

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0315828

Insp Area: 4

Thos Bros: 257-A4

Site Address: 5534 DUNLAY DR SAC

Parcel No: 201-0720-010
N

HERITAGE @ NATOMAS PARK 10 LOT 4

Sub-Type: NSFR

Housing (Y/N):

CONTRACTOR

US HOME
2366 GOLD MEADOW DR STE 100
GOLD RIVER, CA 95670 77041

OWNER

ARCHITECT

Nature of Work: MP2389 1 STORY 7 ROOM SFR

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class B License Number 451839 Date 10/28/03 Contractor Signature Don McClabey

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

____ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

____ I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 10/28/03 Applicant/Agent Signature Don McClabey

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

____ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier OLD REPUBLIC INS. CO. Policy Number MWC10815000 Exp Date 11/01/2003

____ (This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 10/28/03 Applicant Signature Don McClabey

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

RESIDENTIAL SUBDIVISION BUILDING PERMIT APPLICATION

Project Address: 5534 Dunlay St. Assessor Parcel # 201-0720-010
 Lot Number: 4 Subdivision Heritage @ Natomas Park Village 10

OWNER INFORMATION:

Legal Property Owner: US Home Phone# (916) 858-3900
 Owner Address 2366 Gold Meadow Way City Gold River State CA Zip 95670

CONTRACTOR INFORMATION:

Contractor: US Home Lic. # 451839 Phone # (916) 858-3900 Fax (916) 858-3925

Don McCloskey (916) 719-9050

PROJECT INFORMATION:

Land Use Zone R1A Occupancy Group R3 Construction Type VN Fed Code 1A
 No. of Stories: 1 No. of Rooms: _____ Street Width: _____
 1st Floor Area 2372 2nd Floor Area _____ Basement _____ Roof Material _____
 AREA IN SQUARE FOOT OF:
 Dwelling/Living 2389
 Garage/Storage 2372
 Decks/Balconies _____
 Carports _____
 SCOPE OF WORK: _____

FOR OFFICE USE ONLY

- | | | |
|---|---|---|
| <input type="checkbox"/> Information Above Complete | <input type="checkbox"/> AR Flood Waiver Required | <input type="checkbox"/> Planning Approval |
| <input type="checkbox"/> Violation Files Checked | <input type="checkbox"/> Flood Elevation Certificate Required | <input type="checkbox"/> Design Review Approval |
| <input type="checkbox"/> Standard Setbacks | <input type="checkbox"/> Water Development Infill Area | <input type="checkbox"/> Special Fee Districts Apply: |
| <input type="checkbox"/> County Sewer | | |

→ THE FOLLOWING MUST BE PROVIDED IN ORDER TO SUBMIT FOR PERMIT →

- 2 COMPLETE PLOT PLANS, LEGIBLE & DRAWN TO SCALE
- 11 X 17 COPY OF FLOOR PLAN WITH FOLLOWING INFORMATION

a) Assessor's Parcel Number	c) Owners Name
b) New Floor Area	d) Project Address



**INSULATION CONTRACTORS
ASSOCIATION
OF AMERICA**

INSULATION
CERTIFICATE
40565

1321 DUKE STREET, SUITE 303 • ALEXANDRIA, VA 22314 • (703) 739-0356

THIS IS TO CERTIFY THAT INSULATION HAS BEEN INSTALLED IN CONFORMANCE WITH CURRENT ENERGY REGULATIONS, CALIFORNIA ADMINISTRATIVE CODE, TITLE 24, STATE OF CALIFORNIA, IN THE BUILDING LOCATED AT:

LOT # _____ TRACT # _____

STREET **5534 Dunley** CITY _____

EXTERIOR WALLS:

MANUFACTURER _____ THICKNESS/TYPE _____ R-
VALUE **13**

CELLINGS:

BATTS: _____ THICKNESS/TYPE _____ R-
VALUE **38**

BLOWN IN: _____ MINIMUM
THICKNESS _____ R-
VALUE **38**

MANUFACTURER _____ THICKNESS/TYPE _____ R-
VALUE _____

SQUARE FOOTAGE COVERED _____ NUMBER OF BAGS USED _____

FLOORS: _____ THICKNESS/TYPE _____ R-
VALUE _____

MANUFACTURER _____ THICKNESS/TYPE _____ R-
VALUE _____

SLAB ON GRADE: _____ THICKNESS/TYPE _____ R-
VALUE _____

MANUFACTURER _____ THICKNESS/TYPE _____ R-
VALUE _____

WIDTH OF INSULATION _____ INCHES

FOUNDATION WALLS: _____ THICKNESS/TYPE _____ R-
VALUE _____

MANUFACTURER _____ THICKNESS/TYPE _____ R-
VALUE _____

GENERAL CONTRACTOR _____

CALIFORNIA CONTRACTORS LICENSE # _____ DATE _____

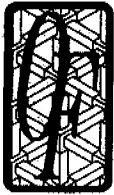
INSULATION CONTRACTOR **ARCADE INSULATION** _____ TITLE _____

CALIFORNIA CONTRACTORS LICENSE #815286 _____ DATE _____

NEVADA CONTRACTORS LICENSE #55201 _____ DATE _____

SIGNATURE _____ TITLE _____

55 34 Drawing D. 304



O'Connor Freeman & Associates, Inc.

Structural Engineering Services

March 4, 2003

Chris Wylly
US Homes Corporation
2366 Gold River Meadow, Suite 200
Gold River, CA 95670

Re: Front Entry Holdowns: Plan 2389 Northborough Village 8-4
O'Connor Freeman Job Number: E020611

Dear Chris:


You contacted our office, via facsimile, regarding the front entry holdowns for Plan 2389 in the Northborough Village 8-4 subdivision. See the attached copy of this facsimile for reference and review. Specifically, you wanted to know if the lateral design could be re-analyzed in order to reduce the size of the holdown in order to make construction easier.

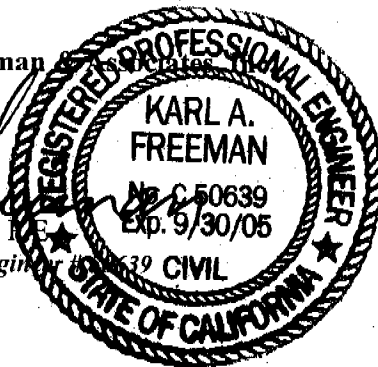
In response to your request, we have reevaluated the lateral loads to the front entry shear wall in order to determine if the holdown could be changed. As a result of our analysis, we found the shear wall sheathing would remain the same. However, by strapping around the window opening, we can reduce the holdown size. We have adjusted the plans to reflect this information. See the attached partial plan exhibits and structural calculations for reference and review.

If you should have any further questions or comments please do not hesitate to call.

Sincerely,

O'Connor Freeman


Karl A. Freeman, P.E.
Registered Civil Engineer



cc: file



Nation's Only 3 Time Winner
National Builder of the Year



Fax Coversheet

KARL @ O'CONNOR FREEMAN

To: LINDA GOSPODNITCH From: Chris Wyly

Company: US HOME

LAUREATE @ NORTH POINTE

Northpointe

Natomas Park

Phone: (916) 419-1043

Fax: _____

Fax: (916) 515-0226

Date: 3/1/03

Cell: (916) 825-4499

978-0627

Pages (Including Cover): _____

PROBLEMS WITH PLAN 2389

#1 **F** SHEAR WALL AT ENTRY

5/8 FOR DOOR JAM'S OK FOR STA ENTRY

IF OPTIONAL ANDERSON FRENCH DOORS ARE USED IN DIVISION

WE HAVE A PROBLEM. ALSO THE USE OF

THE HD 10A HOLD DOWN DO WE HAVE ANY

OTHER OPTIONS? THE TRIM BULGING IS GOING TO

CAUSE PROBLEMS.

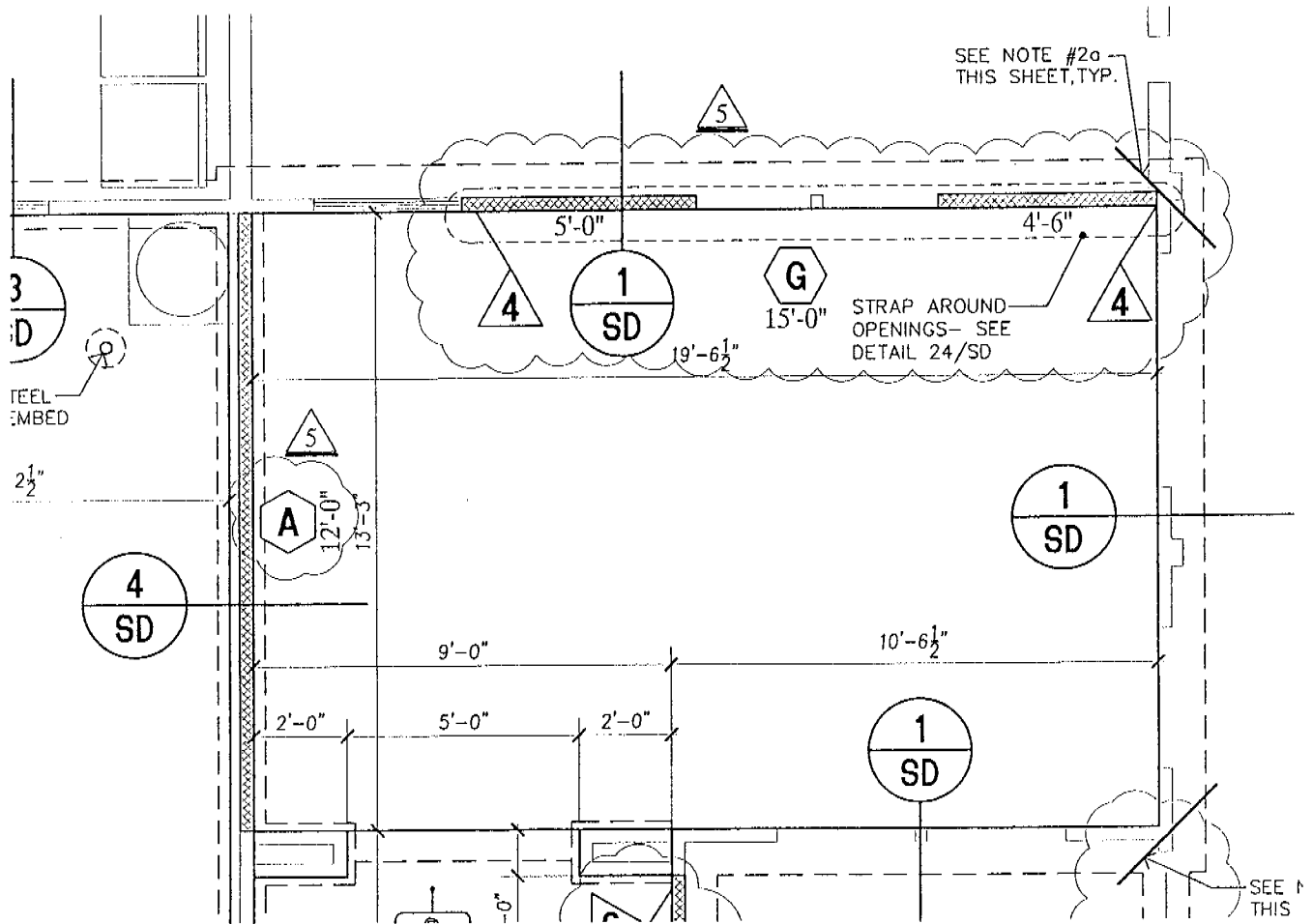
IF WE CAN WE NEED TO DELETE THE

5/8 SHEAR AND CHANGE THE HOLD DOWNS TO

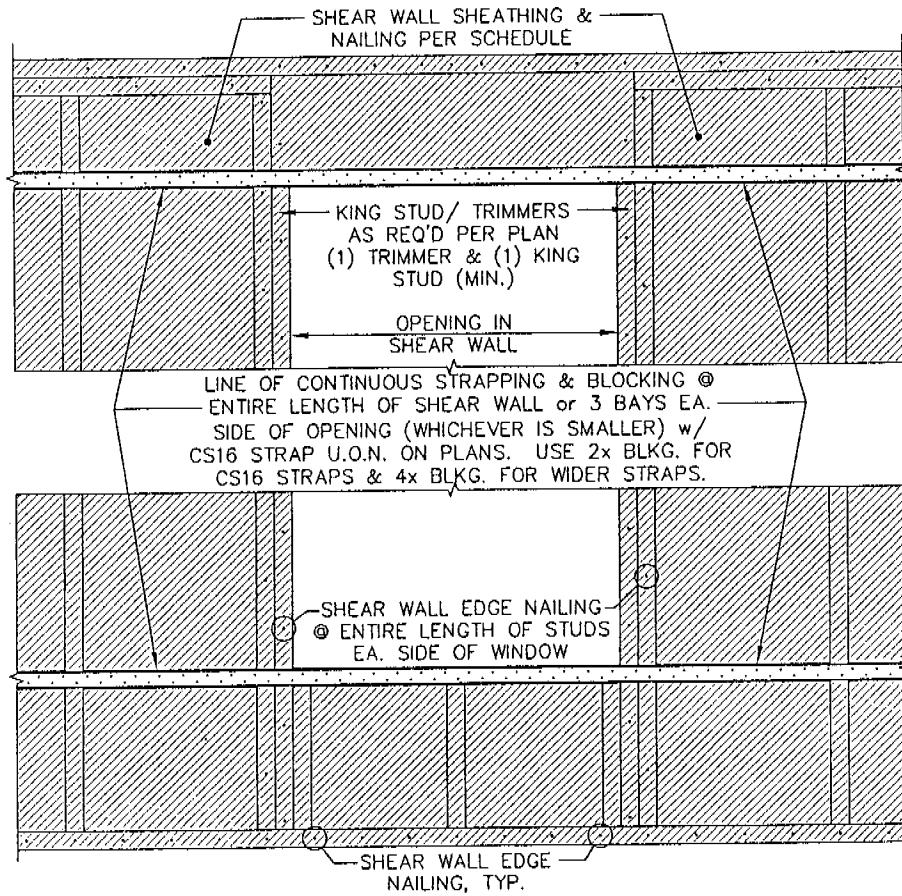
SOMETHING MORE USER FRIENDLY

THANKS FOR YOUR HELP

CHRIS WYLY



FOR CS16 STRAPS: FILL EVERY OTHER NAIL HOLE PROVIDING AT LEAST (14) 8d NAILS INTO BLKG. EA. END



SHEAR WALL STRAP @ OPENINGS

SCALE

3/4"=1'-0"

24

H O L D O W N S C H E D U L E										
MARK	SIMPSON TYPE	HOLDOWN POST	POST FASTENERS	HOLDOWN ANCHORS			THR'D ROD MINIMUM EMBEDMENT	EPOXY RETROFIT		REMARKS
				THR'D ROD DIAMETER	MONOLITHIC SSTB TYPE	TWO-POUR SSTB TYPE		MIN. EMBED.	DIST. FROM CORNER	
1	MSTC28	4x POST	(16) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
2	MSTC40	4x POST	(28) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
3	MSTC52	4x POST	(48) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
4	STHD14/ STHD14RJ	(2) 2x STUDS	(38) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	SEE NOTE 3, 6
5	PHD2	(2) 2x STUDS	(10) SDS 1/4 x 3 WOOD SCREWS	5/8"φ	SSTB16	SSTB20	12"	6"	4"	SEE NOTE 1, 5
6	PHD5	(2) 2x STUDS	(14) SDS 1/4 x 3 WOOD SCREWS	5/8"φ	SSTB20	SSTB24	12"	6"	4"	SEE NOTE 1, 5
7	PHD6	(2) 2x STUDS	(18) SDS 1/4 x 3 WOOD SCREWS	7/8"φ	SSTB28	SSTB34	14"	6 1/2"	5"	SEE NOTE 1, 5
8	PHD8	(2) 2x STUDS	(24) SDS 1/4 x 3 WOOD SCREWS	7/8"φ	SSTB28	SSTB34	16"	7 1/2"	5 1/2"	SEE NOTE 1, 5
9	HD10A	4x POST	(4) 7/8"φ M.B.'s	7/8"φ	SSTB28	SSTB34	18"	9"	6 1/2"	SEE NOTE 1

1. ANCHOR BOLTS SHALL BE ASTM A307 THREADED ROD MATERIAL FOR ALL FIRST FLOOR HOLDOWNS. HOWEVER, SIMPSON SSTB ANCHOR BOLTS MAY BE SUBSTITUTED FOR THREADED ROD ANCHORS AS NOTED IN THE SCHEDULE ABOVE. SEE THE "SSTB ANCHOR BOLT DETAIL" ON THE DETAIL SHEET WHERE OCCURS.

2. "SIMPSON" N16 FASTENERS (16d "SHORTS") OR "SIMPSON" SS16D FASTENERS MAY BE USED IN LIEU OF 16d COMMONS.

3. 10d COMMON NAILS MAY BE USED IN LIEU OF 16d SINKERS.

4. 5/8"φ SSTB MAY BE SUBSTITUTED FOR 3/4"φ THREADED ROD ANCHOR BOLT PROVIDED A DOUBLE WASHER IS INSTALLED BELOW NUT.

5. SEE "SIMPSON" CATALOG C-2001 FOR WOOD SCREW FASTENER INFORMATION.

6. "HTT22", "PHD5", OR "PHD6" HOLDOWN MAY BE USED IN LIEU OF THE "MTT28B", "HPAHD", "STHD" OR "LSTHD" HOLDOWNS IN ANY CASE.

7. PROVIDE LONGER STRAP AS NEEDED TO EXTEND TO SIDE GRAIN OF FASTENING MEMBER (END GRAIN NAILING NOT ALLOWED). LENGTH OF STRAP IS TO BE SUFFICIENT TO ACCOMMODATE 1/2 OF THE NUMBER OF FASTENERS PER SCHEDULE IN TO THE FASTENING MEMBERS AT EACH END OF THE STRAP (# OF FASTENERS SPECIFIED ON SCHEDULE IS THE TOTAL REQUIRED FOR EACH STRAP.)

8. HDC ANCHOR BOLT IS TO ALIGN DIRECTLY UNDER HOLDOWN POST SEE SIMPSON CATALOG FOR MORE INFORMATION

GENERAL HOLDOWN NOTES (APPLIES TO ALL HOLDOWNS)

A. EVERY HOLDOWN INDICATED ON THIS SCHEDULE MAY NOT NECESSARILY BE USED. SEE PLAN FOR SPECIFIC HOLDOWN TYPES USED.

B. IF ANCHOR BOLTS ARE MISINSTALLED OR NEED TO BE RETROFITTED INTO EXISTING CONCRETE, USE "SIMPSON S.E.T. EPOXY-TIE SYSTEM WITH THR'D ROD DIAMETER, EMBEDMENT INTO FIRST POUR FOOTING, AND MIN. DISTANCE AWAY FROM CORNER PER SCHEDULE. PROVIDE SPECIAL INSPECTION BY BLDG. DEPT. APPROVED INSPECTOR FOR ALL EPOXY ANCHOR INSTALLATIONS.

C. USP LUMBER CONNECTORS WITH REFERENCE NUMBERS FOR SUBSTITUTION MAY BE USED IN LIEU OF SIMPSON HARDWARE.

SHEAR WALL SCHEDULE											
MARK	SHEATHING REQUIRED	EDGE NAILING	MIN. FND. SILL PLATE ³	MIN. FRMG. @ ADJNG. PNL. EDGES ⁴	ANCHOR BOLT SPACING				SILL PLATE NAILING ⁶		KEYNOTES
					1/2" DIA.	5/8" DIA.	3/4" DIA.	LMA ⁵	STANDARD	ALTERNATE	
A	3/8" CDX PLYWOOD	8d @ 6"	2x	2x	38" O.C.	54" O.C.	72" O.C.	30" O.C.	16d @ 6"	1/4" LAGS @ 13" O.C.	1, 2
B	3/8" CDX PLYWOOD	8d @ 4"	2x	2x	28" O.C.	40" O.C.	55" O.C.	23" O.C.	16d @ 5"	1/4" LAGS @ 10" O.C.	1, 2
C	3/8" CDX PLYWOOD	8d @ 4"	3x	3x	30" O.C.	48" O.C.	62" O.C.	21" O.C.	1/2" LAGS @ 22" O.C.	1/4" LAGS @ 9" O.C.	1, 2, 3, 4
	3/8" CDX PLYWOOD	8d @ 4"	2x	3x	13" O.C.	18" O.C.	25" O.C.	10" O.C.	16d @ 4"	1/4" LAGS @ 9" O.C.	1, 2, 4
D	3/8" CDX PLYWOOD	8d @ 3"	3x	3x	23" O.C.	37" O.C.	48" O.C.	16" O.C.	1/2" LAGS @ 17" O.C.	1/4" LAGS @ 7" O.C.	1, 2, 3, 4
	3/8" CDX PLYWOOD	8d @ 3"	2x	3x	10" O.C.	14" O.C.	19" O.C.	8" O.C.	16d @ 3"	1/4" LAGS @ 7" O.C.	1, 2, 4
E	3/8" CDX PLYWOOD	8d @ 2"	3x	3x	19" O.C.	30" O.C.	39" O.C.	13" O.C.	1/2" LAGS @ 14" O.C.	1/4" LAGS @ 5 1/2" O.C.	1, 2, 3, 4
	3/8" CDX PLYWOOD	8d @ 2"	2x	3x	8" O.C.	11" O.C.	16" O.C.	N / A	16d @ 2 1/2"	1/4" LAGS @ 5 1/2" O.C.	1, 2, 4
F	1/2" CDX PLYWOOD	10d @ 2"	3x	3x	15" O.C.	23" O.C.	30" O.C.	10" O.C.	5/8" LAGS @ 14" O.C.	1/4" LAGS @ 4 1/2" O.C.	1, 3, 4
G	5/8" CDX PLYWOOD	10d @ 2"	3x	3x	13" O.C.	21" O.C.	27" O.C.	9" O.C.	5/8" LAGS @ 12" O.C.	1/4" LAGS @ 4" O.C.	1, 3, 4
H	3/8" CDX BOTH SIDES	8d @ 2"	3x	3x	9" O.C.	14" O.C.	18" O.C.	N / A	5/8" LAGS @ 8" O.C.	1/2" LAGS @ 6" O.C.	1, 2, 3, 4

KEYNOTES:

- ALL NAILS SHALL BE COMMON WIRE NAILS (UBC TABLE 21-II-B-1) OR GALVANIZED BOX (UBC TABLE 23-III-C-1) UNLESS OTHERWISE NOTED. (8d COMMON = .131" x 2 1/2"; 10d COMMON = .148" x 3")
- 5/8" THICK T1-11 SIDING w/ 1/4" DEEP GROOVES MAY BE SUBSTITUTED FOR 3/8" CDX PLYWD.
- WHERE REQUIRED BY SCHEDULE ABOVE, PROVIDE NOMINAL 3x FOUNDATION SILL PLATE (DBL. 2x PLATE NOT ALLOWED)
- INDICATES MINIMUM FRAMING REQUIRED @ ADJOINING PANEL EDGES. WHERE REQUIRED BY SCHEDULE ABOVE, FRAMING AT ADJOINING PANEL EDGES SHALL BE 3x NOMINAL OR WIDER (DOUBLE 2x FRAMING NOT ALLOWED) AND NAILS SHALL BE STAGGERED.
- "SIMPSON" LMA4, LMA6 ANCHORS IN LIEU OF CONVENTIONAL ANCHOR BOLTS. SEE "SIMPSON" CATALOG FOR MORE INFORMATION. LMA ANCHORS ARE NOT ALLOWED AT TWO POUR SLAB CONDITION UNLESS SLAB DOWELS ARE PROVIDED. MAXIMUM #4 SLAB DOWEL SPACING @ SHEARWALLS WHERE A COLD JOINT OCCURS IS EVERY THIRD ANCHOR OR 32", WHICHEVER IS SMALLER. SEE FOUNDATION DETAILS FOR SLAB DOWEL CONFIGURATION WHERE OCCURS.
- "SILL PLATE NAILING" PER SCHEDULE IS NOT REQUIRED WHEN SHEAR WALL PLYWOOD EXTENDS PAST THE SOLE PLATE AND IS NAILED INTO RIM JOIST OR ANCHORED MUDSILL BELOW. IF THE SHEAR WALL PLYWOOD EXTENDS TO THE RIM JOIST ONLY, THE RIM JOIST OR BLOCKING MUST BE CLIPPED TO THE TOP PLATE OF THE WALL OR ANCHORED MUDSILL BELOW PER DETAILS OR SPECIFIC NOTE ON PLANS AT SHEAR WALL IN QUESTION. WHERE LAG BOLTING IS SPECIFIED, LAG SCREWS MUST BE LONG ENOUGH TO BE EMBEDDED 3" (MIN.) INTO SOLID BLKG. OR JOIST OR TOP PLATE. THE MIN. WIDTH OF THE MEMBER TO RECEIVE LAG BOLTING IS 4 x "D", AND MIN. EDGE DISTANCE FOR LAG BOLTING IS 1.5 x "D". ("D" = DIAMETER OF LAG SCREW)

GENERAL SHEAR WALL NOTES (APPLIES TO ALL SHEARWALLS)

- TO REDUCE BUCKLING OF PLYWOOD SIDING OR SHEAR PLYWD, PROVIDE A 1/8" GAP AT ALL EDGES UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.
- ORIENTED STRAND BOARD (OSB) SHEATHING MAY BE SUBSTITUTED FOR PLYWD SHEATHING IN ALL CASES PROVIDED THAT THE OSB SHEATHING HAS THE SAME THICKNESS AND SPAN RATING AS THE PLYWOOD SHEATHING SPECIFIED. (1997 UBC 73-II-1-1)
- INSTALL ALL SHEAR WALL SHEATHING PRIOR TO INTERIOR WALL CONSTRUCTION.
- IF PLYWOOD SHEATHING IS CONTINUOUS THEN THE PLYWOOD SHEATHING CAN BE APPLIED TO EITHER FACE OF WALL. (ie. NO BREAK RESULTING FROM INTERIOR WALL INTERSECTION)
- ALL SHEAR WALLS ARE TO BE CONSTRUCTED, INSPECTED & APPROVED PRIOR TO BUILDING ANY ARCHITECTURAL POP-OUTS.
- OPTION #1 IN SHEAR WALL SCHEDULE REQUIRES A 3" NOMINAL OR WIDER MUDSILL OR WALL SOLE PLATE. OPTION #2 IN SHEAR WALL SCHEDULE ALLOWS THE USE OF 2x MUDSILL OR WALL SOLE PLATES.
- ALL SHEAR WALL TYPES MUST USE A 2" x 2" x 3/16" STEEL PLATE WASHER AT ALL MUDSILL ANCHOR BOLTS. (UBC 1806.6)
- ALL SHEARWALL EDGES SHALL BE BLOCKED (ACCORDING TO KEYNOTES ABOVE). MAXIMUM NAIL SPACING IN THE FIELD IS 12" O.C., USING THE SAME TYPE FASTENERS PER "EDGE NAILING" IN SCHEDULE ABOVE.
- STAGGER SHEARWALL EDGE NAILING @ FRAMING MEMBERS WIDER THAN 2x NOMINAL AND AT CONNECTED MULTIPLE 2x MEMBERS WHERE OCCURS.



O'Connor Freeman & Associates

Structural Engineering Services
225 30th Street, Suite 201, Sacramento, CA 95816 Phone: (916) 441-5721 Fax: (916) 441-5697

Date	Sheet	Of
Job #	By	Revised

Criteria: (cont.) - Detailed Seismic Force Analysis

Find Period of Building: $T = C_t (h_n)^{3/4}$ (1997 UBC 1630.2.2)

h_n (ft) = 10 Height to top plate or top of lateral force resisting elements.

$C_t = 0.02$ For Building Types other than Steel Moment Resisting Frames

T(sec) = 0.112

Seismic Force: $V = (C_v I / RT) W$ (1997 UBC 1630.2.1)

$V_{min} = (0.11 C_a I) W$ for Zones 1-3

$V_{min} = (0.8 Z N_v I) W$ for Zone 4

$V_{max} = (2.5 C_a I / R) W$ for Zones 1-4

Zone for this project = 3	C_v 0.30 (1997 UBC Table 16-R) based on Soil Type (Default Soil Type = SD: conservative)	Soil type SB
Zone Factor "Z" = 0.3		Soil type SB
Importance Factor "I" = 1.0	C_a 0.30 (1997 UBC Table 16-Q) based on Soil Type (Default Soil Type = SD: conservative)	Soil type SB
	N_v 1.0 (1997 UBC Table 16-F) based on Seismic Source Type and closest distance to known seismic source (Default Source Type = A: conservative) (Default Source Distance = 2km: conservative)	Source type C
		Distance (km) 2
	N_h 0.0 (1997 UBC Table 16-S) based on Seismic Source Type and closest distance to known seismic source (Default Source Type = A: conservative) (Default Source Distance = 2km: conservative)	Source type C
		Distance (km) 2

$V_{min} (0.11 C_a I) = 0.033$ for Zones 1-3; $(0.8 Z N_v I / R) = N/A$ for Zone 4 only

$V = (C_v I / RT) W$; $V_{max} = (2.5 C_a I / R)$

		V_{min}	V_{max}	V	V_{use}	
Plywd. shear walls	R= 5.5	0.033	0.14	0.485	0.136	x W (Dead Load)
Other walls / masonry	R= 4.5	0.033	0.17	0.593	0.167	x W (Dead Load)
Steel frames (OMRF)	R= 4.4	0.033	0.17	0.606	0.170	x W (Dead Load)
Cantilevered columns	R= 2.2	0.033	0.34	1.212	0.341	x W (Dead Load)

Values above are the lesser of the detailed method and the simplified method on previous page

Final Earthquake Force: $E = \rho E_h + E_v$

$E_v = 0$ (ASD) 1997 UBC 1630.1.1

$\rho = 2 - (20 / r_{max} \sqrt{A_B}) = 1.00$

$r_{max} =$	0.2222
$A_B =$	2998

Plywd. shear walls	0.136	x W (Dead Load)
Other walls / masonry	0.167	x W (Dead Load)
Steel frames (OMRF)	0.170	x W (Dead Load)
Cantilevered columns	0.341	x W (Dead Load)



O'Connor Freeman & Associates

Structural Engineering Services
225 30th Street, Suite 201, Sacramento, CA 95816 Phone: (916) 441-5721 Fax: (916) 441-5697

Date	Sheet	Of
Job #	By	Revised

Lateral Load Determination - 1 Story

Wind

Wind Case 1:	N/S	Mean Roof Ht, ft. = 16				Top Plate Ht, ft = 10
						Bot. Plate Ht, ft = 0
						Effective T.W. = 11
Upper limit Ht.	15	20	25	30	40	
Loads, psf	19.84	21.15	22.28	23.03	24.52	
T.W.	10	1	0	0	0	
Load, plf	198	21	0	0	0	V (Case 1) plf = 220

Wind Case 2:	E/W	Mean Roof Ht, ft. = 16				Top Plate Ht, ft = 10
						Bot. Plate Ht, ft = 0
						Effective T.W. = 11
Upper limit Ht.	15	20	25	30	40	
Loads, psf	19.84	21.15	22.28	23.03	24.52	
T.W.	10	1	0	0	0	
Load, plf	198	21	0	0	0	V (Case 2) plf = 220

Wind Case 3:	Garage	Mean Roof Ht, ft. = 13				Top Plate Ht, ft = 9
						Bot. Plate Ht, ft = 0
						Effective T.W. = 8.5
Upper limit Ht.	15	20	25	30	40	
Loads, psf	19.84	21.15	22.28	23.03	24.52	
T.W.	8.5	0	0	0	0	
Load, plf	169	0	0	0	0	V (Case 3) plf = 169

Seismic

Seismic Load Determination (ASD) - See Page 4 for Factor Determination

$$V = \text{Factor} / 1.4 \times [(Roof W, psf)(width of roof) + (Ext. Wall W, psf)(H/2)(\# of walls) + (Int. Wall W, psf)(H/2)(\# of walls)]$$

Seismic Factor =	0.136	Rf W, psf =	23	Ext. Wall W, psf =	15	Int. Wall W, psf =	8
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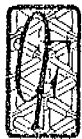
Seismic Case 1:	N/S	Avg. Roof Width, ft. =	62	Wall H, ft. =	10		
		# of Ext. Walls =	2	# of Int. Walls =	4	V (Case 1) plf =	169

Seismic Case 2:	E/W	Avg. Roof Width, ft. =	55	Wall H, ft. =	10		
		# of Ext. Walls =	2	# of Int. Walls =	4	V (Case 2) plf =	153

Seismic Case 3:	Garage	Avg. Roof Width, ft. =	22	Wall H, ft. =	9		
		# of Ext. Walls =	2	# of Int. Walls =	0	V (Case 3) plf =	62

Remarks

Wind Case 1:	Governs @	N/S	=	220	plf
Wind Case 2:	Governs @	E/W	=	220	plf
Wind Case 3:	Governs @	Garage	=	169	plf



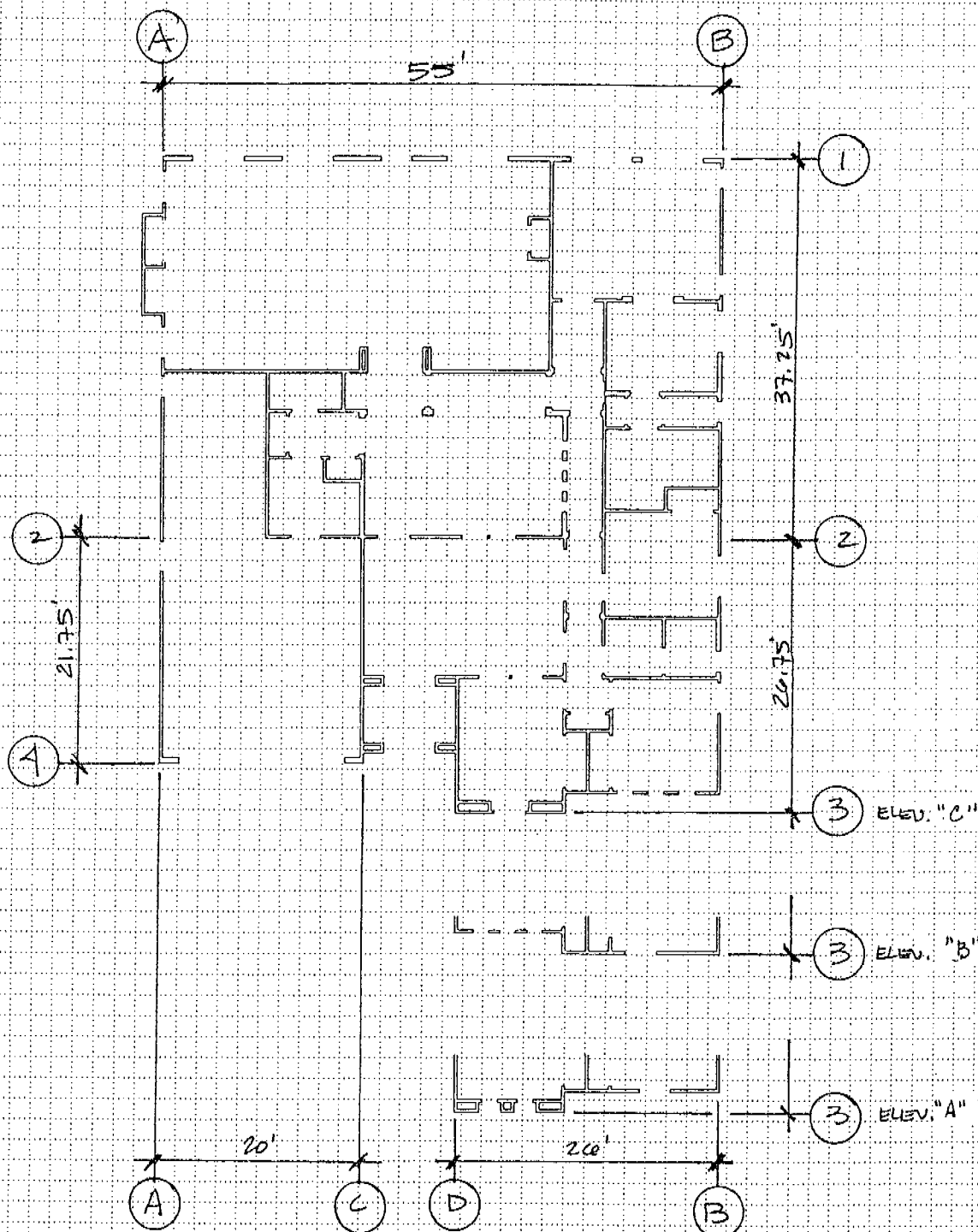
O'Connor Freeman & Associates

Structural Engineering Services
225 30th Street, Suite 201, Sacramento, CA 95816 Phone: (916) 441-5721 Fax: (916) 441-5697

Date	Sheet	01
Job#	By	Revised

BUILDING SCHEMATIC

PLAN 2389





O'Connor Freeman & Associates

Structural Engineering Services
225 30th Street, Suite 201, Sacramento, CA 95818 Phone: (916) 441-5721 Fax: (916) 441-5697

Date	Sheet	Of
Job #	By	Revised

Line 2

Wind Governs: V, # = 7040

Load Determination	Seismic	T.W., ft = 64.0 / 2 + 0.0 = 32.0	Wind	T.W., ft = 64.0 / 2 + 0.0 = 32.0	
		w, plf = 153		w, plf = 220	
		Trib. V, # = 4896		Trib. V, # = 7040	
	Seismic Load From Line Above		Wind Load From Line Above		
	Other Seismic Load			Other Wind Load	
	Total Seismic Load, # = 4896	^ ht, ft ^ ^ V, # ^		Total Wind Load, # = 7040	^ ht, ft ^ ^ V, # ^

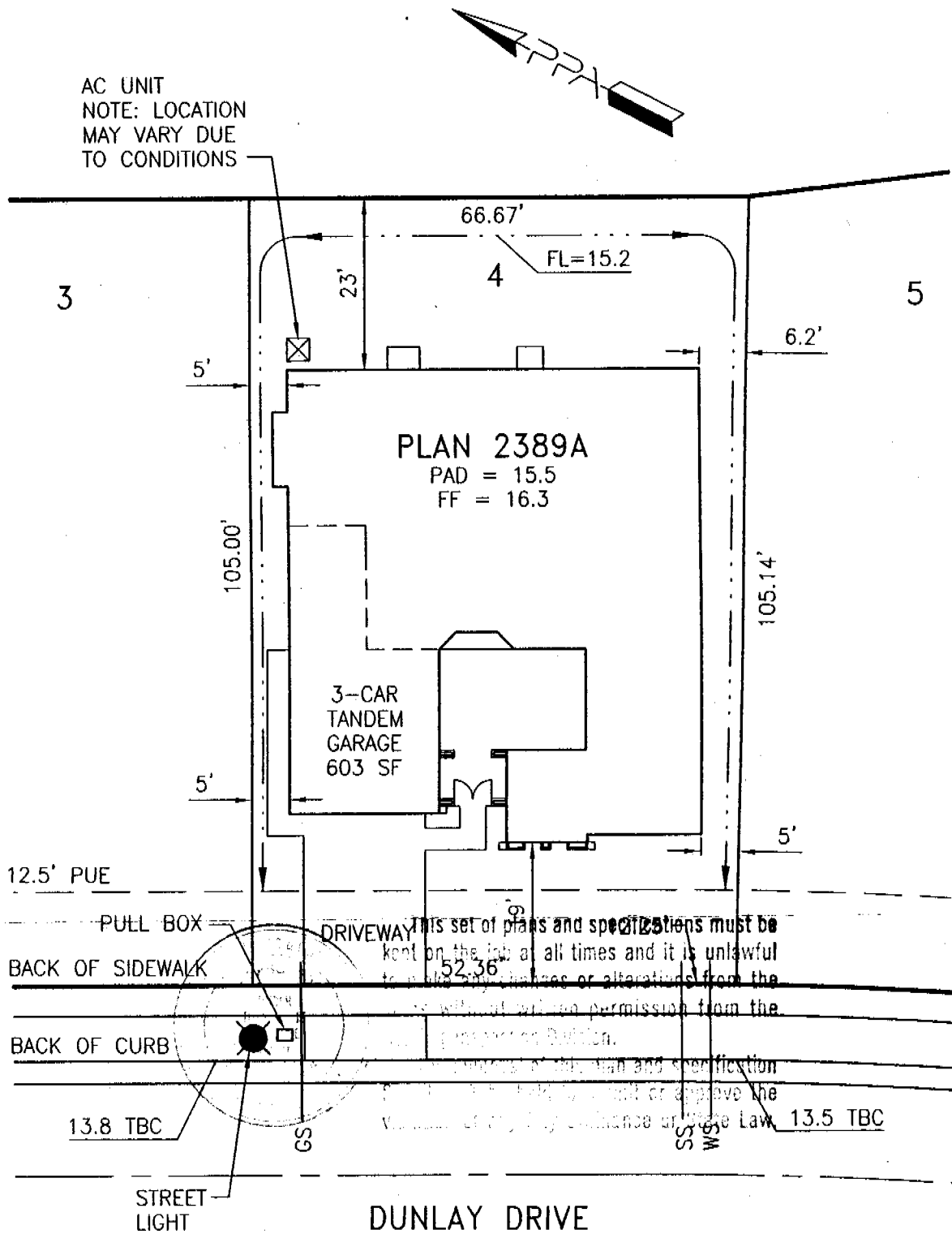
*Panel heights shown are used for calculations only, does not apply to height-width ratio determination

Shear Analysis & Overturning Moments	Panel #	1	2	3	4	5	6	7	8	9
	Length, ft.	5.00	4.50							
	Panel Ht., ft.	10.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Seis. Load, #	2576.8	2319.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Wind Load, #	3705.3	3334.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	O.T.M., ft.-#	37052.6	33347.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<input checked="" type="checkbox"/> Use DF Shear Values?		F _{cr} plf = 741				OK		5/8" one side w/ 10d @ 2:12		
		Allow. Shear, plf = 870								

*Distances below measured in feet from left end of shear wall, typ.

Overturning Analysis	R.M. Factor = 0.67	Roof DL, psf: 23	Floor DL, psf: 10	Wall DL, psf: 10	{Other DL}, psf: 0					
	CASE "A"	Panel #(s): 1 2	Override L = 15	O.T. Length = 15.0						
	Unif. Loads	START, ft.	END, ft.	Roof T.W.	Floor T.W.	Wall T.W.	Other Load T.W.	w (DL), plf	R.M. Left	R.M. Right
	w1 (DL)	0.0	15.0	8.00		10.00		284	31950	31950
	w2 (DL)							0	0	0
	(UP) Pt. Lds	Loc, ft	P (DL), #	O.T.M. Left	O.T.M. Right	(DN) Pt. Lds	Location, ft.	P (DL), #	R.M. Left	R.M. Right
	P1 (UP)			0	0	P1 (DL)			0	0
	P2 (UP)			0	0	P2 (DL)			0	0
	OVER-TURNING SUMMARY	O.T.M., ft.-#	O.T.M. From Pt. Loads	Factored R.M., ft.-#	TDF, #				Holdown:	STHD14
	About Left End of Wall	70400	0	21300	3273	OK			Capacity:	3800
About Right End of Wall		0	21300	3273				Notes:	(38) 16d snkr	

THIS PLAN IS PREPARED TO SHOW THE DIMENSIONAL RELATIONSHIP FROM BUILDING FOUNDATION TO PROPERTY LINES, DRAINAGE CONTROL ELEVATIONS AND DIRECTION OF DRAINAGE FLOW. THIS IS DONE TO CONFORM TO LOCAL ORDINANCES FOR THE PURPOSE OF BUILDING PERMIT ISSUANCE. INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE EXCEPT FOR MINIMUM SETBACKS WHICH ARE REQUIRED BY LOCAL ORDINANCE. THIS PLAN DOES NOT REFLECT AS-BUILT CONDITIONS WHICH WILL LIKELY VARY FROM THIS PLAN.



AC UNIT
NOTE: LOCATION
MAY VARY DUE
TO CONDITIONS

PLAN 2389A

PAD = 15.5

FF = 16.3

3-CAR
TANDEM
GARAGE
603 SF

12.5' PUE

PULL BOX

BACK OF SIDEWALK

BACK OF CURB

13.8 TBC

STREET
LIGHT

DUNLAY DRIVE

This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations from the plans without written permission from the Planning Division.

The contractor shall be responsible for the verification of the plan and specification information. The contractor shall not be held liable for the violation of any local ordinance or State Law.

Approved By:	US Home Corp. Rep.	Date
Revision	Approved By	Date
1		
2		

LOT AREA: 6893 SF
 ALLOWED LOT COVERAGE: 3102 SF = 45.0%
 ACTUAL LOT COVERAGE: 2699 SF = 39.2%
 REAR YARD AREA: 1531 SF
 NUMBER OF BEDROOMS:

It is understood that the drainage areas, slopes and grades shall not be altered, changed, blocked, modified or in any way be reconstructed by Owner contrary to what is depicted on this Plot Plan. THESE CONDITIONS RUN WITH THE LAND AND ARE BINDING ON ALL SUBSEQUENT OWNERS. All setback dimensions and elevations as shown may be adjusted to fit field conditions.

Plot Plan for Heritage at Natomas Park Village 10

PPA Job #005007

Natomas Laureate

Lot 4

5534 Dunlay Drive, Sacramento, CA 95835

APN 201-0720-010

US Home Corporation - Sacramento Division

2366 Gold Meadow Way, Suite 200, Gold River, CA 95670 Phone (916) 858-3900 Fax (916) 858-3925

Plot Plan Associates www.plotplans.org

Date Drawn: 09/24/03 Scale: 1"=20'

PO Box 435 Citrus Heights CA 95611-0435 (916) 769-9063

Date Revised: Drawn By: MRM

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