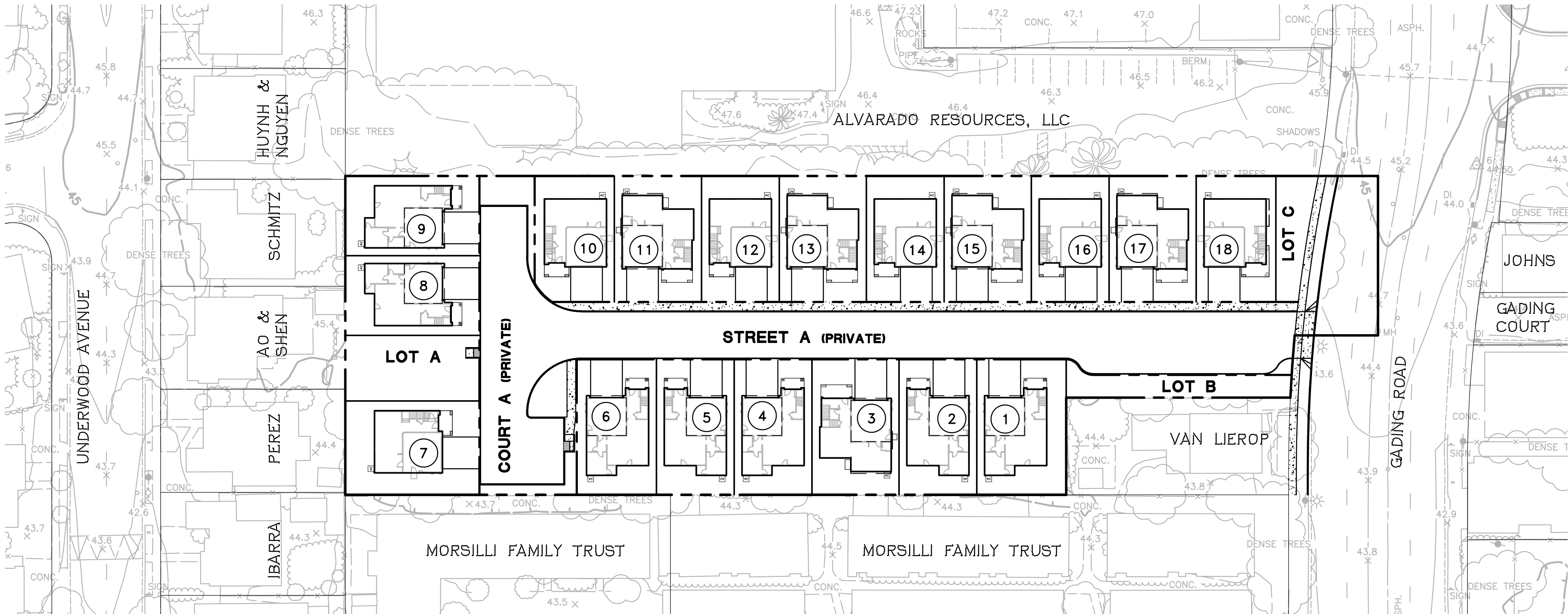
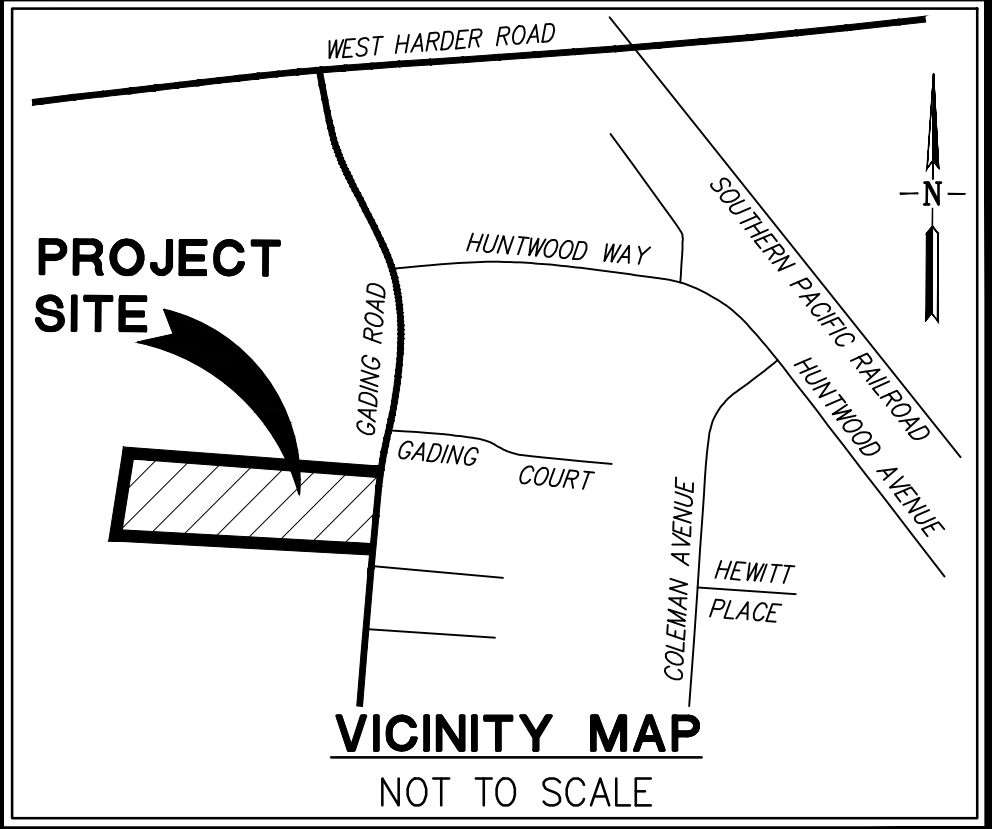


BENCHMARK

CITY OF HAYWARD BENCHMARK. A STANDARD CITY MONUMENT DISK LOCATED AT THE INTERSECTION OF GADING ROAD AND HUNTWOOD WAY. ELEVATION = 46.705 FEET. (NGVD 29).

PRELIMINARY DEVELOPMENT PLAN
GADING II

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.



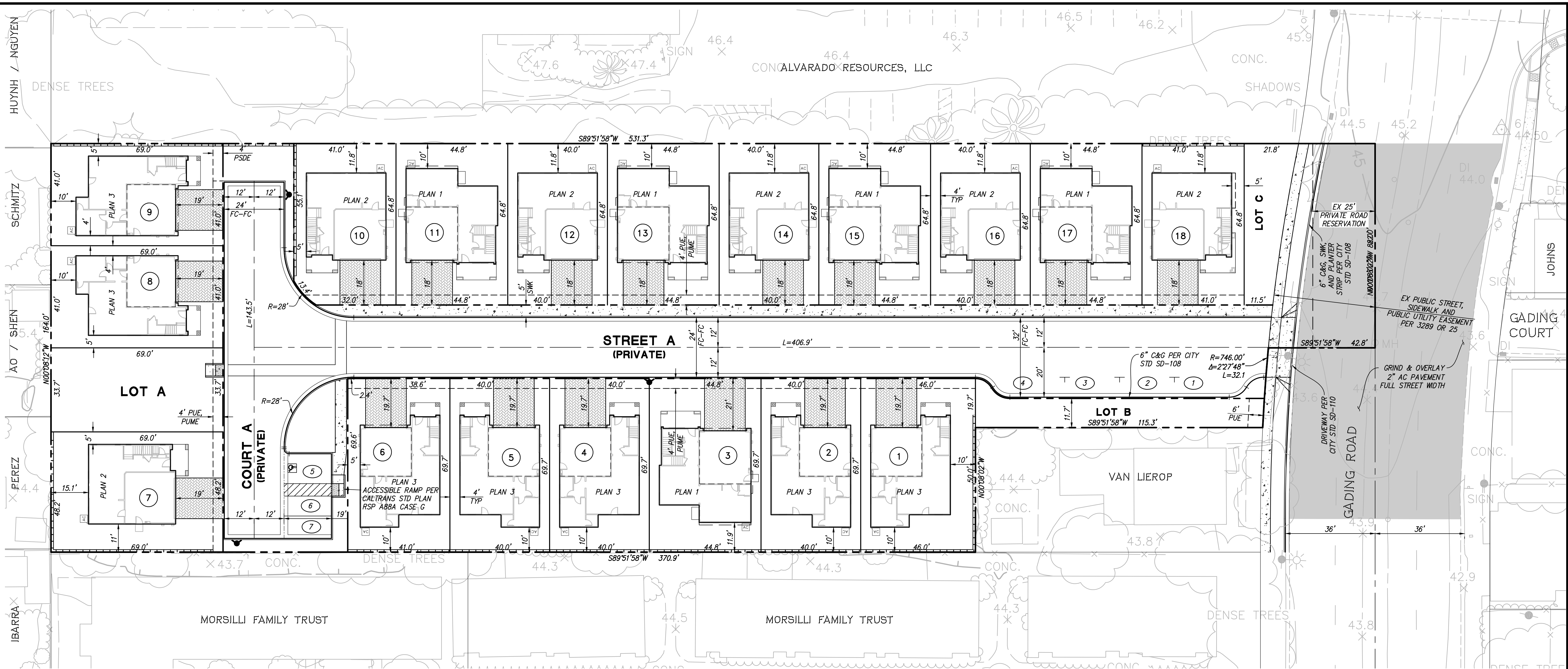
PROJECT TEAM

- | | |
|---------------------------|---|
| 1. APPLICANT: | DUTRA ENTERPRISES, INC.
43360 MISSION BLVD., SUITE 230
FREMONT, CA 94539
TEL: (510) 403-7973
CONTACT: ZAHEER SIDDIQUI |
| 2. CIVIL ENGINEER: | RUGGERI-JENSEN-AZAR
4690 CHABOT DRIVE, SUITE 200
PLEASANTON, CA 94588
TEL: (925) 227-9100
CONTACT: STEVE LICHLITER |
| 3. GEOTECHNICAL ENGINEER: | ENGEO, INC.
2010 CROW CANYON PL, SUITE 250
SAN RAMON, CA 94583
TEL: (925) 866-9000
CONTACT: RANDY HILDEBRANT |
| 4. ARCHITECT: | KTGY GROUP, INC.
580 SECOND STREET, SUITE 200
OAKLAND, CA 94607
TEL: (510) 463-2046
CONTACT: CINDY MA |
| 5. LANDSCAPE ARCHITECT: | RIPLEY DESIGN GROUP
1615 BONANZA STREET, SUITE 314
WALNUT CREEK, CA 94596
TEL: (925) 938-7377
CONTACT: WILL GREEN |

SHEET INDEX

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
P-1	TITLE SHEET
P-2	PRELIMINARY SITE PLAN
P-3	PRELIMINARY GRADING PLAN
P-4	PRELIMINARY TRAFFIC CIRCULATION PLAN

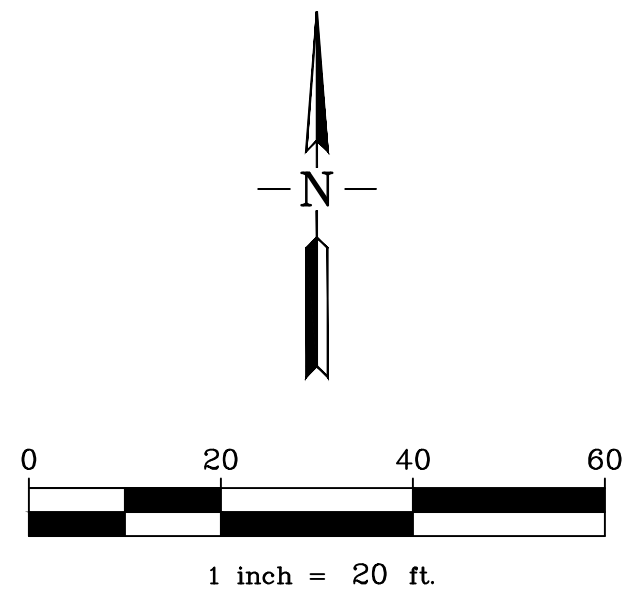
G:\JOB2017\171030\CAD FILES\02-PLANNING\PD\P-2 PRELIMINARY SITE PLANNING 2/27/2018 HILLARY RAYA



PARKING SUMMARY	
GARAGE PARKING	36
DRIVEWAY PARKING	36
STREET PARKING	7
TOTAL	79

LOT SUMMARY	
LOT NO.	AREA (SF)
1	3,206
2	2,788
3	3,124
4	2,788
5	2,788
6	2,857
7	3,329
8	2,829
9	2,829
10	2,620
11	2,905
12	2,592
13	2,905
14	2,592
15	2,905
16	2,592
17	2,905
18	2,657
LOT A	2,328
LOT B	1,048
LOT C	1,397
STREET A & COURT A	18,632
GADING ROAD	3,077
TOTAL	77,693

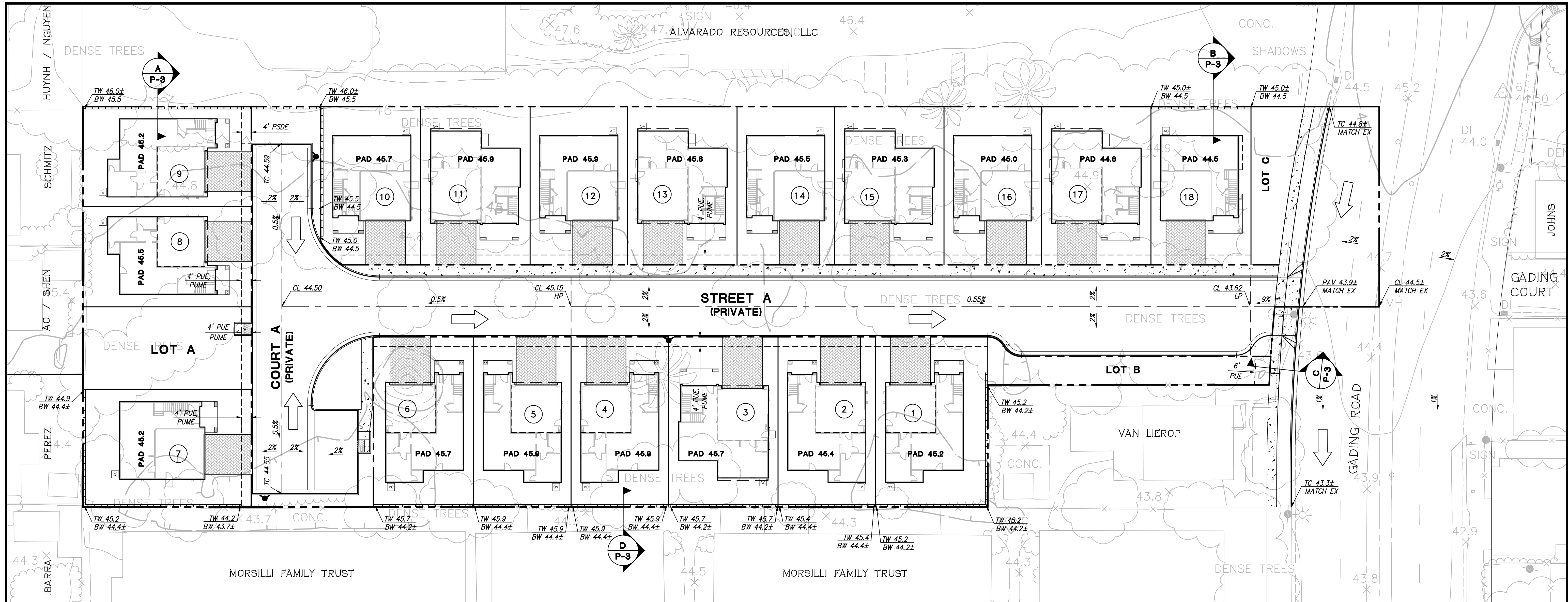
LEGEND	
	PERVIOUS PAVEMENT
	NEW CONCRETE PAVEMENT
	NEW ASPHALT PAVEMENT



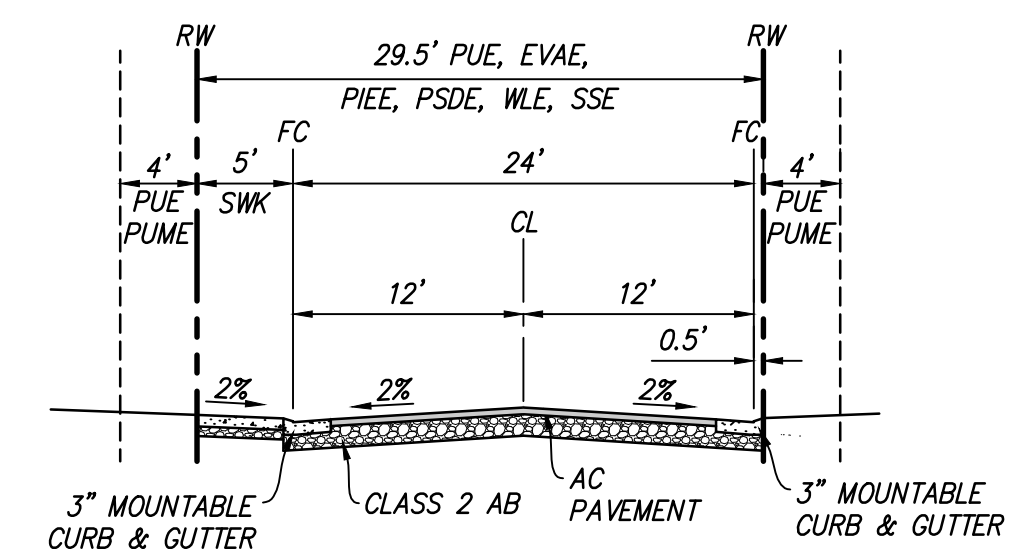
PRELIMINARY DEVELOPMENT PLAN
GADING II
PRELIMINARY SITE PLAN
CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

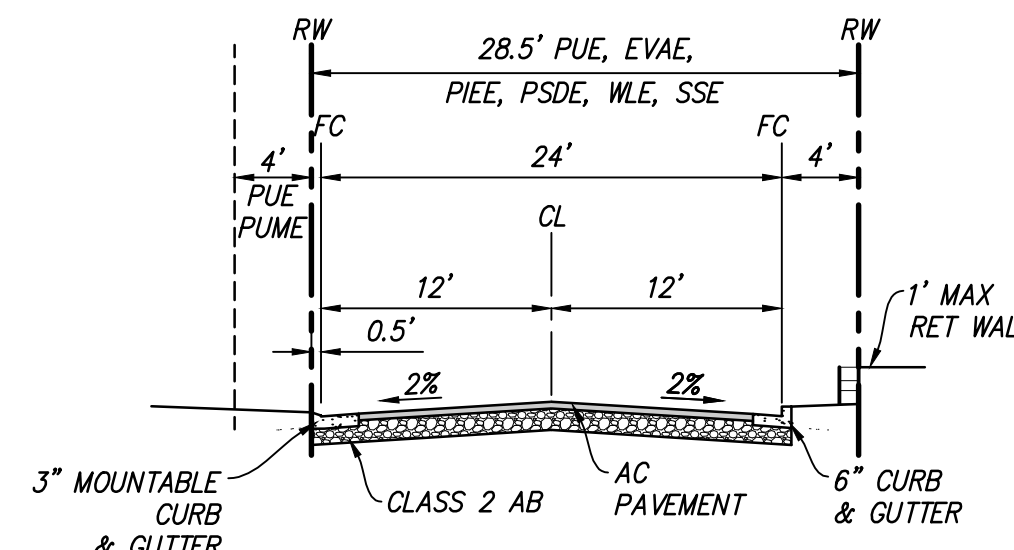
G:\JOB2017\171030\CAD FILES\02-PLANNING\PD\P-3 PRELIMINARY GRADING PLANNING 12/14/2017 HILLARY RAYA



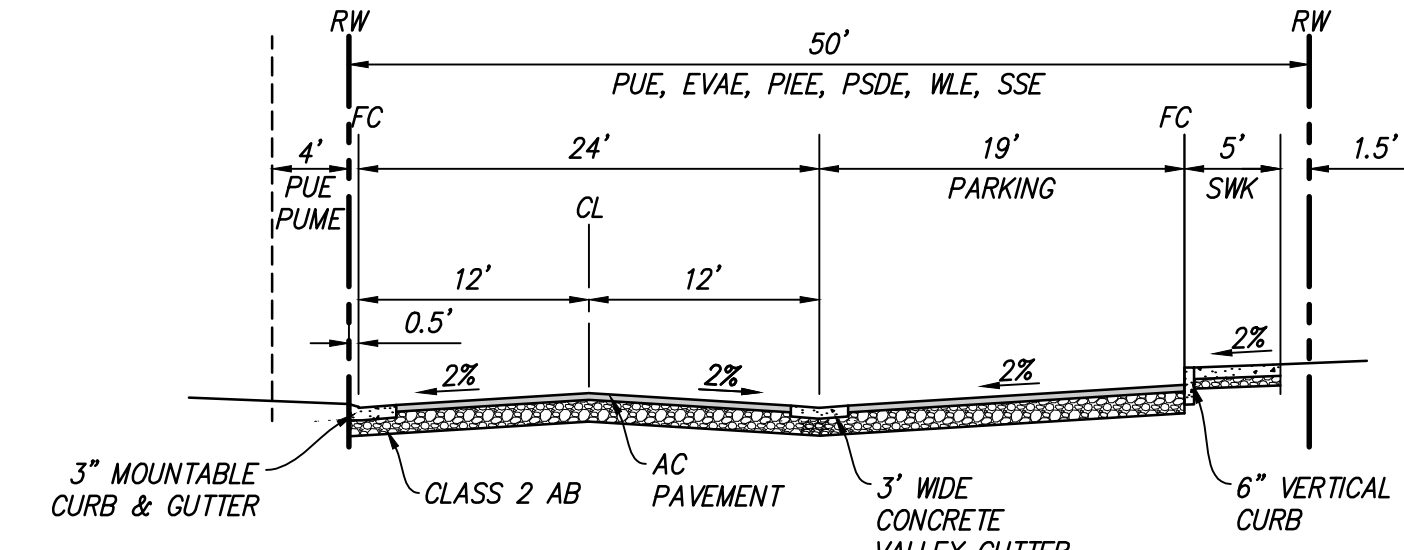
PRELIMINARY PAVEMENT DESIGN CHART				
STREET NAME	TRAFFIC INDEX	"R" VALUE	AC PAVEMENT SECTION	
			A.C.	A.B.
STREET A	5	5	3.0"	10.0"
COURT A	5	5	3.0"	10.0"



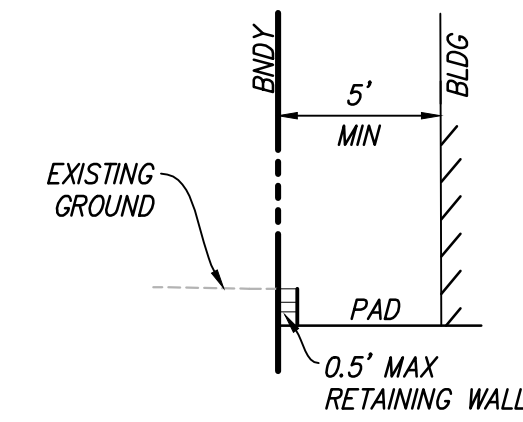
STREET A (PRIVATE)
NOT TO SCALE



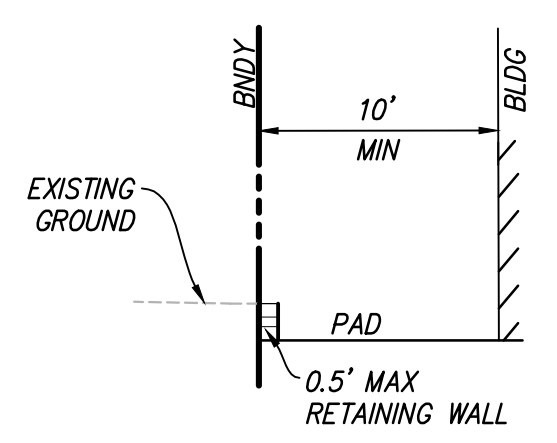
COURT A (PRIVATE)
NOT TO SCALE



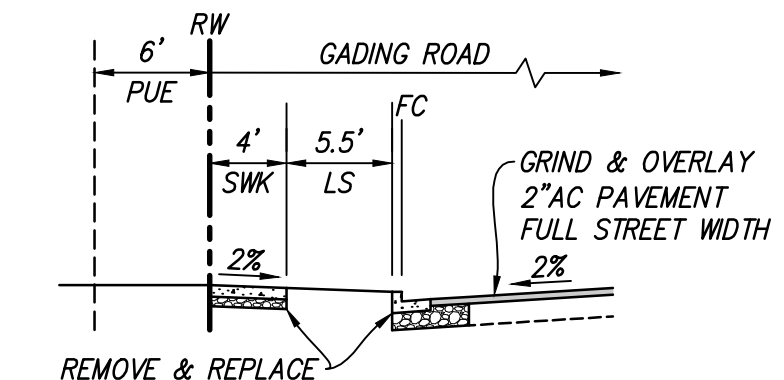
COURT A (PRIVATE)
WITH PARKING
NOT TO SCALE



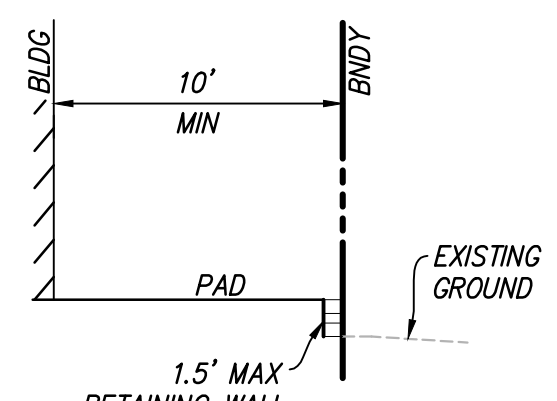
SECTION A
NOT TO SCALE



SECTION B
NOT TO SCALE



SECTION C
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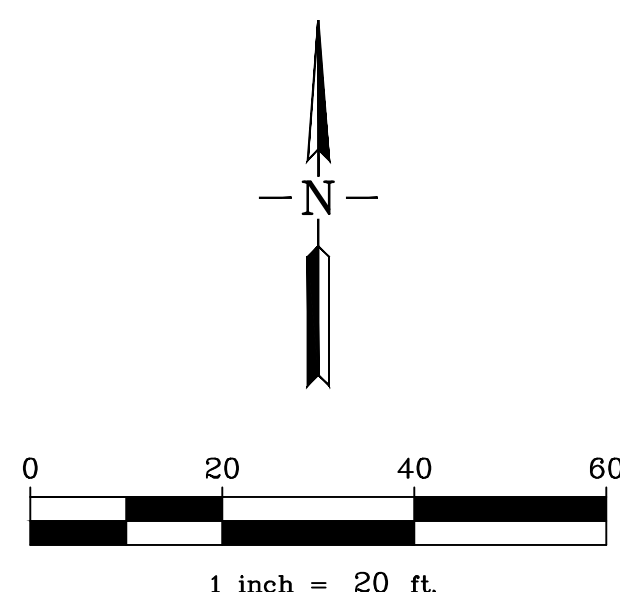
SECTION D
NOT TO SCALE

PRELIMINARY DEVELOPMENT PLAN

GADING II

PRELIMINARY GRADING PLAN

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.



RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300



BENCHMARK

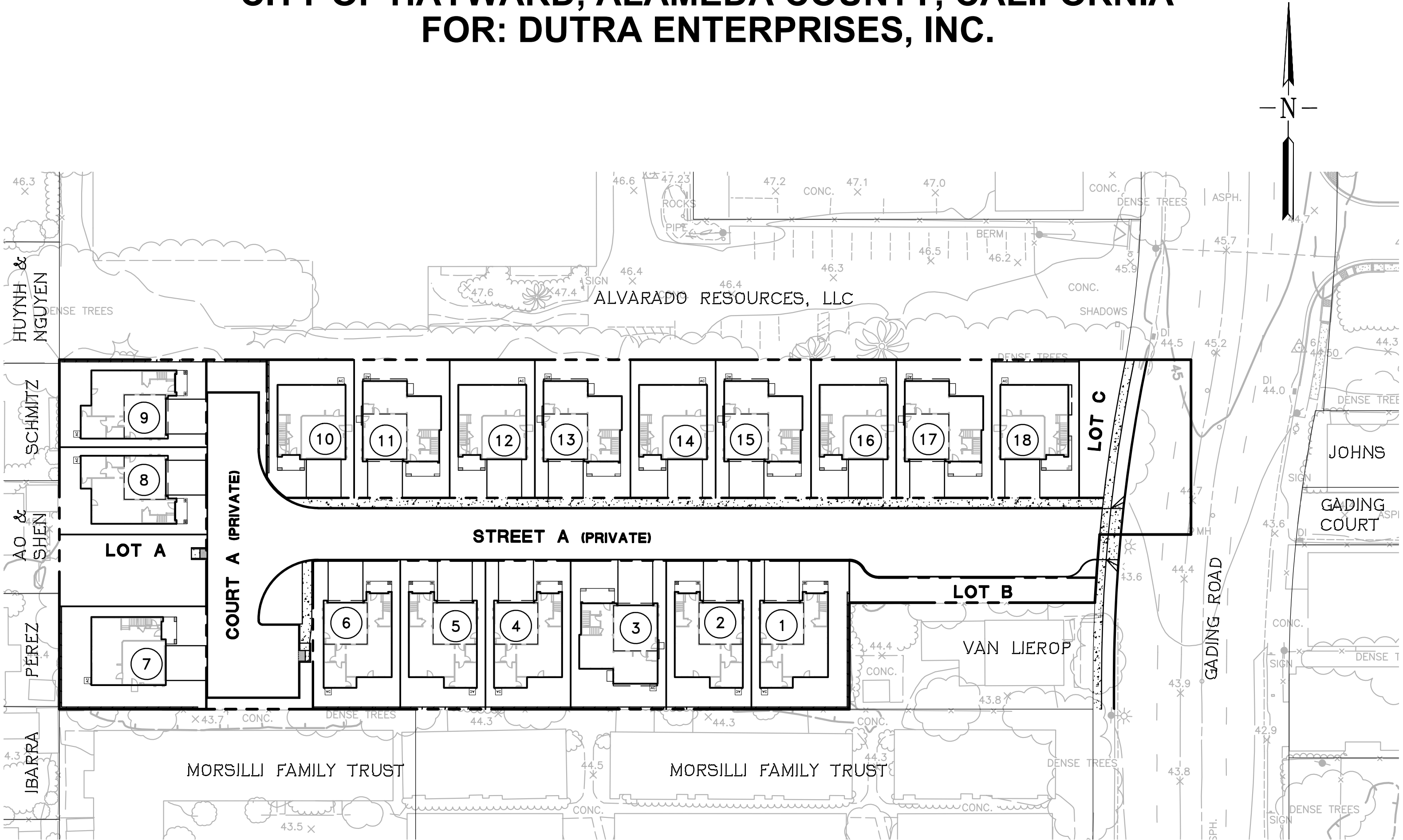
CITY OF HAYWARD BENCHMARK, A STANDARD CITY MONUMENT DISK LOCATED AT THE INTERSECTION OF GADING ROAD AND HUNTWOOD WAY.
ELEVATION = 46.705 FEET. (NGVD 29).

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	TRACT BOUNDARY	
	LOT LINE	
	RIGHT OF WAY	
	CENTER LINE	
	RETAINING WALL	
	EASEMENT LINE	
	STORM DRAIN	
	SANITARY SEWER	
	WATER	
	GAS	
	CURB & GUTTER	
	SIDEWALK	
	OVERLAND RELEASE PATH	
	STORM WATER INLET	
	DROP INLET	
	AREA DRAIN	
	DIRECTION OF FLOW	
	MANHOLE	
	FIRE HYDRANT	
	SANITARY SEWER CLEAN OUT	
	SANITARY SEWER LATERAL	
	WATER LATERAL WITH METER	
	WATER BLOWOFF	
	WATER VALVE	
	STREET LIGHT	
	TRANSFORMER	
	JOINT TRENCH BOXES	
	TREE	
	CONTOUR ELEVATIONS	
	SPOT ELEVATION	
	SLOPE	
	LOT NUMBER	
	BIO-RETENTION	

VESTING TENTATIVE MAP
TRACT 8432
GADING II

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.



LOCATION MAP
NOT TO SCALE

SHEET INDEX

SHEET NO.	DESCRIPTION
C-1	TITLE SHEET
C-2	EXISTING CONDITIONS & DEMOLITION PLAN
C-3	PRELIMINARY SITE PLAN
C-4	PRELIMINARY GRADING PLAN
C-5	PRELIMINARY UTILITY PLAN
C-6	PRELIMINARY STORMWATER TREATMENT PLAN
C-7	DETAILS

OWNER'S STATEMENT

DUTRA ENTERPRISES, INC. AGREES TO THE FILING OF SAID MAP AND AGREES TO COMPLY WITH THE PROVISIONS OF THE CITY OF HAYWARD SUBDIVISION ORDINANCE AND THE STATE MAP ACT AS THEY APPLY TO THE PROCESSING AND APPROVAL OF SAID MAP.

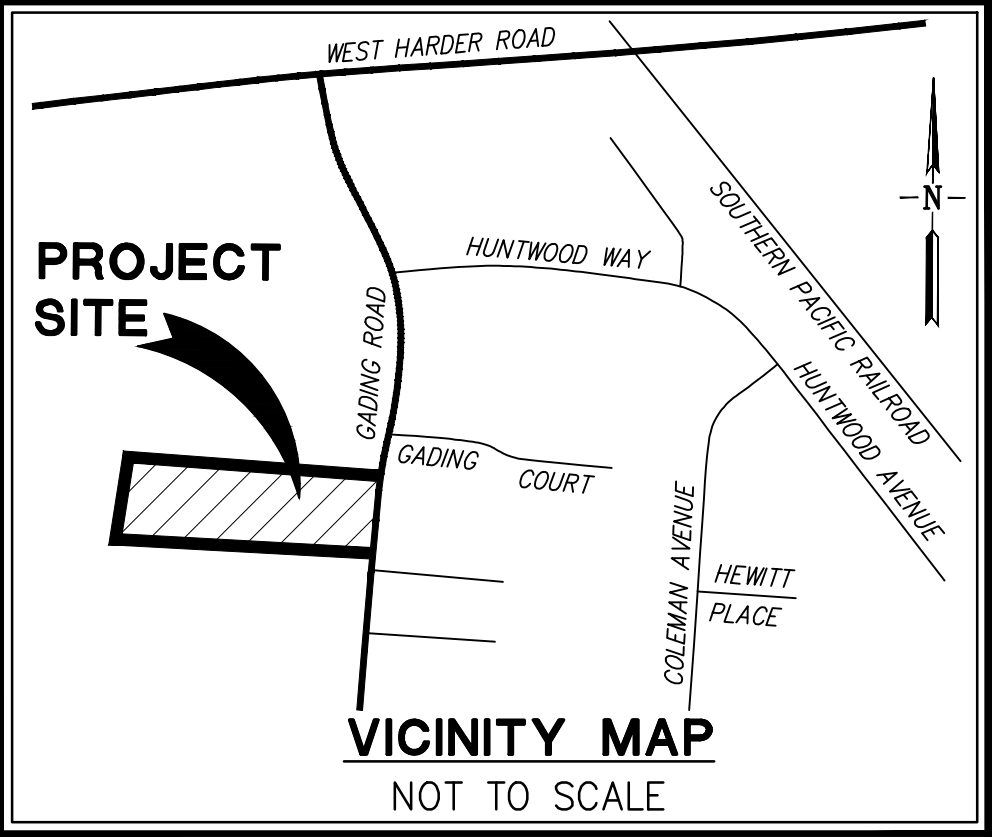
DUTRA ENTERPRISES, INC.
ZAHEER SIDDIQUI

PLANS PREPARED UNDER THE DIRECTION OF:

JOHN STEVEN LICHLITER, RCE 41637
RUGGERI-JENSEN-AZAR



DATE

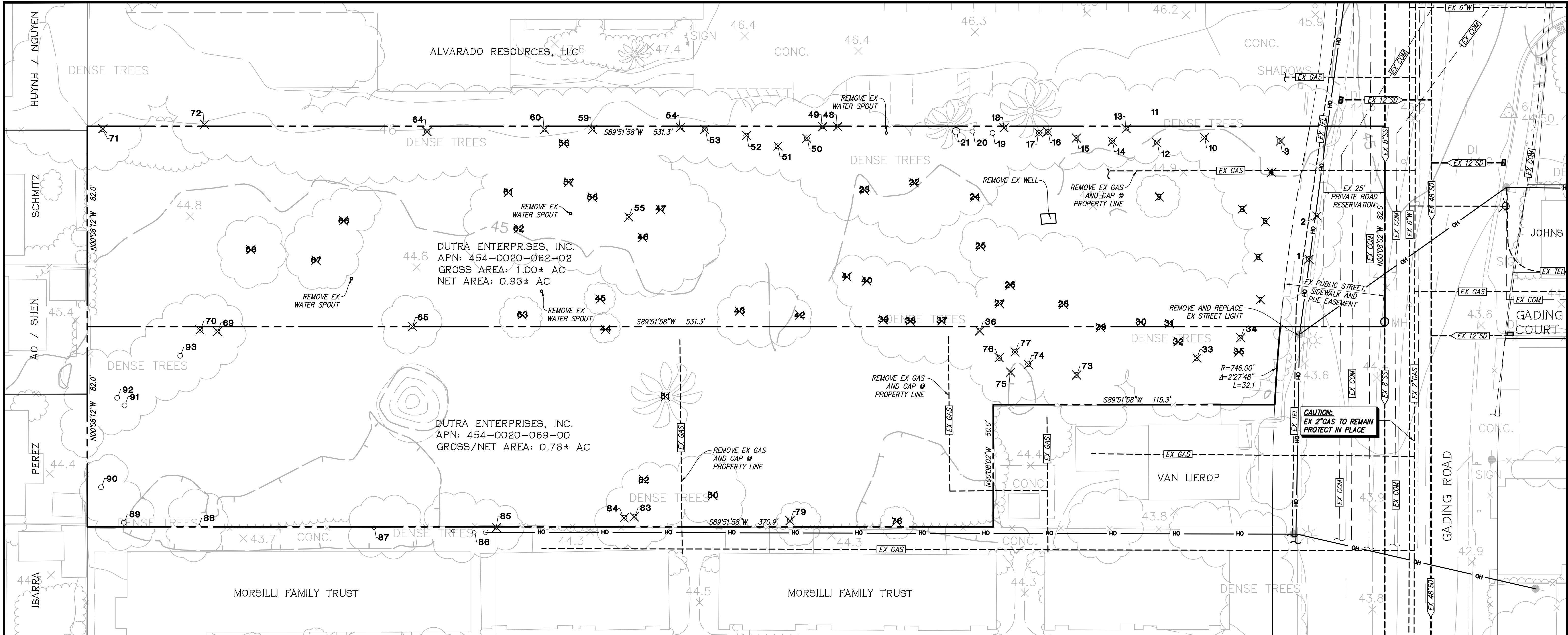


GENERAL NOTES

- OWNER:
DUTRA ENTERPRISES, INC.
43360 MISSION BLVD., SUITE 230
FREMONT, CA 94539
TEL: (510) 403-7973
CONTACT: ZAHEER SIDDIQUI
- CIVIL ENGINEER:
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TEL: (925) 866-9000
CONTACT: RANDY HILDEBRANT
- ARCHITECT:
KTOY GROUP, INC.
580 SECOND STREET, SUITE 200
OAKLAND, CA 94607
TEL: (510) 463-2046
CONTACT: CINDY MA
- LANDSCAPE ARCHITECT:
RIPLEY DESIGN GROUP
1615 BONANZA STREET, SUITE 314
WALNUT CREEK, CA 94596
TEL: (925) 938-7377
CONTACT: WILL GREEN
- ASSESSOR'S PARCEL NUMBERS:
454-0020-062-02
454-0020-069
- CURRENT USE:
VACANT LOT AND
ONE SINGLE-FAMILY RESIDENCE
- CURRENT GENERAL PLAN DESIGNATION:
MEDIUM DENSITY RESIDENTIAL
- PROPOSED USE:
SINGLE-FAMILY DETACHED
- EXISTING ZONING:
SINGLE-FAMILY RESIDENTIAL
& CIVIL SPACE ZONE
- PROPOSED ZONING:
PLANNED DEVELOPMENT
- GROSS SITE AREA:
1.78 ACRES
- NET DEVELOPMENT AREAS:
1.71 ACRES
- PROPOSED SITE DENSITY:
10.5 (UNITS/ACRE)
- TOTAL NUMBER OF PROPOSED LOTS:
18 SINGLE-FAMILY LOTS
3 COMMON LOTS
TOTAL: 21 LOTS
- OPEN SPACE:
LOT A (2,327 SF)
LOT B (1,397 SF)
LOT C (1,048 SF)
- UTILITIES:
a. WATER: CITY OF HAYWARD
b. SANITARY SEWER: CITY OF HAYWARD
c. STORM DRAIN: CITY OF HAYWARD
d. FIRE: CITY OF HAYWARD
e. GAS AND ELECTRIC: PACIFIC GAS AND ELECTRIC
f. TELEPHONE: AT&T
g. CABLE TV: COMCAST
- TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AERIAL TOPOGRAPHIC SURVEY PROVIDED BY RADMAN AERIAL SURVEYS IN APRIL 2017.
- THIS PROPERTY LIES WITHIN FLOOD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), AS SHOWN IN FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 289 OF 725, DATED AUGUST 3, 2009.
- ALL EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CRITERIA AND STANDARDS OF THE CITY OF HAYWARD.
- THE HOMEOWNERS' ASSOCIATION WILL OWN AND MAINTAIN STREET A, COURT A, AND LOTS A, B & C.
- A PRIVATE STORM DRAIN EASEMENT SHALL BE PROVIDED OVER LOT B AND LOT C.
- BUILDING CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE 2016 CALIFORNIA RESIDENTIAL CODE.



G:\JOB2017\171030\CAD FILES\02-PLANNING\TENT-MAP\C-3 EXISTING CONDITIONS & DEMOLITION PLAN.DWG 12/4/2017 HILLARY RAYA



TREE NO.	SPECIES	TRUNK DIAMETER (IN.)	REMOVE OR PRESERVE
1	EVERGREEN PEAR	6	REMOVE
2	EVERGREEN PEAR	10	REMOVE
3	BLUE ATLAS CEDAR	36	REMOVE
4	DEODAR CEDAR	7	REMOVE
5	PURPLELEAF PLUM	9,6,4	REMOVE
6	PEAR	7,6,5,4,4	REMOVE
7	BOTTLEBRUSH	9,7,6	REMOVE
8	DOUGLAS FIR	16	REMOVE
9	BOTTLEBRUSH	13	REMOVE
10	GLOSSY PRIVET	4,4,4,3	REMOVE
11	INCENSE CEDAR	15	PRESERVE
12	ORANGE	5,4,4	REMOVE
13	GLOSSY PRIVET	4,4,4,3,2	REMOVE
14	GLOSSY PRIVET	4,3,2,2,2	REMOVE
15	AUSTRALIAN BUSH CHERRY	10,7	REMOVE
16	AUSTRALIAN BUSH CHERRY	5,4,2	REMOVE
17	AUSTRALIAN BUSH CHERRY	10	REMOVE
18	GLOSSY PRIVET	6,5,4	REMOVE
19	CAUCASIAN PERSIMMON	5,4,4	PRESERVE
20	PLUM	4,3,3,2	PRESERVE
21	CANARY ISLAND DATE PALM	38	PRESERVE
22	ALEPPO PINE	18	REMOVE
23	INCENSE CEDAR	35	REMOVE
24	APPLE	9,8	REMOVE
25	GRAPEFRUIT	5,4,3	REMOVE
26	PERSIMMON	9,7	REMOVE
27	GLOSSY PRIVET	7,4	REMOVE
28	GLOSSY PRIVET	6	REMOVE
29	LOQUAT	17	REMOVE
30	GLOSSY PRIVET	4	REMOVE

TREE NO.	SPECIES	TRUNK DIAMETER (IN.)	REMOVE OR PRESERVE
31	CHINESE HACKBERRY	15	REMOVE
32	CHINESE HACKBERRY	12	REMOVE
33	DEODAR CEDAR	28	REMOVE
34	GINKGO	7	REMOVE
35	GLOSSY PRIVET	4,3,2	REMOVE
36	COAST LIVE OAK	4,3,2	REMOVE
37	CANARY ISLAND PINE	21	REMOVE
38	OLIVE	7,6,6,5	REMOVE
39	CANARY ISLAND PINE	15	REMOVE
40	GLOSSY PRIVET	6,5,5	REMOVE
41	GLOSSY PRIVET	6	REMOVE
42	COAST LIVE OAK	4,3	REMOVE
43	MONTEREY PINE	9	REMOVE
44	FIG	9,6	REMOVE
45	BLACKWOOD ACACIA	16,15,15,12,9,5	REMOVE
46	LOQUAT	12,9	REMOVE
47	APRICOT	4	REMOVE
48	GLOSSY PRIVET	6,6	REMOVE
49	GLOSSY PRIVET	4	REMOVE
50	GLOSSY PRIVET	15,6	REMOVE
51	GLOSSY PRIVET	5	REMOVE
52	GLOSSY PRIVET	4,4,4,3,2	REMOVE
53	GLOSSY PRIVET	12,9,9,8	REMOVE
54	GLOSSY PRIVET	9,7,7,6,6,5,5,5	REMOVE
55	COAST LIVE OAK	18	REMOVE
56	GLOSSY PRIVET	6,4,3,3,2	REMOVE
57	BOXELDER	5	REMOVE
58	FIG	6,6,5,4	REMOVE
59	GLOSSY PRIVET	9,8,8,8,6,6,5,4,3	REMOVE

TREE NO.	SPECIES	TRUNK DIAMETER (IN.)	REMOVE OR PRESERVE
60	GLOSSY PRIVET	28 STEMS 10" & SMALLER	REMOVE
61	AVOCADO	4,4,4	REMOVE
62	APPLE	4,4,4	REMOVE
63	APRICOT	4,2,1,1,1	REMOVE
64	GLOSSY PRIVET	50 STEMS 10" & SMALLER	REMOVE
65	COAST LIVE OAK	7,6	REMOVE
66	FIG	12,11,9,8,7	REMOVE
67	FIG	7,5	REMOVE
68	FIG	11,9,7,7,5,5,5	REMOVE
69	COAST LIVE OAK	10	REMOVE
70	COAST LIVE OAK	9	REMOVE
71	GLOSSY PRIVET	10,5,3,1,1,1	REMOVE
72	GLOSSY PRIVET	4,3,1,1,1	REMOVE
73	LOQUAT	12,12	REMOVE
74	COAST LIVE OAK	5	REMOVE
75	COAST LIVE OAK	11	REMOVE
76	COAST LIVE OAK	7	REMOVE

TREE NO.	SPECIES	TRUNK DIAMETER (IN.)	REMOVE OR PRESERVE
77	COAST LIVE OAK	4	REMOVE
78	GLOSSY PRIVET	9,5,5	REMOVE
79	GLOSSY PRIVET	6	REMOVE
80	FIG	12,9,8,7,5	REMOVE
81	CANARY ISLAND DATE PALM	48	REMOVE
82	FIG	7,6,5,5,4	REMOVE
83	COAST LIVE OAK	9	REMOVE
84	COAST LIVE OAK	10	REMOVE
85	GLOSSY PRIVET	7,5,5,4,3	REMOVE
86	HOLLYWOOD JUNIPER	15,9,7,5,4	PRESERVE
87	HOLLYWOOD JUNIPER	17,14,8	PRESERVE
88	ENGLISH WALNUT	11	PRESERVE
89	GLOSSY PRIVET	7,7,6,6,5	PRESERVE
90	COAST LIVE OAK	6,5,5,4,4	PRESERVE
91	COAST LIVE OAK	9,8	PRESERVE
92	COAST LIVE OAK	12	PRESERVE
93	COAST LIVE OAK	9	PRESERVE

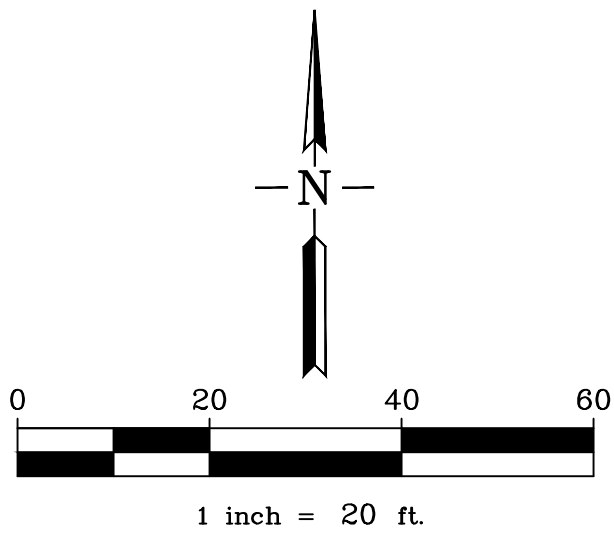
VESTING TENTATIVE MAP
TRACT 8432 - GADING II
EXISTING CONDITIONS & DEMOLITION PLAN

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.

- NOTES:
- EXISTING UNDERGROUND UTILITIES ARE BASED ON RECORDS PROVIDED BY OTHERS AND FIELD SURVEY IN GADING ROAD.
 - EXISTING ABOVE GROUND UTILITIES ON GADING ROAD FRONTING THE SITE SHALL BE PLACED IN UNDERGROUND CONDUITS AND VAULTS.
 - EXISTING WELL ON SITE TO BE ABANDONED AND DESTROYED PER ALAMEDA COUNTY STANDARDS.
 - EXISTING SEPTIC SYSTEM ON SITE TO BE ABANDONED AND DESTROYED PER ALAMEDA COUNTY ENVIRONMENT HEALTH'S LAND USE PROGRAM REGULATIONS.
 - REMOVE EXISTING CURB & GUTTER AT PROPOSED DRIVEWAY ENTRY.
 - THE EXISTING PUBLIC STREET, SIDEWALK AND PUBLIC UTILITY EASEMENT TO BE DEDICATED TO THE CITY OF HAYWARD AS PART OF GADING ROAD.

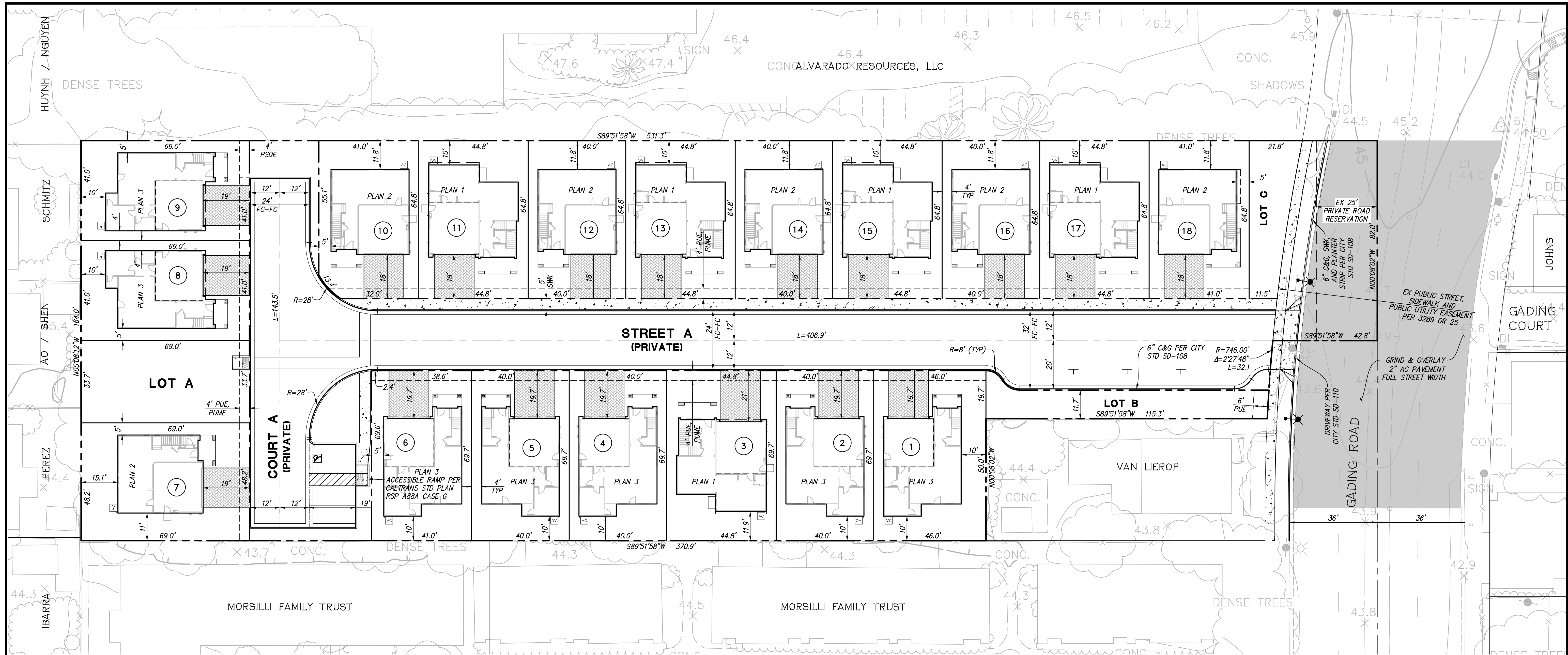
LEGEND

- 50 EXISTING TREE TO BE PRESERVED
X EXISTING TREE TO BE REMOVED



RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
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G:\JOB2017\171030\CAD FILES\02-PLANNING\TENT-MAP\C-4 PRELIMINARY SITE PLANNING 2/27/2018 HILLARY RAYA



PARKING SUMMARY	
GARAGE PARKING	36
DRIVEWAY PARKING	36
STREET PARKING	7
TOTAL	79

LEGEND

PERVIOUS PAVEMENT

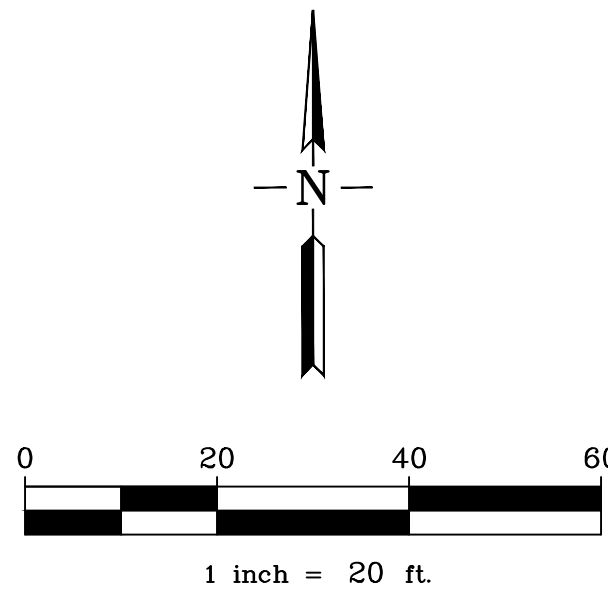
CONCRETE PAVEMENT

ASPHALT PAVEMENT
(GRIND AND OVERLAY)

VESTING TENTATIVE MAP
TRACT 8432 - GADING II
PRELIMINARY SITE PLAN

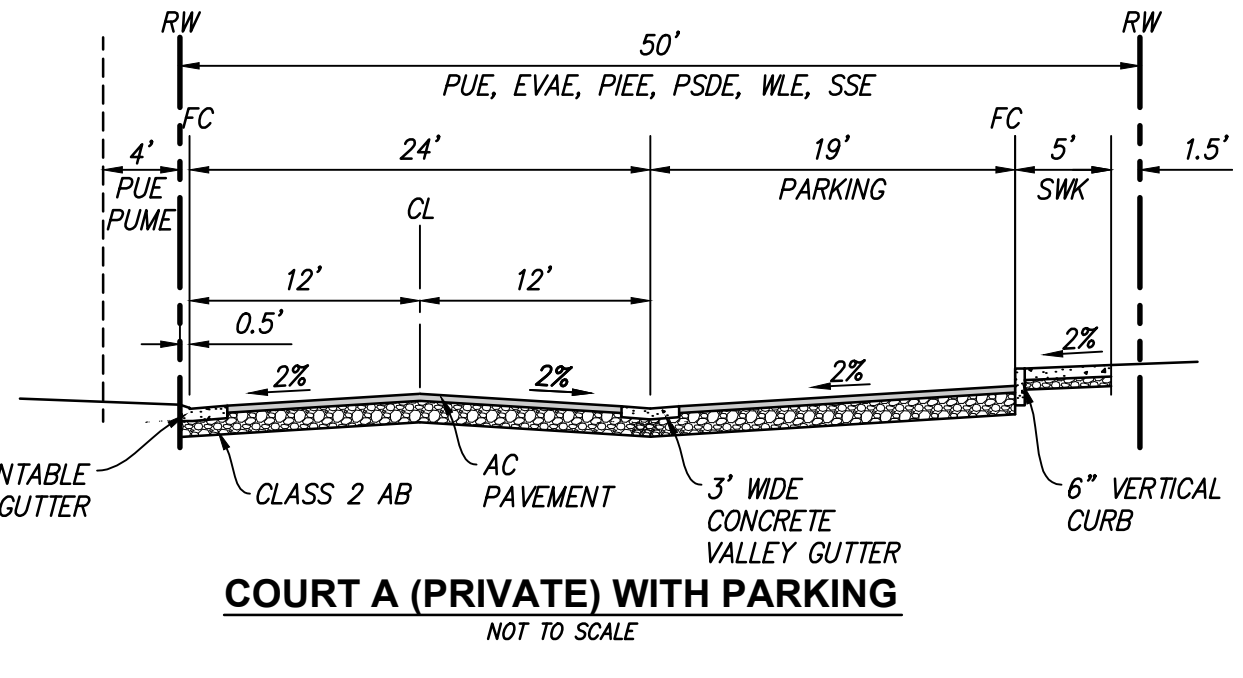
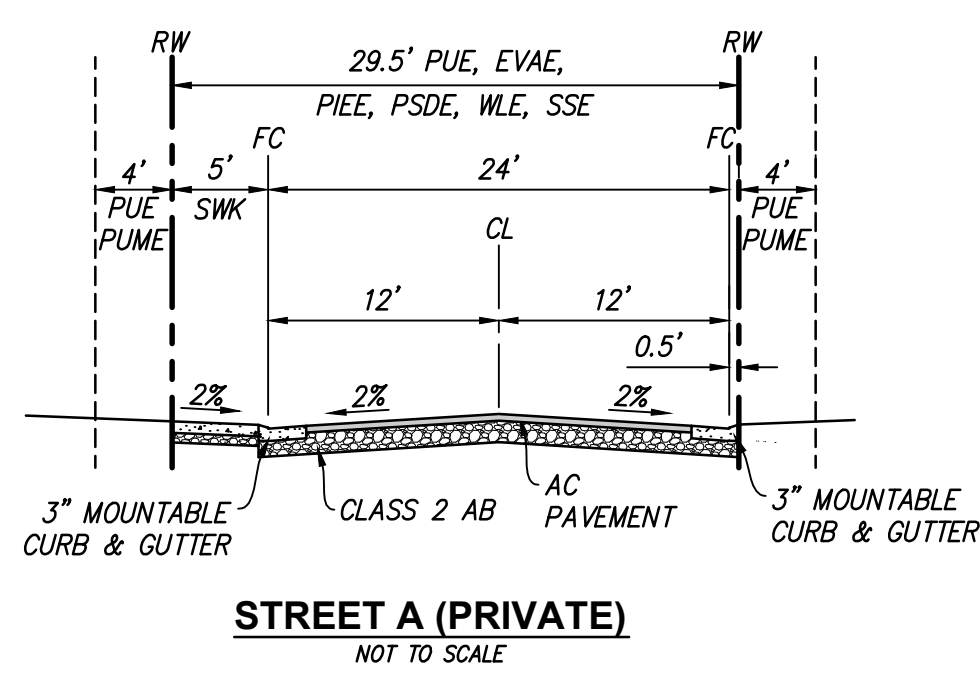
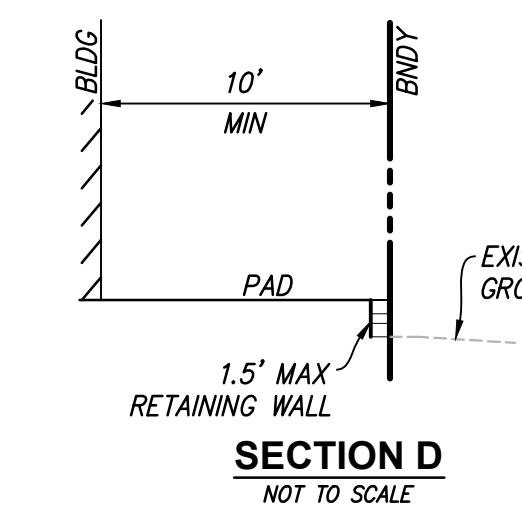
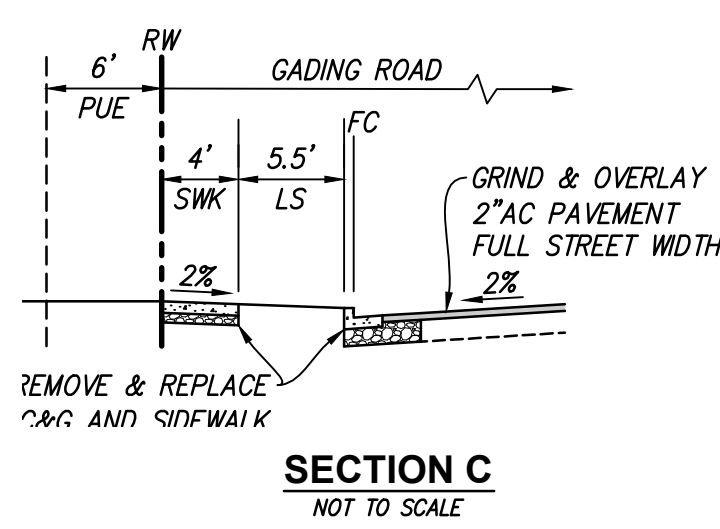
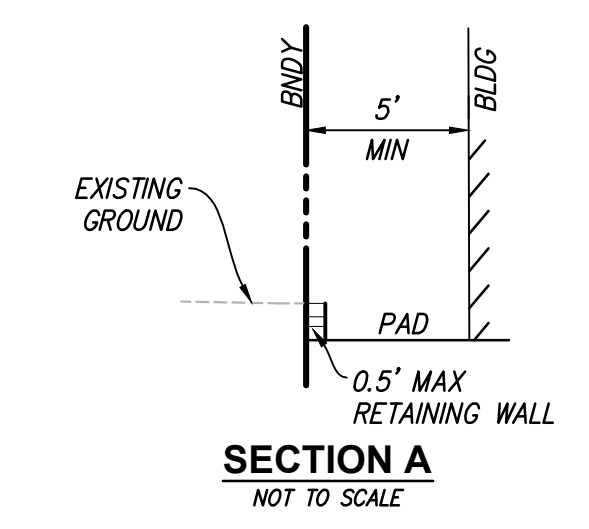
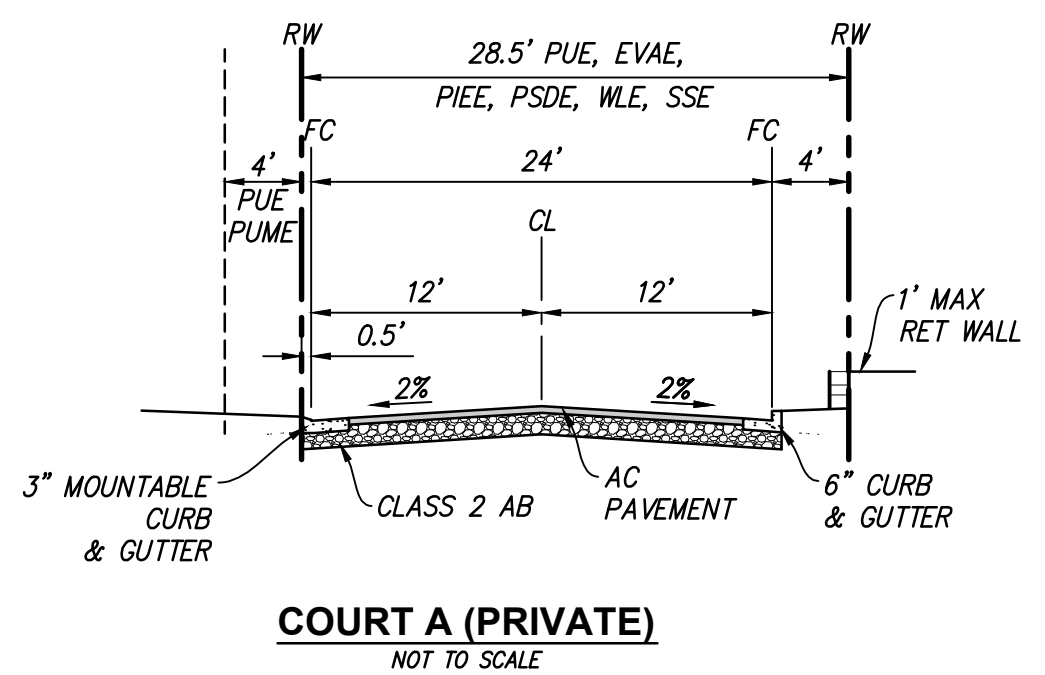
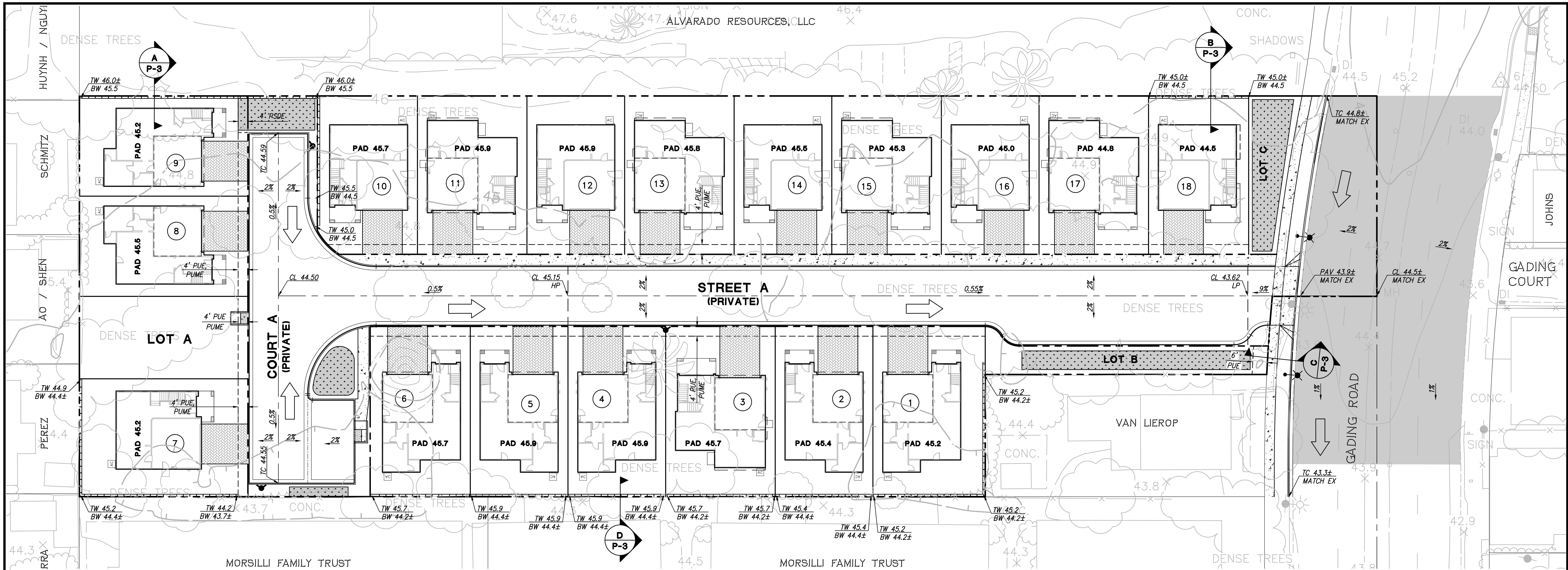
CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.

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G:\JOB2017\171030\CAD FILES\02-PLANNING\TENT-MAP\C-5 PRELIMINARY GRADING PLANDING 2/22/2018 HILLARY RAYA



PRELIMINARY PAVEMENT DESIGN CHART				
STREET NAME	TRAFFIC INDEX	"R" VALUE	AC PAVEMENT SECTION	
			A.C.	A.B.
STREET A	5	5	3.0"	10.0"
COURT A	5	5	3.0"	10.0"

PRELIMINARY ESTIMATED EARTHWORK QUANTITIES		
ITEMS	CUT (C.Y.)	FILL (C.Y.)
STRIPPING & DEMOLITION	-	-
LOTS	150	1,110
STREET A & COURT A	800	0
FOUNDATION & PLUMBING SPOIL	360	-
TRENCH SPOIL	760	-
C.3 SPOIL	250	-
SHRINKAGE (ASSUME 10%)	-	110
TOTAL	2,320	1,220
EXPORT	1,100	

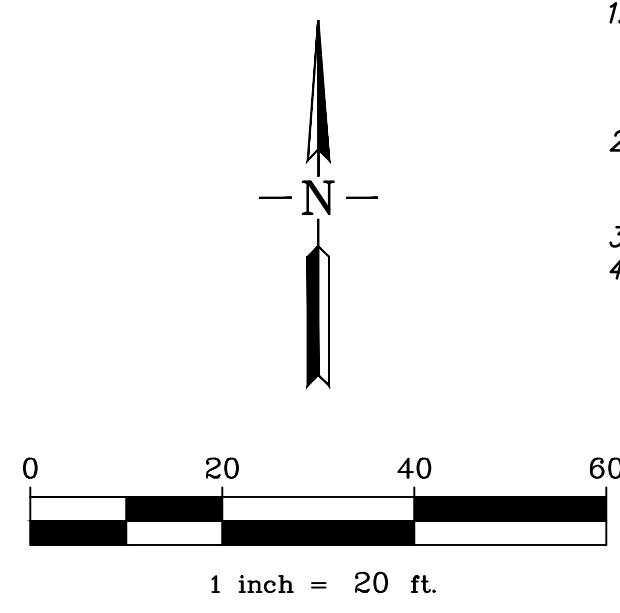
- NOTE:
- ALL QUANTITIES SHOWN ON THIS PLAN ARE APPROXIMATE. CALCULATED CUT AND FILL ARE TO "ROUGH GRADE" AND EXISTING GROUND. THE ACTUAL AMOUNT OF EARTH MOVED IS VARIABLE DEPENDENT ON COMPACTION, CONSOLIDATION, STRIPPING REQUIREMENTS, AND THE CONTRACTOR'S METHOD OF OPERATION.
 - THE CONTRACTOR SHALL VERIFY ALL EARTHWORK QUANTITIES BEFORE START OF WORK. THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER WITH ANY DISCREPANCIES.
 - FOUNDATION SPOIL ASSUMED AT 20 C.Y. PER LOT.
 - IT IS ASSUMED THAT THE SITE HAS UNDERGONE STRIPPING AND DEMOLITION.

VESTING TENTATIVE MAP

TRACT 8432 - GADING II

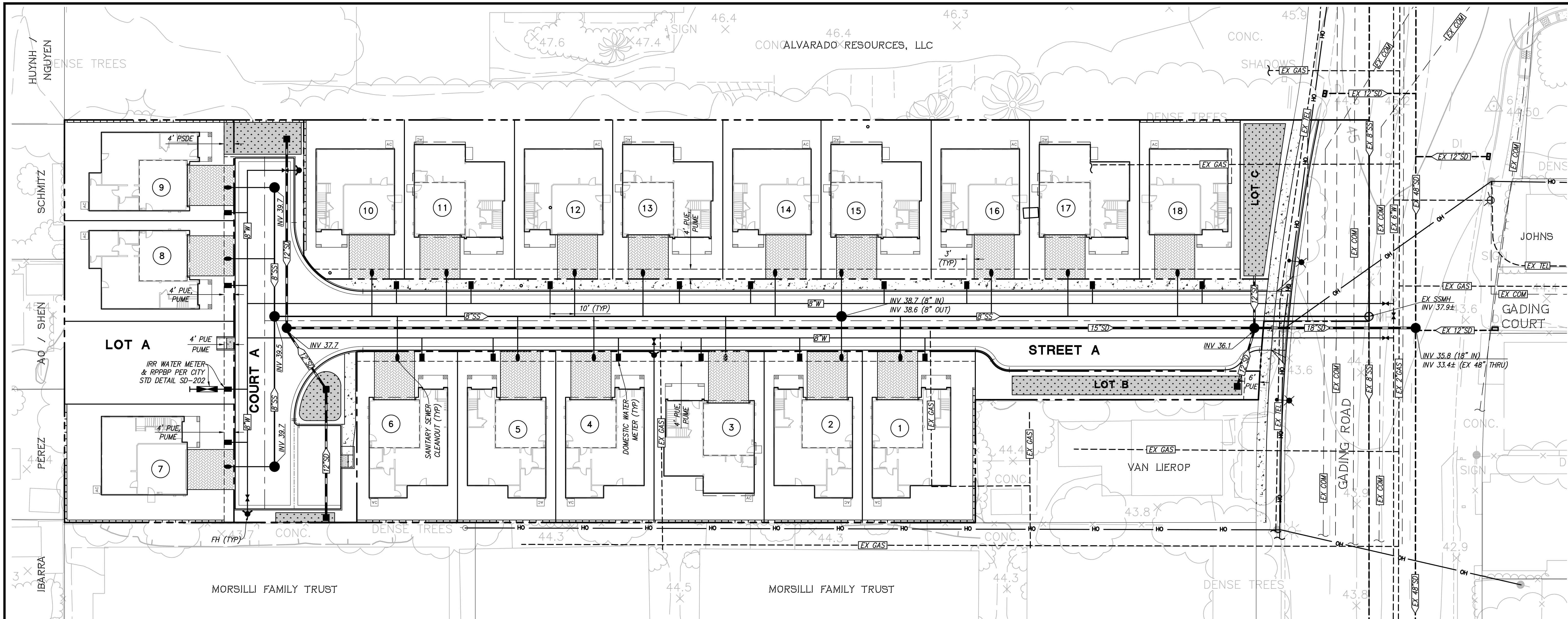
PRELIMINARY GRADING PLAN

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.



RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

G:\JOB2017\171030\CAD FILES\02-PLANNING\TENT-MAP\C-6 PRELIMINARY UTILITY PLAN.DWG 1/11/2018 HILLARY RAYA



NOTES:

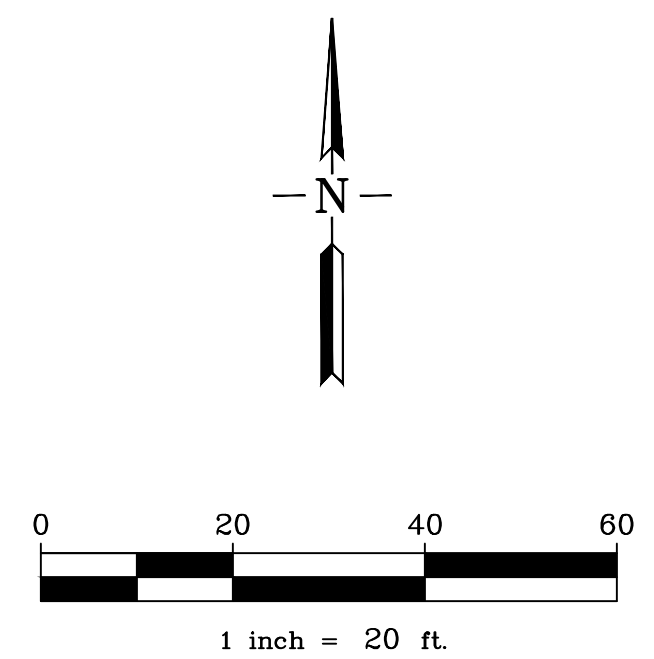
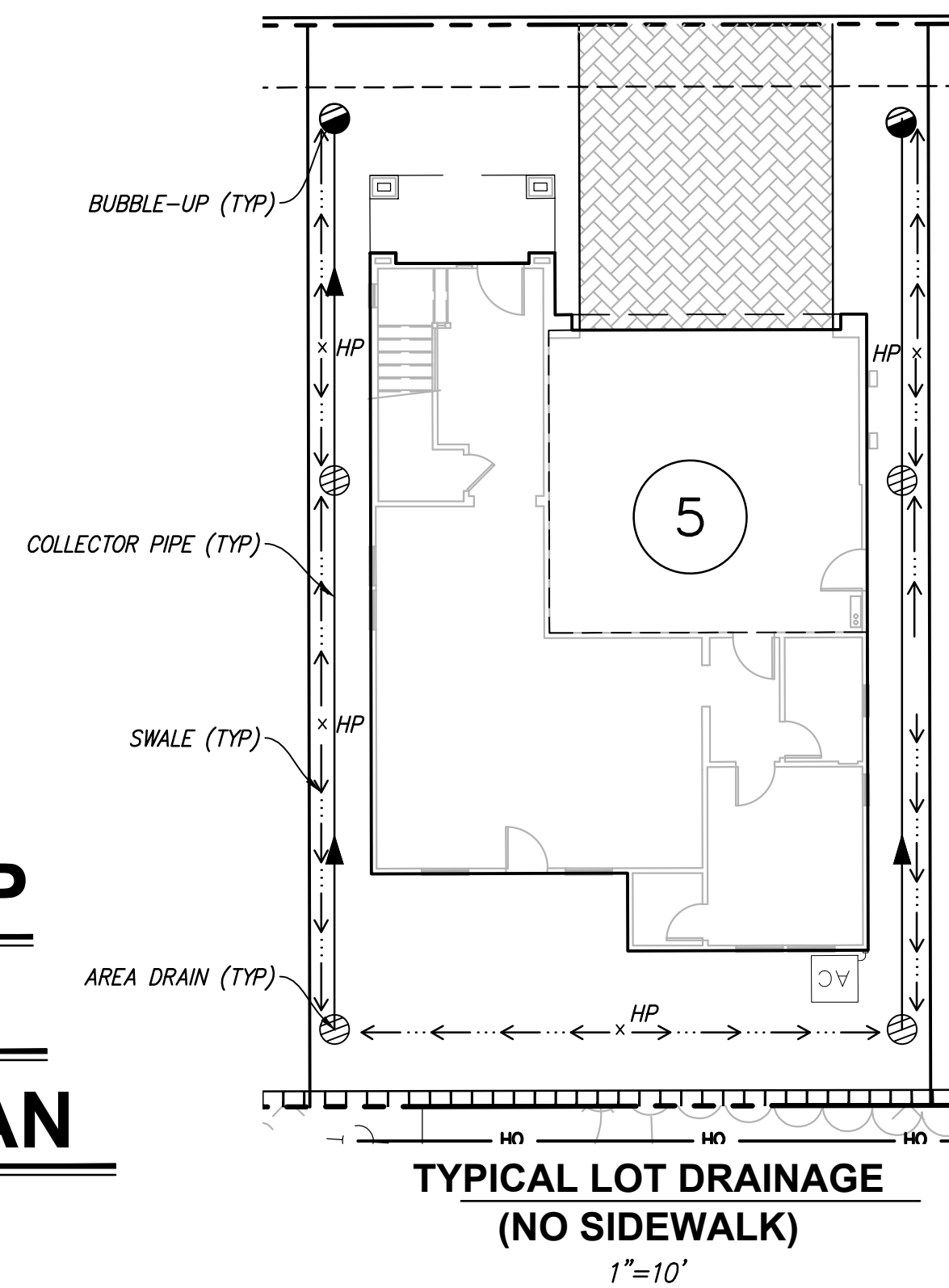
1. EACH RESIDENTIAL DWELLING UNIT SHALL HAVE AN INDIVIDUAL SANITARY SEWER LATERAL AND BE CONSTRUCTED PER CITY STD DETAIL SD-312.
2. ALL DOMESTIC AND IRRIGATION WATER METERS SHALL BE RADIO-READ TYPE.
3. ALL RESIDENTIAL WATER METERS SHALL HAVE COMBINED DOMESTIC AND FIRE SERVICES PER CITY STD DETAIL SD-216.
4. WHERE THE PROPOSED PUBLIC WATER MAIN HAS LESS THAN 10 FEET HORIZONTAL CLEARANCE BETWEEN STORM DRAIN AND/OR SANITARY SEWER MAINS OR IS UNDER DECORATIVE, STAMPED, OR COLORED CONCRETE, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
5. SIDEWALK CROSS DRAIN TO BE INSTALLED ALONG STREET A TO CONVEY ON LOT DRAINAGE TO STREET. SEE DETAIL ON SHEET C-7.
6. THE PROPOSED GATE VALVE SHOWN AT THE NEW WATER MAIN CONNECTION IN GADING ROAD SHALL BE INSTALLED BY CITY WATER DISTRIBUTION PERSONNEL AT THE DEVELOPER'S EXPENSE.

VESTING TENTATIVE MAP

TRACT 8432 - GADING II

PRELIMINARY UTILITY PLAN

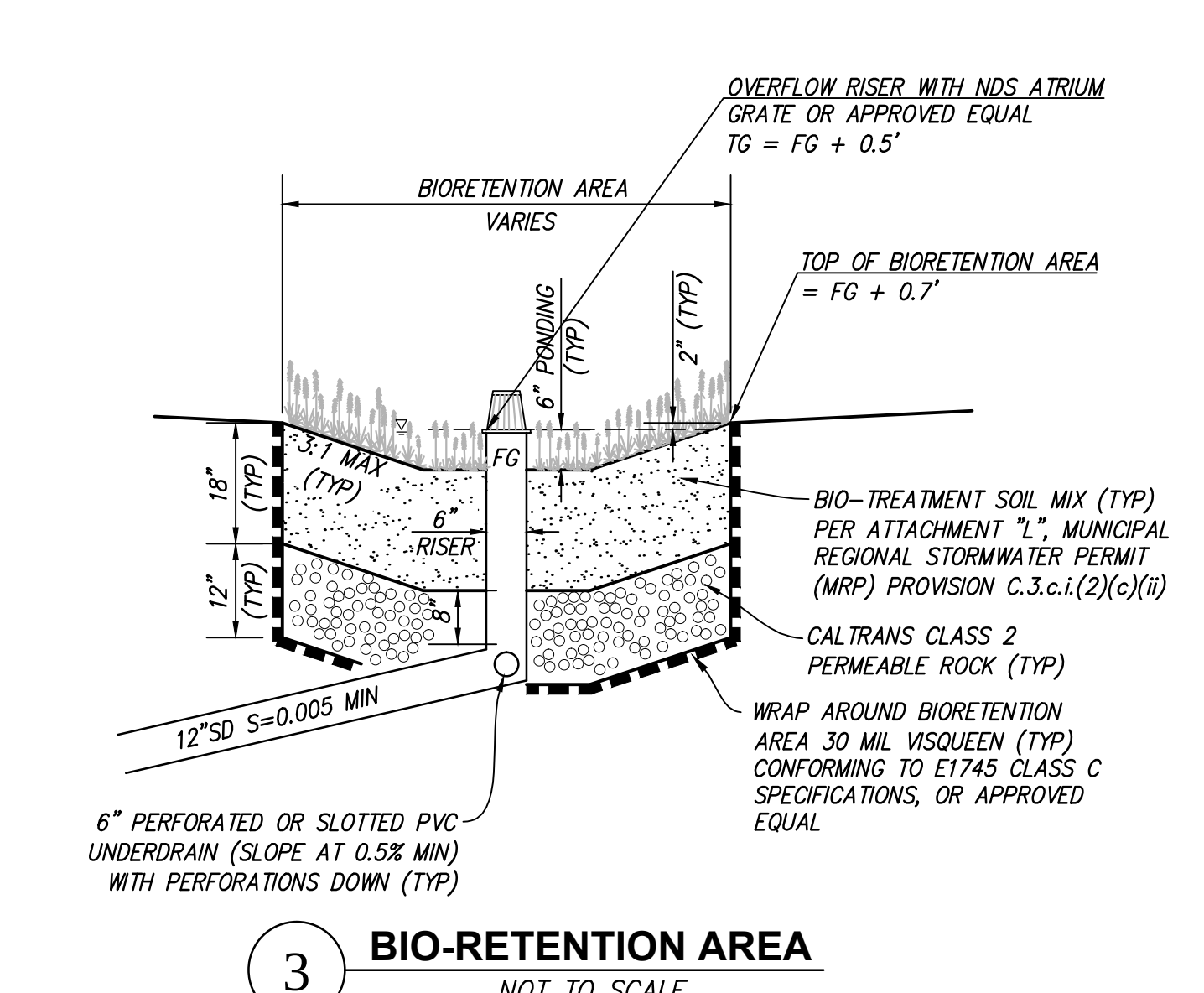
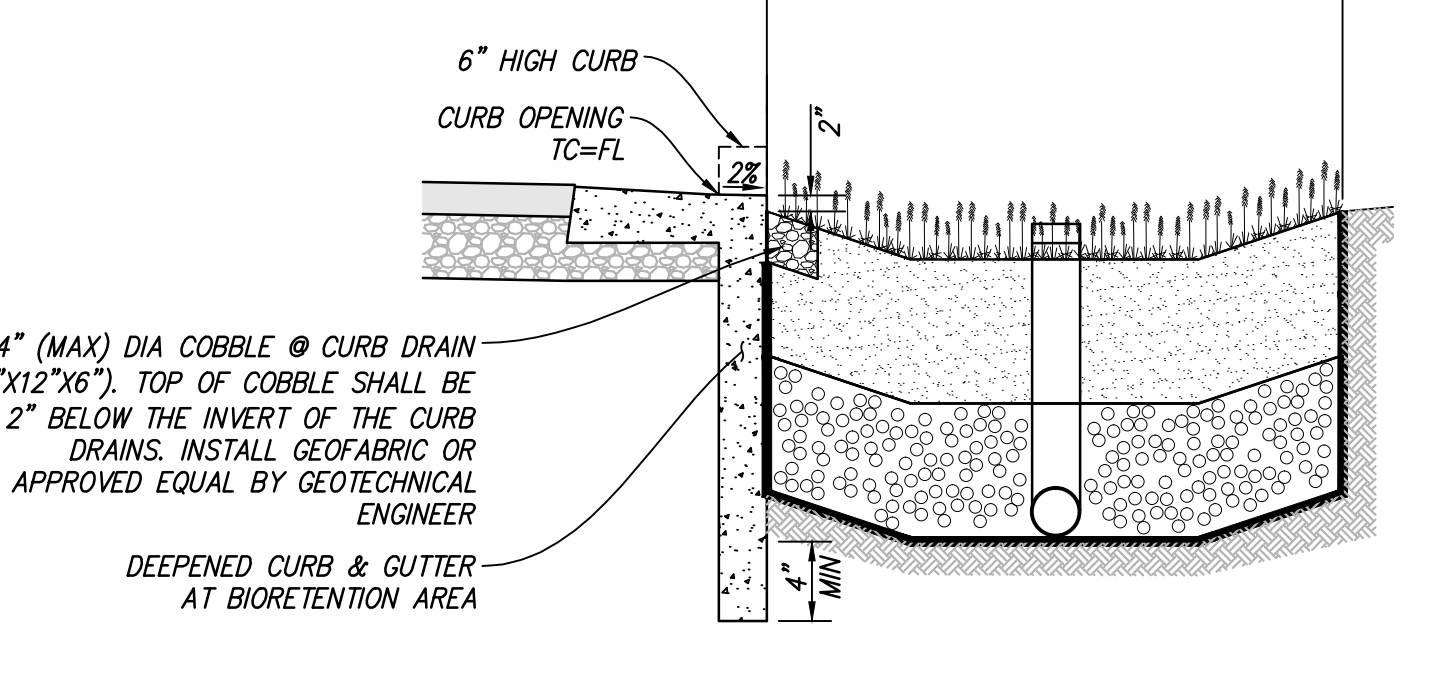
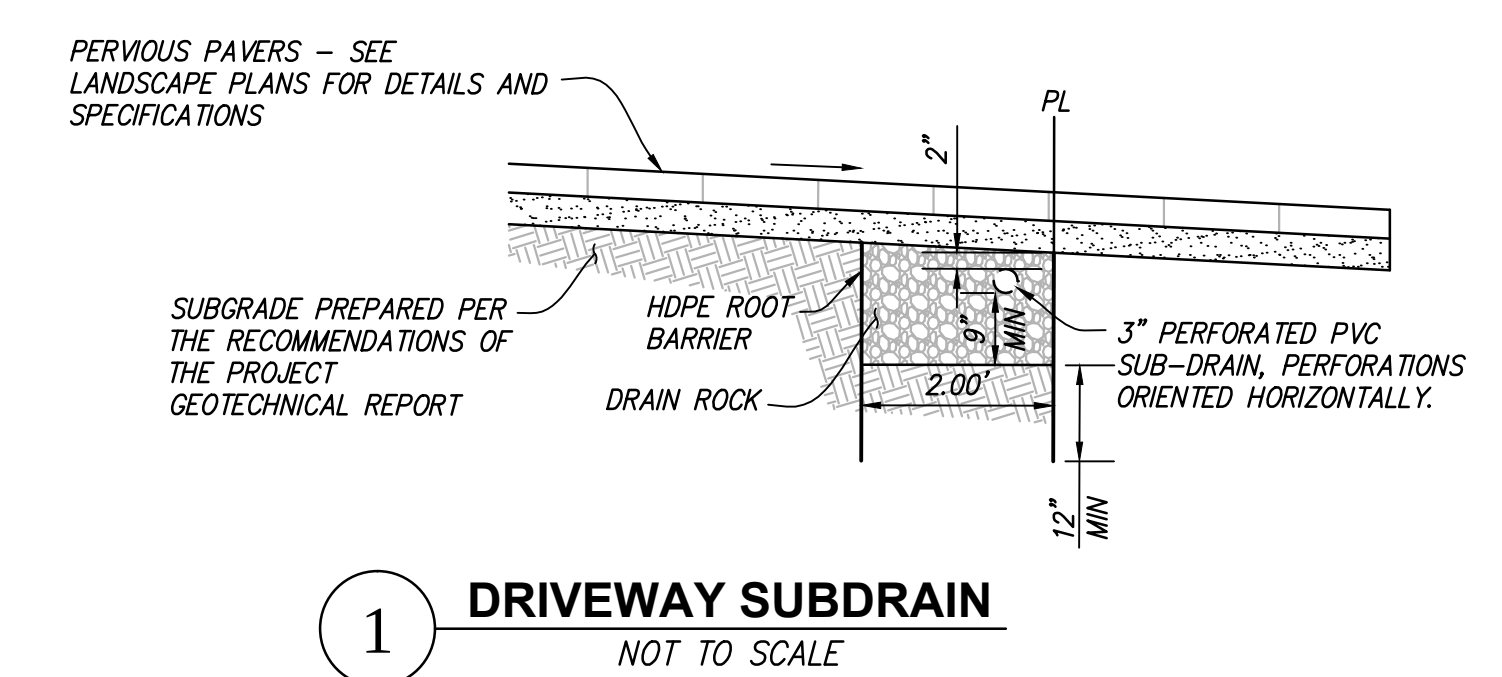
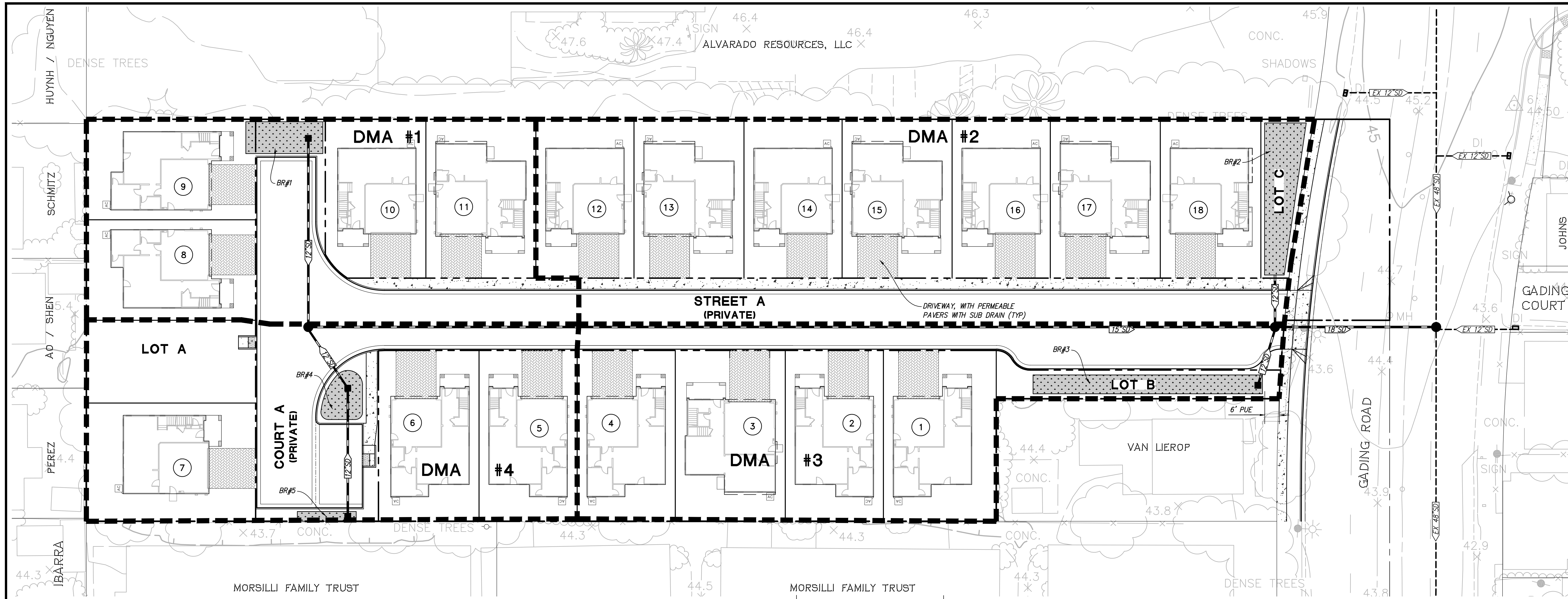
CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.



RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

REV DATE: JANUARY 11, 2018
DATE: DECEMBER 11, 2017 JOB NO. 171030

G:\JOB2017\171030\CAD FILES\02-PLANNING\TENT-MAP\C-7 PRELIMINARY STORMWATER TREATMENT PLANNING 12/1/2017 HILLARY RAYA



LEGEND

--- DMA
BR BIO-RETENTION

1 inch = 20 ft.

0 20 40 60

PRELIMINARY STORMWATER TREATMENT CALCULATIONS						
DMA #	SURFACE	IMPERVIOUS AREA (SF)	EFFECTIVE IMPERVIOUS AREA (SF)	TREATMENT AREA REQUIRED (SF)	TREATMENT AREA PROVIDED (SF)	TREATMENT CONTROL MEASURES
1	ROOF/HARDSCAPE/LANDSCAPE/STREET	9,379	9,842	394	400	BR#1
2	ROOF/HARDSCAPE/LANDSCAPE/STREET	12,878	13,947	558	775	BR#2
3	ROOF/HARDSCAPE/LANDSCAPE/STREET	8,449	9,192	368	718	BR#3
4	ROOF/HARDSCAPE/LANDSCAPE/STREET	8,048	8,759	350	350	BR#4, BR#5

NOTES:

1. THE CALCULATIONS ARE BASED ON THE ALAMEDA COUNTYWIDE CLEAN WATER PROGRAM, C.3 STORMWATER TECHNICAL GUIDANCE, DATED MAY 2, 2016, AND THE FOLLOWING CRITERIA:

a. 0.2 INCHES/HOUR RAINFALL INTENSITY ON 100% IMPERVIOUS AREA.

b. SOIL FOR TREATMENT MEDIUM WITH A 5 INCHES/HOUR INFILTRATION RATE.

c. A TREATMENT MEDIUM OF 0.04 SIZING FACTOR FOR BIO-RETENTION AREAS.

2. SIZING FACTOR OF 0.04 NOTED ABOVE IS CALCULATED BASED ON THE FOLLOWING CRITERIA:

a. SIZING FACTOR=(0.2 IN/HR)/(5 IN/HR)=0.04

b. PERVIOUS AREAS DRAINING TO THE TREATMENT MEASURE ARE MULTIPLIED BY A FACTOR OF 0.1 TO OBTAIN THE AMOUNT OF "EFFECTIVE IMPERVIOUS AREA"

VESTING TENTATIVE MAP

TRACT 8432 - GADING II

PRELIMINARY STORMWATER TREATMENT PLAN

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA

FOR: DUTRA ENTERPRISES, INC.

RJA

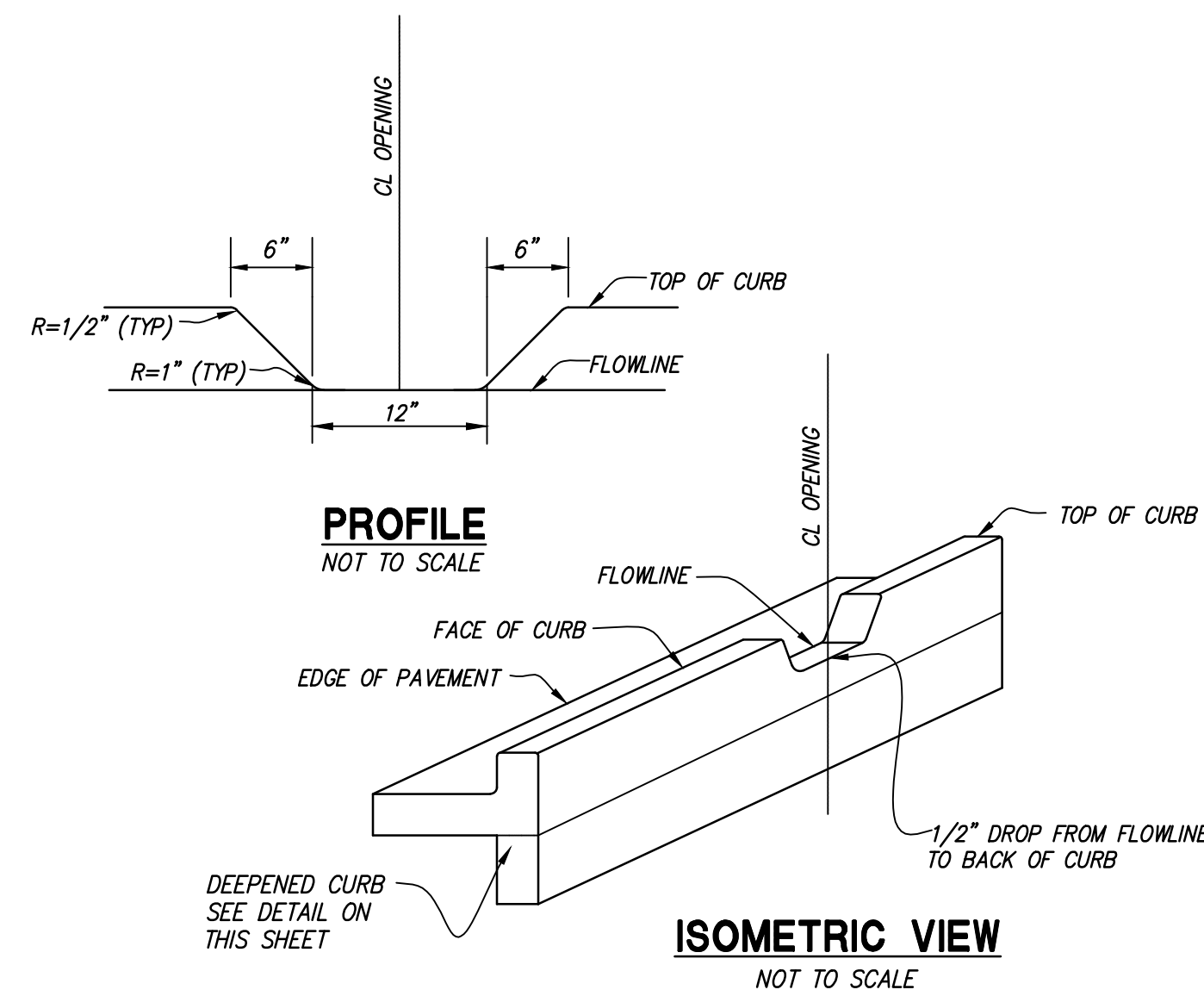
RUGGERI-JENSEN-AZAR

ENGINEERS • PLANNERS • SURVEYORS

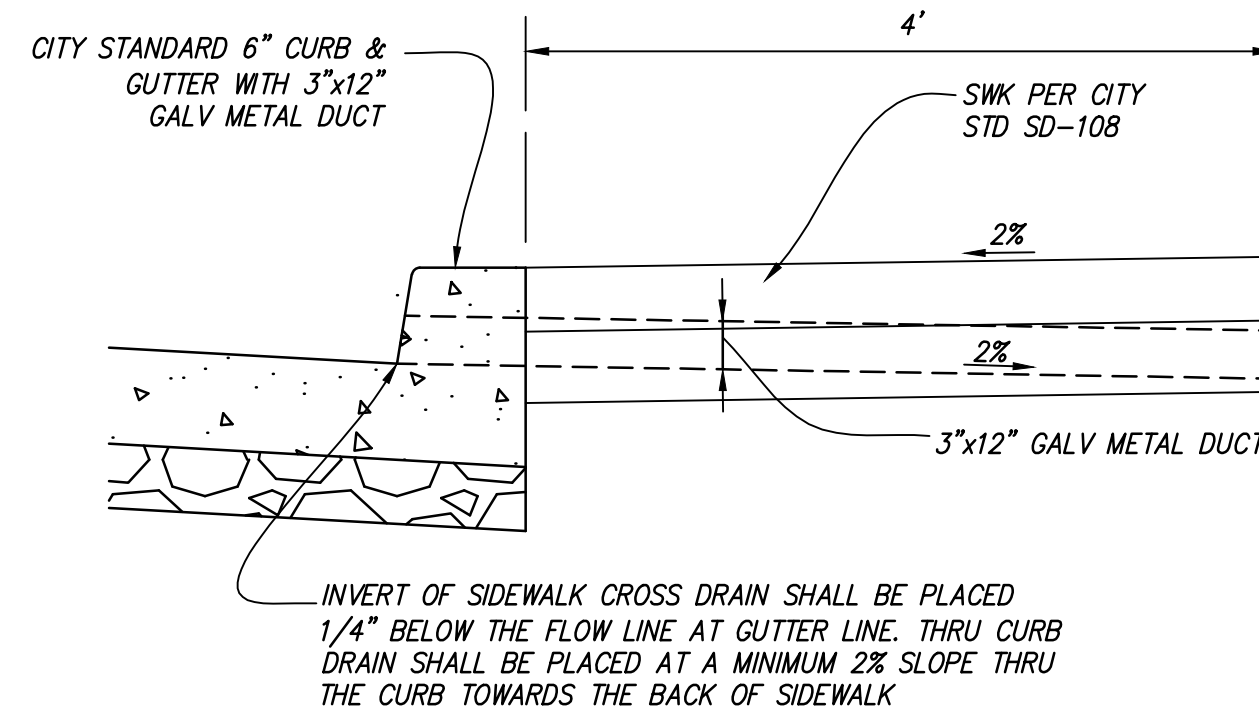
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588

PHONE: (925) 227-9100 FAX: (925) 227-9300

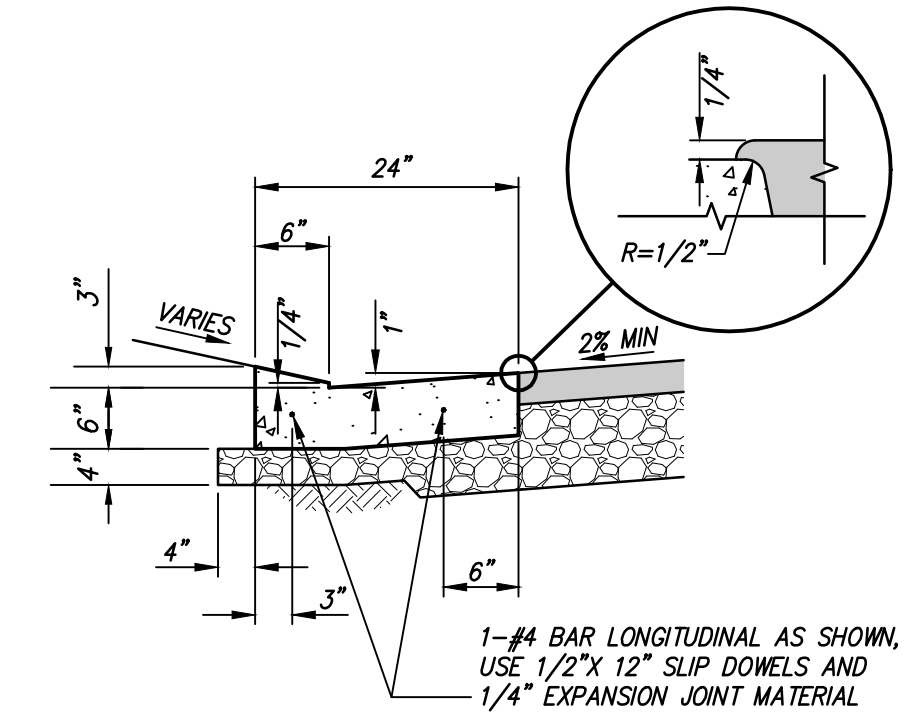
DATE: DECEMBER 11, 2017 JOB NO. 171030 C-6



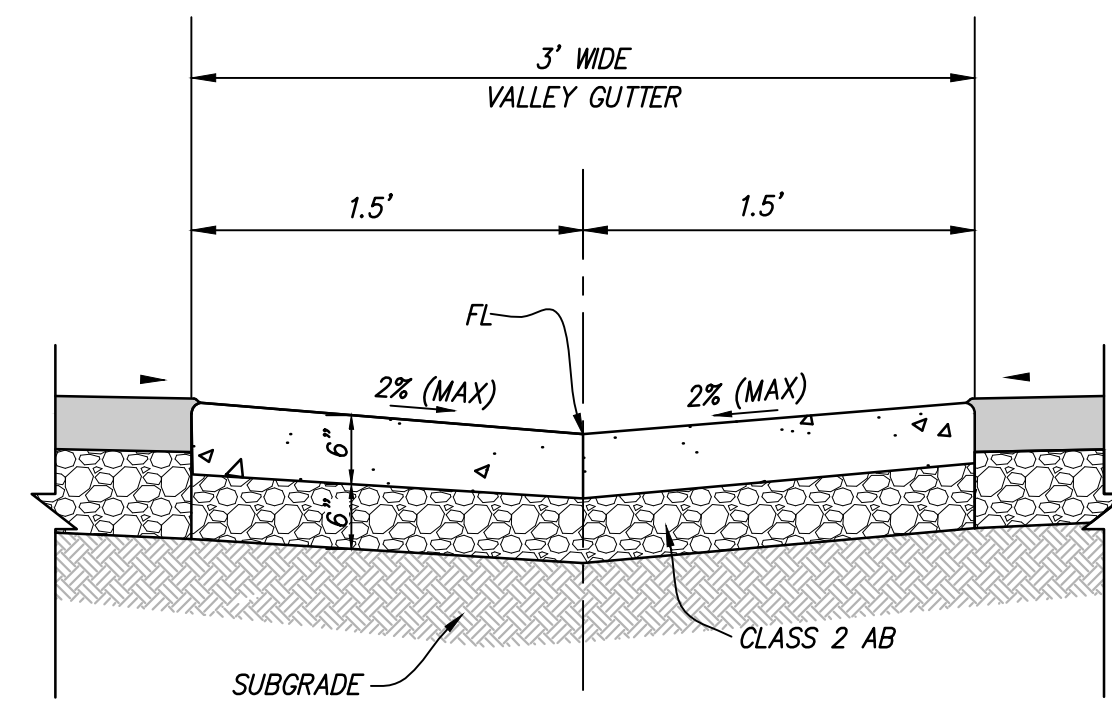
1 CURB OPENING AT BIO-RETENTION AREA
NOT TO SCALE



2 SIDEWALK CROSS DRAIN
NOT TO SCALE



3 3" MOUNTABLE CURB
NOT TO SCALE



4 3' CONCRETE VALLEY GUTTER
NOT TO SCALE

VESTING TENTATIVE MAP

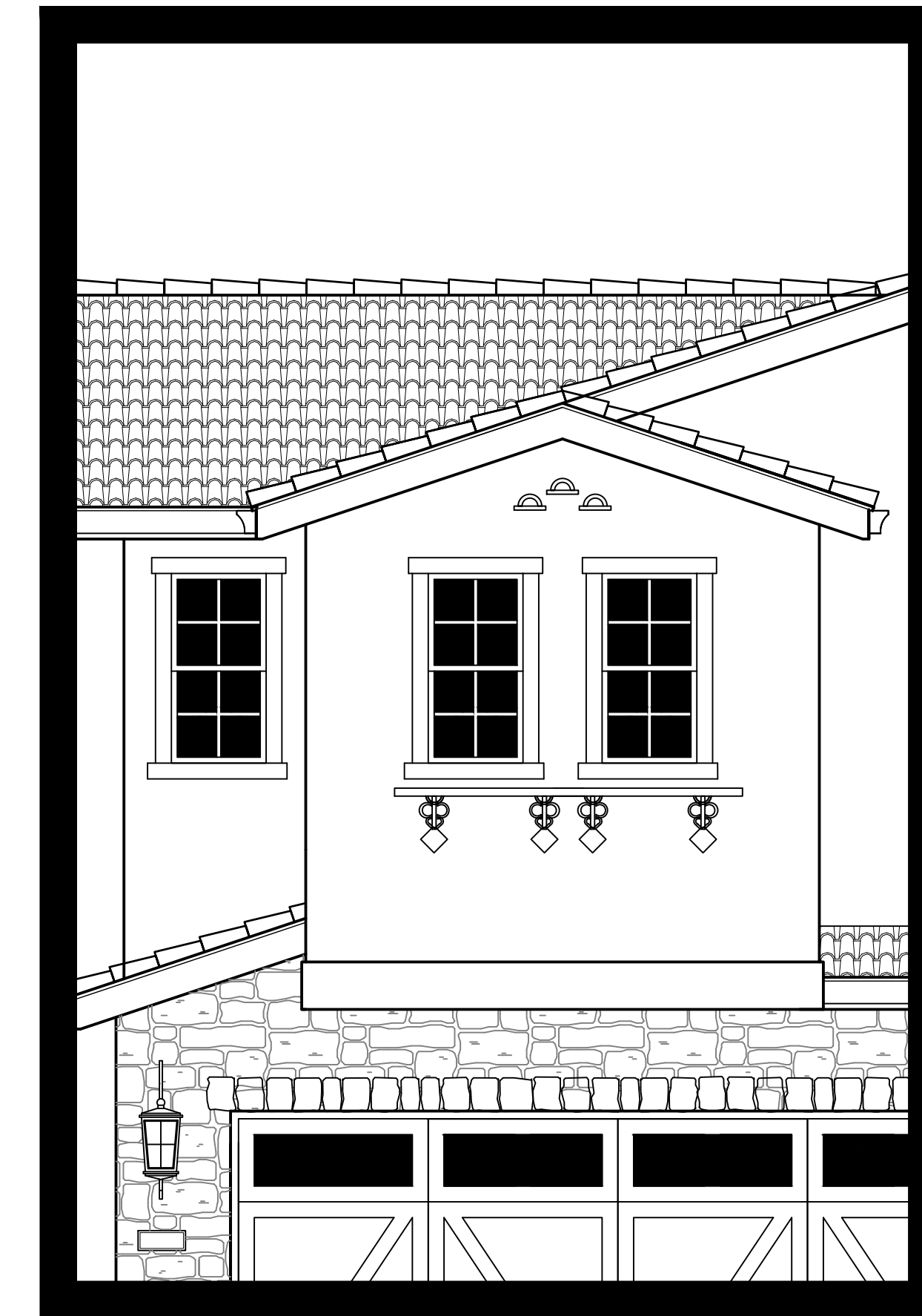
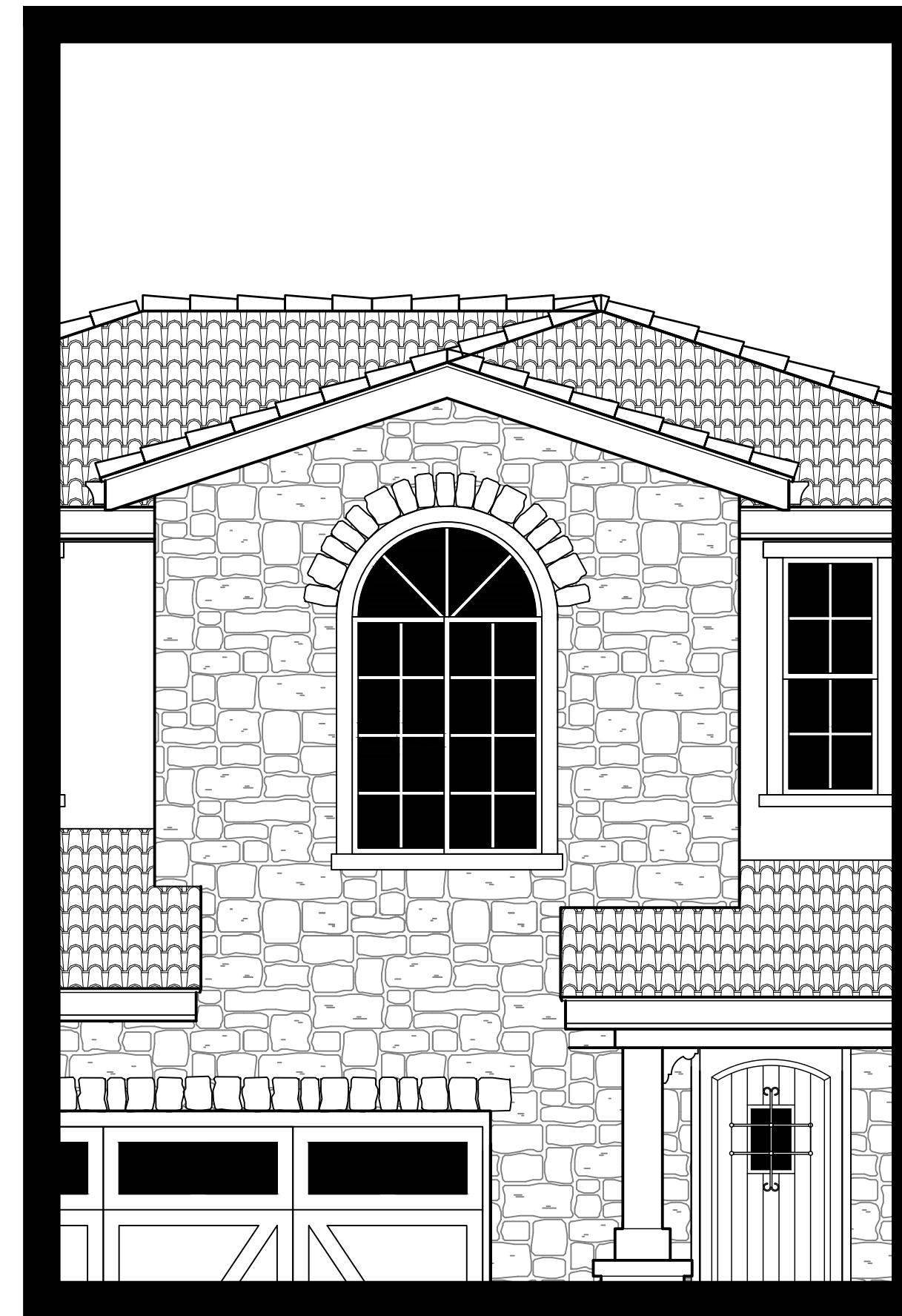
TRACT 8432 - GADING II

DETAILS

CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA
FOR: DUTRA ENTERPRISES, INC.

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GADING II HAYWARD



NOTES:

1. Project scope of work: New Construction of 18 new single family homes, including all utilities, stormwater management and road improvements (see civil drawings)
2. Building construction shall meet the requirements of the 2016 CA Residential Code, 2016 CA Electrical, Mechanical, and Plumbing Codes, and 2016 Energy Efficiency Standards and the City of Hayward Municipal Code and Ordinances.
3. All Buildings shall be Type V-B Construction, R3 Occupancy with U Garage Occupancy. Provide NFPA 13D approved automatic fire sprinkler system.
4. All attached garages shall have conduit for electric vehicle charging capability
5. All homes shall be provided with photovoltaic solar panels

PROJECT TEAM

APPLICANT:
DUTRA ENTERPRISES, INC.
43360 MISSION BLVD. STE. 230
FREMONT, CA 94539
CONTACT: TONY DUTRA

CIVIL ENGINEER:
RUGGERI-JENSEN-AZAR
4690 CHABOT DRIVE, STE. 200
PLEASANTON, CA 94588
CONTACT: STEVE LICHLITER

ARCHITECT:
KTGY GROUP, INC.
1814 Franklin STREET, STE. 400
OAKLAND, CA 94612
CONTACT: JILL WILLIAMS

LANDSCAPE ARCHITECT:
RIPLEY DESIGN GROUP
1615 BONANZA STREET, STE 314
WALNUT CREEK, CA 94596
CONTACT: ANNIKA CARPENTER

DRAWING INDEX

A0-01	TITLE PAGE	
A0-10	SITE PLAN & OPEN SPACE EXHIBIT	
A1-01	PLAN 1A,1B,1C	FRONT ELEVATIONS
A1-10	PLAN 1A	FLOOR PLANS
A1-11	PLAN 1A	EXTERIOR ELEVATIONS
A1-12	PLAN 1B	EXTERIOR ELEVATIONS
A1-13	PLAN 1C	EXTERIOR ELEVATIONS
A2-01	PLAN 2A,2B,2C	FRONT ELEVATIONS
A2-10	PLAN 2A	FLOOR PLANS
A2-11	PLAN 2A	EXTERIOR ELEVATIONS
A2-12	PLAN 2B	EXTERIOR ELEVATIONS
A2-13	PLAN 2C	EXTERIOR ELEVATIONS
A2-14	PLAN 2A	CORNER ELEVATIONS
A3-01	PLAN 3A,3B,3C	FRONT ELEVATIONS
A3-10	PLAN 3A	FLOOR PLANS
A3-11	PLAN 3A	EXTERIOR ELEVATIONS
A3-12	PLAN 3B	EXTERIOR ELEVATIONS
A3-13	PLAN 3C	EXTERIOR ELEVATIONS

UNIT SUMMARY:

Unit Name	Description	Type	Approx Gross SF*	#	%	Approx Gross total SF
P1	3 bd + 2.5 bath	Front Loaded	1956	5	28%	9780
P2	3 bd + 2.5 bath	Front Loaded	1638	6	33%	9828
P3	4 bd + 3 bath	Front Loaded	1915	7	39%	13405
Subtotal				18	100%	33013
Overall Density			+/-	10.5	du/ac	
Approx. GROSS Avg. Unit Square Foot			+/-	1834	sq.ft.	

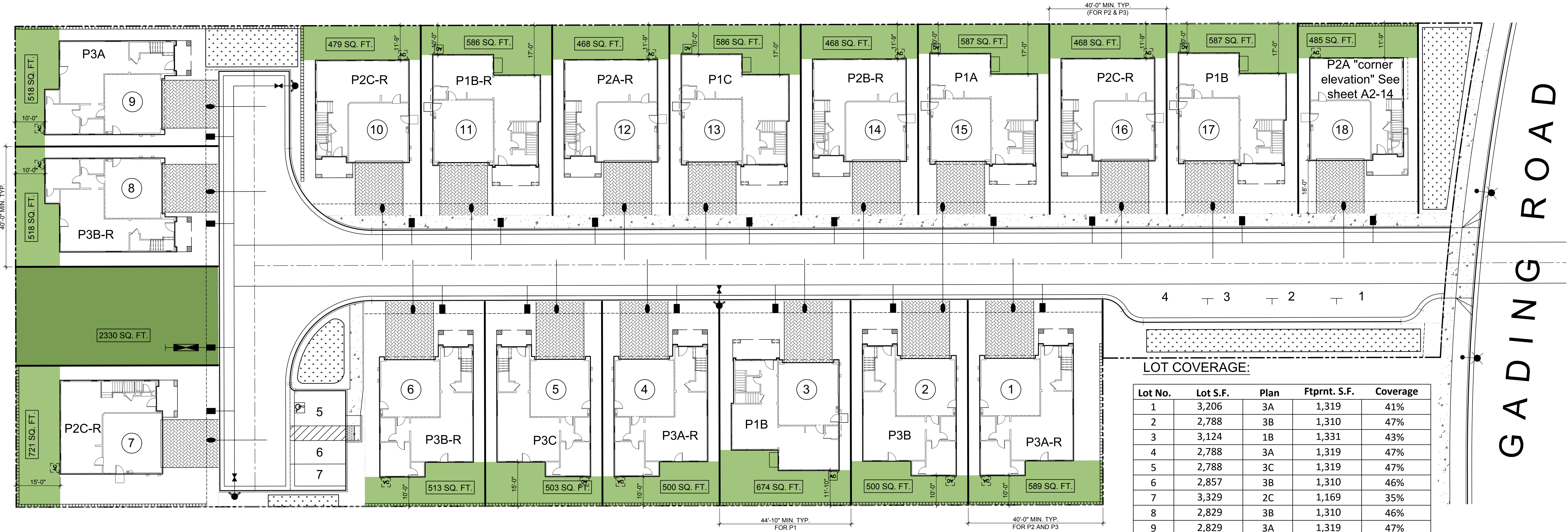
*Gross SF measure to outside face of stud, excludes garage area

PARKING SUMMARY:

Parking Provided				
Garage spaces:	18	x2	36	garage spaces
Private Driveway spaces:	18	x2	36	driveway spaces
On-street parking:			7	spaces
			79	total spaces provided

OPEN SPACE SUMMARY:

Open Space Required	
18 units X 350 sf/unit =	6300 SF
Open Space Provided	
Private	9750 SF
Group	2328 SF
Total:	12078 SF
	671 SF/Unit



LOT COVERAGE:

Lot No.	Lot S.F.	Plan	Ftprnt. S.F.	Coverage
1	3,206	3A	1,319	41%
2	2,788	3B	1,310	47%
3	3,124	1B	1,331	43%
4	2,788	3A	1,319	47%
5	2,788	3C	1,319	47%
6	2,857	3B	1,310	46%
7	3,329	2C	1,169	35%
8	2,829	3B	1,310	46%
9	2,829	3A	1,319	47%
10	2,620	2C	1,169	45%
11	2,905	1B	1,331	46%
12	2,592	2A	1,184	46%
13	2,905	1C	1,325	46%
14	2,592	2B	1,177	45%
15	2,905	1A	1,361	47%
16	2,592	2C	1,169	45%
17	2,905	1B	1,331	46%
18	2,657	2A	1,208	45%



1A Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves, 2" Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Corbels

ELEVATION 1A MISSION



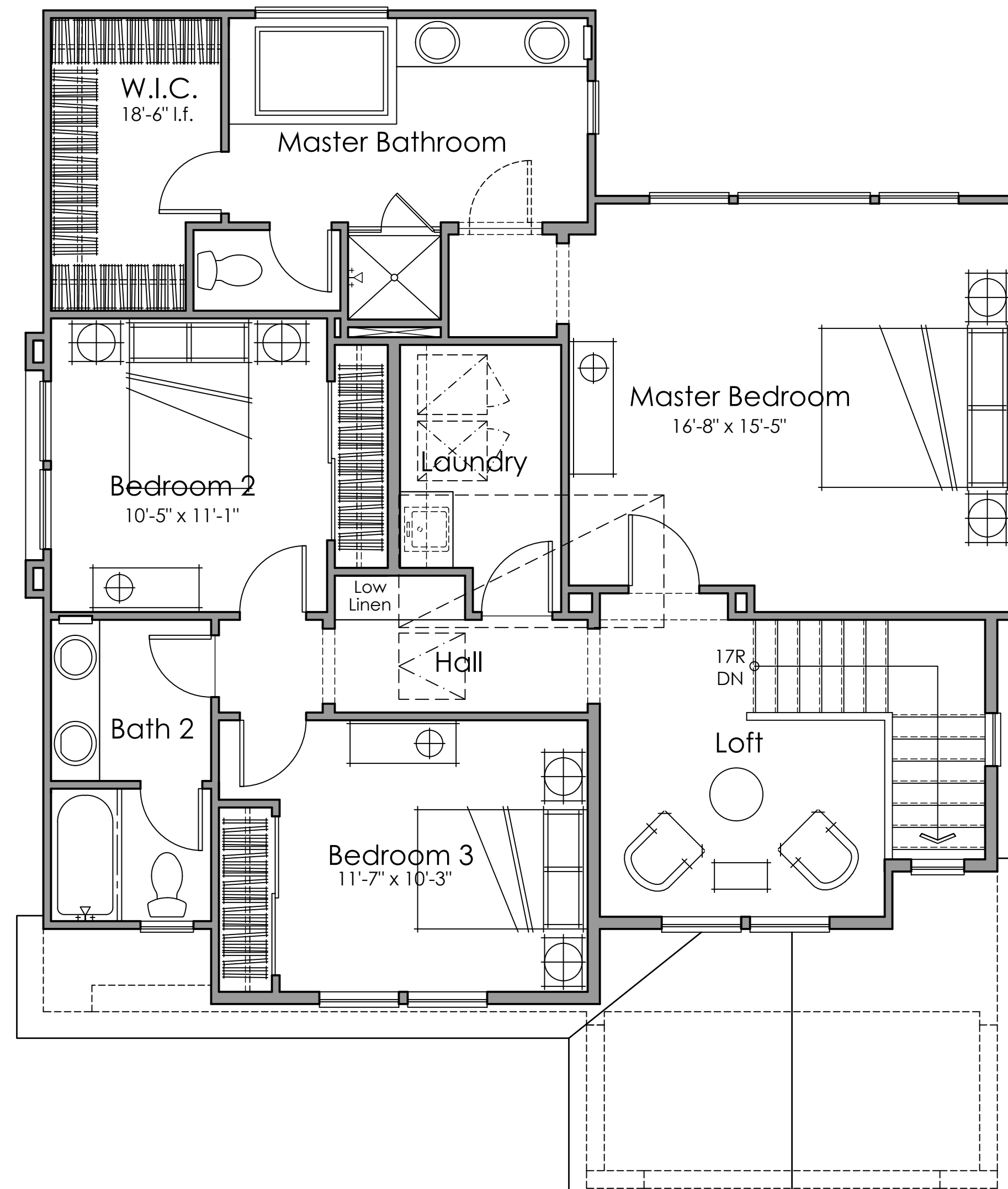
1B Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves & Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Brackets

ELEVATION 1B SPANISH RESORT

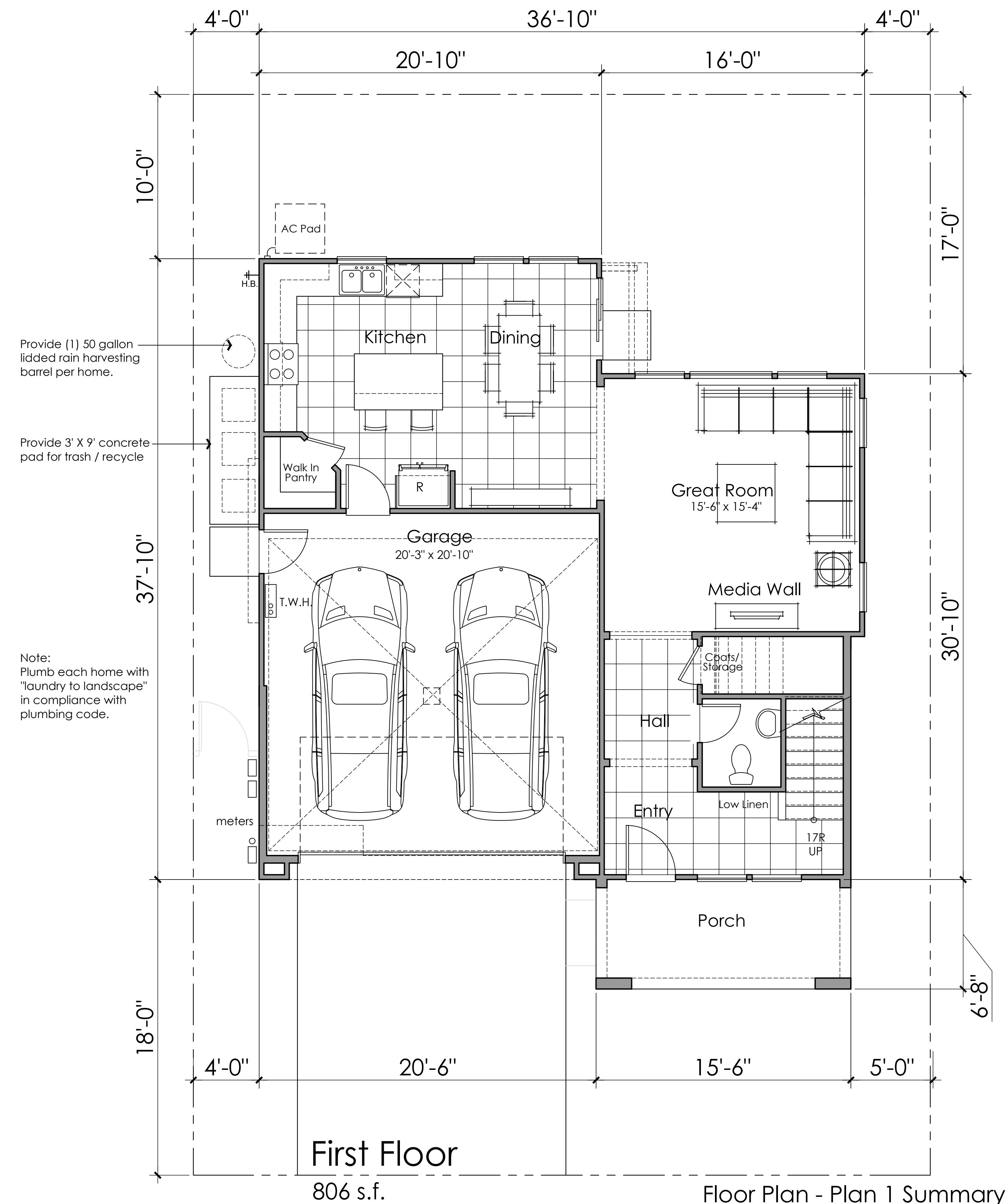


1C Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves & Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Stone Veneer
Shutters

ELEVATION 1C HACIENDA

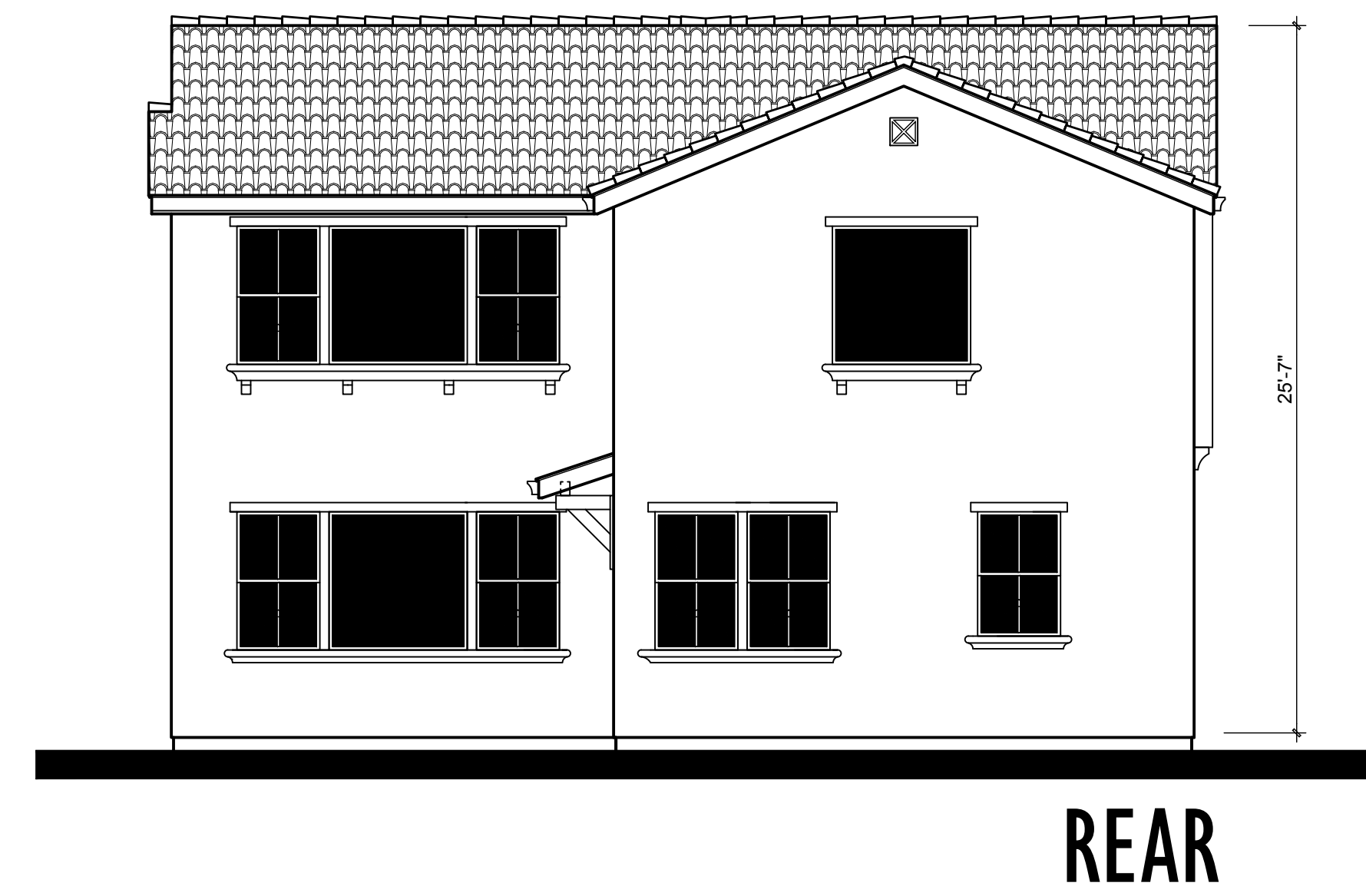
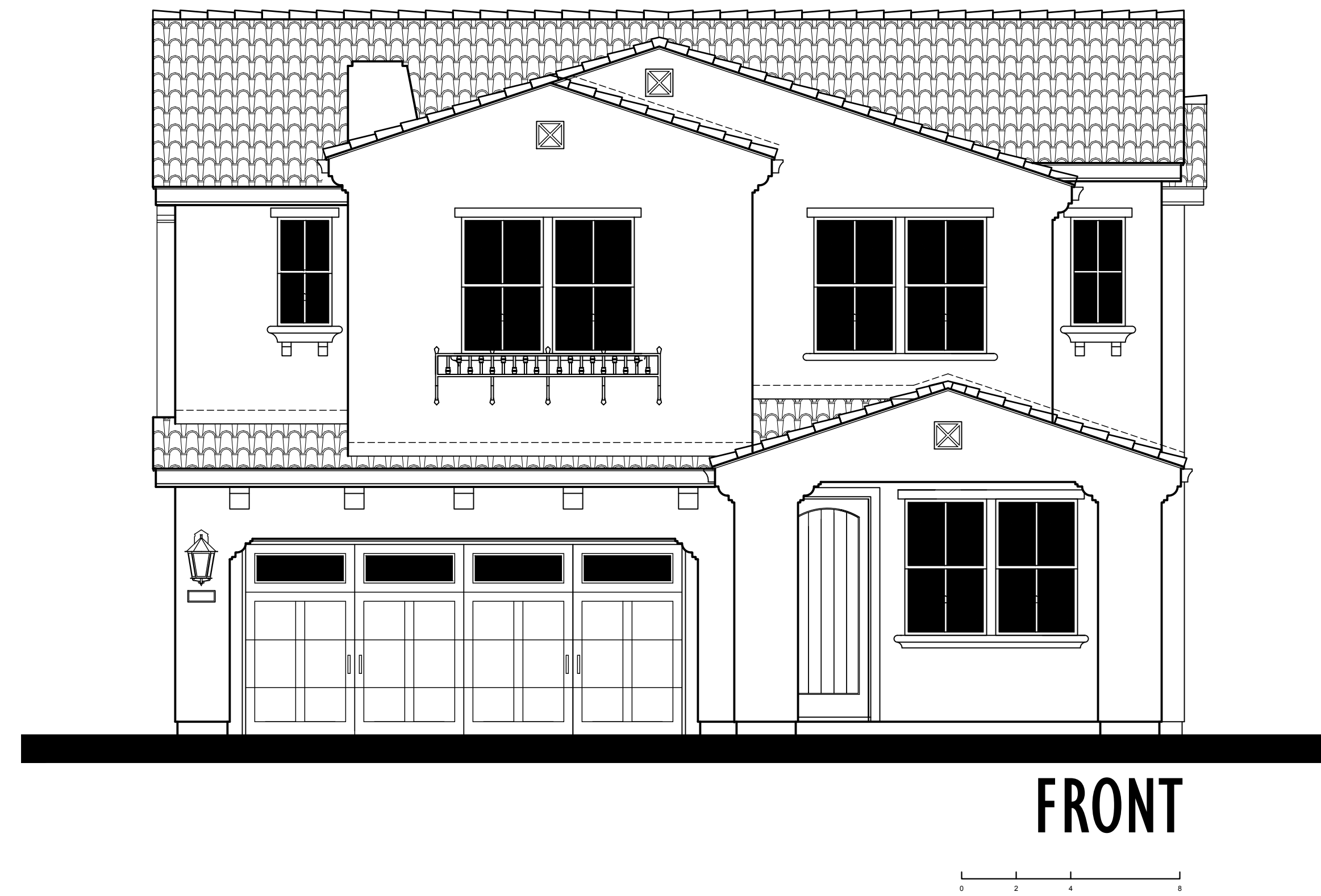


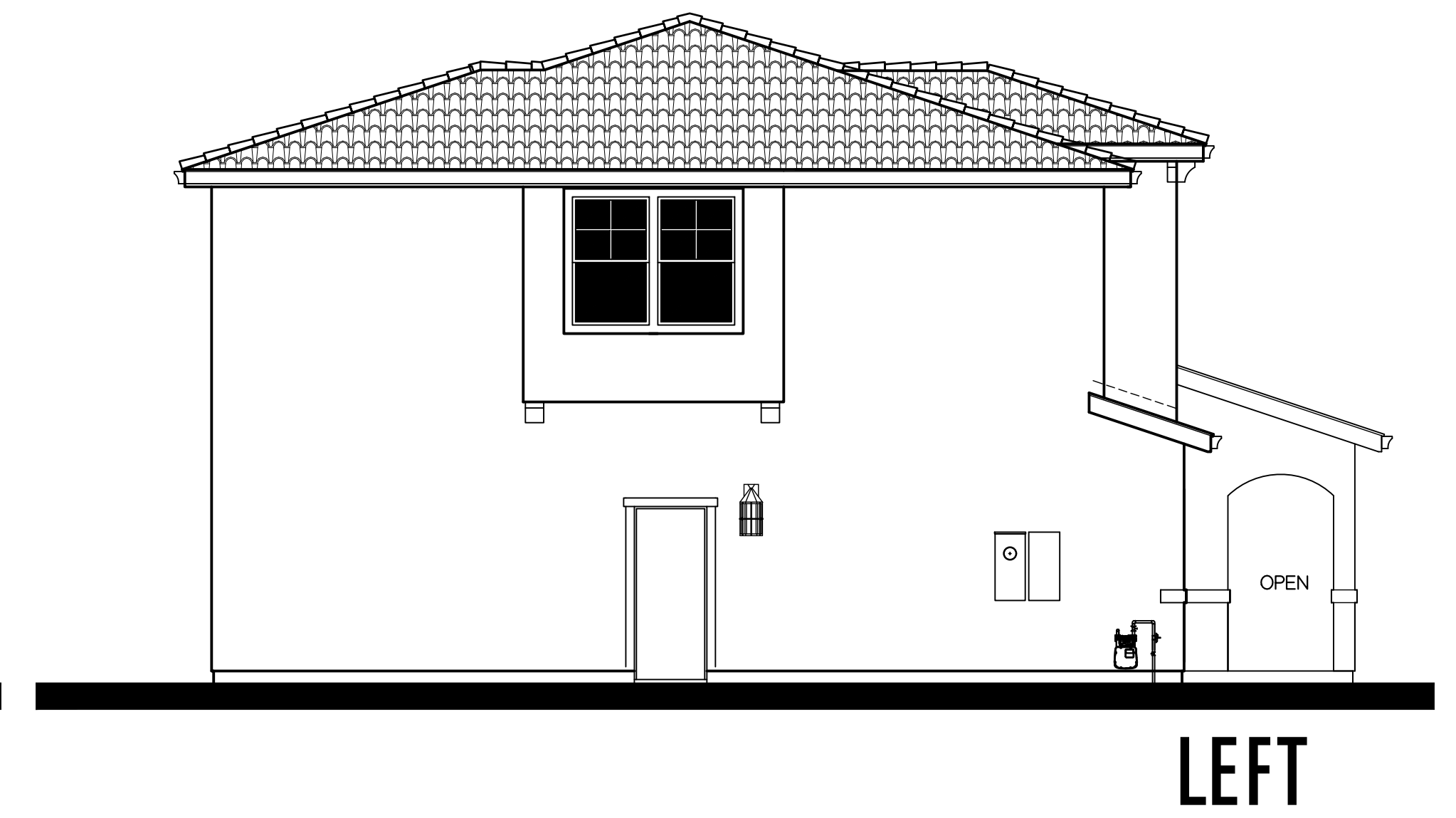
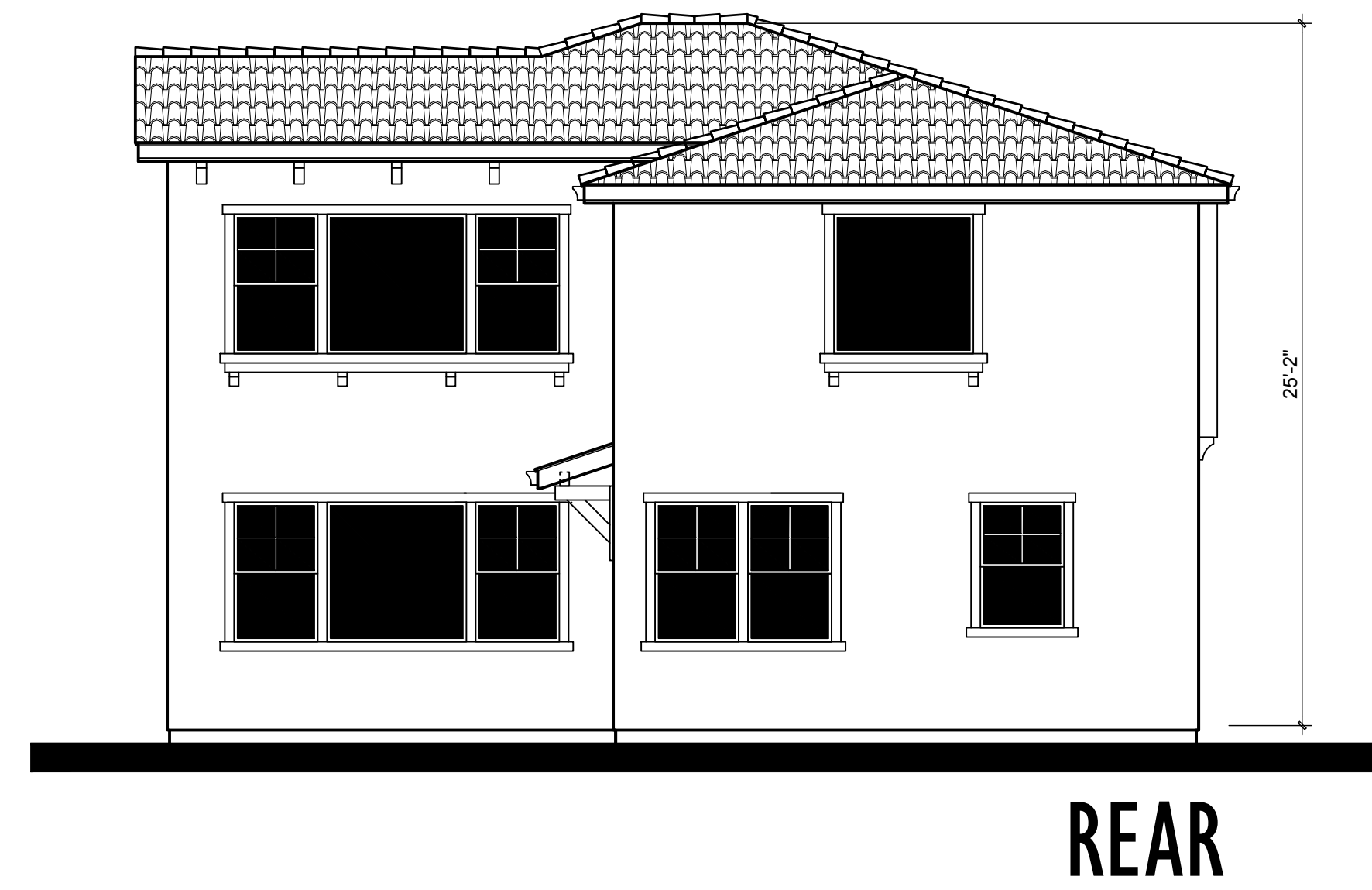
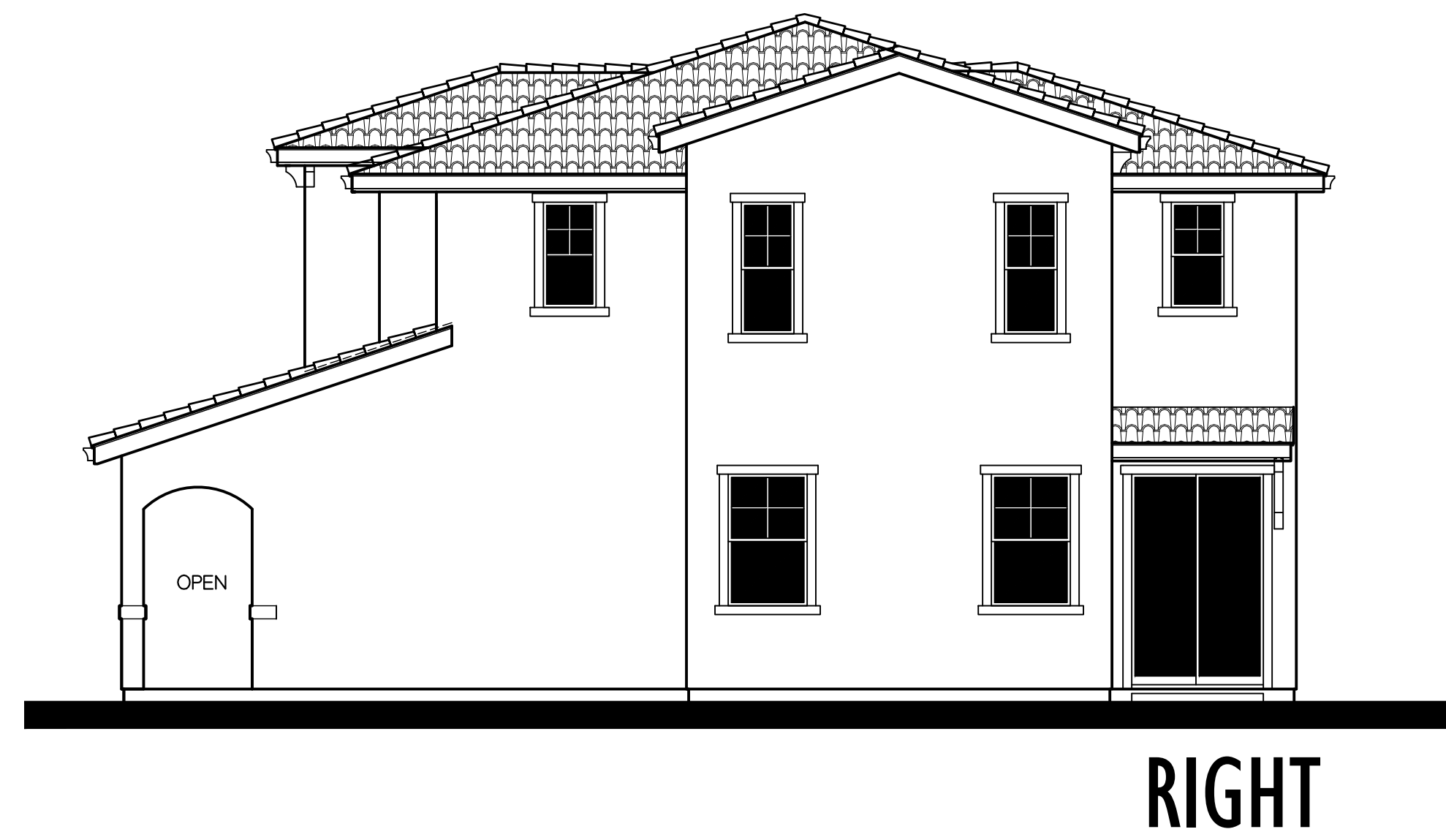
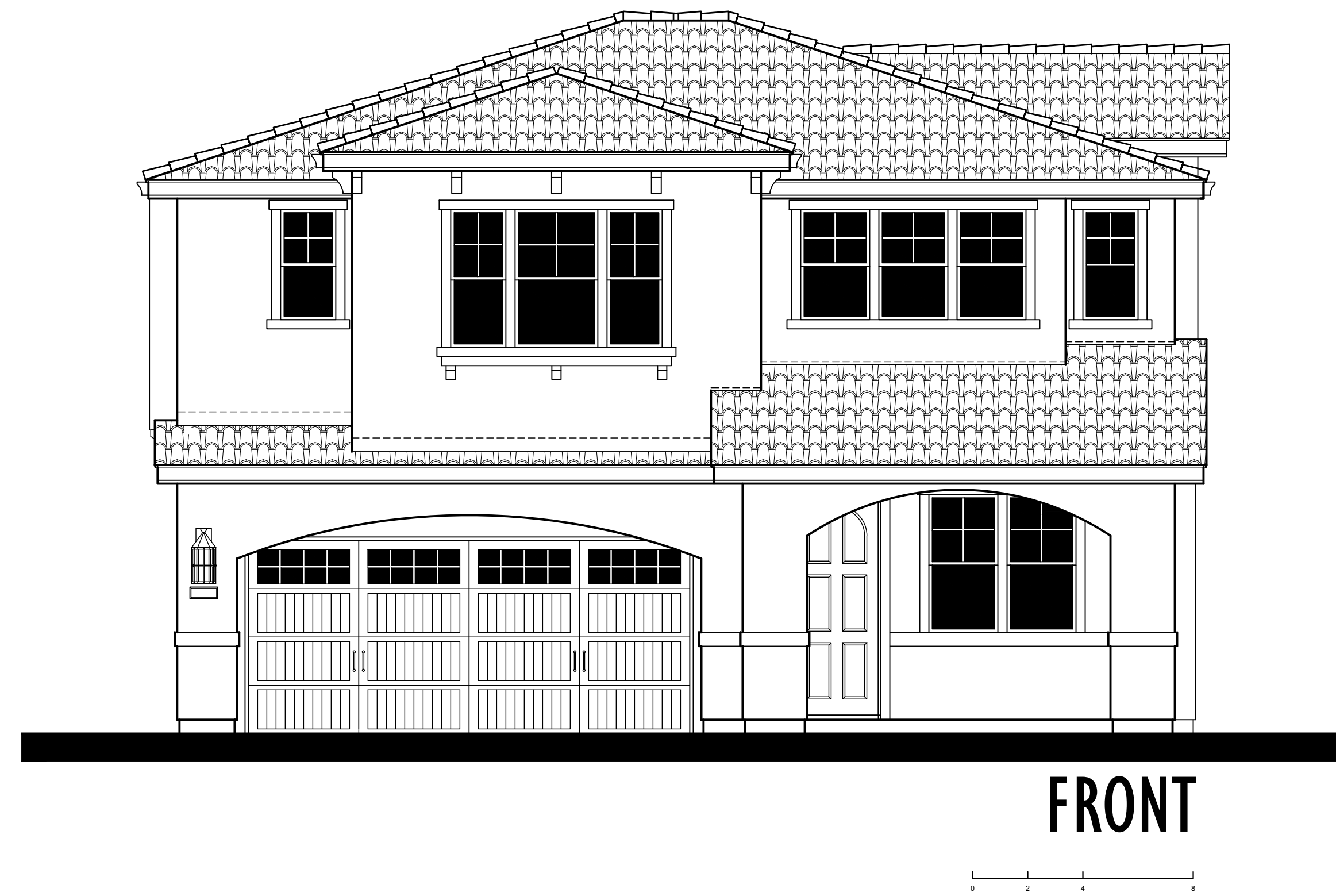
Second Floor
1150 s.f.

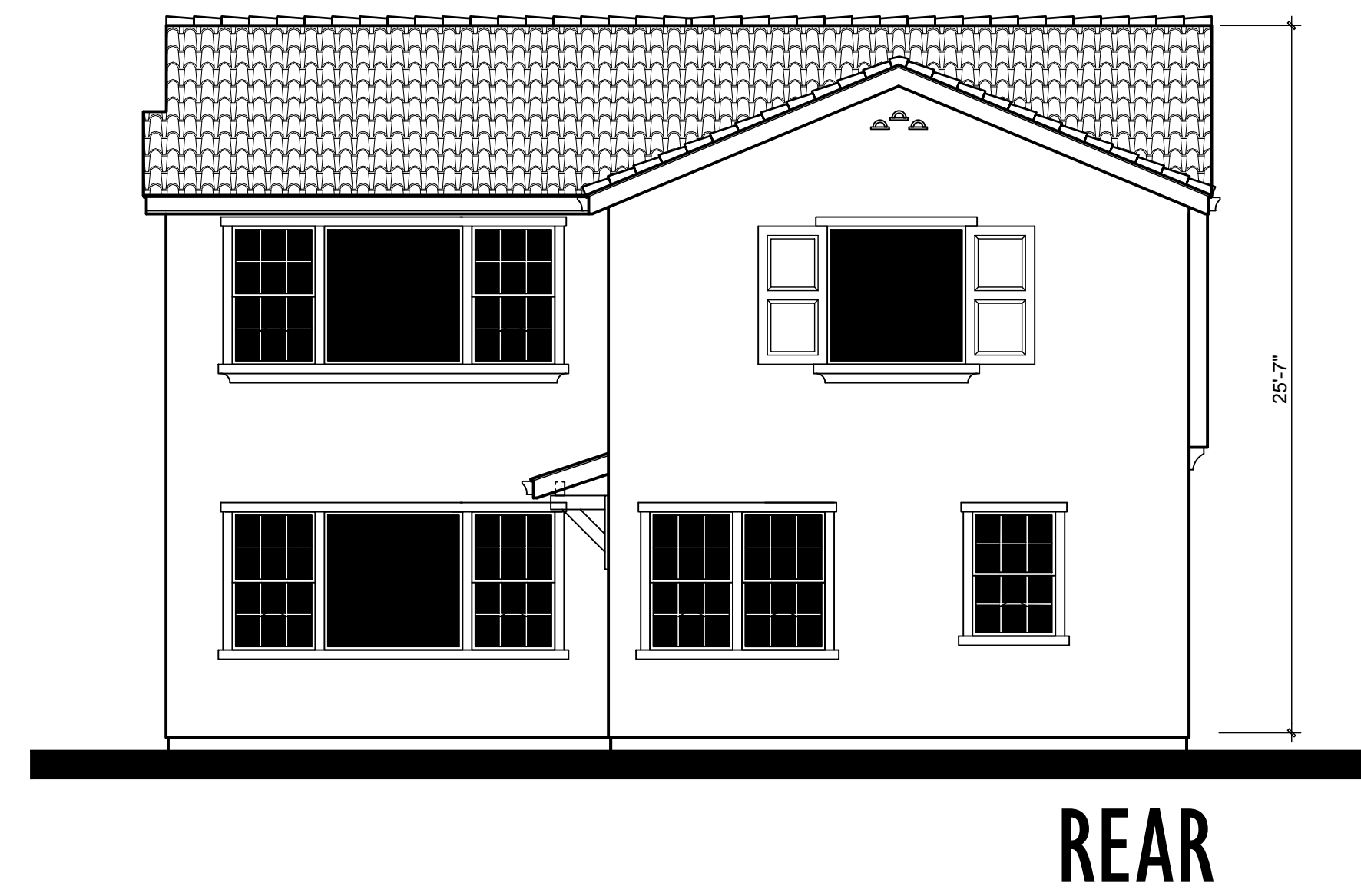
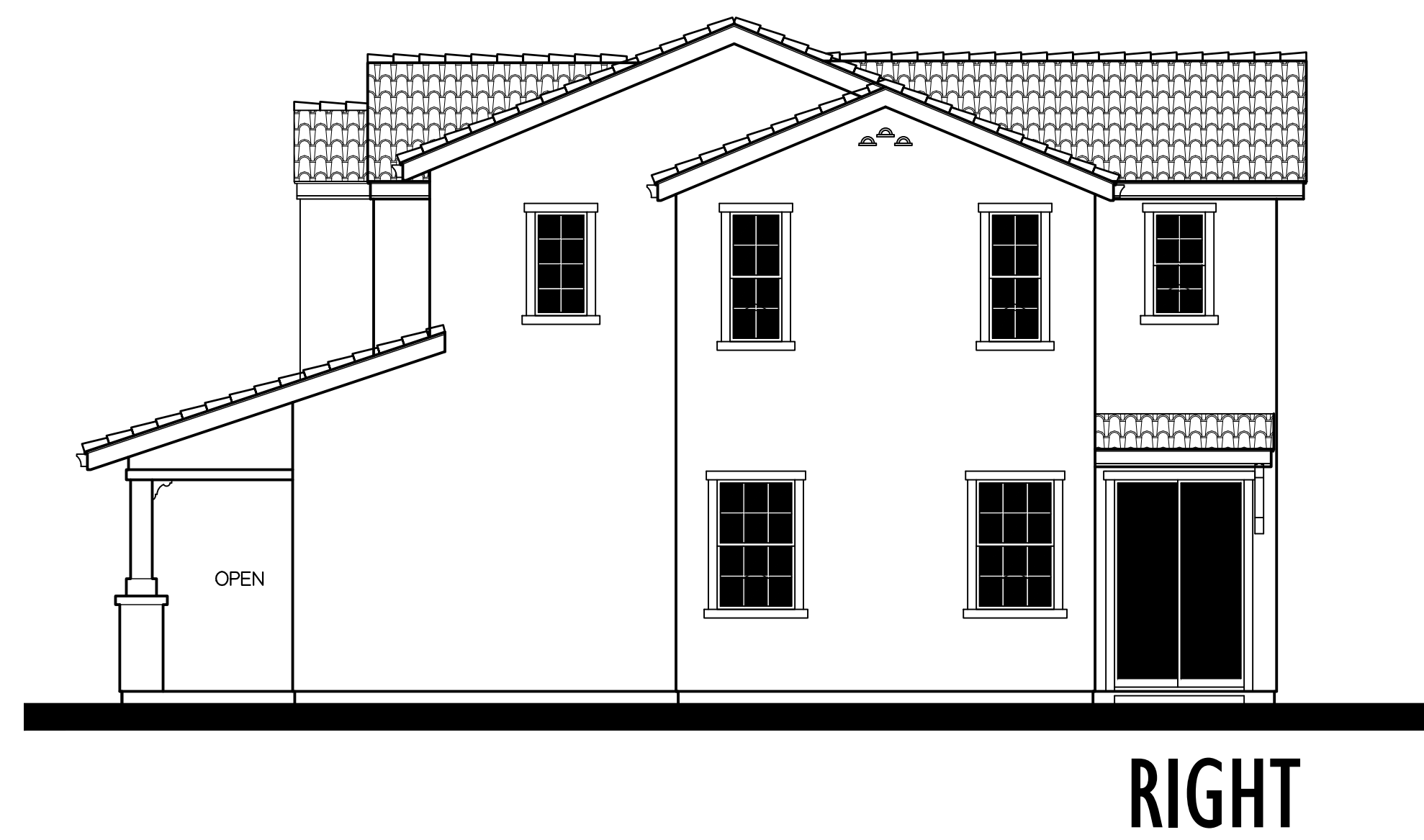
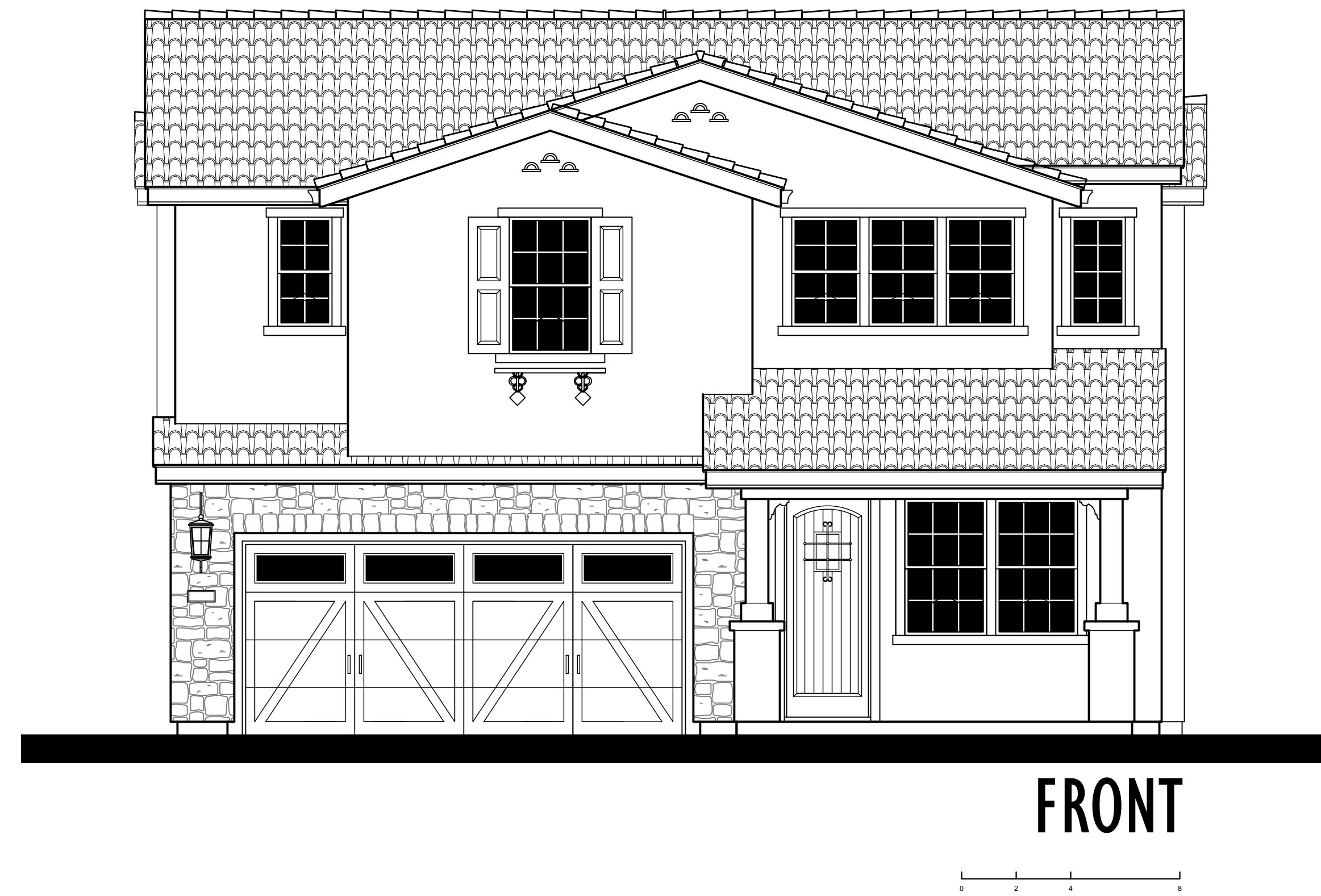


First Floor
806 s.f.

Floor Plan - Plan 1 Summary:
Great Room / Entertaining
3 Bedrooms and Loft
2.5 Baths
1,956 s.f.









1A Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves, 2" Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim

ELEVATION 2A MISSION



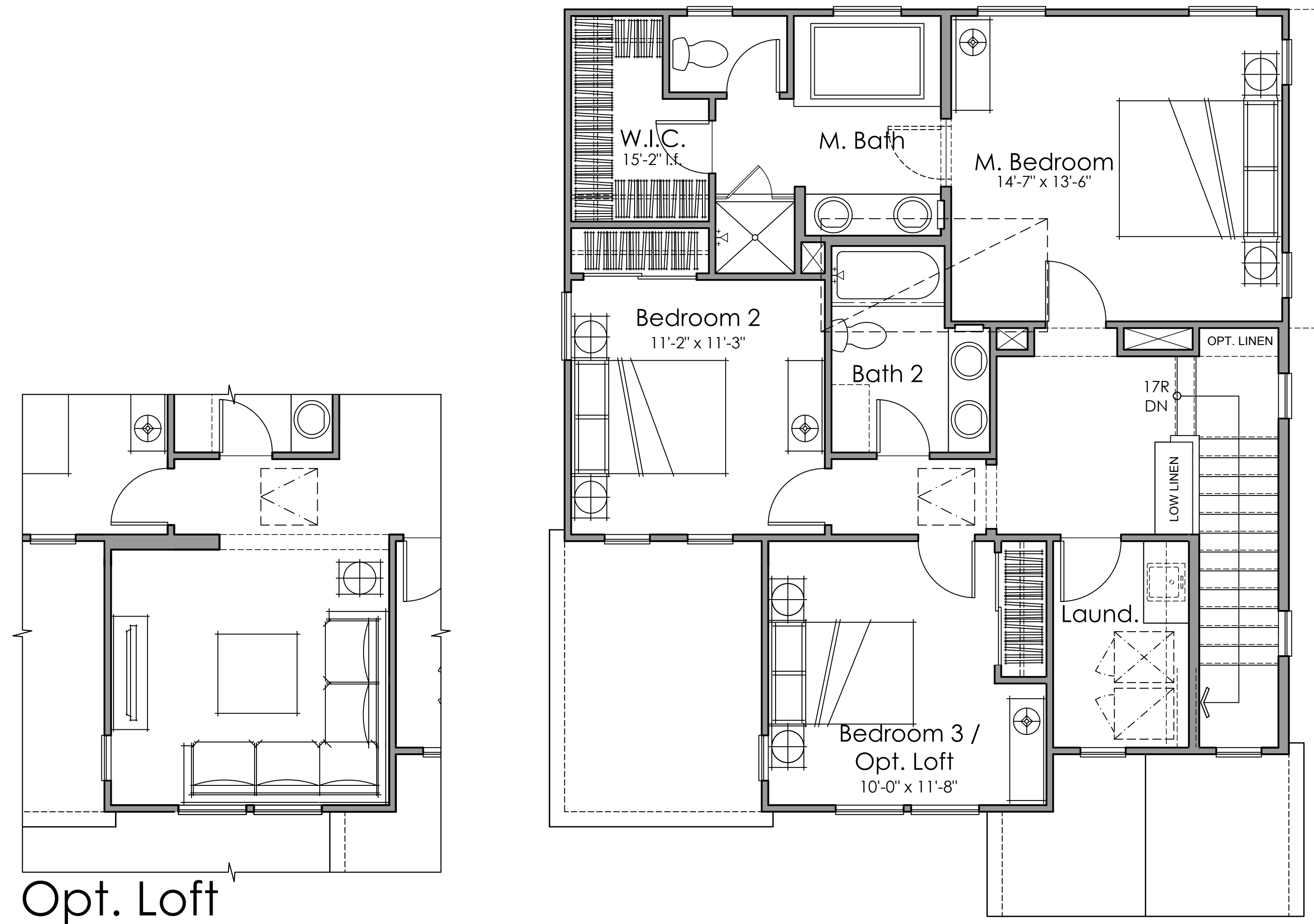
1B Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves & Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Brackets

ELEVATION 2B SPANISH RESORT

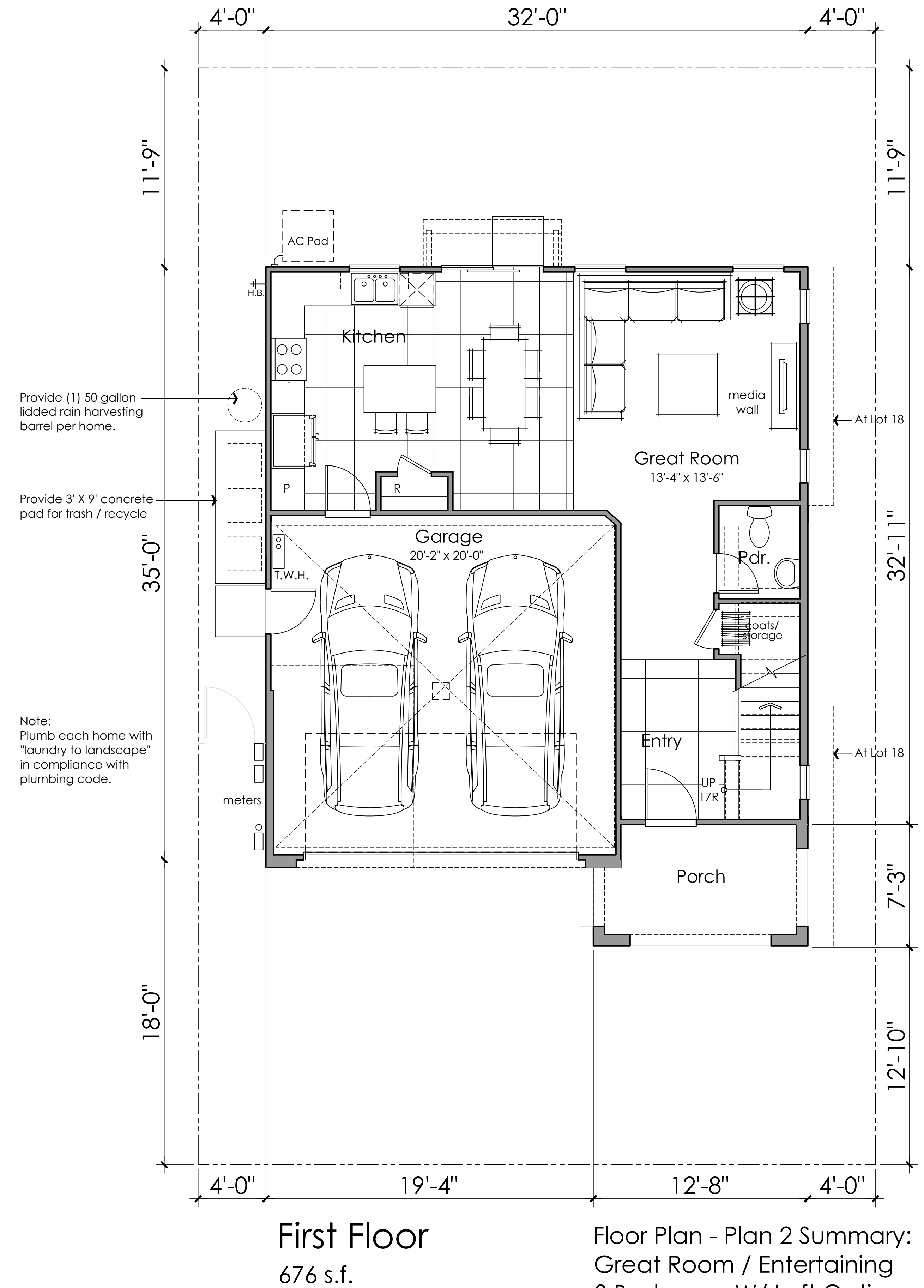


1C Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves & Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Stone Veneer

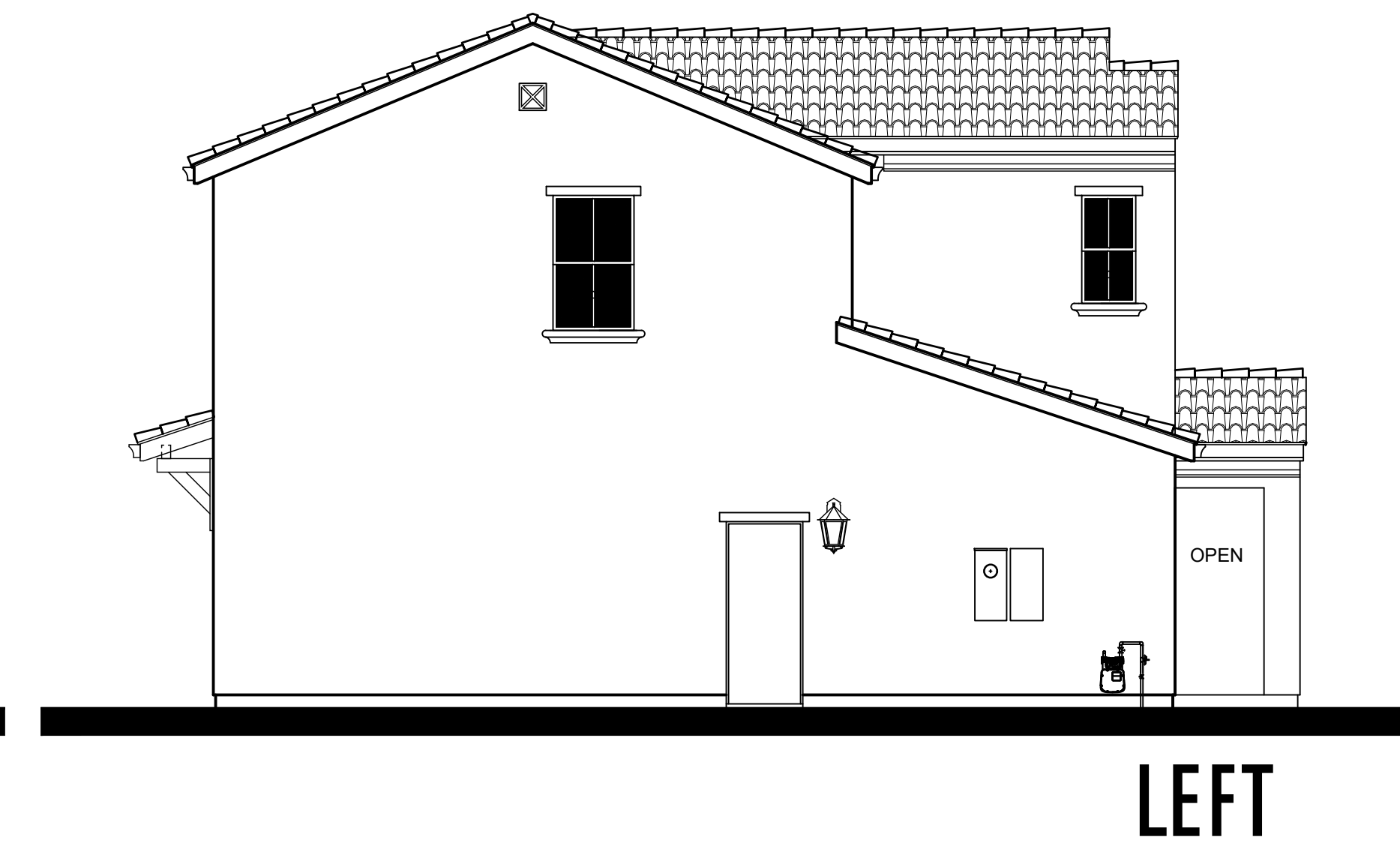
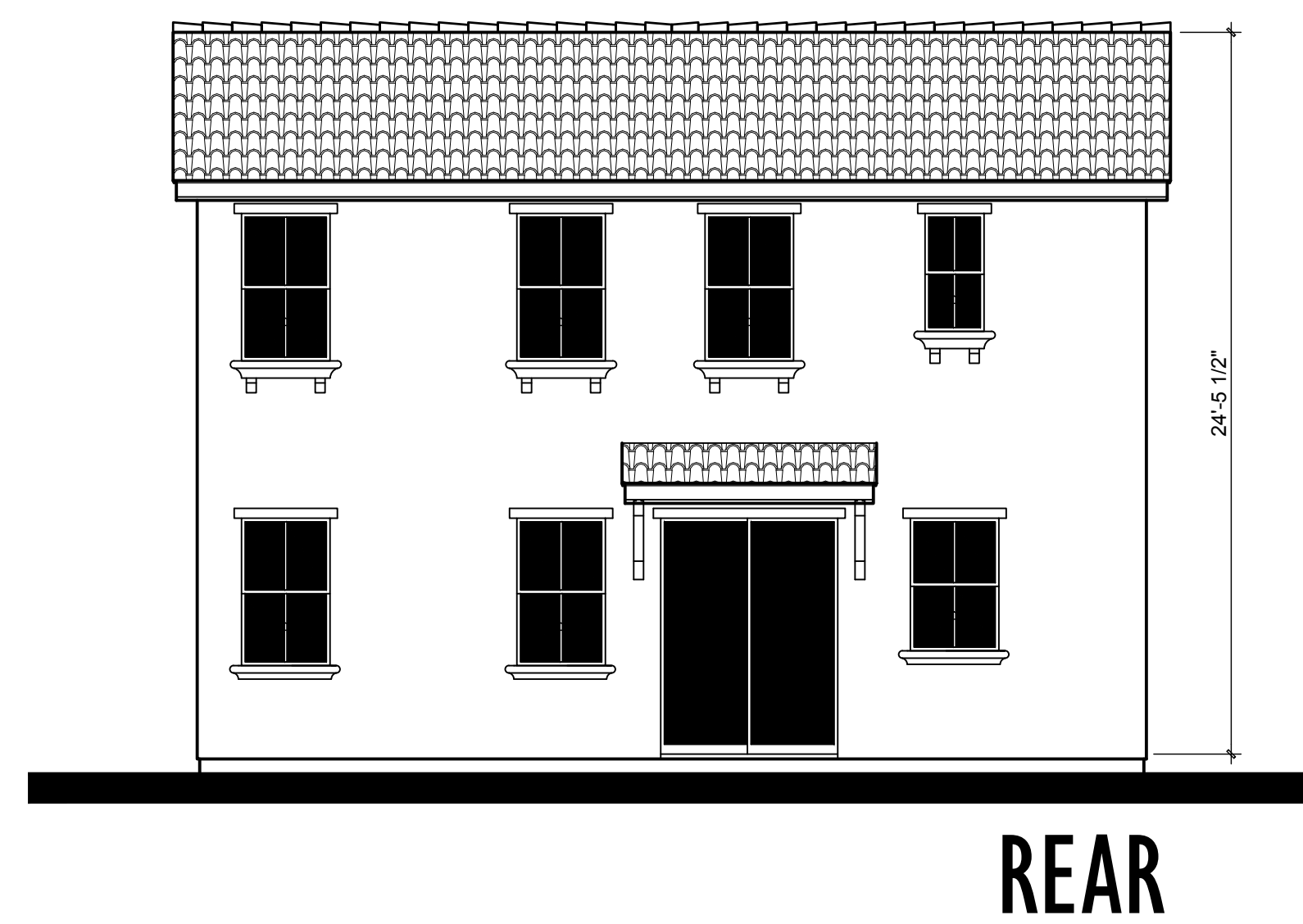
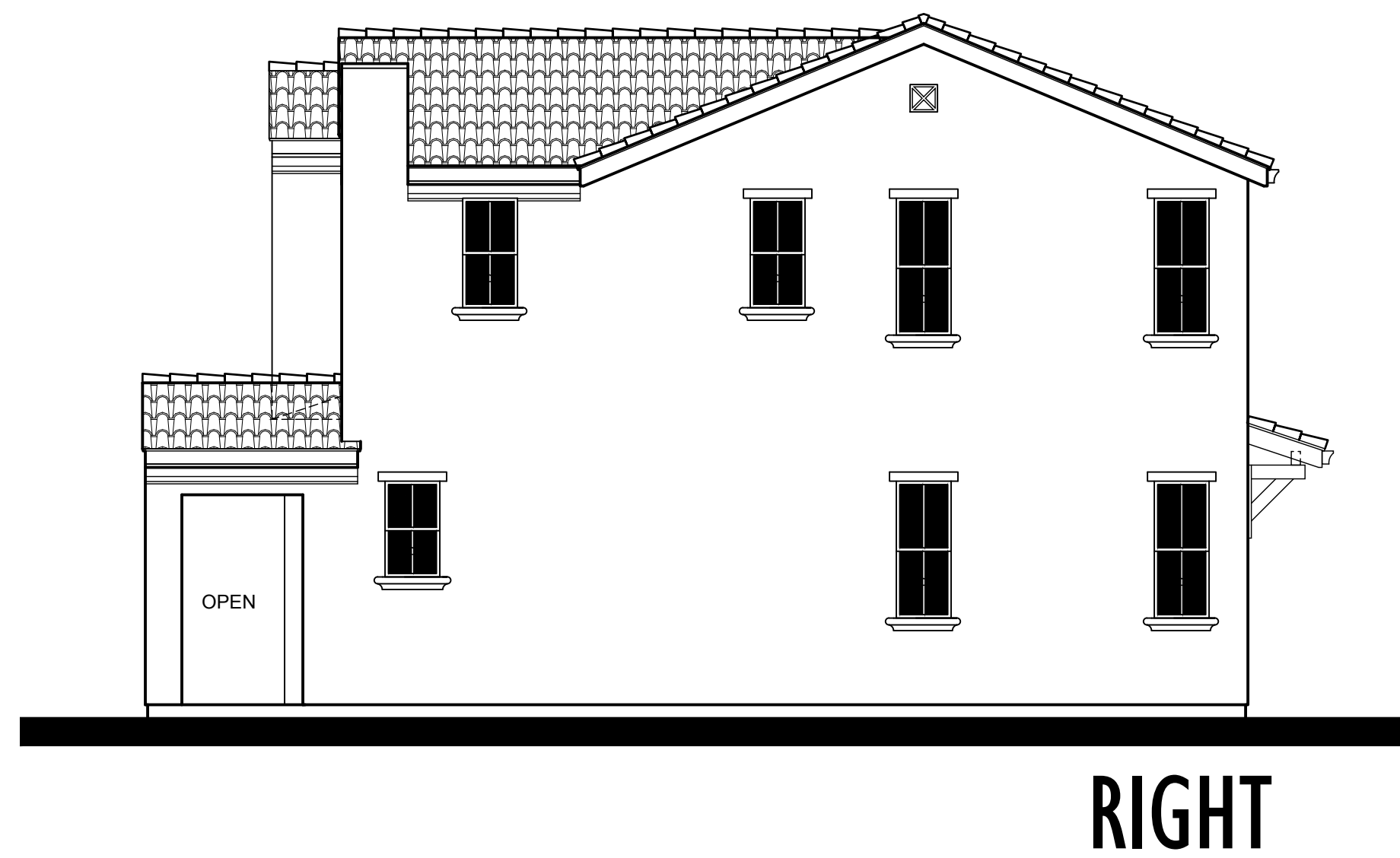
ELEVATION 2C HACIENDA

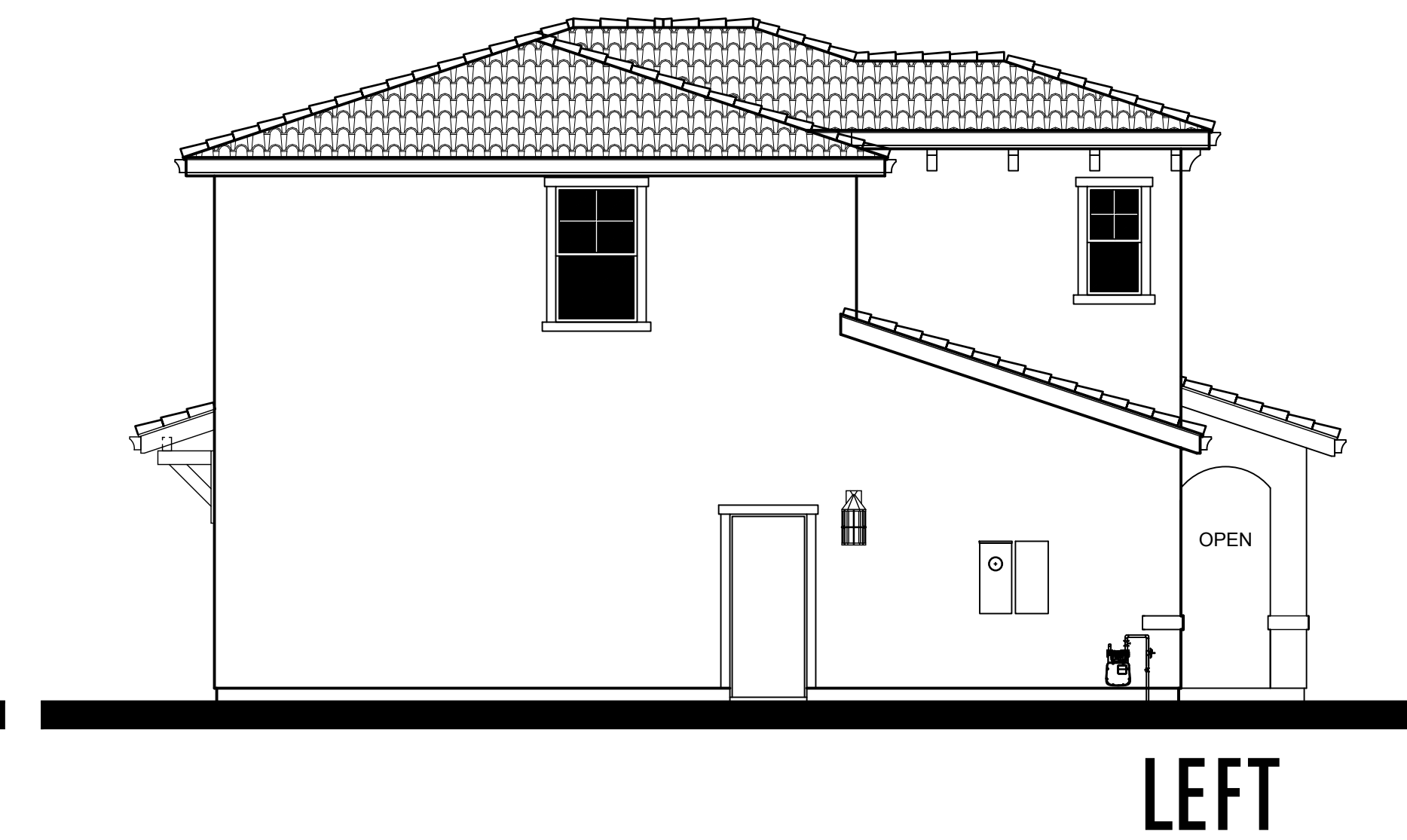
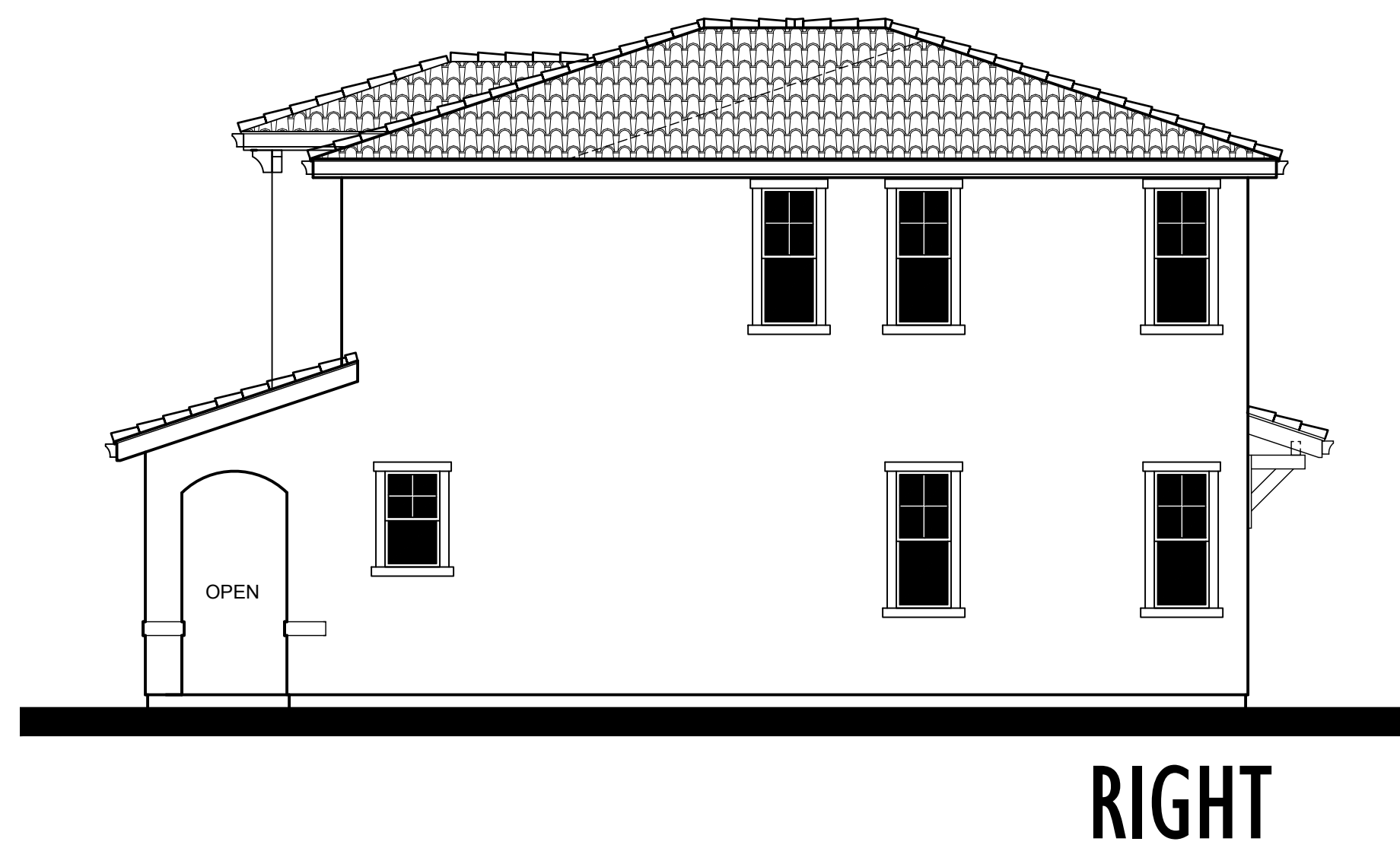


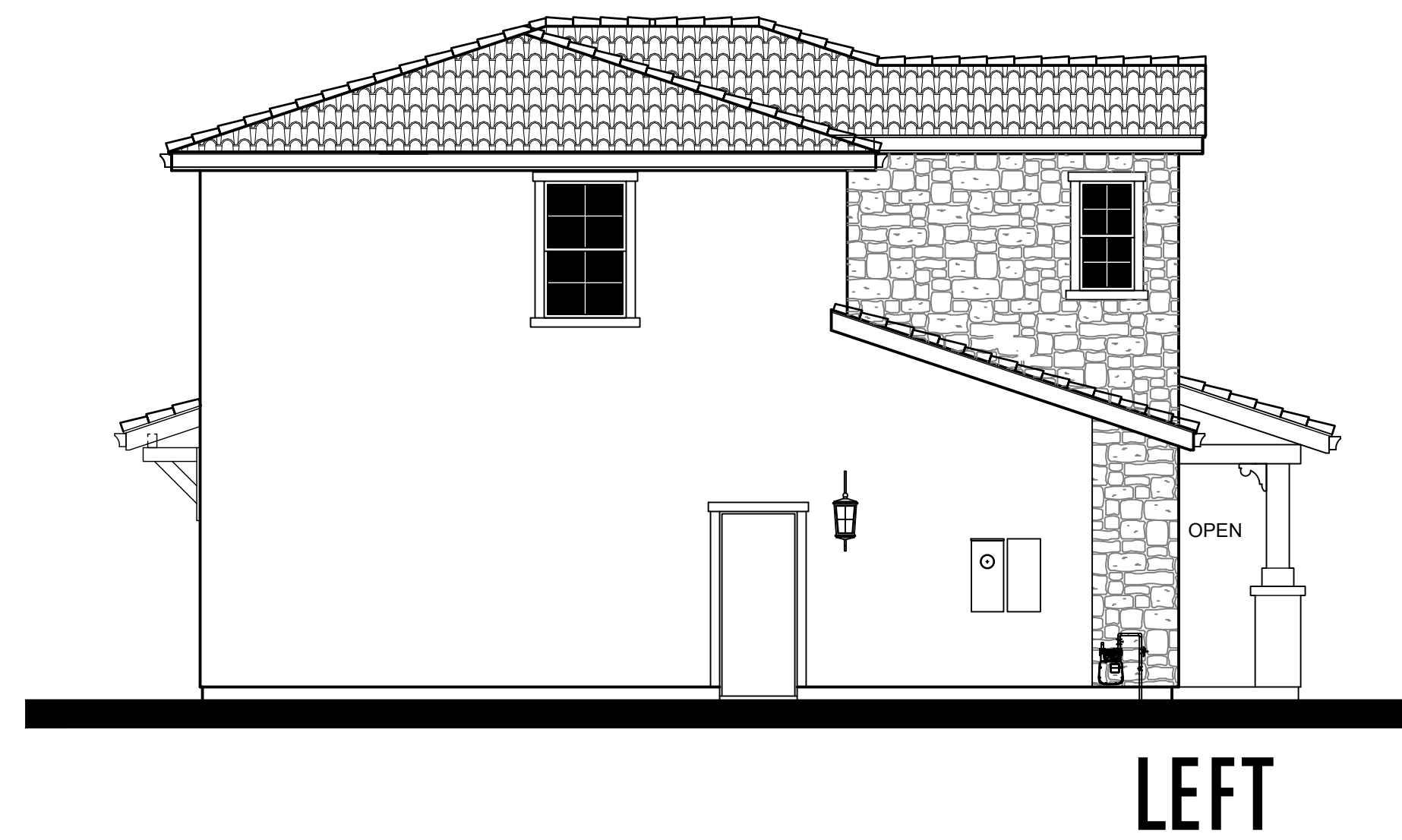
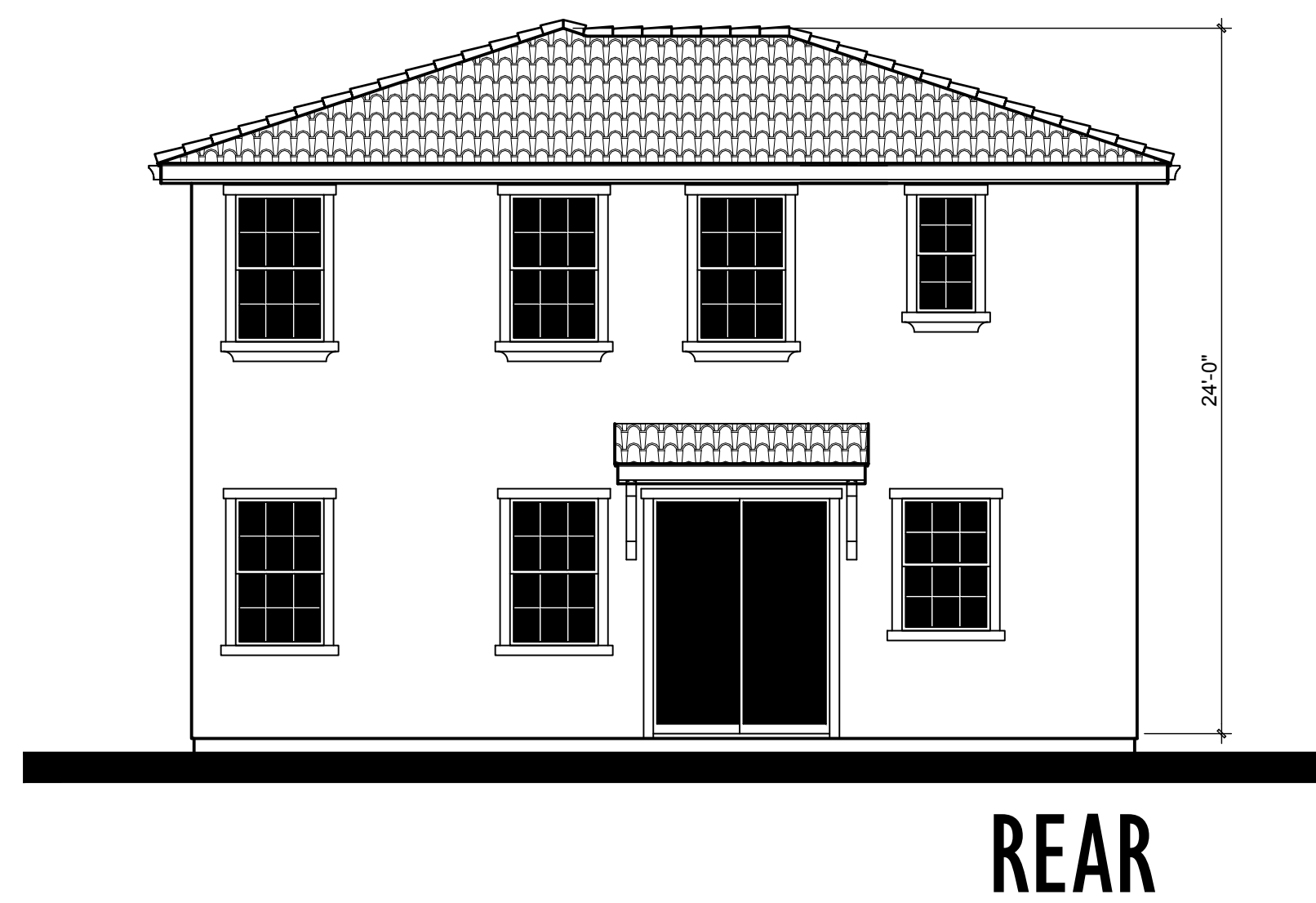
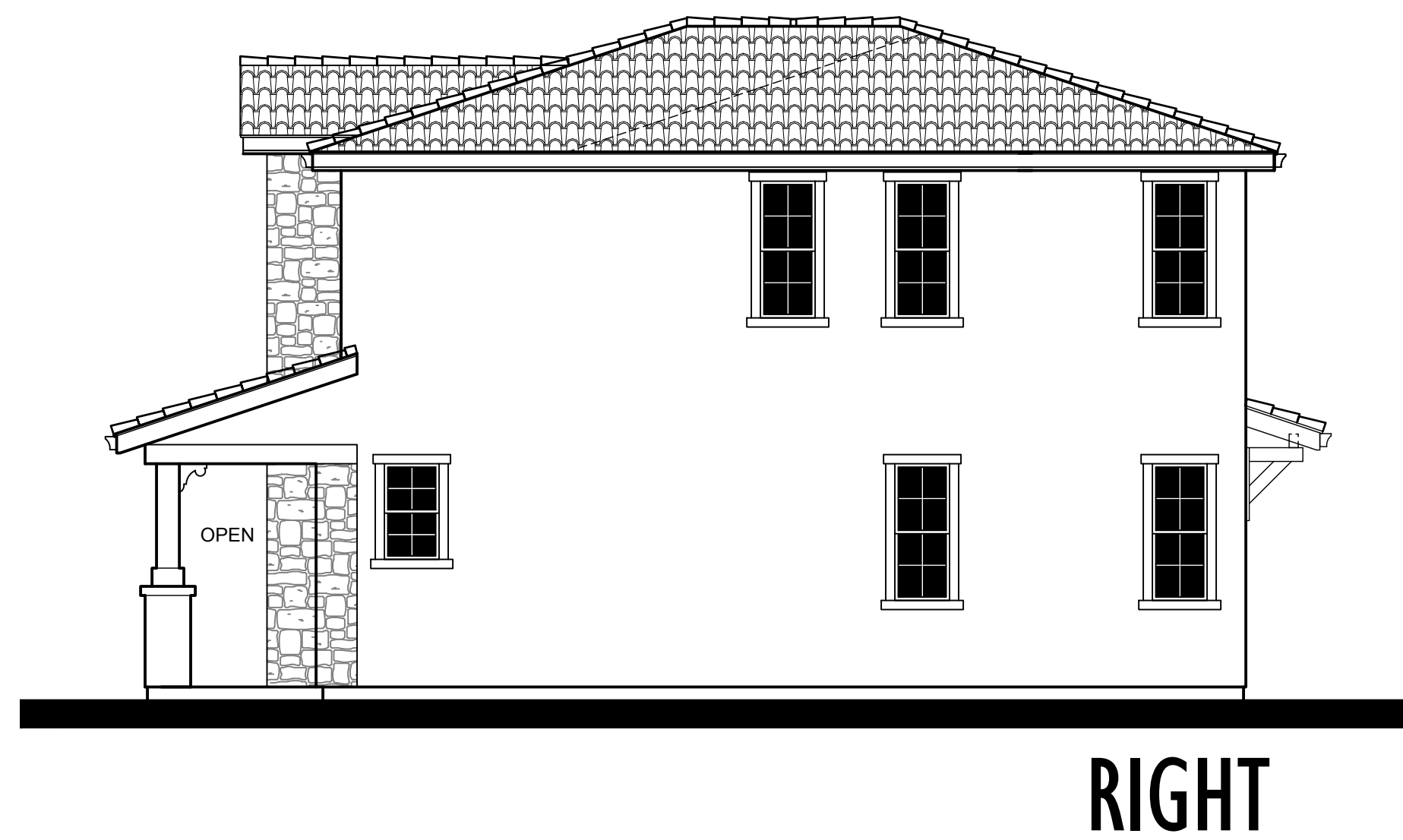
Second Floor
962 s.f.

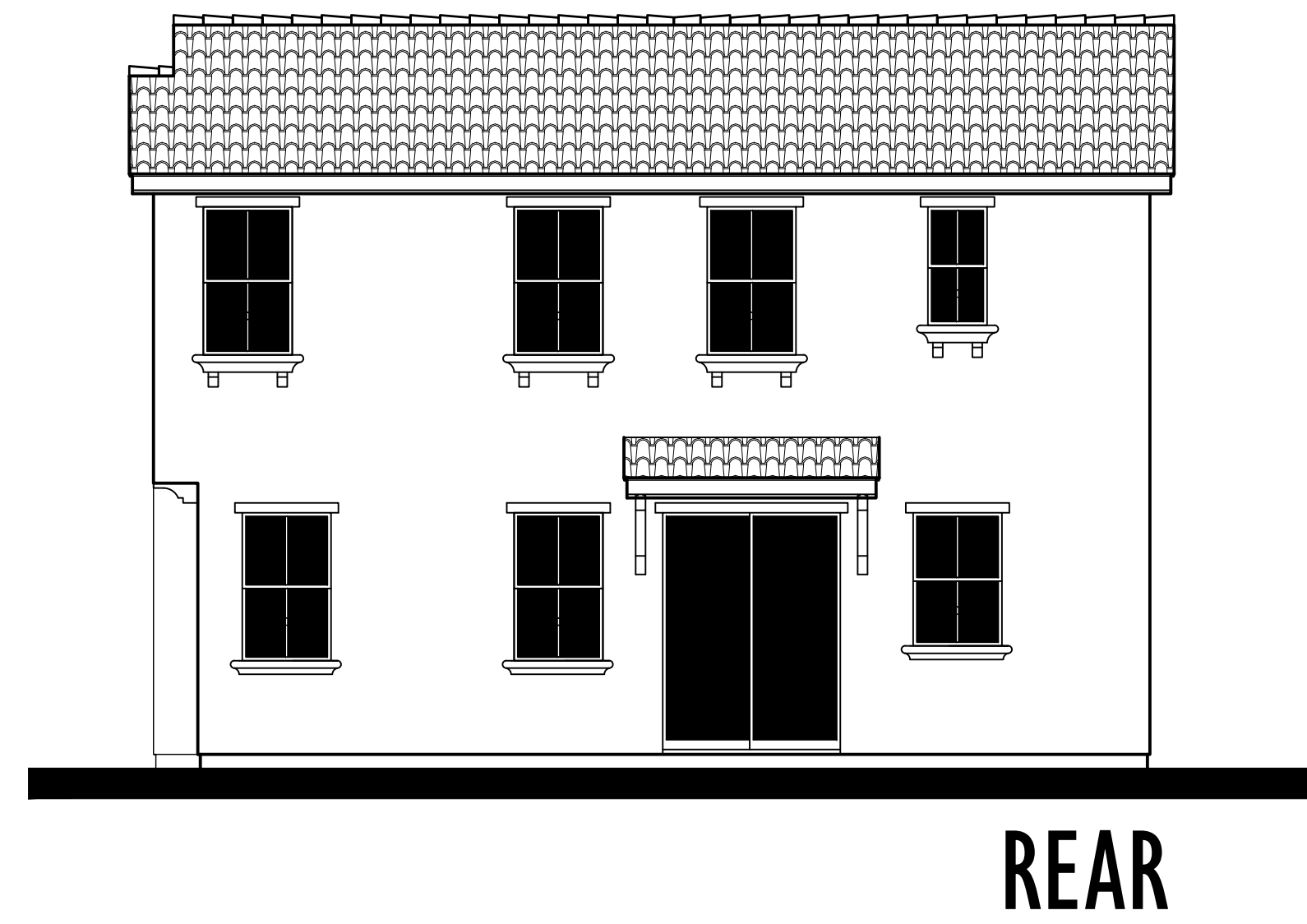


Floor Plan - Plan 2 Summary:
Great Room / Entertaining
3 Bedrooms W/ Loft Option
2.5 Baths
1,638 s.f.











3A Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves, 2" Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim

ELEVATION 3A MISSION



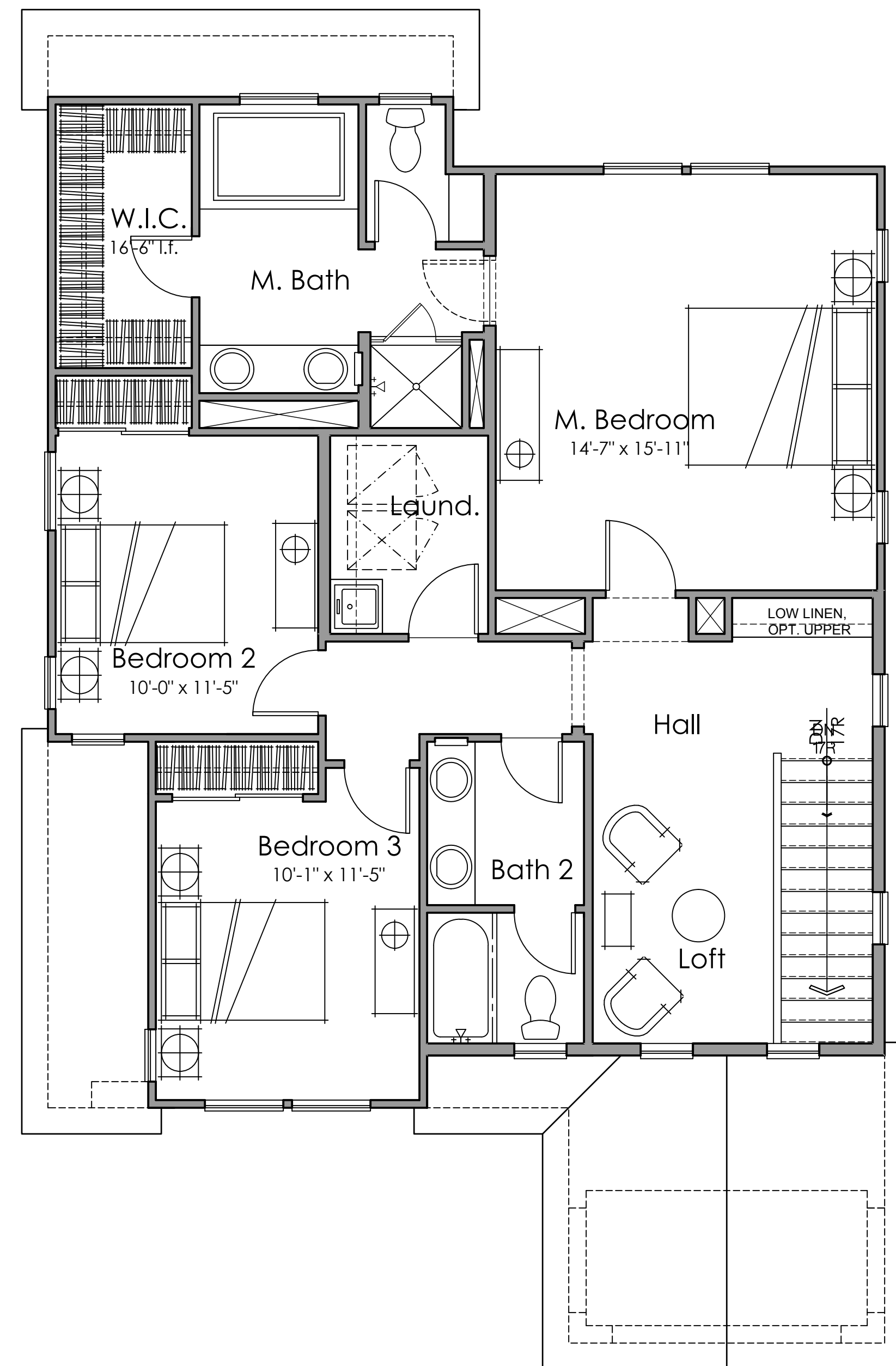
3B Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves & Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Brackets

ELEVATION 3B SPANISH RESORT



3C Materials-
Concrete Roof Tile
"Low Profile S Tile"
12" Eaves & Rakes
Decorative Details
Coach Light
1x Stucco Finish Trim
Stone Veneer

ELEVATION 3C HACIENDA

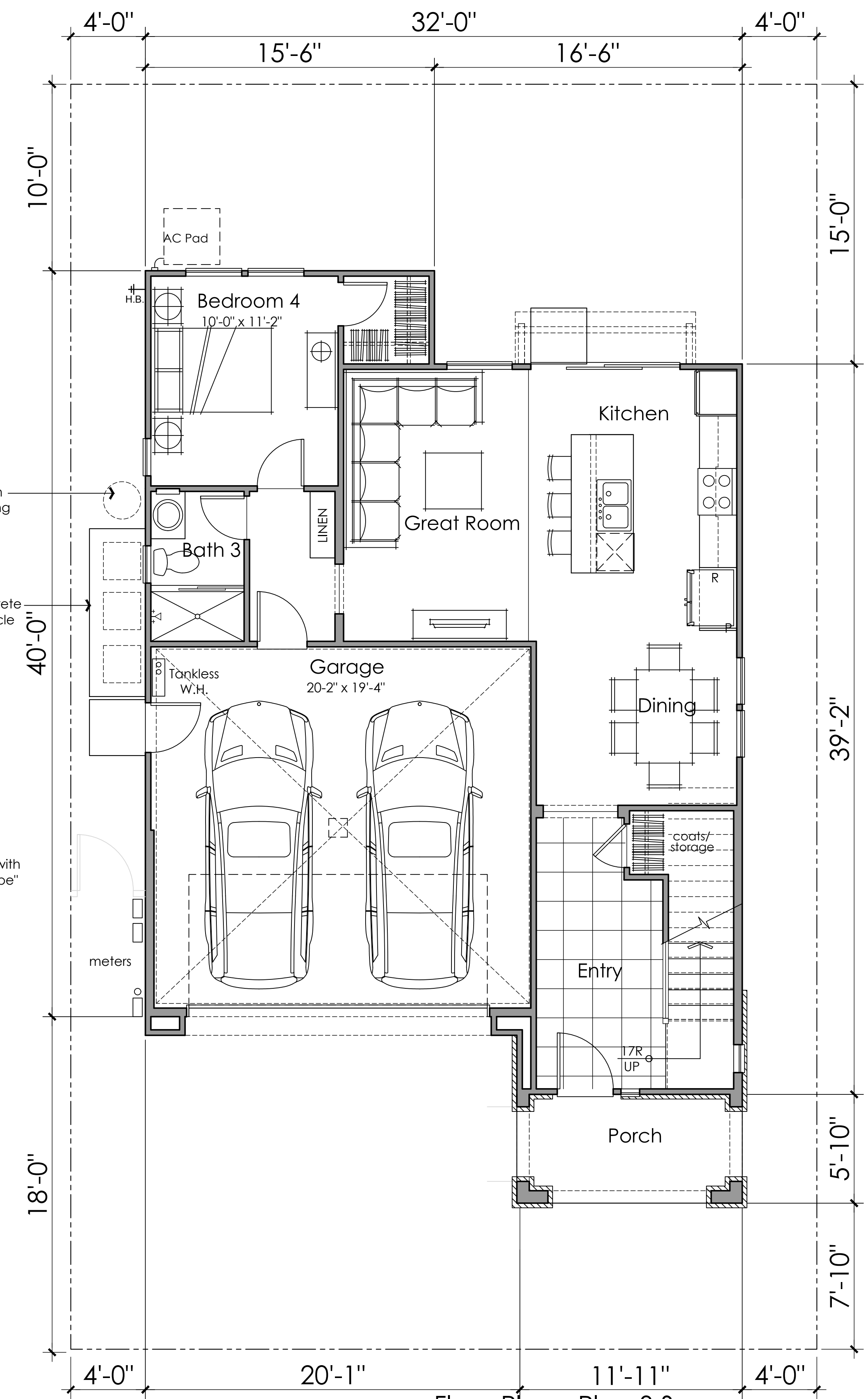


Second Floor
1080 s.f.

Provide (1) 50 gallon
lidded rain harvesting
barrel per home.

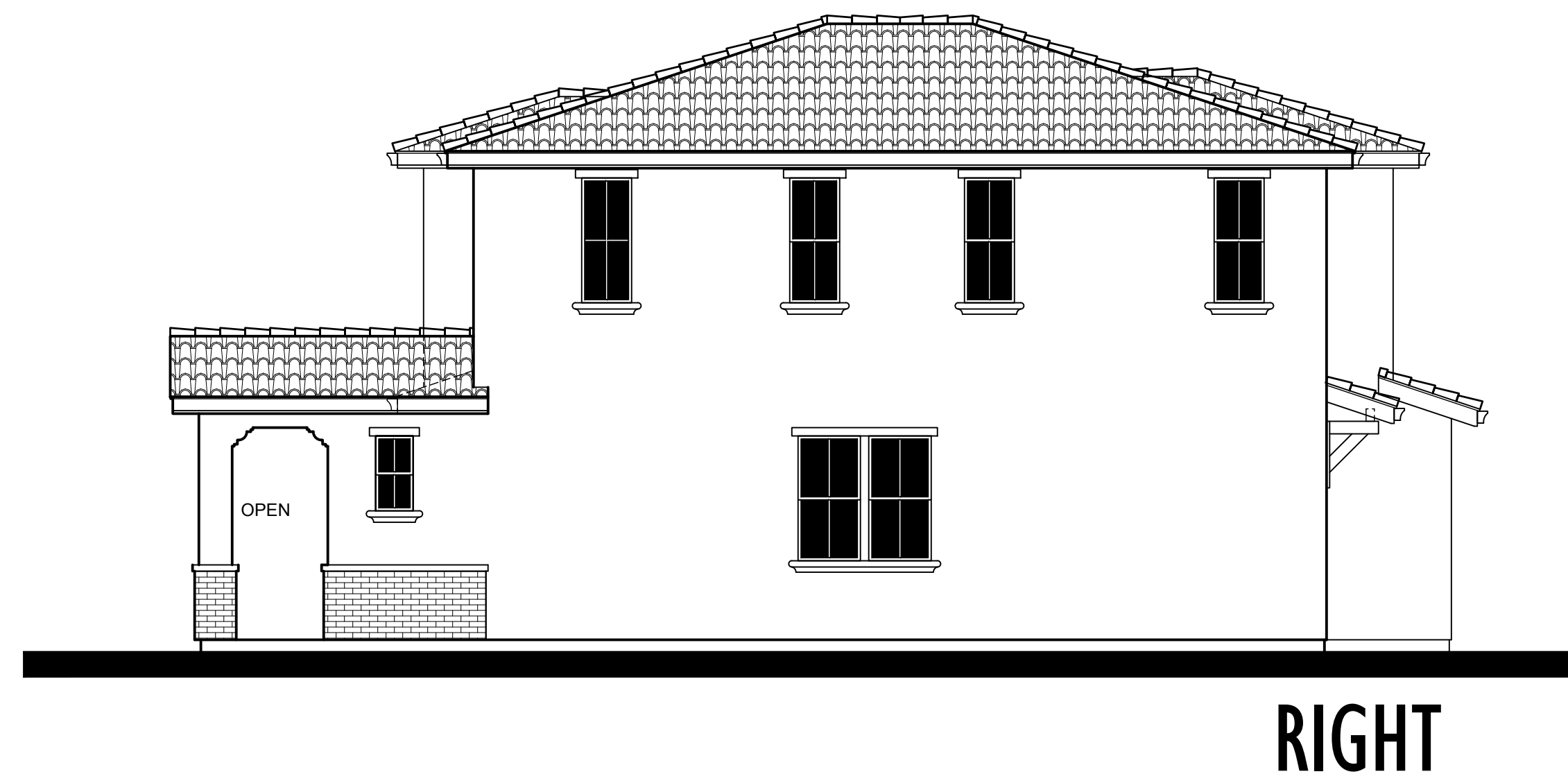
Provide 3' X 9' concrete
pad for trash / recycle

Note:
Plumb each home with
"laundry to landscape"
in compliance with
plumbing code.

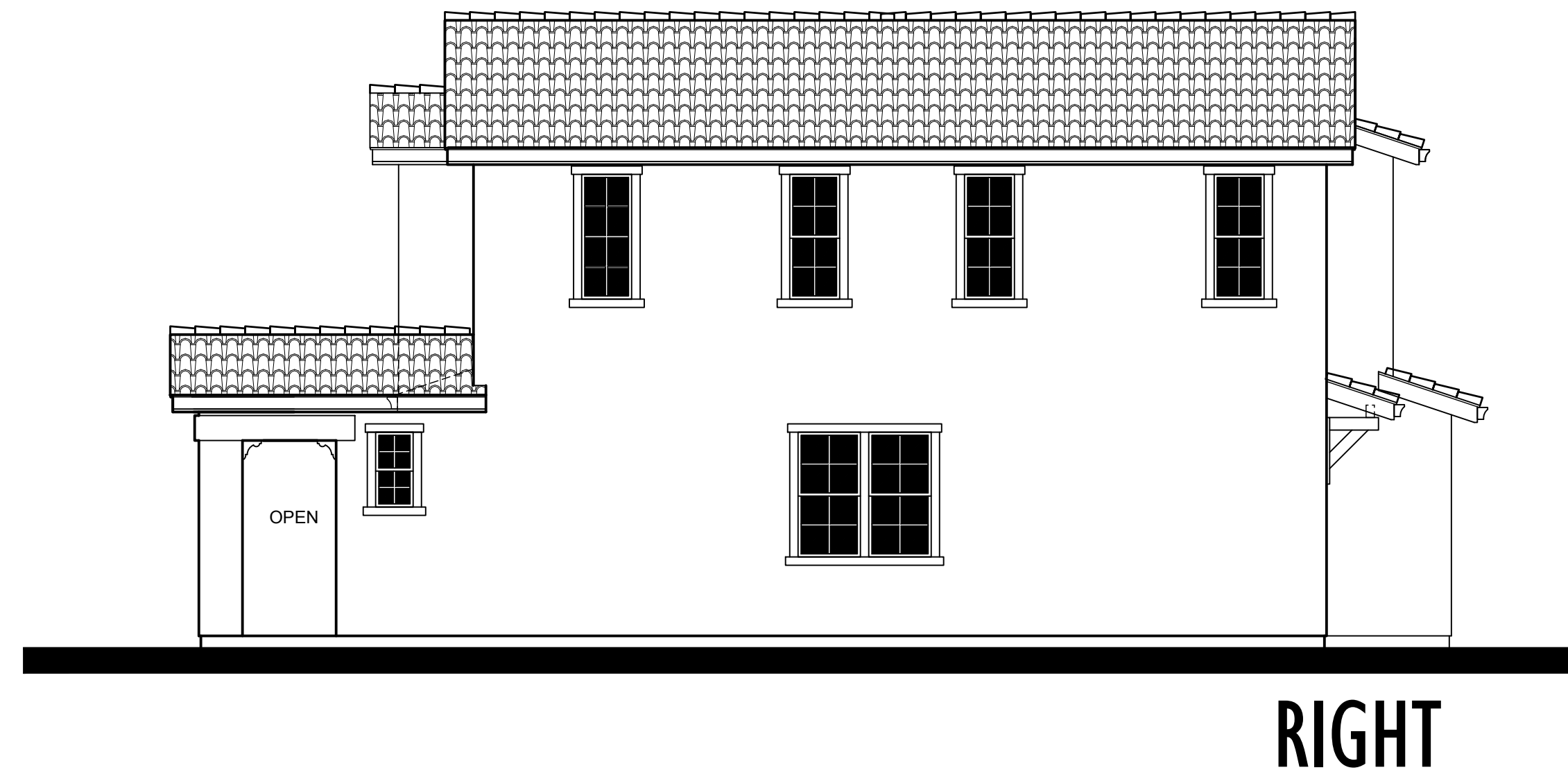


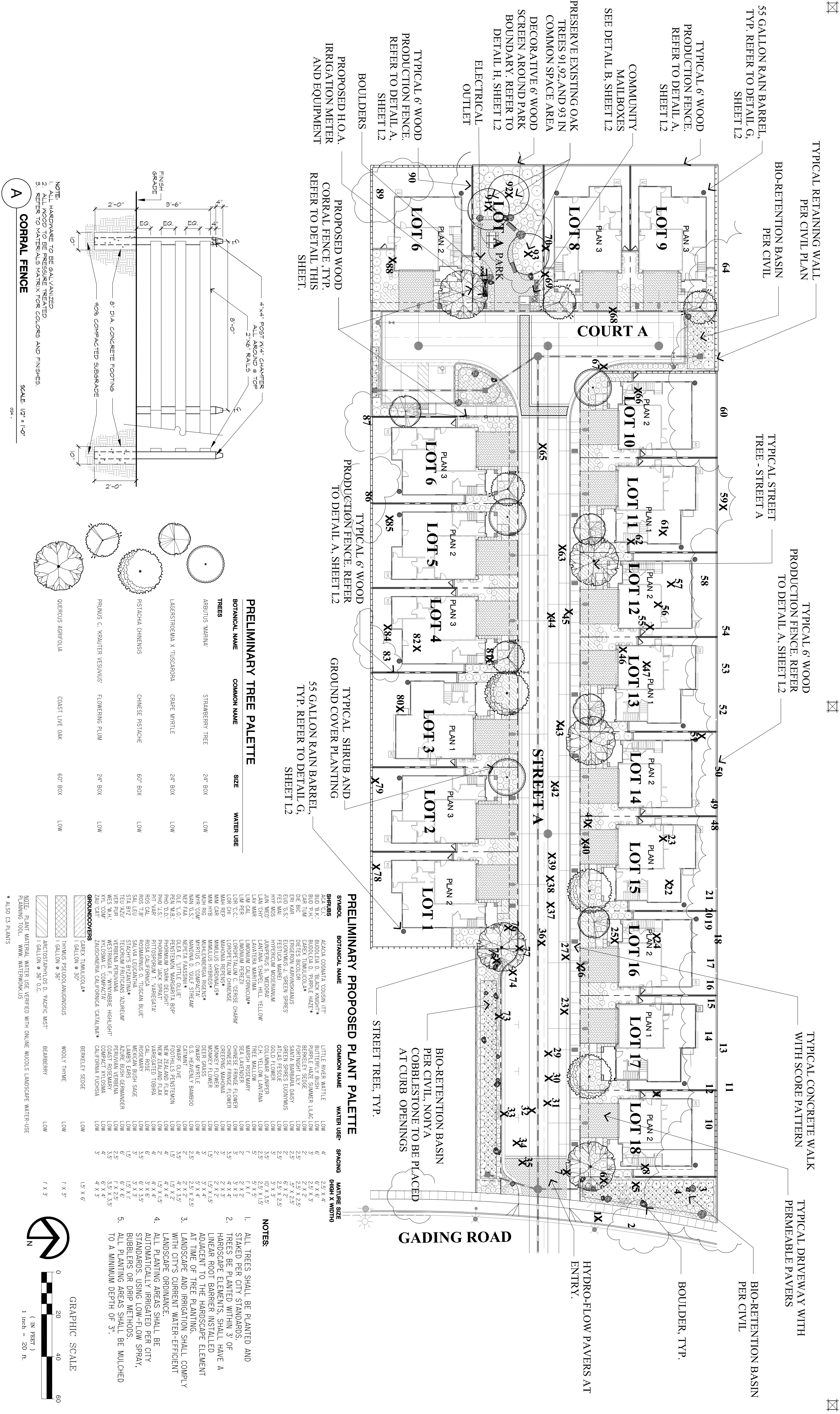
First Floor
835 s.f.

Floor Plan - Plan 3 Summary:
Great Room / Entertaining
4 Bedrooms W/ Loft
3 Baths
1,915 s.f.









PRELIMINARY PROPOSED PLANT PALETTE			
SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE
	SHRUBS		
	TREES		
	GROUNDCOVERS		



Gading II

Hayward, California

LANDSCAPE ARCHITECTURE

LAND PLANNING

1615 BONANZA STREET

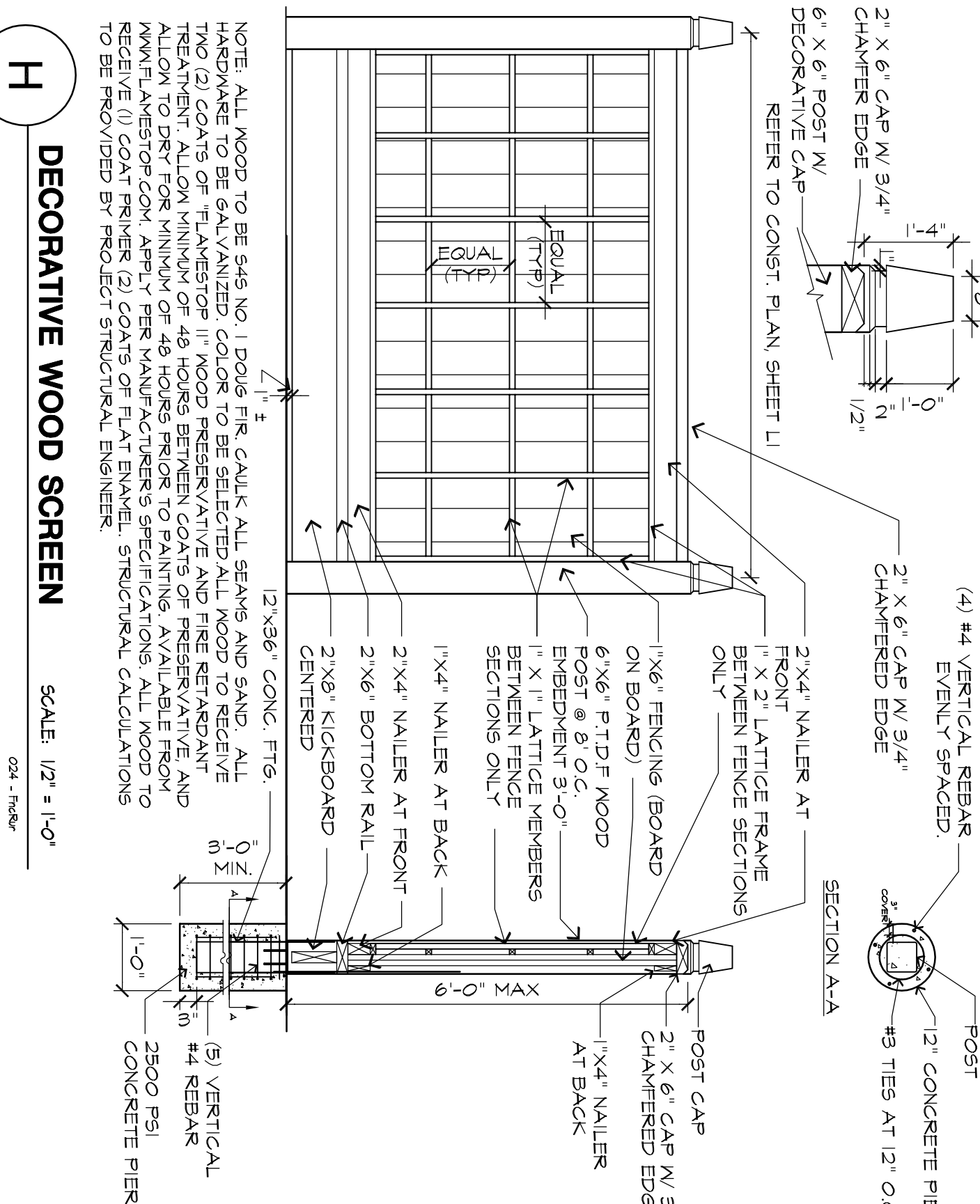
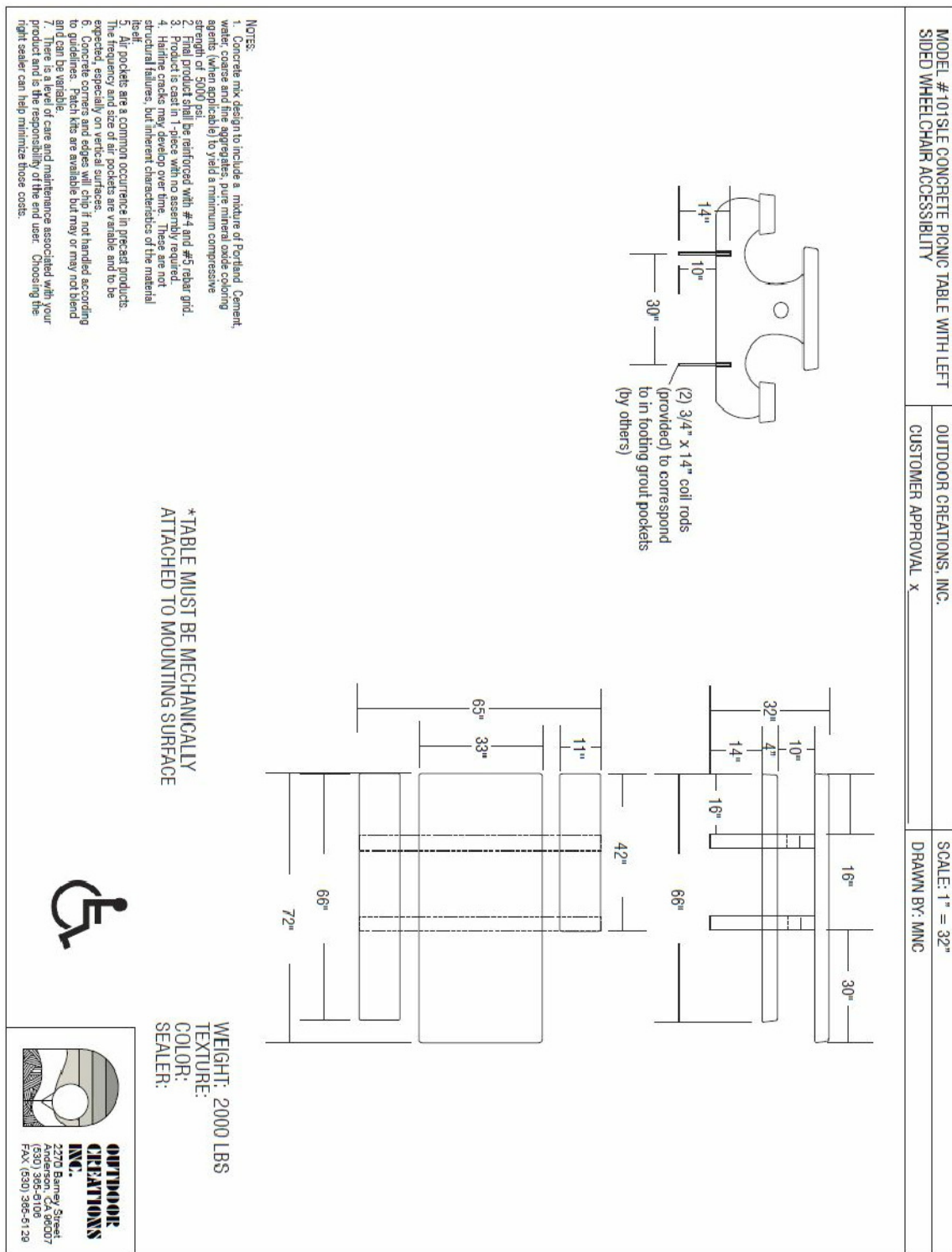
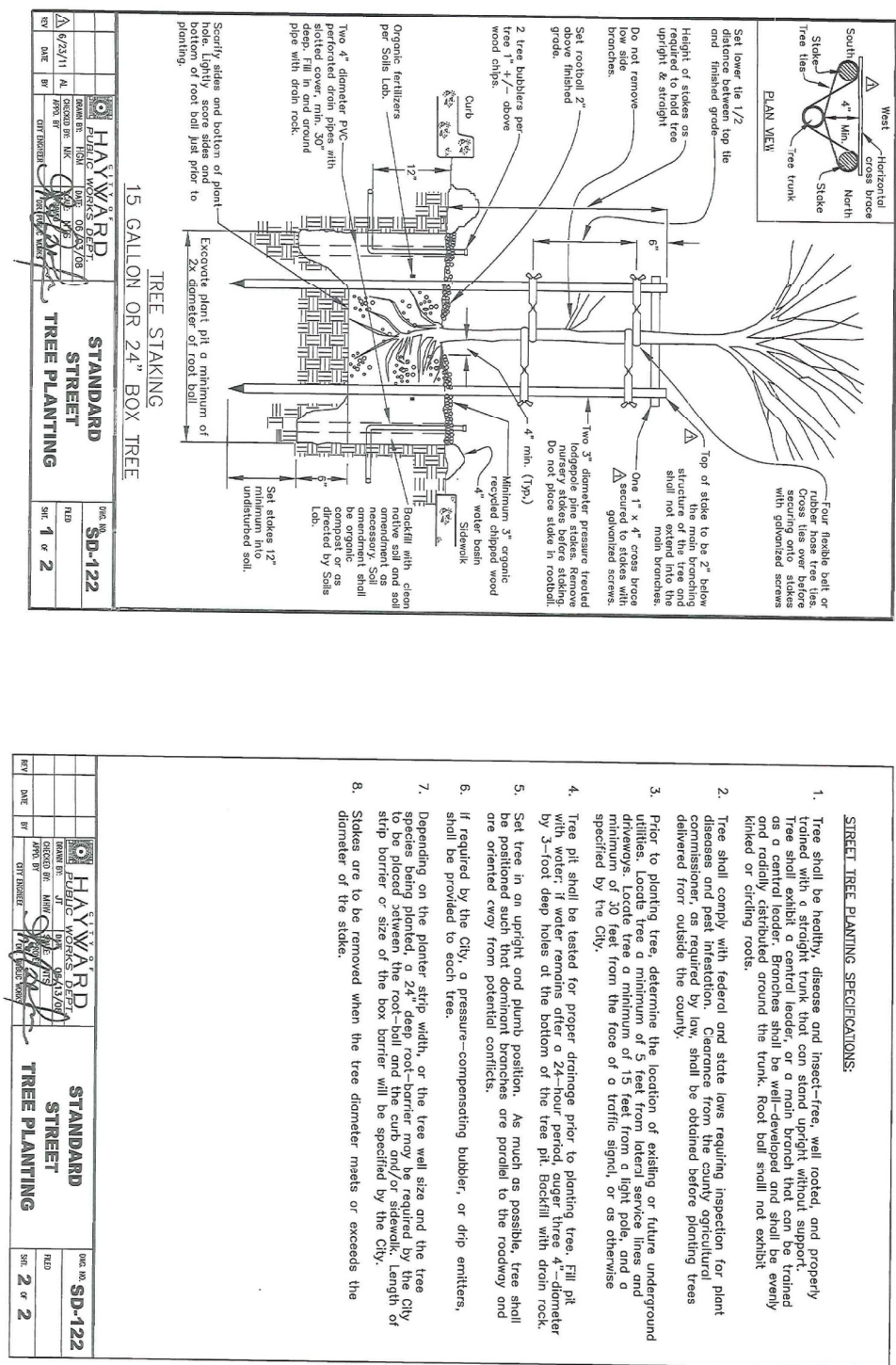
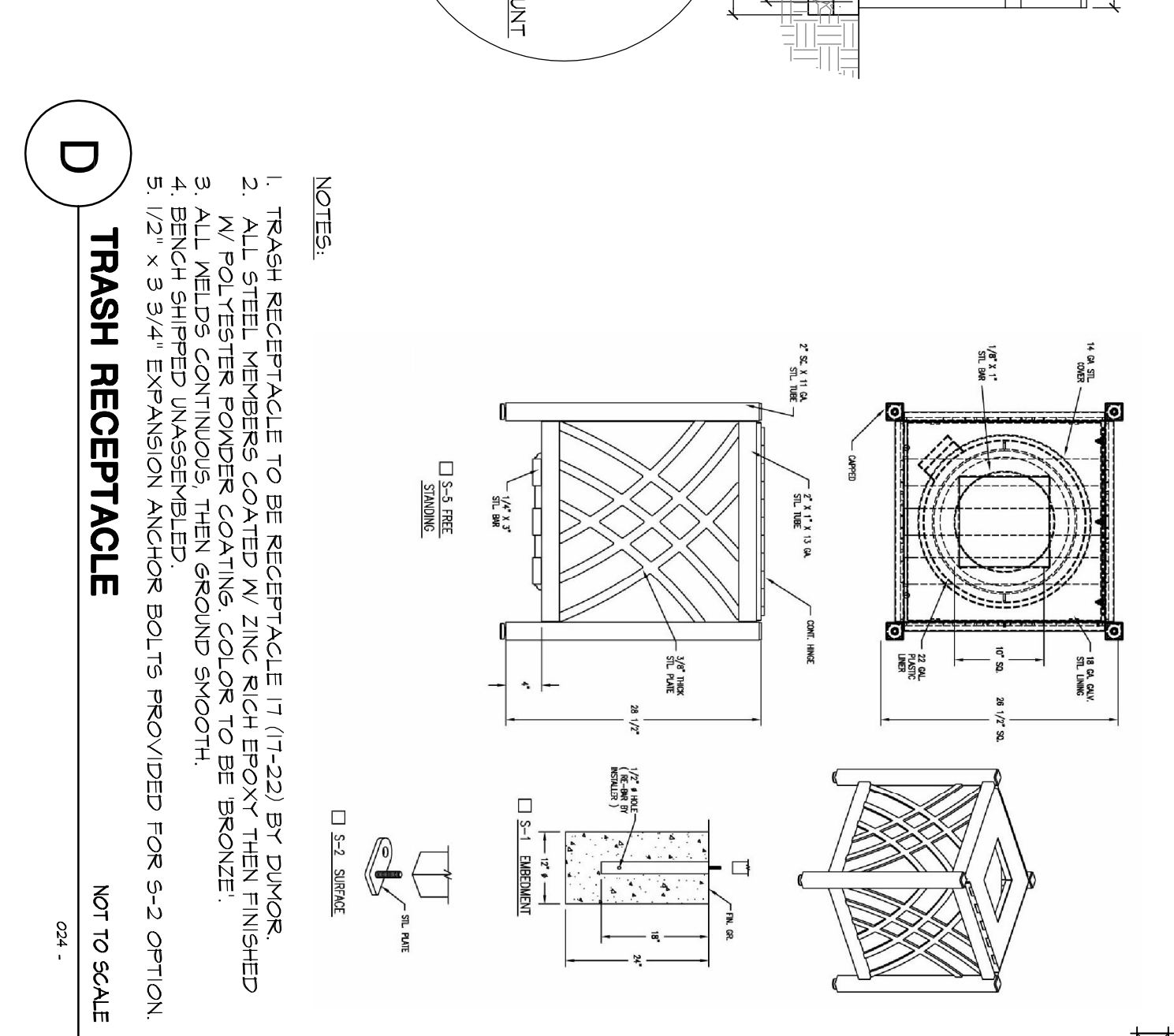
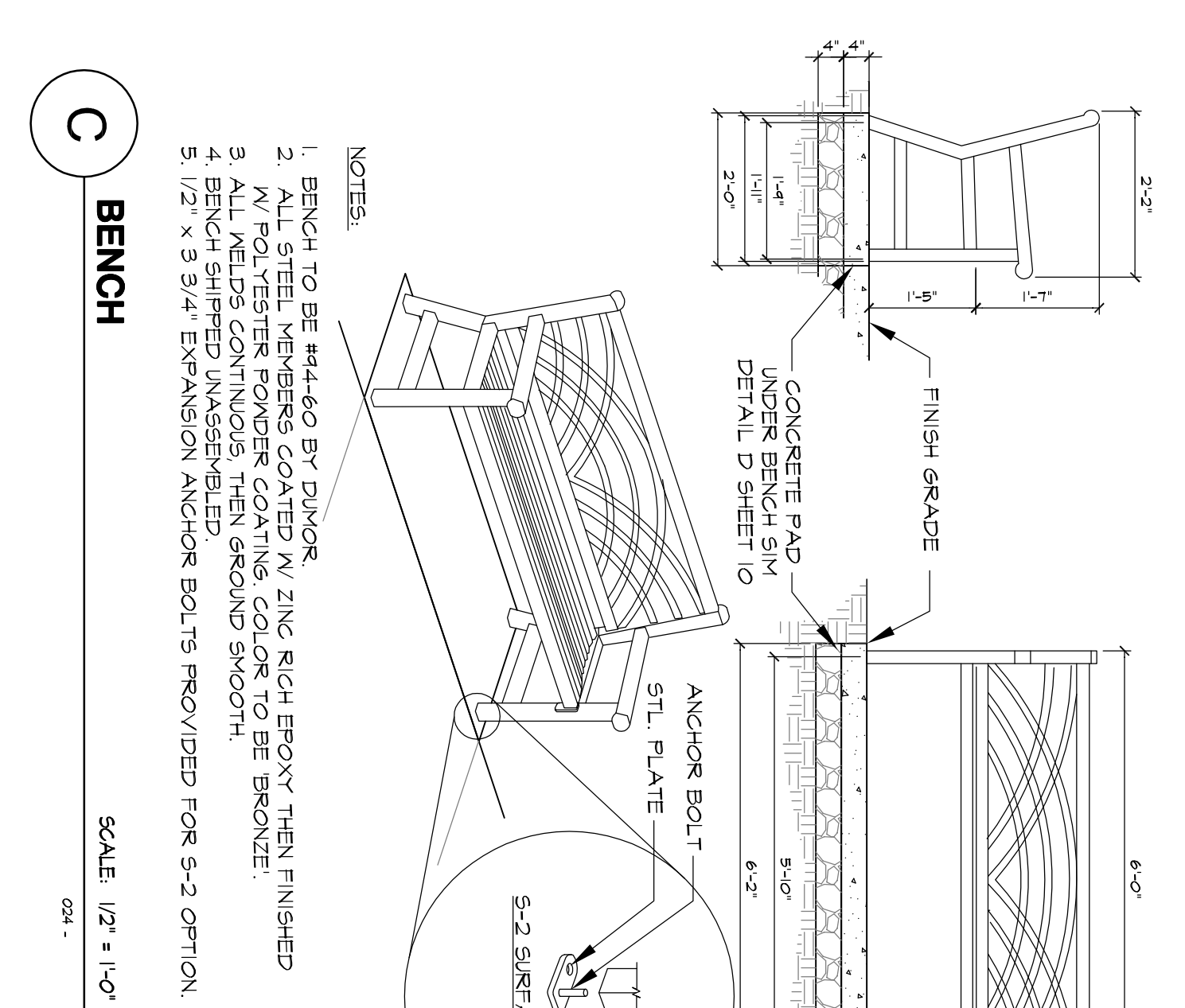
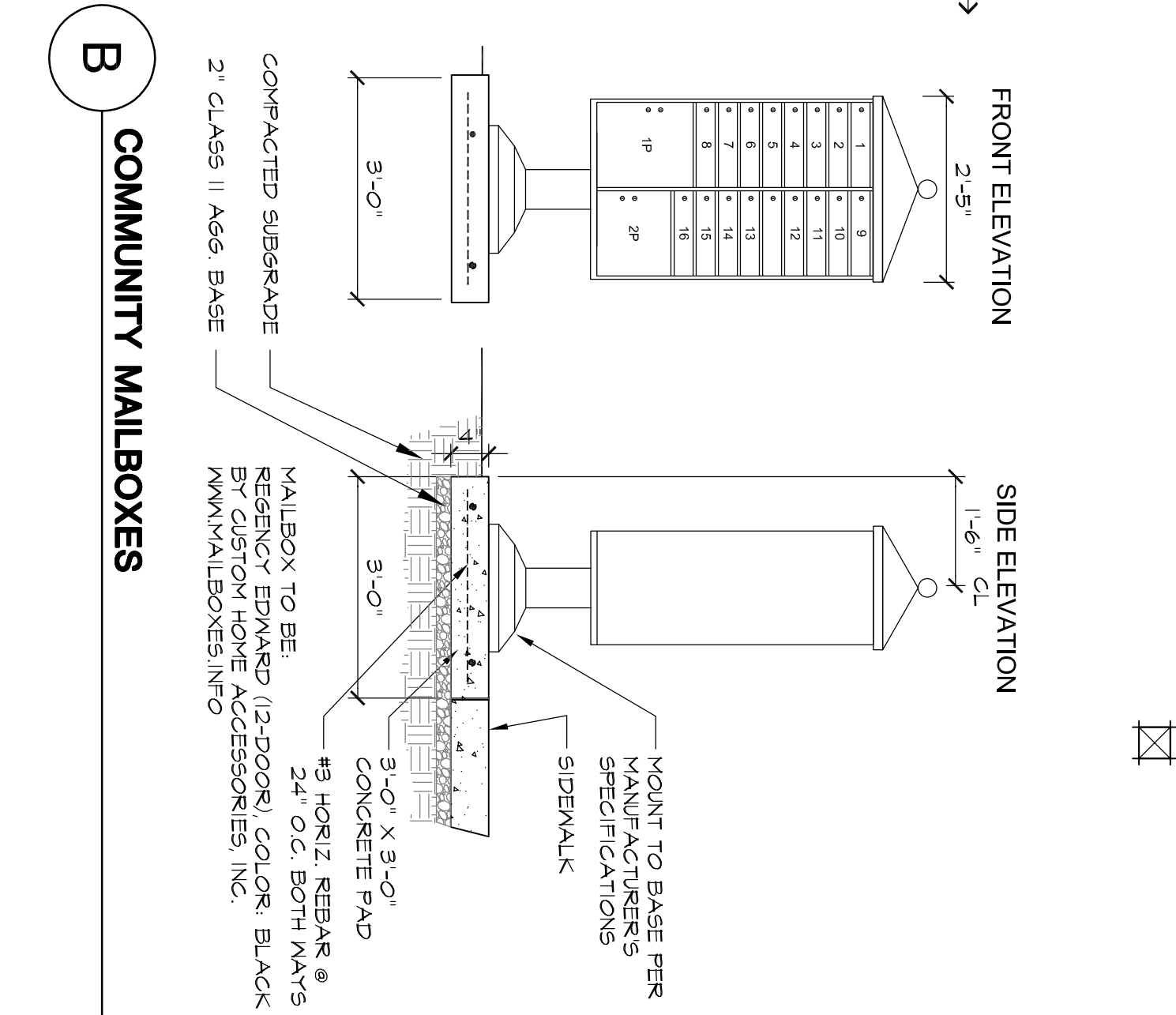
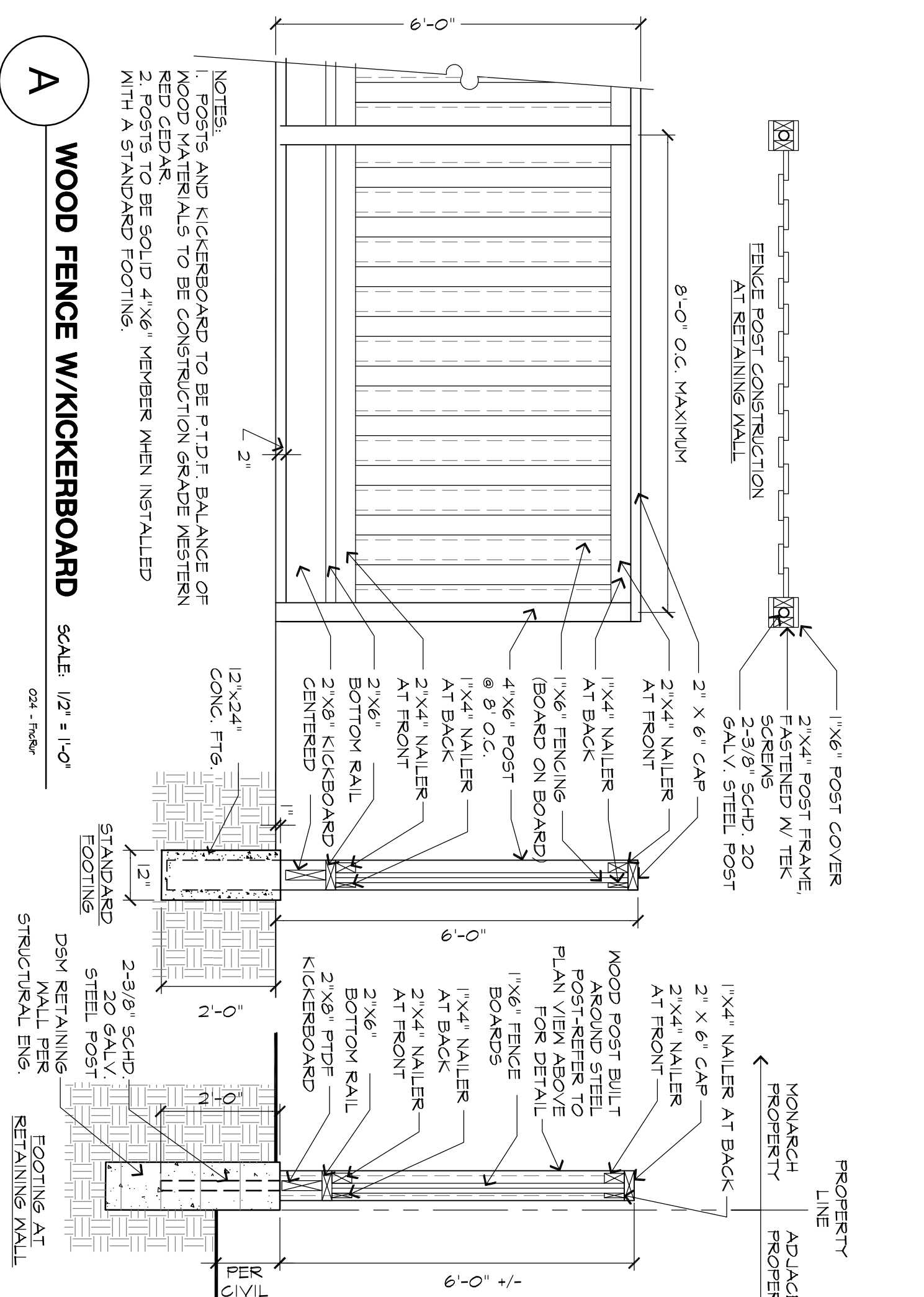
SUITE 314

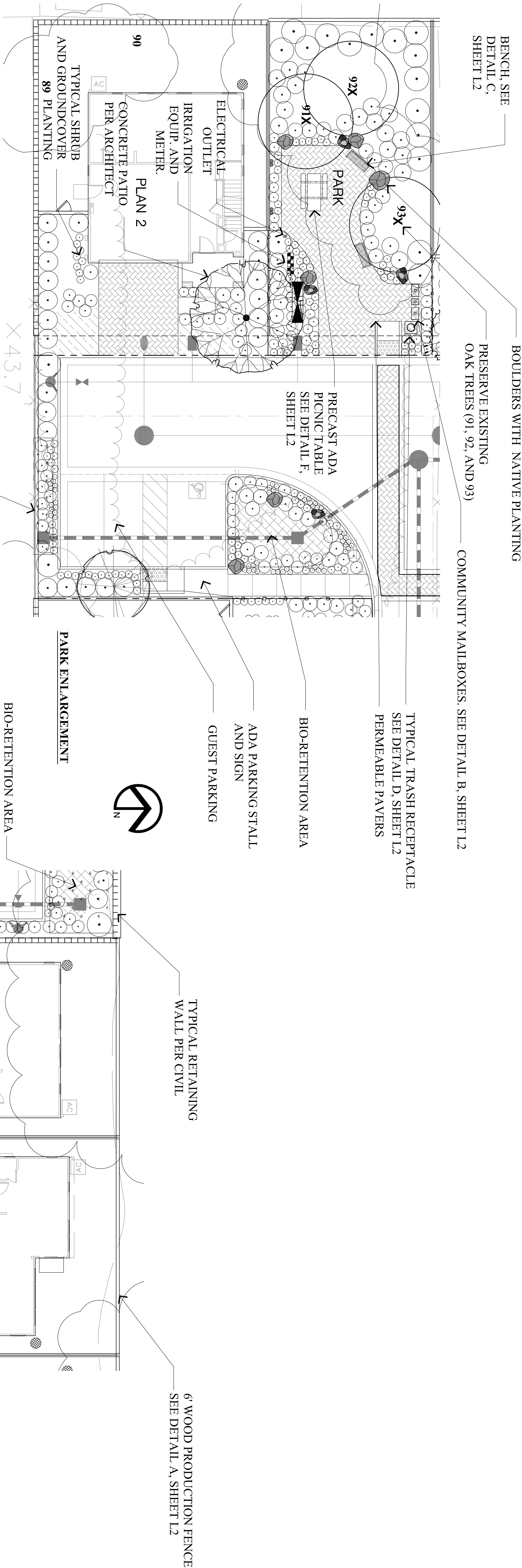
WALNUT CREEK, CA 94596

TEL: 925.938.7377

FAX: 925.938.7436

Preliminary Landscape Plan





CONCEPTUAL LANDSCAPE STATEMENT

REGIONAL AND MICRO-CLIMATE CONDITIONS, SOLAR ORIENTATION AND SOIL CONDITIONS WILL BE TAKEN INTO ACCOUNT WITH REGARDS TO PLANT SELECTION AND PLACEMENT. THE PLANT PALETTE PROVIDES MANY PLANTS WITH VARYING GROWTH HABITS, PREFERENCES AND TOLERANCES, SO SELECTION OF JUST THE RIGHT PLANT SHOULD NOT BE DIFFICULT. A HIGH PERCENTAGE OF PLANTS SELECTED WILL BE DROUGHT TOLERANT AND APPROPRIATE FOR THE CLIMATE. THIS PALETTE, ALONG WITH A DRIP IRRIGATION SYSTEM WILL CONSERVE WATER WITHIN THE PROJECT.

BY SPECIFYING PLANTS WHICH REQUIRE LITTLE TO NO PRUNING, THE GREEN WASTE WILL BE REDUCED. PLANTS SELECTED WILL COMPLEMENT THE ARCHITECTURE.

ENTRWAYS AND PICTURE WINDOWS WILL BE FRAMED BY SPECIMEN SHRUBS AND NODES WILL HAVE ACCENT PLANTINGS. PLANT SPECIES WHICH ENHANCE THE ARCHITECTURAL ELEVATIONS SHALL BE USED. A DIVERSE USE OF PLANT SPECIES WILL DISPLAY VARIOUS TEXTURES, FORMS, FOLIAGE COLOR, AND FLOWERS; WILL CREATE A BEAUTIFUL LANDSCAPE TO CONTRIBUTE AESTHETICALLY TO THE SURROUNDING NEIGHBORHOODS.

THE TREES HAVE BEEN SELECTED TO HAVE NON-INVASIVE ROOT SYSTEMS, AND PLACED WITH ADEQUATE SETBACKS TO ENSURE NO CONFLICT WITH UTILITIES AND HARDSCAPE, OR CONFLICT WITH ANY SITE LINE DISTANCES. ROOT BARRIERS WILL BE INSTALLED ON ALL TREES NEAR PAVINGS AND UTILITIES, WHERE FEASIBLE. TREES HAVE BEEN PLACED TO MITIGATE SOLID BUILDING SURFACES AND FENCES. TALLER SHRUBS WILL ALSO BE LOCATED AT SOLID BUILDING SURFACES AND FENCES, WHILE LOWER SHRUBS WILL BE LOCATED WHERE GROUND LEVEL, WINDOWS AND ARCHITECTURAL FEATURES OCCUR, AND AT CORNERS TO MAINTAIN SITE LINE DISTANCES.

THE PROJECT FEATURES A COMMON PARK SPACE THAT PROVIDES OPPORTUNITIES FOR ADULTS AND CHILDREN TO INTERACT. AN OPEN TURF AREA AND SEATING PROVIDE A FAMILY FRIENDLY SPACE THAT ALLOWS ITS USERS TO ENJOY THE OUTDOORS.

THE IRRIGATION SYSTEM WILL USE WEATHER-BASED CONTROLLERS TO CONSERVE THE USE OF WATER. SPRAY IRRIGATION WILL ONLY OCCUR AT TURF AREAS, AND SPRAY HEADS WITH LOW PRECIPITATION RATES WILL BE USED TO MINIMIZE RUNOFF, EROSION AND OVERSPRAY; THE BALANCE OF THE PLANTING AREAS WILL BE IRRIGATED USING DRIP IRRIGATION METHODS. THE TREES WILL BE ON SEPARATE VALVES AND WILL BE IRRIGATED WITH BUBBLERS. SHRUBS WILL BE HYDROZONED ACCORDING TO THEIR WATER REQUIREMENTS AND MICROCLIMATES.

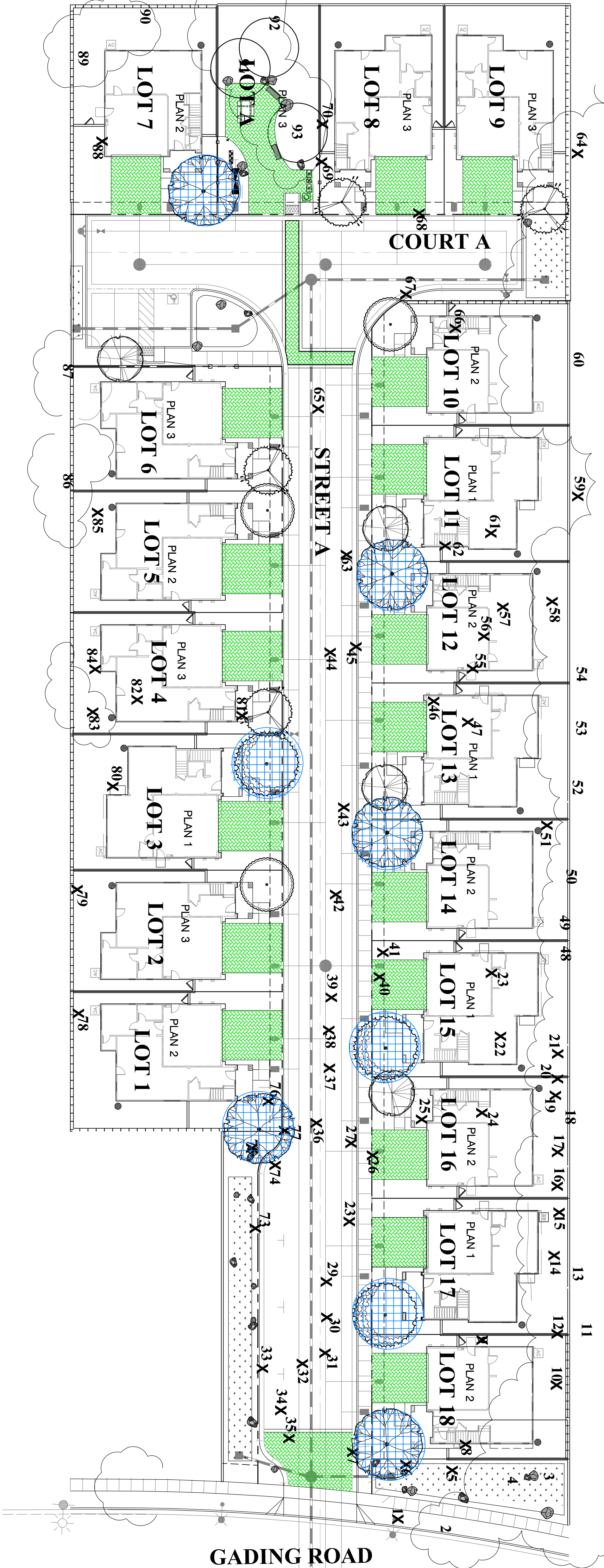
IT IS OUR INTENT TO SPECIFY IN THE LANDSCAPE CONSTRUCTION DOCUMENTS THE USE OF RECYCLED MATERIALS SUCH AS RECYCLED WOOD MULCH, INGREDIENTS WITHIN THE CONCRETE, FORMWORK, SITE FURNITURE, ETC. IT IS OUR INTENT TO STOCKPILE THE TOPSOIL FOR RE-USE, UNLESS SOIL TESTS DEEM THE SOIL INADEQUATE AND RECOMMEND IMPORTED SOIL. WE INTEND TO RECYCLE A MINIMUM OF 50% OF THE LANDSCAPE CONSTRUCTION AND GREEN WASTES.

TREE REPORT EVALUATION

(PER TREE REPORT PREPARED BY HORTSCIENCE, INC. AND DATED OCTOBER, 2017)

Table 4 Appraisal of Value 29841 Gading Road, Hayward, CA.				
Tee No.	Species	Trunk Diameter (in.)	Disp.	Appraised Value
1	Evergreen pear	6	Remove	\$350
2	Remove	10	Remove	\$1,450
3	Dunece cedar	32	Remove	\$700
4	Purpleleaf plum	96.4	Remove	\$1,100
5	Remove	75.5-4	Remove	\$2,400
6	Balsam poplar	16	Remove	\$1,000
7	Douglas fir	15	Remove	\$2,000
8	Remove	4.4-3	Remove	\$2,450
9	Remove	15	Remove	\$1,000
10	Remove	4.4-3	Remove	\$1,000
11	Remove	4.4-3	Remove	\$1,000
12	Remove	4.4-3	Remove	\$1,000
13	Remove	4.3-2.2-2	Remove	\$1,100
14	Remove	5.0-7	Remove	\$1,100
15	Australian bluish cherry	5.0-2	Remove	\$750
16	Remove	3.750	Remove	\$350
17	Remove	6.5-4	Remove	\$350
18	Remove	3.500	Remove	\$350
19	Remove	4.3-3.2	Remove	\$350
20	Remove	38	Remove	\$1,500
21	Canary albert date palm	35	Remove	\$13,100
22	Remove	35	Remove	\$13,100
23	Remove	35	Remove	\$13,100
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96	Remove	35	Remove	\$13,100
97	Remove	35	Remove	\$13,100
98	Remove	35	Remove	\$13,100
99	Remove	35	Remove	\$13,100
100	Remove	35	Remove	\$13,100
TOTAL				\$158,000

PROPOSED APPRAISED TREE VALUE: \$ 142,300

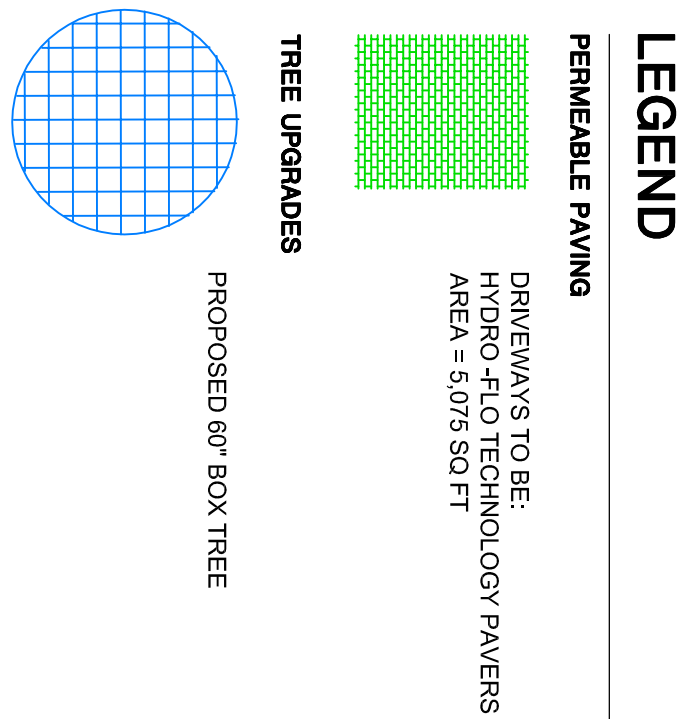


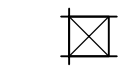
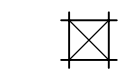
PROPOSED TREE MITIGATION MEASURES

COST OF MATERIALS- TREE UPGRADES			
15 GALLON	24" BOX	60" BOX	PROPOSED QTY
Upgrade 15 Gallon Trees to 60" Box Trees	\$70.00	\$4,000.00	4
Upgrade 24" Box Trees to 60" Box Trees	\$150.00	\$4,000.00	4
TOTAL MATERIAL UPGRADES= \$11,200.00			
COST OF LABOR- TREE UPGRADES			
15 GALLON	24" BOX	60" BOX	PROPOSED QTY
Upgrade 15 Gallon Trees to 60" Box Trees	\$20.00	\$400.00	4
Upgrade 24" Box Trees to 60" Box Trees	\$50.00	\$350.00	4
TOTAL LABOR UPGRADES= \$2,920.00			
TOTAL UPGRADE COST= \$14,120.00			

COST OF MATERIALS- PERMEABLE PAVERS			
STANDARD CONCRETE	PERMEABLE PAVIER	IMPROVEMENT COST	PROPOSED S.F.
Upgrade Vehicular Concrete Paving to Permeable Pavers	\$3.75	\$9.90	6,343
Upgrade Pedestrian Concrete Paving to Permeable Pavers	\$3.00	\$9.90	731
TOTAL MATERIAL UPGRADES= \$44,080.95			
COST OF LABOR- PERMEABLE PAVERS			
STANDARD CONCRETE	PERMEABLE PAVER	IMPROVEMENT COST	S.F.
Upgrade Vehicular Concrete Paving to Permeable Pavers	\$3.75	\$12.10	6,343
Upgrade Pedestrian Concrete Paving to Permeable Pavers	\$3.00	\$12.10	731
TOTAL LABOR UPGRADES= \$59,652.55			
TOTAL UPGRADE COST= \$103,733.50			

TOTAL PROPOSED TREE MITIGATION COSTS: \$137,773





LANDSCAPE HYDROZONE LEGEND

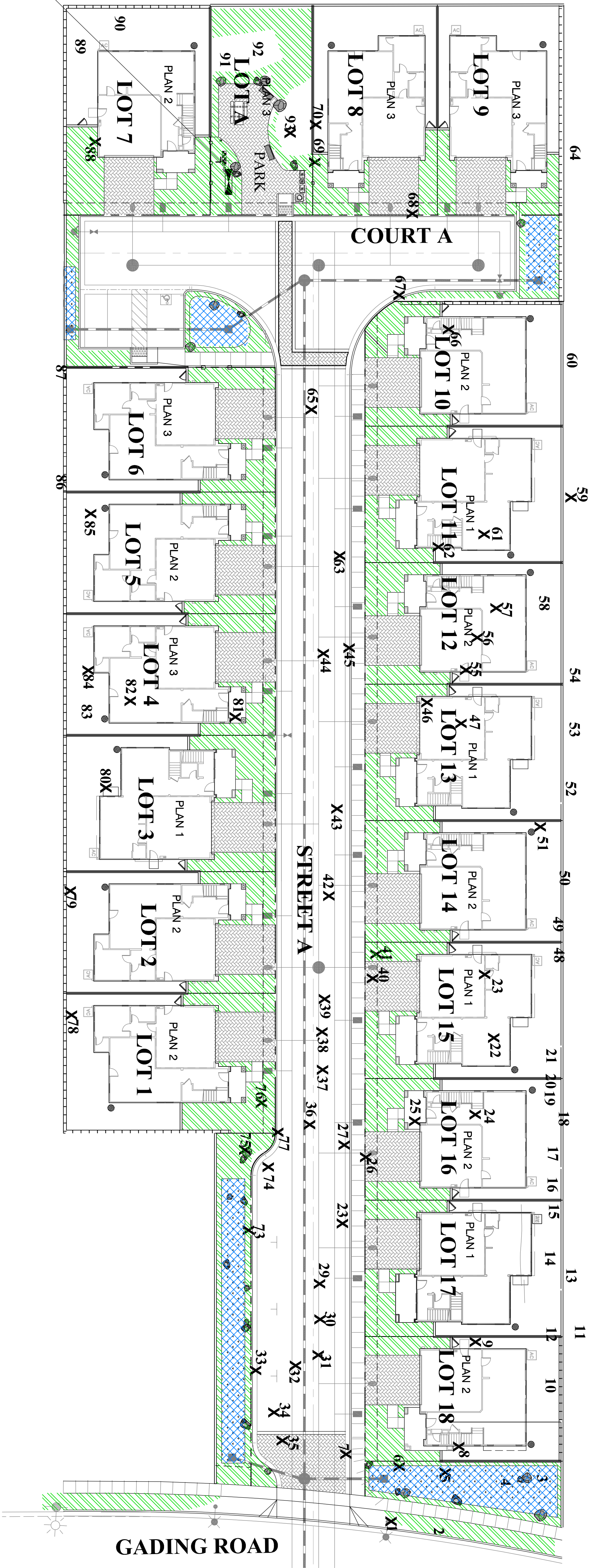
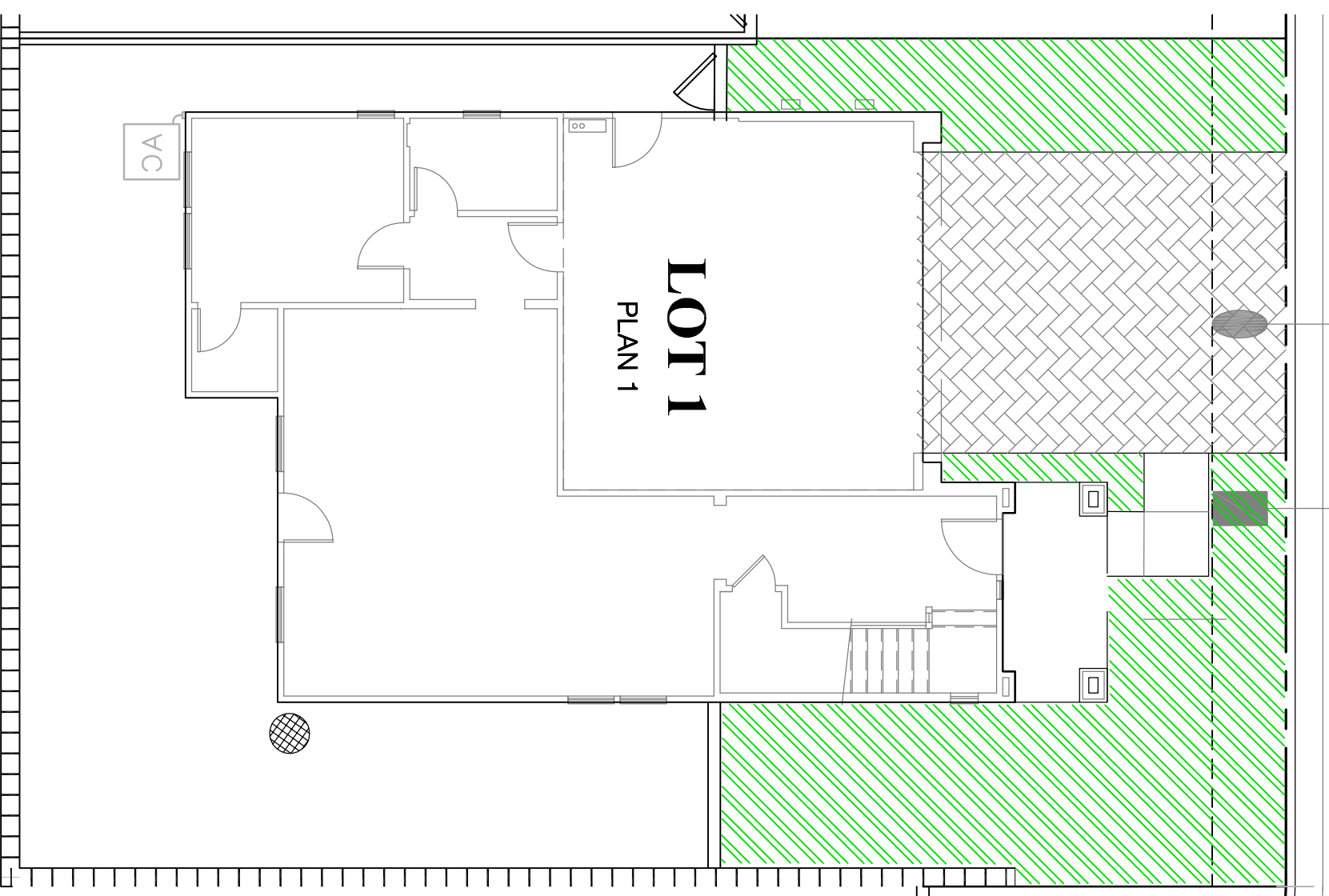
- ZONE A: PARTIAL TO FULL SUN, DROUGHT TOLERANT PLANTING WITH DRIP EMITTERS, LOW WATER USE.
- ZONE B: BIOPRETENTION PLANTING WITH DRIP EMITTERS, LOW WATER USE.
- ZONE C: STREET TREES AND ACCENT TREES WITH INDIVIDUAL BUBBLERS (NOT SHOWN)

NOTE: MEDIAN WATER USE SHARP PLANTING AREAS SHALL NOT EXCEED 20% OF TOTAL LANDSCAPED AREA. SEPARATE VALVES TO BE USED FOR MEDIUM WATER USE SHRUBS.

WATER BUDGET CALCULATIONS:

LOW WATER USE PLANTING AREA		= 15,623 SF
MEDIUM WATER USE PLANTING AREA		= 0 SF
HIGH WATER USE AREA - TURF		= 0 SF
TOTAL PLANTING AREA		= 15,623 SF
ESTIMATED TOTAL WATER USE:		
ETWU (LOW WATER USE)	= (44.2) X (0.62) X (0.2 X 15,623)	= 17,042 GAL/YR
ETWU (MEDIUM WATER USE)	= (44.2) X (0.62) X (0.4 X 0)	= 0 GAL/YR
ETWU (HIGH WATER USE)	= (44.2) X (0.62) X (0.2 X 0)	= 0 GAL/YR
TOTAL ETWU		= 17,042 GAL/YR
MAXIMUM APPLIED WATER ALLOWANCE:		
MAMA TOTAL LANDSCAPED AREA = (44.2) X (0.62) X (0.45 X 15,623) = 186,974 GAL/YR		

PROPOSED IRRIGATION METER LOCATION, BACKFLOW DEVICE, AND POINT OF CONNECTION. IRRIGATION SYSTEM TO BE DESIGNED FOR MAXIMUM OF 7 G.P.M. AT AN OPERATION PRESSURE OF 50 P.S.I. STATIC PRESSURE.



LANDSCAPE HYDROZONE LEGEND

- ZONE A: PARTIAL TO FULL SUN, DROUGHT TOLERANT PLANTING WITH DRIP EMITTERS, LOW WATER USE.
- ZONE B: BIOPRETENTION PLANTING WITH DRIP EMITTERS, LOW WATER USE.
- ZONE C: STREET TREES AND ACCENT TREES WITH INDIVIDUAL BUBBLERS (NOT SHOWN)

TYPICAL LOT WATER BUDGET CALCULATIONS (LOT 1):

LOW WATER USE PLANTING AREA		= 1188 SF
MEDIUM WATER USE PLANTING AREA		= 0 SF
HIGH WATER USE AREA - TURF		= 0 SF
TOTAL PLANTING AREA		= 1188 SF
ESTIMATED TOTAL WATER USE:		
ETWU (LOW WATER USE)	= (44.2) X (0.62) X (0.2 X 1188)	= 9,170 GAL/YR
ETWU (MEDIUM WATER USE)	= (44.2) X (0.62) X (0.4 X 0)	= 0 GAL/YR
ETWU (HIGH WATER USE)	= (44.2) X (0.62) X (0.2 X 0)	= 0 GAL/YR
TOTAL ETWU		= 9,170 GAL/YR
MAXIMUM APPLIED WATER ALLOWANCE:		
MAMA (LOW WATER USE) = (44.2) X (0.62) X (0.45 X 1,188) = 14,650 GAL/YR		

1. ALL TREES SHALL BE PLANTED AND STAKED PER CITY STANDARDS.
2. TREES BE PLANTED WITHIN 3' OF HARDSCAPE ELEMENTS. SHALL HAVE A LINEAR ROOT BARRIER INSTALLED ADJACENT TO THE HARDSCAPE ELEMENT AT TIME OF TREE PLANTING.
3. LANDSCAPE AND IRRIGATION SHALL COMPLY WITH CITY'S CURRENT WATER-EFFICIENT LANDSCAPE ORDINANCE.
4. ALL PLANTING AREAS SHALL BE AUTOMATICALLY IRRIGATED PER CITY STANDARDS, USING LOW-FLOW SPRAY, BUBBLERS OR DRIP METHODS.
5. ALL PLANTING AREAS SHALL BE MULCHED TO A MINIMUM DEPTH OF 3".



DUTRA ENTERPRISES, INC.



Conceptual Irrigation Plan

Gading II
Hayward, California

March 2, 2018

L5