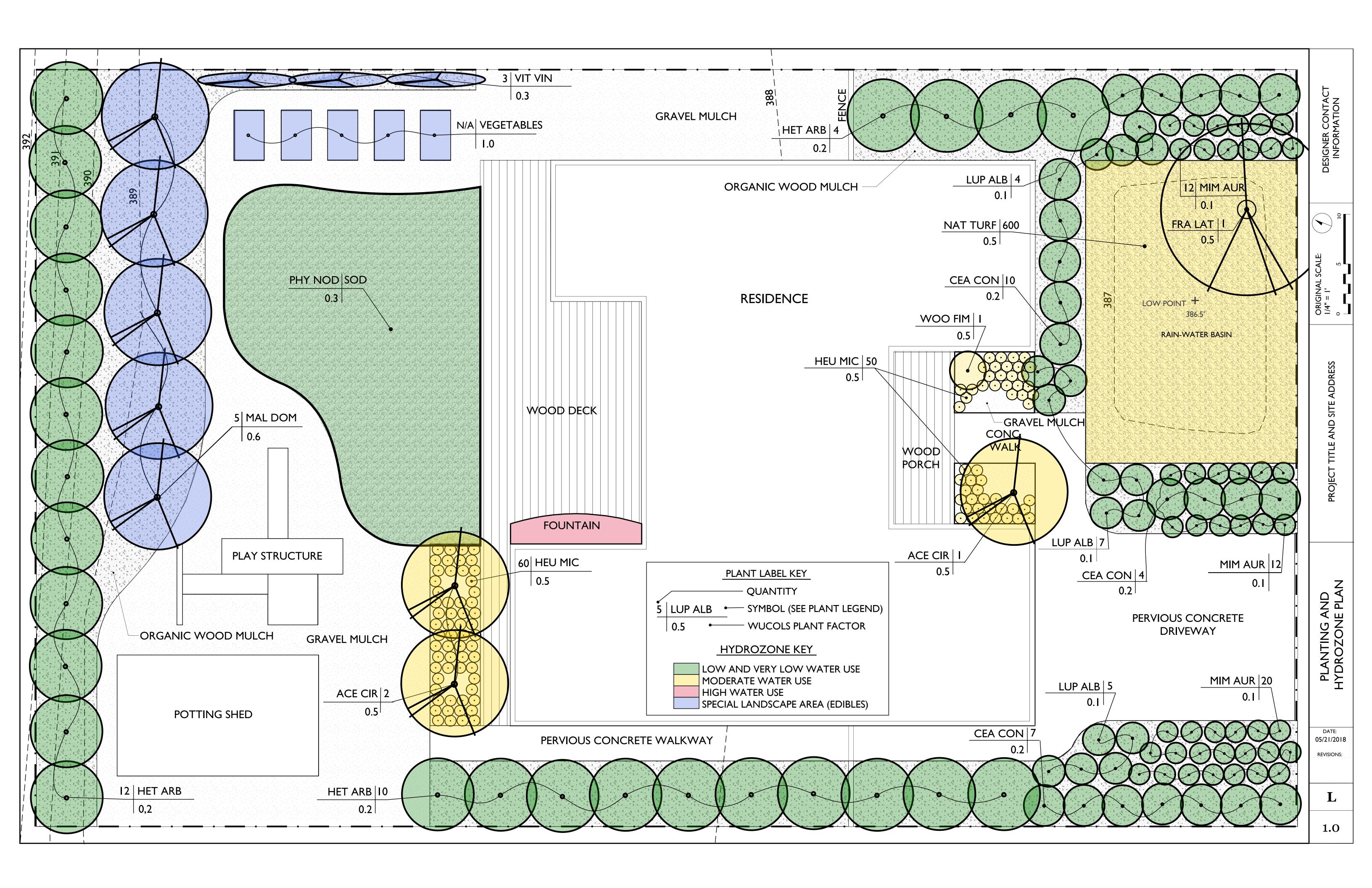


ALWAYS WATER WISELY!

SAMPLE WATER EFFICIENT RESIDENTIAL LANDSCAPE PLANS

The following sample set of landscape plans meets the minimum requirements of the Model Water Efficient Landscape Ordinance (MWELO) as enforced by the East Bay Municipal Utility District. Contact your local City or County planning office for its landscape design and installation requirements.





SAMPLE PLANT LEGEND

(BOTANICAL NAME AND WATER USE DESIGNATION REQUIRED)

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	NOTES	WUCOLS
TREES:						
ACE CIR	ACER CIRCINATUM	VINE MAPLE	3	15 GAL.	NATIVE, MULTI-STEM	M
FRA LAT	FRAXINUS LATIFOLIA	OREGON ASH	1	24" BOX	NATIVE, STANDARD	M
MALDOM	MALUS DOMESTICA 'FUJI'	FUJI APPLE	4	15 GAL.	EDIBLE, STANDARD	M
SHRUBS:						
CEA CON	CEANOTHUS CONCHA	MOUNTAIN LILAC	20	5 GAL.	NATIVE, REDUCED SUMMER WATER	L
HET ARB	HETEROMELES ALBUTIFOLIA	TOYON	16	5 GAL.	NATIVE, REDUCED SUMMER WATER	L
LUP ALB	LUPINUS ALBIFRONS	SILVER BUSH LUPINE	17	1 GAL.	NATIVE, REDUCED SUMMER WATER	VL
		STICKY MONKEY				
MIM AUR	MIMULUS AURANTIACUS	FLOWER	29	1 GAL.	NATIVE, REDUCED SUMMER WATER	VL
VIT VIN	VITIS CALIFORNICA 'RODGER'S RED'	WILD GRAPE	3	1 GAL.	NATIVE HYBRID	L
WOO FIM	WOODWARDIA FIMBRIATA	GIANT CHAIN FERN	1	5 GAL.	NATIVE	M
GROUNDCOVERS:						
HEU MAX	HEUCHERA MICRANTHA	CREVICE ALUM ROOT	110	4 INCH	NATIVE	M
PHY NOD	PHYLA NODIFLORA	KURAPIA	675 SF	SOD	NATIVE CULTIVAR	L
NAT TURF	F.OCCIDENTALLIS, F. RUBRA, F. IDAHOENSIS	NATIVE FESCUE BLENG	600 SF	SOD	NATIVE	L

SAMPLE NOTES

(REQUIRED MEASURES)

PLANTING

- I) TURF IS LIMITED TO 25 PERCENT OF THE TOTAL IRRIGATED AREA (EXCEPT WHERE NON-RESIDENTIAL PLAY FIELDS ARE A PROGRAM REQUIREMENT) AND NOT PLANTED ON AREAS SLOPING MORE THAN 25 PERCENT.
- 2) PLANTINGS MUST BE GROUPED INTO HYDROZONES BASED ON MICROCLIMATE, SOIL TYPE, PLANT TYPE, AND WATER USE CLASSIFICATION (SEE WUCOLS: WWW.UCNR.EDU/SITES/WUCOLS/).

IRRIGATION

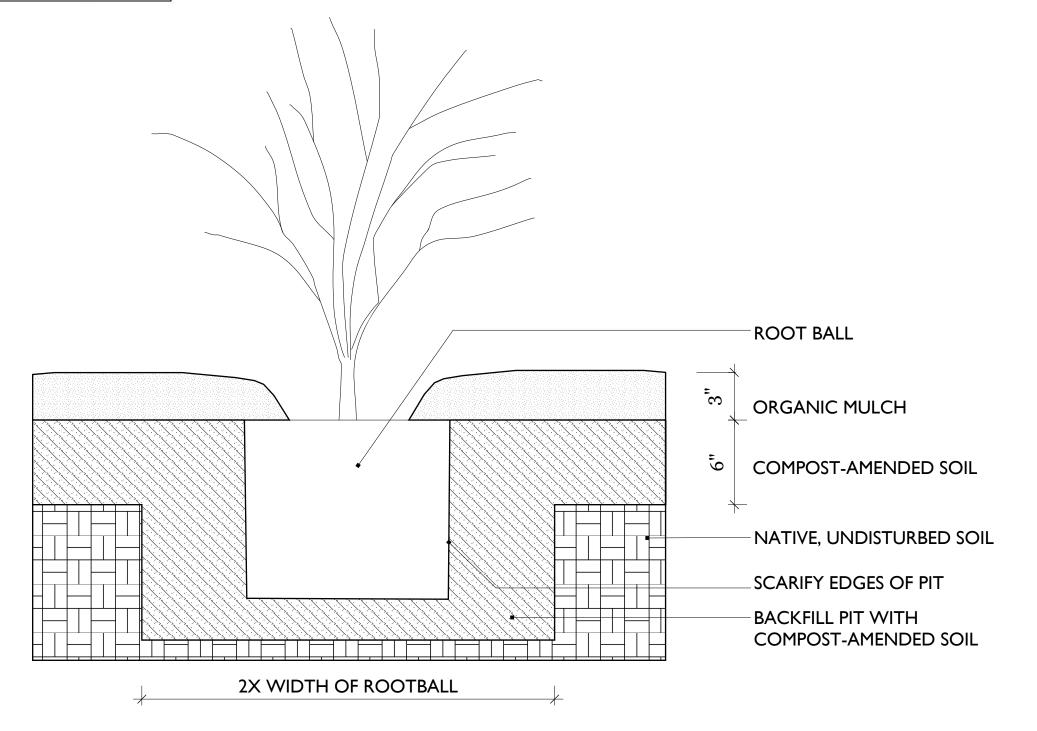
- 3) PRECIPITATION RATES MUST BE UNIFORM ACROSS EACH ZONE.
- 4) EMITTERS MUST BE FIXED RATE AND OF THE SAME TYPE WITHIN A ZONE. NO VARIABLE OR ADJUSTABLE FLOW RATE EMITTERS ARE ALLOWED. MIXING EMITTERS WITHIN A ZONE IS NOT ALLOWED.
- 5) OVERHEAD SPRAY IS NOT ALLOWED IN AREAS LESS THAN TEN FEET ACROSS IN ANY DIMENSION.
- 6) OVERHEAD SPRAY NOZZELS MUST BE SET BACK A MINIMUM OF TWO FEET FROM ADJACENT IMPERVIOUS SURFACES.

COMPOST

7) INCORPORATE COMPOST AT A RATE OF FOUR (4) CUBIC YARDS PER 1,000 SQUARE FEET INTO THE TOP SIX (6) INCHES OF SOIL OR COMPOST PER HORITICULTURAL SOIL REPORT RECOMMENDATIONS.

MULCH

8) APPLY ORGANIC MULCH TO A MINIMUM DEPTH OF THREE (3) INCHES ON ALL EXPOSED SOIL IN THE PLANTED AREA EXCEPT WHERE CONTRAINDICATED.



SAMPLE PLANTING DETAIL

NOT TO SCALE

DESIGNER CONTACT INFORMATION

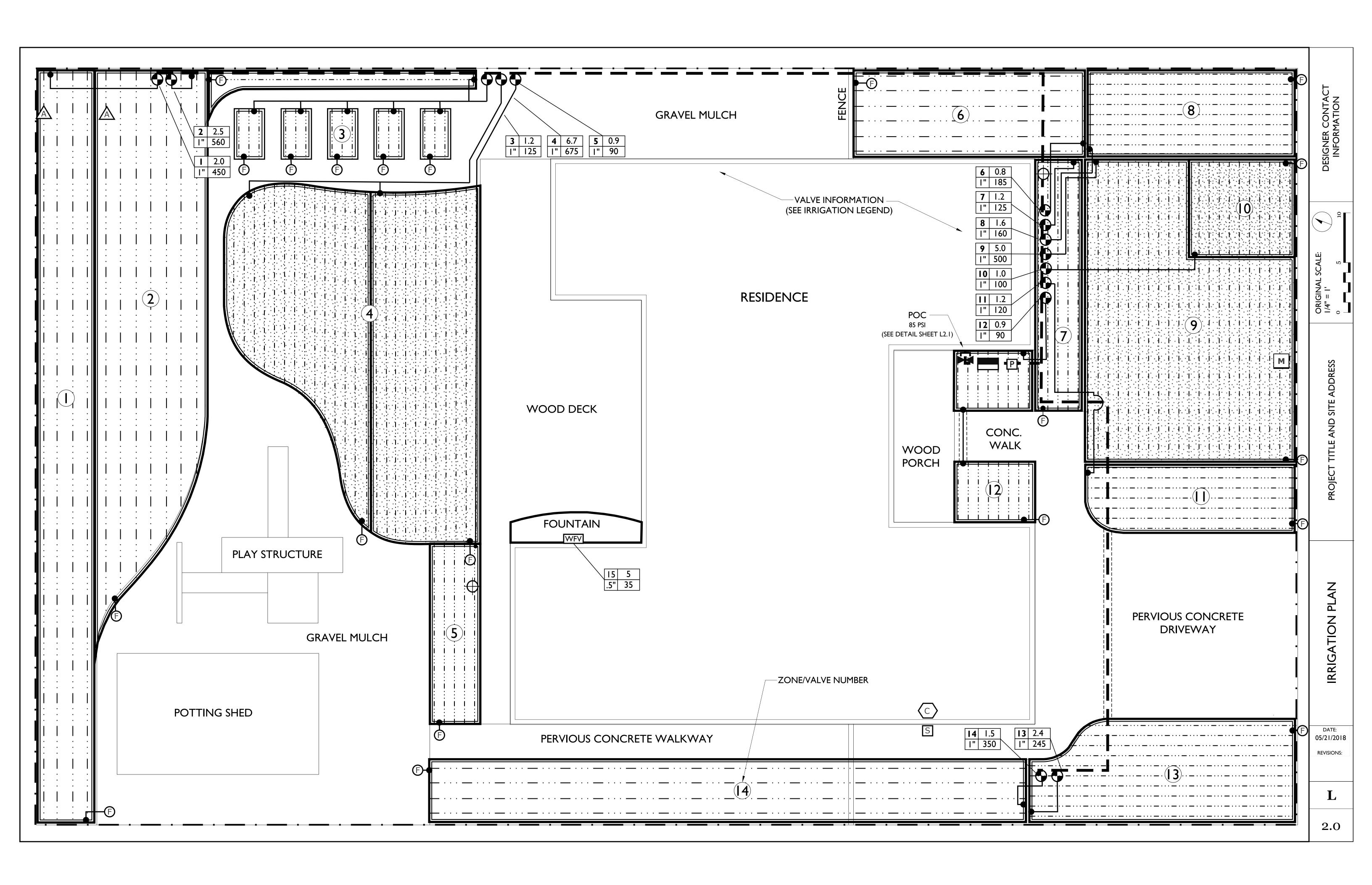
T TITLE AND SITE ADDRESS

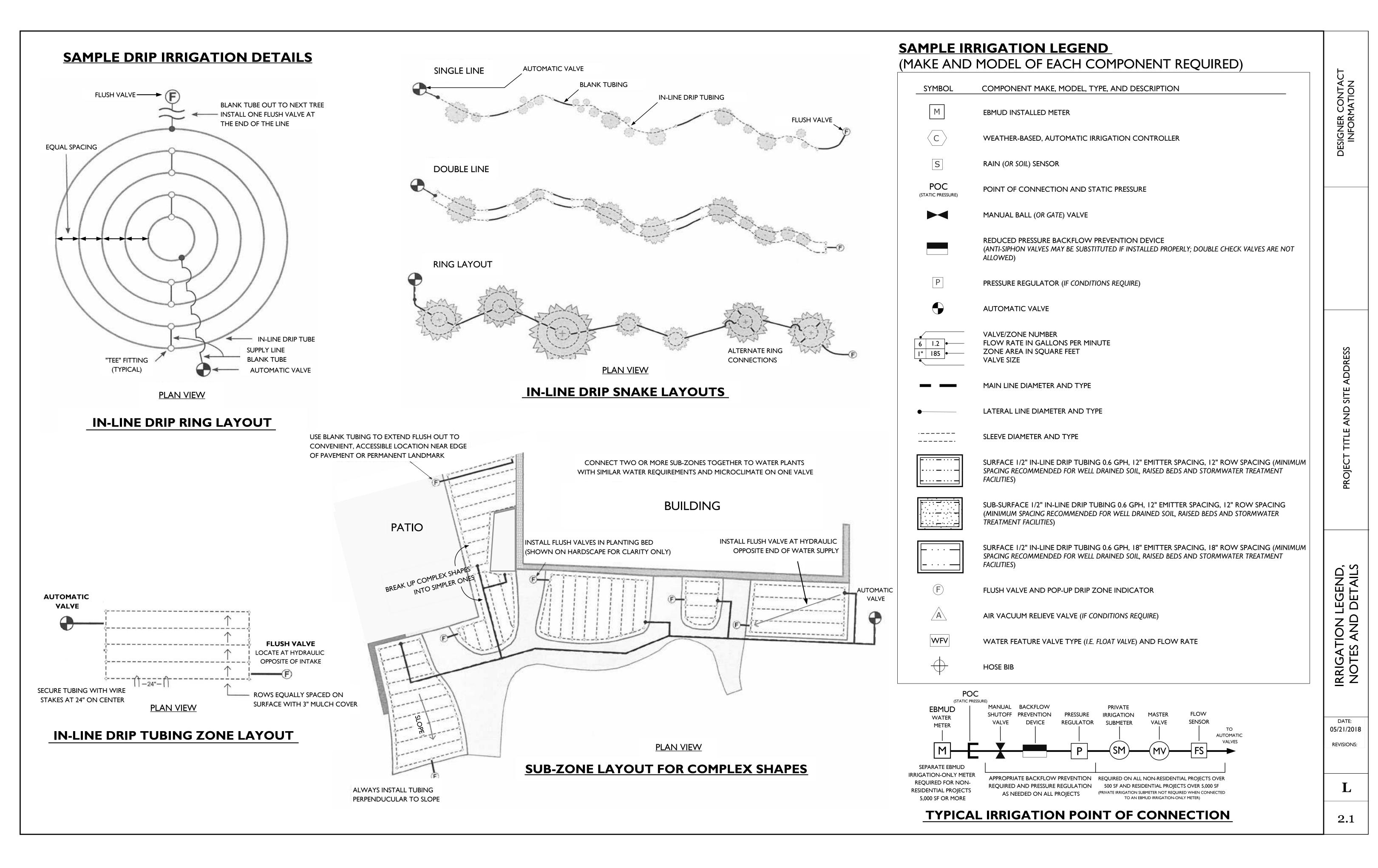
PLANT LEGEND, NOTES AND DETAILS

DATE: 05/21/2018 REVISIONS:

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1.1





SAMPLE WATER BUDGET WORKSHEET (REQUIRED FOR RESIDENTIAL LANDSCAPES OVER 2,500 SQUARE FEET AND NON RESIDENTIAL LANDSCAPES OVER 1,000 SQUARE FEET)

EBMUD - Water Efficient Landscape Worksheet

ulate a project's Estimated Total Water Use and Maximum Applied Water Allowance to determine its compliance with the Model Water Effi This worksheet is to be filled out by the project applicant and is a required element of the MWELO Landscape Documentation Package.

Property Address:	175 Gil Blas Rd., Danville, 94526	NOTES
Reference Site	Walnut Creek	1) ETo is the reference evapotrans
(See MWELO Appendix A):	A):	across the State of California.
Annual ETo	46.2 Inches	the entholise and one of
(Reference Evapotranspiration Rate):	iration Rate):	schools. ETAF is a percentage of E
ETAF (ET Adjustment Factor)	actor) 55.0 %	3) Use an ETAF of 100% for any s
for Landscape Areas:		pools and sports fields), areas irric

ETAF	ETAF for Special Landscape Areas: ESTIMATED TOTA	as: TAL WATER USE	Landscape Areas: 100% by permit (e.g. bio-retention basins, bio-swales, and flow-th low-th converts inches to gallons per square foot	by permit where 0.62 is the coefficien	(e.g. bio-retention	by permit (e.g. bio-retention basins, bio-swales, and flow-through planters). coefficient that converts inches to callons per square foot	w-through planters).		MAXIMUM APPLIED WATER
	O COLUMNICA COLU	200 410 400	(mm) x (mm) x (mm) x (mm) = (mm)	שומב ממל וא מב מסוומם	A UNIT COMMON IN	amhe pd anima or car			ALLOWANCE (MAWA)
ZONE/ VALVE	Eg Medium Trees, Groundcover, Water Feature, etc.	(PF) Water requirements as a % of ETo	IRRIGATION EFFICIENCY (IE) Percent of applied water that reaches its target (e.g. root zone or water feature) by irrigation method	FACTOR (APF) (PF/IE) = APF Watering requirements adjusted for irrigation	AREA (AREA) Square Feet	EACTOR The coefficient that converts inches to gallons per square foot	ETWU PER HYDRO ZO NE (ETo)(APF)(Area)(0.62) = Annual gallons required to irrigate this landscape		MAWA represents the annual water budget for this landscape. It is the maximum amount of water allowed per year for imigation
				efficiency as a % of ETo				,	
Land	ndscape Areas (LA)								LA
1	Shrubs	30%	%06	33%	450	0.62	4241		(ETo)(ETAF)(Total Area)(0.62) = Arnual gallons
4	Forbs	30%	%06	33%	675	0.62	6361		allowed
2	Trees	20%	%06	26%	90	0.62	1445		
9	Shrubs	20%	%06	22%	185	0.62	1170		
7	Shrubs	30%	%06	33%	125	0.62	1178		
8	Shrubs	30%	%06	33%	160	0.62	1508		
6	Grasses and Strap-leafed Plants	%09	%06	9/6/9	200	0.62	9610		
10	Trees	%09	%06	%29	100	0.62	1922		
11	Shrubs	30%	%06	33%	120	0.62	1131		
12	Trees	20%	%06	26%	06	0.62	1445		
13	Shrubs	30%	%06	33%	245	0.62	2309		
14	Shrubs	20%	%06	22%	350	0.62	2213		
15	Water Feature	100%	100%	100%	35	0.62	1003		
				Totals:	3125	0.62	35536	MAWA for LA:	49213
Spec	vecial Landscape Areas	s (SLA)							SLA
2	Trees			100%	260	0.62	16041		(ETo)(ETAF)(Total Area)(0.62) =
m	Forbs			100%	125	0.62	3581		Annual gallons allowed
				Totals:	685	0.62	19622	MAWA for SLA:	19621
	Controller Controller	ller A				Grand Total:	55158	Grand Total:	68834
)-10% =	PLAN Very low; 10-30% = Low; 40-60%	PLANT FACTOR RANGES: 40-60% = Moderate; 70-100% =	0-10% = Very low; 10-30% = Low; 40-60% = Moderate; 70-100% = High. Water Requirements cited in this	Spray	ATION METHC = 70%; Rotating r	IRRIGATION METHODS AND EFFICIENCIES: Spray = 70%; Rotating nozzle = 75%; Bubblers = 80%;	:IES: 80%;	Pass	: Yes
00	inance are derived from the publica (uca	olication accewater Use Cla (ucanr.edu/sites/WUCOLS/).	ordinance are derived from the publication accewater Use Classification of Landscpe Speciesac (ucanr.edu/sites/WUCOLS/).	Point-source	drip = 85%; In-lir	Point-source drip = 85%; In-line drip = 90%; Water feature = 100%	ure = 100%	ETWU	ETWU shall not exceed MAWA

SAMPLE BASE IRRIGATION SCHEDULE

		Monthly ETO Values:		9	Mar	Apr N	May Jun	IN L	Aug	Sep	00	NOV	Dec	Annual
	Controller Controller A		8.0	1.5	2.9 4	4.4	5.6 6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
ZONE/ VALVE #	Sum of all emitters in a zone in gallons per minute (GPM)	AVERAGE PRECIPITATION RATE (IN/HR) (FR x 60 Min per Hr)/(Area in SF/1.6 In per SF)				Mo	Monthly	Run	Time	.⊑	Minutes	es		
Landscape Areas	S													
1	2.0	0.43	37	69	133 2	202 2	257 308	8 340	294	1 216	152	69	46	2121
4	6.7	0.961	16	31	60 6	90	115 138	8 152	131	1 97	89	31	21	949
2	0.9	0.968	28	25	101	153 1	195 233	3 257	7 222	163	1115	25	35	1605
	0.8	0.418	25	48	92 1	139 1	177 212	2 234	1 203	3 149	105	48	32	1464
7	1.2	0.929	17	32	62 9	4	119 142	2 157	136	100	70	32	21	982
8	1.6	0.968	16	31	59 6	90	114 137	7 151	130	96 (67	31	20	942
6	5.0	0.968	33	62	121	183 2	233 279	9 308	3 266	3 195	137	62	45	1921
10	1.0	0.968	33	62	121	183 2	233 279	9 308	3 266	5 195	137	62	42	1921
11	1.2	0.968	16	31	59 6	90	114 137	7 151	130	96 (67	31	20	942
12	0.9	0.968	28	25	101	153	195 233	3 257	7 222	163	115	25	35	1605
13	2.4	0.948	17	31	6 09	92 1	117 140	0 154	133	38	69	31	21	962
14	1.5	0.415	56	48	93 1	140	179 214	4 236	5 204	150	105	48	32	1475
15	5.0	13.825	c	7	13	19	24 29	32	28	20	14	7	4	201
Special L	andscape Areas													
	2.5	0.432	111	208	403 6	611 7	778 931	1 1028	8 889	653	458	208	139	6417
e e	3.0	2.323	21	39	75 1	114 1	145 173	3 191	165	5 121	82	39	26	1193
	Monthly Budge	Budget for the Maximum Applied Water Allowance	owar	ce										
Landscape Areas	S													
		Inches applied per month	6.0	8.0	1.6 2	2.4	3.1 3.7	7 4.1	3.5	5.6	1.8	0.8	9.0	25.4
		Gallons per month	852	1598 3	3089 46	4687 5	5965 7137	17 7883	3 6817	7 5007	7 3515	5 1598	3 1065	49213
		Average gallons per day	27.5	57.1	99.6 15	156.2 19	192.4 237.9	.9 254.3	3 219.9	9 166.9	9 113.4	4 53.3	34.4	
Special Landscape	the Areas													
		Inches applied per month	8.0	1.5	2.9 4	4.4	5.6 6.7	7 7.4	6.4	4.7	3.3	1.5	1.0	46.2
		Gallons per month	340	637 1	1232 18	1869 2	2378 2845	15 3143	3 2718	8 1996	6 1402	637	425	19622
		Average gallons per day	11.0	22.8	39.7 62	62.3 7	76.7 94.8	8 101.4	4 87.7	7 66.5	5 45.2	21.2	13.7	
All Landscape Areas	reas													
		Total Gallons per month	1192 2235 4321	235 4		8 9259	8343 99	9982 11026 9535	953		7003 4917	7 2235	1490	68835