALL BE TAKEN SO THAT THE STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION MATERIALS SHALL NOT COME IN CONTACT WITH STORM WATER.
6. IF APPLICABLE, ALL GRADING SHALL BE DONE IN ACCORDANCE WITH PROVISIONS OUTLINED IN THE SOILS REPORT.
7. NO GRADING AND/OR TRENCHING SHALL BE DONE WITHIN THE DRIPLINE OF ANY TREE LOCATED WITHIN THE PROJECT AREA WITHOUT FIRST OBTAINING THE APPROVAL OF A CERTIFIED ARBORIST.
8. WHERE APPLICABLE, ALL DIMENSIONS PROVIDED BY THE ARCHITECT SHALL SUPERSEDE ANY DIMENSIONS SHOWN ON THIS PLAN.
9. ALL TREES SHOWN ON THIS PLAN ARE TO REMAIN ACCORDING TO THEIR PRE-DEVELOPMENT CONDITION UNLESS OTHERWISE SPECIFIED.
10. THE STORM RUNOFF GENERATED BY THE NEW DEVELOPMENT SHALL NOT DRAIN ONTO ADJACENT PROPERTIES. THE EXISTING STORM DRAINAGE FROM THE ADJACENT PROPERTIES SHALL NOT BE BLOCKED BY THE NEW DEVELOPMENT.
11. THE APPLICANT SHALL REMOVE AND REPLACE ALL CRACKED, DAMAGED, UPLIFTED OR DEPRESSED FRONTAGE IMPROVEMENTS, EXISTING OR DAMAGED BY THE CONSTRUCTION ACTIVITIES, PER CITY STANDARDS ALONG THE ENTIRE PROPERTY FRONTAGE.
12. THE APPLICANT/CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE CITY'S ENGINEERING DIVISION PRIOR TO THE START OF ANY WORK WITHIN THE CITY'S RIGHT-OF-WAY OR PUBLIC EASEMENT AREAS. THE APPLICANT SHALL OBTAIN PERMITS FROM THE UTILITY COMPANIES PRIOR TO APPLYING FOR A CITY ENCROACHMENT PERMIT.
13. GRADING AND DRAINAGE IN THE REAR YARD OF THE SUBJECT PARCEL IS TO REMAIN ACCORDING TO THE CURRENT CONDITIONS.
14. MAINTAIN 2% DOWNWARD SLOPE FOR DRAINAGE PURPOSES FROM BUILDING TO PUBLIC WAY.
15. A SUBDRAIN SHALL BE CONSTRUCTED BEHIND THE ENTIRE BASEMENT RETAINING WALL PER THE DETAIL SHOWN ON SHEET C-2. THE SUBDRAIN SHALL BE CONVEYED TO THE SUMP PUMP LOCATED IN THE LIGHTWELL.
16. ALL DRAINS IN LIGHTWELLS SHALL HAVE ULTRALIGHT TIDEFLEX CHECK VALVES INSTALLED TO PREVENT BACKDRAINAGE INTO THE LIGHTWELL.
17. INSTALL STRAW WATTLE AROUND THE PROJECT PERMITER PER DETAIL EC-4 SHOWN ON NEXT PAGE.
18. INSTALL GRAVEL CONSTRUCTION ENTRANCE PER DETAIL EC-2 AS SHOWN ON NEXT PAGE.
19. SEE LANDSCAPE PLAN FOR BIO RETENTION AREA AND INFILTRATION BASIN DETAILS AND LOCATIONS.

ENGINEER:

DMG ENGINEERING, INC.
DYLAN GONSALVES, PE, PLS
30 OAKVUE COURT
PLEASANT HILL, CA 94523
PHONE: 925-787-0463
FAX: 925-287-8503

REGISTERED PROFESSIONAL ENGINEER
DYLAN M. GONSALVES
NO. 70277
EXP. 09-30-14
CIVIL
STATE OF CALIFORNIA

DMG ENGINEERING, Inc.
30 OAKVUE COURT
PLEASANT HILL, CA 94523
PHONE: (925) 787-0463
FAX: (925) 287-8503

DMG ENGINEERING, Inc.
RESTRICTED ENGINEERING DRAWINGS

The information, plans, designs, notes and arrangements shown on this drawing are confidential and may not be reproduced in whole or part without the expressed written permission of DMG ENGINEERING, Inc. Drawings noted as Preliminary/schematic and/or concept contain information that is conceptual subject to verification and/or change. The engineer makes no claim for accuracy of conceptual information or of information supplied by others.

REVISIONS

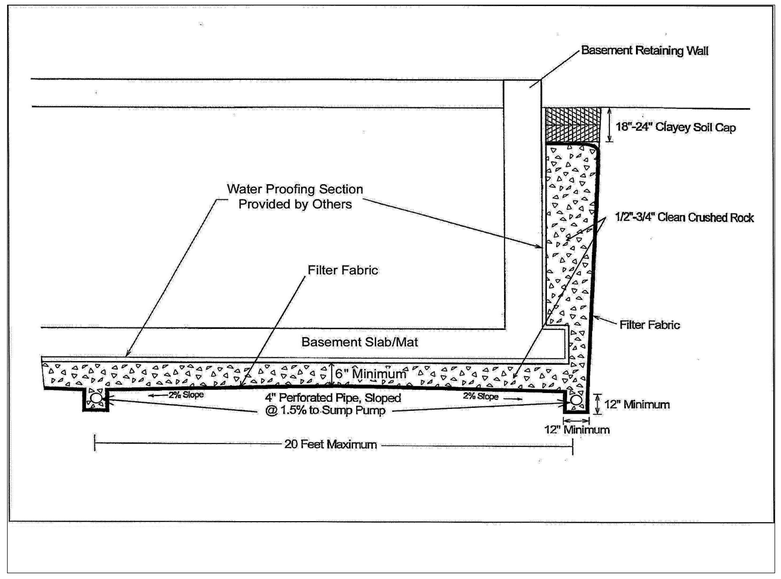
NO.	DATE	DESCRIPTION	BY
1	12/16/13	PLANNING COMENTS	DMG
2	4/28/14	GRADING REVISIONS	DMG

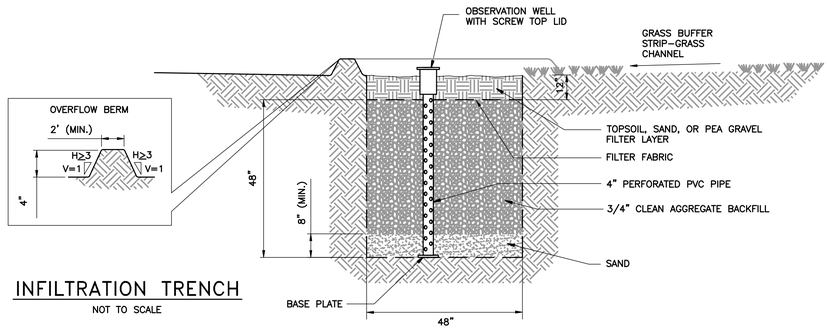
GRADING/DRAINAGE PLAN
542 BENVENUE
CITY OF LOS ALTOS
SANTA CLARA COUNTY – CALIFORNIA
SCALE: 1" = 8' JULY 2013

SHEET: C1

ORIG.DWG: 8-22-2013
REV.DWG: 4-28-2014
JOB: 10-40

E:\Land Projects 2006\1040WOODFORD\dwg\WOODFORD-G-D-PLAN-4-28-14.dwg 4/28/2014 3:37:14 PM PDT





INFILTRATION TRENCH

NOT TO SCALE

DETAILS

542 BENVENUE AVENUE
CITY OF LOS ALTOS

SANTA CLARA COUNTY – CALIFORNIA

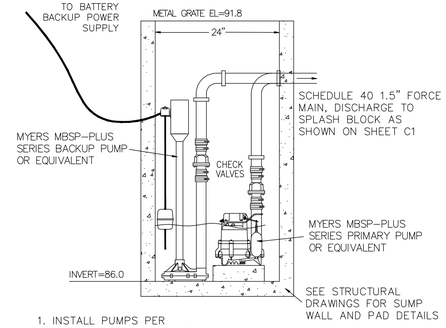
SCALE: 1" = 8' JULY 2013

GRAPHIC SCALE

8 0 4 8 16 32

(IN FEET)

1 inch = 8 ft.



1. INSTALL PUMPS PER MANUFACTURER'S RECOMMENDATIONS.

2. CONTRACTOR SHALL SUPPLY A COMPLETELEY SELF CONTAINED MOTOR CONTROL PANEL. THE CONTROL PANEL SHALL PROVIDE SHORT CIRCUIT AND OVERLOAD PROTECTION FOR THE PUMPS.

3. PROVIDE BENTONITE PASTE AT ALL PIPE CONNECTIONS TO PUMP BASIN.

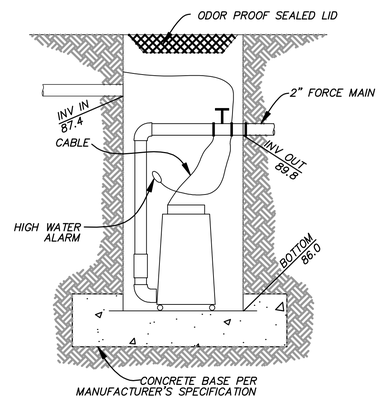
4. SUMP PUMP MAINTENANCE REQUIREMENTS: CLEAN STORM DRAIN VAULT AND PUMP OF DEBRIS EVERY SIX MONTHS MINIMUM.

5. PROVIDE BACKFLOW PREVENTERS ON ALL GRAVITY PIPE ENTERING THE PUMP BASIN.

INSTALL LIBERTY PUMPS PRO 370 SIMPLEX EFFLUENT PUMPING PACKAGE INCLUDING 21" DIA FIBERGLASS PUMP BASIN WITH LIBERTY P372LE41 0.4HP 115V SUMP PUMPS WITH ALARM AND ALARM SWITCH, CHECK VALVE, BALL VALVE, DISCHARGE HOSE, PUMP LIFTOUT CABLE AND ELECTRICAL JUNCTION BOX. CONNECT BASIN PUMP WIRING TO SEPARATE LIBERTY SIMPLEX ELECTRICAL CONTROL PANELS IN NEMA 1 ENCLOSURES

NOTE: PUMPS MAY ALSO BE SET IN PRECAST CONCRETE MANHOLE OR DROP INLET IN LIEU OF FIBERGLASS BASIN. DISCHARGE PIPING OF PUMP MUST BE EQUIPPED WITH A CHECK VALVE, BALL VALVE, TRUE UNION AND LIFTOUT CABLE.

CONTRACTOR SHALL ENSURE THAT SUMP PUMP IS PROPERLY VENTED SUCH THAT ODORS ASSOCIATED WITH SANITARY SEWERS DO NOT ACCUMULATE IN THE LIGHTWELL.

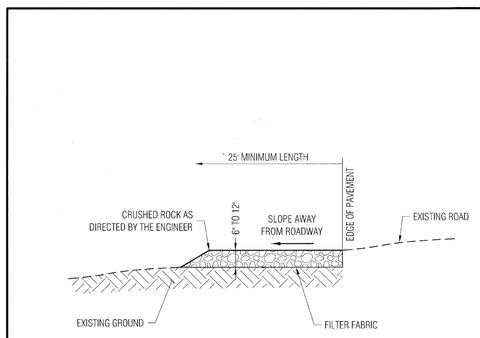


SEWER PUMP BASIN DETAIL

NOT TO SCALE

ENGINEER:

DMG ENGINEERING, INC.
DYLAN GONSALVES, PE, PLS
30 OAKVUE COURT
PLEASANT HILL, CA 94523
PHONE: 925-787-0463
FAX: 925-287-8503



NOTES:
1. PROVIDE A FANNED STABILIZED CONSTRUCTION ENTRANCE TO ACCOMODATE THE TURNING RADIUS OF CONSTRUCTION EQUIPMENT ON AND OFF THE PUBLIC STREET

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE ALONG NEW DRIVEWAY CORRIDOR FOR THE FULL PROPOSED WIDTH

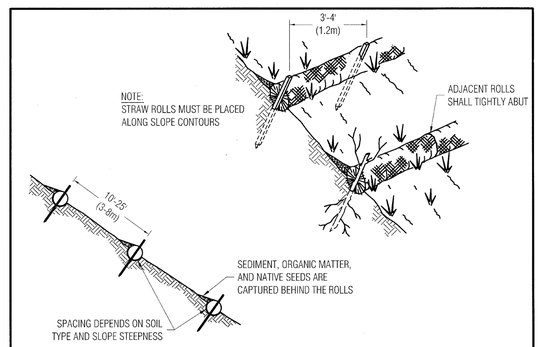
Approved: City Engineer Date 1/4/10

REVISION	
Description	Date

ENGINEERING DIVISION

STABILIZED CONSTRUCTION SITE ENTRANCE — EC-2

STANDARD DETAILS MAY 2010



NOTES:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" (75-125mm) DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL

2. VERTICAL SPACING FOR SLOPE INSTALLATIONS
1:1 SLOPES = 10 FEET APART
2:1 SLOPES = 20 FEET APART
3:1 SLOPES = 30 FEET APART
4:1 SLOPES = 40 FEET APART
<4:1 SLOPE = ONE ROW AT LOW POINT

3. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT TO RUN OFF-SITE AND CAN BE PERMANENTLY STABILIZED

Approved: City Engineer Date 1/4/10

REVISION	
Description	Date

ENGINEERING DIVISION

STRAW ROLLS — EC-4

STANDARD DETAILS MAY 2010

DMG ENGINEERING, Inc.
30 OAKVUE COURT
PLEASANT HILL, CA 94523
PHONE: (925) 787-0463
FAX: (925) 287-8503

DMG ENGINEERING, Inc.
RESTRICTED ENGINEERING DRAWINGS

The information, plans, designs, notes and arrangements shown on this drawing are confidential and may not be reproduced in whole or in part without the expressed written permission of DMG ENGINEERING, Inc. Drawings noted as Preliminary/schematic and/or concept contain information that is conceptual subject to verification and/or change. The engineer makes no claim for accuracy of conceptual information or of information supplied by others.

REVISIONS

NO.	DATE	DESCRIPTION	BY

DETAILS
542 BENVENUE
CITY OF LOS ALTOS
SANTA CLARA COUNTY – CALIFORNIA
SCALE: 1" = 8' JULY 2013

SHEET: C2

ORIG.DWG: 7-24-2013

REV.DWG: 12-16-2013

JOB: 10-40

E:\Land Projects 2006\1040WOODFORD\dwg\WOODFORD-G-D-PLAN-4-28-14.dwg 4/28/2014 3:37:14 PM PDT

Total Existing Hardscape:	2280 sf
Existing Softscape area:	
Lot Area:	8106 sf
Existing hardscape area	2280 sf
Total exisiting softscape:	4999 sf (62%)

Proposed hardscape area:	
Residence attached garage	1789 sf
Covered Front porch	130 sf
Front Paved walkway	60 sf
Right side paved walkway	103 sf
Back Arbor Patio	213 sf
Back Uncovered Patio	347 sf
Outdoor Kitchen	165 sf
Left Side lightwell	26 sf
Right Side lightwell	19 sf
Back lightwell	35 sf
Sunken patio/stairs	220 sf

Total proposed Hardscape	3107 (38% of lot)
	827 sf more than existing

Proposed softscape area:	
Lot area:	8106 sf
Proposed hardscape:	3106 sf
Total proposed softscape area	4999 sf (62% of lot)
	10% less then existing

CA: 800–227–2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
NV: 800–227–2600

Notes:
1. All bare soil will be covered with mulch 2-3” thick.
2. Plants to be irrigated with smart controllers and water reuse wherever possible.
3. Rock material to be gathered onsite.
4. All materials site placement to be determined in field.
5. All trenches will be boarded for safety every 48”,with trenches compacted and not left quick.
6. All mulch basins to have mulch shields readily accessible even with finish landscape dressing.
7. Plants to be watered in times of drought and summer for first year, and occasionally second year until established with grey-water system.
8. All pathways to be mulch or decomposed granite, depending on homeowner preference.
9. All plants to be guaranteed three years with the exception of rodent/deer damage, if planted and irrigated by MSL/SWP staff.
10. All boulders to be handled with safety equipment.
11. All plant maintenance to be directed by plant maintenance manual or MSL/SWP staff.
12. Fertilizer not recommended for greywater plants. Compost yearly is acceptable.
13. All mulch basin berms shall be inspected the first major rain events of each season until plants are established.
14. All drains shall be checked and maintained yearly to ensure proper flow.
15. Irrigation and plant schematic based on Exhibit A, Woodford gallon weekly capture/reuse of greywater.

SYMBOL (PLANT) LEGEND

- California Wax Myrtle
- Carpenteria sp.
- Assorted Fruit Evergreen Trees
- Street Trees (Fraxinus sp.)
- Vine Maple
- Mahonia sp.
- Redtwig Dogwood (*Cornus serciea*), Mountain Spirea (*Spirea douglasiana*), Spice Bush (*Calycanthus occidentalis*), Thimble Berry (*Rubus parviflorus*)
- Rosa californica
- Lavender (assorted)
- Grass, Sedge and Rush grouping: Berkley Sedge (*Carex temuleca*), California fescue (*Festuca california*),
- Common Spike Rush (*Juncus effesus*), Scouring Rush (*Equisteum scirpoides*), Deer Grass (*Muhlenbergia rigens)*
- Assorted Ferns/Iris
- Mock Orange
- Native Perennials/Huechra sp.

SYMBOL LEGEND

- Infiltration Basin, SD 2.1
- Stepped Planted Bioswale, SD 2.2
- Municipal Water Meter
- Mulch Basin Type S2 > 5’ diameter, SD 2.3
- Polyline, 1”
- PVC sch. 40 1”
- ABS 2” at >2% slope
- Log Material
- Boulder Material

Woodford Landscape CONCEPTUAL

All topography and lines are approximate. Installation may alter slightly due to natural occurrences of rock and other unforeseen sight materials.
Safety Information: Indemnity volunteer waiver needs to be signed prior to any onsite visit by a non-MSL staff, subcontractor or representative for pedestrian and vehicular safety for duration of this installation.
Contractor is responsible for pedestrian and vehicular safety for duration of this installation.

PLAN CHECK

Date:	
Approval:	
Comment:	
Date:	
Approval:	
Comment:	

Woodford Landscape Plan
Overview Plot Plan
542 Benvenue
Los Altos, CA
Santa Clara County

Landscape Base Plan:
Carolyn Price

Water Reuse Plan Prepared by:
SIERRA WATERSHED PROGRESSIVE
18653 Main Street
Groveland, CA 95321

PL101

PNW-ISA Certified Tree Risk Assessor #1188
ISA Certified Arborist #WE-0132A
www.rmarborist.com
eMail: ray@rmarborist.com

Ray Morneau
• ARBORIST •

550 S. Shoreline Blvd.
Mountain View, CA 94041-1929
Tel: 650-964-7664
Fax: 650-938-1577

Certified Arborist's Tree Inventory & Pre-Construction Report

February 23, 2014
Original Report: March 12, 2013

Prepared for:
Jill Woodford
542 Benvenue Avenue
Los Altos, CA 94024

Site:
New Home
542 Benvenue Avenue
Los Altos, CA 94024

Prepared by:
Ray Morneau
ISA Certified Arborist #WE-0132A
PNWISA Certified Tree Risk Assessor #1188

Contents

1.0 Assignment & Introduction

I have been retained by Jill Woodford as the Project Arborist to provide the pre-construction tree inventory and Arborist's Report for her family's new home project at 542 Benvenue Avenue in Los Altos.

Current drawings have been provided for my reference – including a proposed site plan in February 2013, to which I have added my tree numbers and included in this report.

2.0 Discussion with leading summary

2.1 Summary

Four (4) trees are associated with this property, three (3) on site and one (1) overhanging from the neighbors on the east. The site plan shows this project's new house with attached garage (with a partial basement) in the same location as the existing, but a little larger.

The main tree is the oak - #1 overhanging from the neighbor's. This can be preserved with the implementation of a tree protection plan, as discussed on site February 06, 2013.

Cedar #2 is at the edge of the new driveway footprint. Multiple stresses have taken their toll on this cedar from the compromised root structure at ground level up to the severe line clearance pruning in the foliage crown. Permission to remove this should be granted so a better structured specimen can be planted, which will grow to be an asset for years to come.

Oak tree #3 at the corner of the existing house likely grew from an acorn carried in by a local squirrel, who planted it in the shelter of this house – but placed it unrealistically close for it to reach its potential as a mature local coast live oak. The grading design challenges to build here require that oak #3 be removed.

Walnut #4 is in the back (northwest) corner of this parcel. This walnut is in very poor condition because it has been compromised by severe pruning that has irreparably damaged its structural integrity and ruined its ability to recover and live like a tree instead of a hat rack.

Overall Condition Chart

Percentage Range	Text Description	Quantity
0%	DEAD	0
1% to 25%	Very Poor	1
26% to 49%	Poor	1
50 % to 70%	Fair	1
71% to 90%	Good	1
91% to 100%	Excellent	0
		4

2.2 Discussion

The existing driveway can be maintained intact until near the end of this project – thus covering critical root zone for oak #1 and allowing its interim use as a work space and material storage area, even worker parking. Root zone beyond the driveway can be buffered with a thick layer of wood chip mulch to make the area usable while still preserving more root zone. Placing tree protection fence (TPF) at the street can reduce the risks of construction damage.

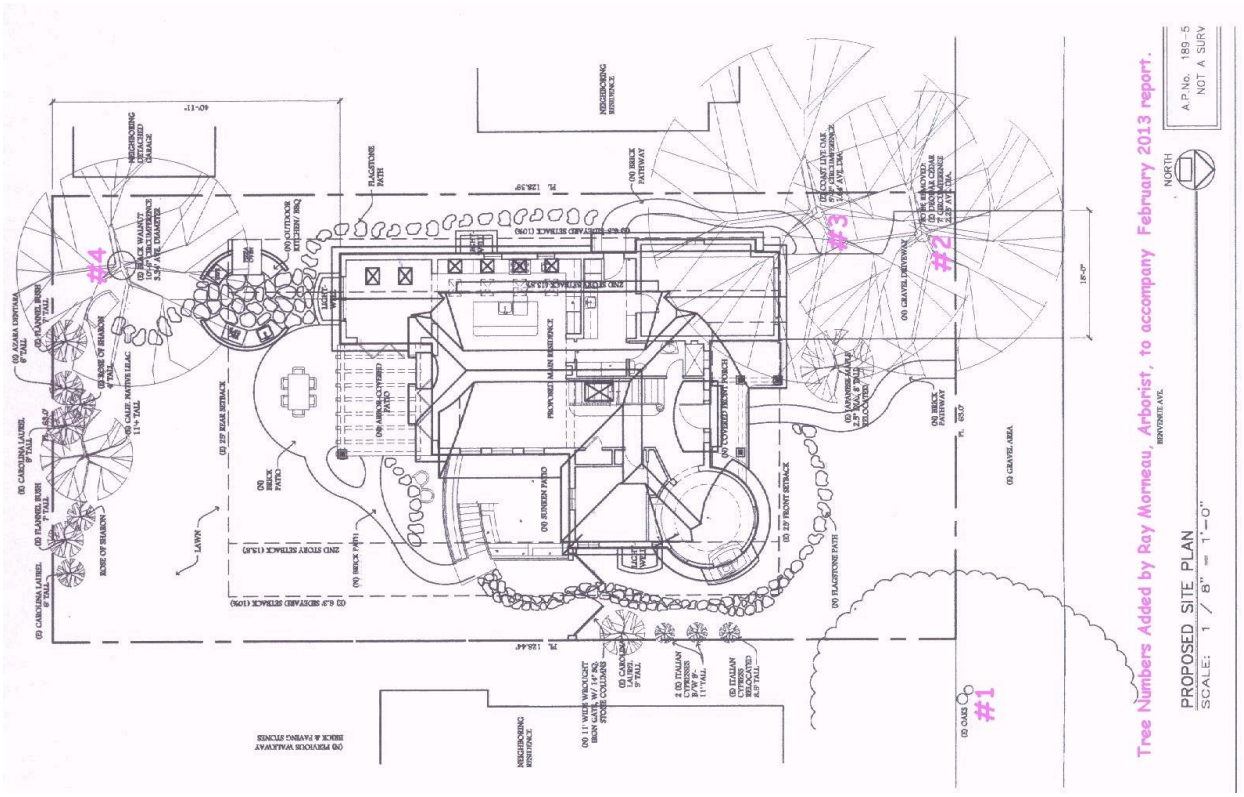
Cedar #2 is declining and should be removed – replaced with a tree suitable for planting beneath power line, which has a better structure than the current specimen compromised from its roots to its crown.

Oak #3 will require removal to accommodate necessary grading under the new house. Consider replanting another elsewhere on site – or maybe one in front and one in the back.

Walnut #4 is so severely declining that it makes sense to remove and replace with a better condition selection(s) from a more sensible planting palette.

3.0 Site Plan, Tree Data, & Data Legend

3.1 Plan, with tree numbers added



3.2 Tree Data (following half page)

3.3 Data Legend (then following two pages)

Tree #	Common Name	dbh (Diametrer at Breast Height	Crown Radius	Height	Crown Class	% Vigor	% Structure	% Overall	Suitability to Preserve	Additional Comments
1	Oak, Coast Live *(Quercus agrifolia)*	31.0" @ 1'	25'	45'	Dom.	68%	65%	66% Fair	Mod.	Co-dominant trunks at 3-feet. with substantial narrow angle of attachment with embedded bark. But vigorous root flare in parking strip asphalt. Neighbor's tree (property line at 7-feet.). Concrete slab driveway at 9-feet. Edge of street pavement at 14
2	Cedar, Deodar *(Cedrus deodara)*	26.4"	21'	53'	Co-dom.	53%	44%	47% Poor	Low	Neighbor's asphalt drieway at 4-feet.; 19-feet. to corner of existing house; 19-feet. to edge of street pavement; 6-feet. to sewer cleanout. Substandard communication lines attachment to trunk. Root flare prominent on south side, but defective around 40
3	Oak, Coast Live *(Quercus agrifolia)*	21.9" @ 3'	22'	50'	Co-dom.	68%	75%	72% Good	Mod.	Two trunks at 4-feet (9", 19"). Crowded, .lop-sided against cedar #2 15-feet. to north. Existing house corner at 5-feet; neighbor's asphalt driveway at 1-foot; 6-feet to gas meter; edge of street pavement at 35-feet.
4	Walnut, Black *(Juglans nigra)*	40.3" @ 1'	20'	35'	Dom.	25%	25%	25% V. Pr.	Very Low	Back fence at 9-feet south; west side fence at 7-feet. Severely declining with 40% of root flare and lower trunk circumference showing low vigor. Hat-racked (severely pruned) at ~28-feet with decay started at old, poorly located and executed cuts.

3.3 Legend - Tree Inventory Headers

Observations were made and data gathered during my on-site inspection February 11, 2013.
Further conclusions and protection measures were refined from office research, seminar information, and past experience based on those observations and data.

Unless otherwise defined as a limited inventory, all site trees larger than a minimum diameter (usually ≥4-inch) were numbered and inspected. The gathered data was entered into a Microsoft® Excel database.
The data is encapsulated into the accompanying "Tree Inventory Data" section. The categories are typically self-descriptive with only the following notes.

Tree Number:	I sequentially assigned tree numbers from 1 to 4. A 1" by 3" aluminum tag is stapled to each tree at about eye level. I add a prefix "13" to identify each as linked with this inventory, thus differentiating it from any other numbering system.
Names:	We employ the initial common names from McMinn, if listed, otherwise from Sunset. Scientific/botanical names are included to minimize confusion. As applicable, we used McMinn's key and/or Sunset's descriptions.
DSH:	Diameter at Standard Height: This measurement is the trunk diameter measured at the standard height defined by the jurisdiction in which the tree trunk grows. The industry standard is 54 inches above ground level, taken with a standard surveyor's diameter tape, recorded in inches. Multi-trunked tree's diameters are measured below the lowest branch swelling and/or individual stems at 54 inches, or an average, depending on which height measurement is deemed to produce the best representative figure.
Trunk Circum-ference:	City of Mountain View Planning Department has preferred that I convert the standard diameter measurements to circumference. This column shows my arithmetic results of multiplying the diameters by pi (3.141592).
Crown Radius: (CR):	The averaged radii's measurement is shown in feet … (N+S+E+W) / 4 = CR.
Canopy Cover:	Estimated averaged radii of foliage canopy cover (crown's shadow at noon on the ground below). [This column is omitted when not project-relevant.]
Ht (Height):	Estimated distance foliage crown extends above grade, recorded in feet.
Vigor:	Rating for tree's growth and vitality as a blend of elements like leaf or bud size and color, twig growth (elongation), accumulation of deadwood, cavities, woundwood development, trunk expansion (growth "cracks"), etc.

Form:	Structure rating for tree's architecture as a composite of factors like branch attachment, lean and balance, effects of prior breakage, crossing-tangled-twisted limbs, codominant trunks and/or branches, decay and cavities, anchorage (roots), etc.
Overall Condition:	Percentage rating assessing the tree's overall vigor, recent growth, insects/diseases, and structural defects. Relative text rating included in the same cell as: Excellent, Good, Fair, Poor, Very Poor. This corresponds to the "Condition Percentage" factor in tree valuations per the Council of Tree and Landscape Appraisers (CTLA) system used by the International Society of Arboriculture. (CTLA, 1992.) This combines foliage, branches, limbs, trunk, and root ratings into a composite condition score. This rating is used calculating these trees' appraised values required by some jurisdictions like Palo Alto.
Overall Suitability:	Considers the species' tolerance to construction impacts and the tree's condition (vigor & structure), longevity/age, adaptability, and aesthetics. This rating takes into account most announced intentions of changes in area/lot use. Degrees: High, Moderate, Low, Very Low, In footprint. • High: Tree in great condition and any existing defects or stresses are minor or can be easily mitigated. • Moderate: Notable vigor and/or stability problems but which can be moderated with treatment &/or increased tree protection zone. • Low: Significant problems, including shorter life expectancy. Difficult to retain but potential with much larger tree protection zone. • Very Low: Substantial existing problems, defects, stresses. Unlikely to survive impact of any project. • In footprint: So close to the proposed construction impacts that it is rated as being within the new footprint.
Age / Longevity:	Rates tree's relative age: Young (Long) / Semi-Mature / Mature / Over-Mature (Short).
Comments:	Notes most obvious defects, insects, diseases or unique characteristics.

4.0 Tree Preservation Guidelines: Pre-Construction Maintenance notes

- Preserving pre-existing trees on construction sites dooms them to struggle due to hardships imposed by construction needs.
- Trees need space (above and below ground).
- Trees prefer their status quo.
- Buildings need space … enough said.
- The "dripline", defined as the reach of the extended branches, is often unwisely assumed to be the root zone – the extended reach of most of the roots.
- Tree preservation discussions and/or tree protection measures cannot be all-inclusive but some are offered in many of my reports to assist planning and understanding.

4.1 Identify a TPZ (Tree Protection Zone) for each tree to remain after the project closes. A TPZ is defined by the jurisdiction in which the project is located to provide above-ground- and root-zone-protection for trees. In the absence of a specific local definition, the TPZ shall be a circle with a radius of 10-feet for every 1-foot of trunk diameter.

Within the TPZ shall be identified a CRZ (Critical Root Zone) – a no man's land within which no activity may occur without Project Arborist or City Arborist monitoring and/or sign-off. Unless otherwise specified, the CRZ shall be the larger of 3-foot-radius-circle or a circle with a radius of 2-feet for every 1-foot of trunk diameter.

4.2 Supplemental watering should be provided for all trees to remain. A rule of thumb for construction site stressed trees is 10-20 gallons per trunk diameter inch per month, particularly critical during hot weather. This is modified by the Project Arborist on site with root zone inspections and monitoring as water demands will obviously be lower during cool, damp weather. Inspection should find soil between 3" and 18" below grade moist enough for roots to thrive.

4.3 No pruning is absolutely needed at this time, though pruning to reduce foliage branch endweights could usually make for better-structured trees. Typically, crown raising for clearance over some areas of a site is useful (7-feet over bike lanes, 14-feet for vehicle access, 1- to 3-feet over roofs [species-dependant]). Nevertheless, deadwood removal and endweight reduction is commonly performed to improve existing site and neighboring trees. And, usually project trees benefit from "Crown Cleaning" for deadwood removal and "Crown Thinning" to lighten branch endweights) at sometime before the close of the project. Then the owner has a benchmark against which to compare future status of the trees. All work must conform to published ISA BMPs keyed to ANSI A-300 Standards as the basis for written pruning specifications drafted by an ISA Certified Arborist (or equivalent).

4.4 Approaching project commencement, when the foundations, driveways, and other hardscape features (including trenches) have been staked/located, then some pruning may likely be needed. Raising/clearance can be minimized for space to work. Root pruning along the lines within 15-feet on either side of mature trees' trunks can sever roots cleanly, reducing shock to these trees' systems.

Root pruning prior to excavating for the foundation and driveway must be done to avoid excessive root damage (rips, tears, shatter, breakage). This is commonly performed with a trencher until 1-inch diameter roots are encountered, at which time the crew continues with exposing larger roots for hand pruning with a sharp saw (hand saw, Sawz-All®, or equivalent). This can be done by careful hand-digging or air/hydraulic excavation to avoid damaging tree roots.

4.5 All project tree work performed before, during, or after construction is to be done by WCISA Certified Tree Workers under the supervision of an ISA Certified Arborist (or equivalents, if they possess sufficient skill for approval by Project Arborist). This includes all pruning, removals (including stump removals) within driplines of trees to be preserved, root pruning, and repair or remedial measures.

5.0 Tree Preservation Guidelines: Tree Protection Measures

5.1 Fencing and other root zone protection is usually specified as a drip-line installation of 6-foot high chain link fence on galvanized drive posts, plus root zone wood chip mulch. However, due to the inevitable myriad project variables, alternatives are frequently allowed – but require careful strategies arranged with and signed off by the Project Arborist or City Arborist.

For this project, it is highly likely that all site trees must be removed/replaced, so only adjoining-overhanging trees need protecting … and the property line fences would be the appropriate fencing this time.

Must be in place before demolition or any other project site work.

Though generally expected to extend to the dripline, here the TPF can be installed as close to that as possible.

One 24- to 36-inch opening or gate should be left for inspection access to each area.

Fence material is to be 6-foot-high chain link fence supported by 8-foot long, 2-inch diameter galvanized fence posts driven 2-feet into the soil.

Where no plant material root zone buffer is growing (e.g. ivy), a wood chip mulch is to be spread evenly to a 4-inch depth from the dripline to 6-inches from the base of the trunk. Taper to existing ground level at the base of the trunk with a slope of about 2:1.

Additional root zone areas requiring protection can be buffered as Project Arborist requires, e.g., if project scope changes. Commonly acceptable buffer materials often include wood chips, crushed rock, plywood, steel trench plates, and/or a combination of such materials. Consult Project Arborist for depth specifications (which vary depending on use of area and/or specific traffic).

Root zone areas to be protected may be modified by the Municipal Arborist or Project Arborist as plans develop.

5.2 Prohibited Acts & Admonishments/Requirements

5.2.1 No parking or vehicle traffic over any root zones, unless using buffers approved by Project Arborist or City Arborist.

5.2.2 Monitor root zone moisture and maintain as per above.

5.2.3 Have an ISA Certified Arborist repair any damage promptly.

5.2.4 No pouring or storage of fuel, oil, chemicals, or hazardous materials under any trees' foliage canopies or future plant materials' root zone areas.

5.2.5 No grade changes (cuts, fills, etc.) under these foliage crowns without prior Project Arborist approval. For instance, hand excavation and thinner base prep may be required in some root zone areas.

5.2.6 Any additional pruning required must be performed under arborist supervision – including root pruning – clean, smooth cuts with no breaking, scraping, shattering, or tearing of wood tissue and/or bark.

5.2.7 No storage of construction materials under any foliage canopy without prior Project Arborist or City Arborist approval.

5.2.8 No trenching within the critical root zone area. Consult Project Arborist before any trenching or root cutting beneath any tree's foliage canopy. It is best to route all

trenching out from under trees' driplines. Often trenches in root zones must be hand excavated to leave roots intact.

5.2.9 No clean out of trucks, tools, or other equipment over any essential root zone. Keep this debris outside of any existing or future root zone.

5.2.10 No attachment of signs or other construction apparatus to these trees.

5.3 Construction-time Maintenance

5.3.1 Monitor root zone moisture and maintain as per above (§4.1).

5.3.2 Maintain/repair tree protection fences and/or root zone mulch/buffer material.

5.3.3 Have a certified arborist promptly repair any damage to trees.

5.3.4 Develop the plan for follow-up care so, as the project closes, the care of the trees can be handed over for continuing management by the owner and/or landscape contractor.

5.4 Post-Construction Follow-Up

5.4.1 Monitor root zone moisture, especially during/following drought//dry seasons. [A dry season is any time more than 60 days elapse since significant rainfall (2-inches or less).]

5.4.2 Monitor root zone mulch (if used), maintain depth, and scarify (approximately once or twice annually) to break up compaction/matting.

5.4.3 Monitor for insect pests and diseases, especially insects with sucking/chewing mouthparts or boring insects (bark beetles)..

5.4.4 Inspect for structural safety before storm season and after severe weather events.

5.4.5 Follow California Oak Foundation guidelines as to not irrigating and/or planting water loving plant material within 10-feet of the trunks of mature trees.

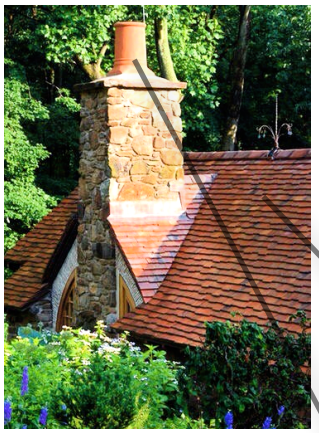
6.0 Certification

I certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge, ability, and belief, and are made in good faith.

Thank you for the opportunity to apply my knowledge and expertise working with your trees. Good luck with the construction project and tree care decisions ahead of you. If I can answer any further questions for you, the City staff, tree care contractors, or anyone with concerns about your trees, please call or e-mail to inform me.

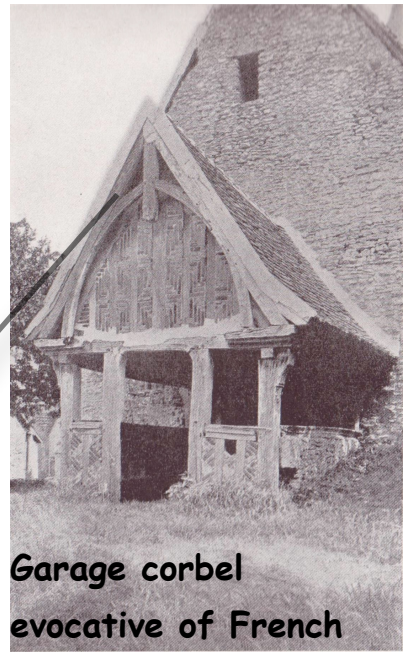
Respectfully submitted,

Raymond J. Morneau
ISA Certified Arborist #WE-0132A
PNW-ISA Certified Tree Risk Assessor #1188



Northern Roof Tiles
French Style Flat
Clay Tile Roof

Inset casement windows with bullnose stucco surround

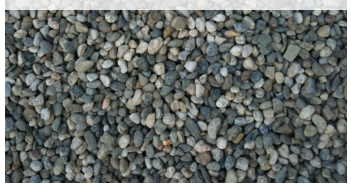


Garage corbel evocative of French Country Stable house

Clay
Chimney Pot

Natural Butter Ochre stucco, inspired by Provençal colors

3/4" Black and white gravel for driveway



"French blue" lapis pigmented paint for windows.

Wooden beams for corbels, pillars