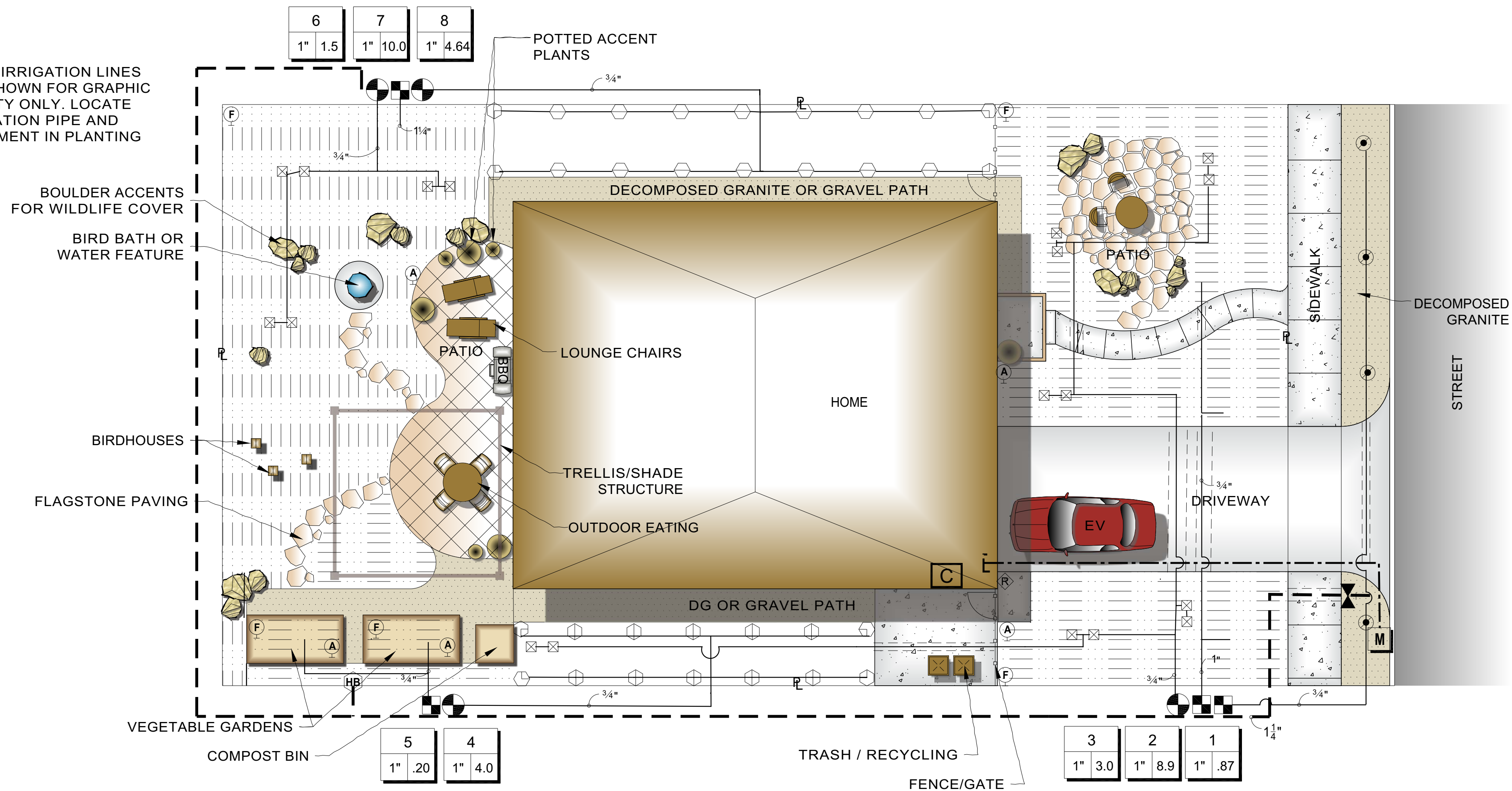


NOTE: IRRIGATION LINES ARE SHOWN FOR GRAPHIC CLARITY ONLY. LOCATE IRRIGATION PIPE AND EQUIPMENT IN PLANTING AREAS



IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Toro O-T-5702-6P COM 8 Series or Equal Shrub Spray, 6" popup with check valve, Precision Series spray nozzles.
	Toro 570S-FB-25-PC or Equal Flood Bubbler for Trees
	Toro T-PR25-9 or Equal Pressure Regulating 9-Outlet Drip Manifold for connection to 1/4" Micro-tube & 1gph emitters to plants, 2 per plant. Below grade in 6" plastic valve box. Tubing 2" minimum below grade to plants.
	Area to Receive Dripline Toro T-PCB1810-12 (12) or Equal Landscape Dripline, 5/8" with pressure compensating 1.02gph emitters at 12" o.c. dripline Dripline lateral rows spaced at 12" apart, with emitters offset for triangular pattern. Run line 2" below grade.
	Toro EZF-29 or Equal Electric Remote Control Valve with Atmospheric Vacuum Breaker (AVB) with flow control
	Toro DZK-EZF-075-LF or Equal Drip zone kit. 3/4" EZ-Flo Plus AVB valve, filter, low-flow regulator and fittings
	Spears True Union 2000 Ball Valve or Equal PVC, 1/2" to 4", same size as pipe
	Toro T-FCH-H-FIPT or Equal Flush valve, plumbed to flush manifold at low point
	Toro T-YD-500-34 or Equal Dripline air relief valve plumbed to drip tubing at each high point
	Hose Bibb
	Irritrol Smart Dial SD900-INT or Equal ET-based Controller, 9 stations, indoor, with plastic cabinet
	Irritrol RS1000 or Equal Wireless Rain Sensor. Mount as noted by manufacturer, use controller power.
	Water Meter
	Water Service Line from Meter
	Irrigation Lateral Line: PVC Schedule 40 and Class 200
	Irrigation Mainline: PVC Schedule 40 and Class 315
	Pipe Sleeve under Hardscape Paving: PVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.
	Valve Callout
	Valve Number
	Valve Flow
	Valve Size

Resources for Irrigation Components and Smart Controllers (call for store hours)

Ewing	Ewing	Ewing
Chula Vista 591 C Street, Suite B Chula Vista 91910 619.426.5200	El Cajon 1923 John Towers Ave. El Cajon, CA 92020 619.562.3300	San Diego 7151-A Ronson Road San Diego, CA 92111 858.576.9550
Chula Vista 375 Trousdale Dr. Chula Vista, CA 91910 619.691.9700	El Cajon 435 N. Marshall Ave. El Cajon, CA 92020 619.440.4703	San Diego 5805 Keaney Villa Rd. San Diego, CA 92123 858.560.6611
Chula Vista 2202 Venus Street San Diego, California 92154 619.575.2222	San Diego 7366 Engineer Road San Diego, California 92111 858.278.5151	
El Cajon 1073 N. Marshall El Cajon, CA 92020 619.562.8777		

WATER SCHEDULE FOR JULY

Native/Habitat Typical Water Smart Home Landscape Plan for San Diego

Schedule based on the following design parameters
3/4" water meter : 22.5 GPM "Capacity"

FORMULA: T= (60 X ET X PF) / (PR X IE) X 7 / water days per week where:

T = IRRIGATION TIME (in minutes)
ET = Daily Evapotranspiration Rate = (Peak ET for Month of July)
PF = CROP COEFFICIENT (kc)
PR = PRECIPITATION RATE
IE = IRRIGATION EFFICIENCY

minutes per day	ET	PF	PR	IE	water days	water days per week	Minutes per run day	
EMITTER DRIP AREA (Low water)=	60.0	0.220	0.2	0.3	0.8	7	1	77
INLINE DRIP AREA (Low water)=	60.0	0.220	0.2	1.56	0.8	7	1	15
SHRUB SPRAY (Low water)=	60.0	0.220	0.2	1.0	0.55	7	2	17
TREE BUBBLER (Low water)=	60.0	0.220	0.2	1.93	0.8	7	1	12
SHRUB SPRAY (Moderate water)=	60.0	0.220	0.5	1.0	0.55	7	2	42
INLINE DRIP AREA (High water)=	60.0	0.220	0.8	1.56	0.8	7	3	20

CONTROLLER (8 Stations)	GPM	Station	PR	PF	Run Time
Emitter Drip Area (Low)	0.87	1	0.30	0.2	77
Inline Drip Area (Low)	8.9	2	1.56	0.2	15
Tree Bubbler (Low)	3.0	3	1.93	0.2	12
Shrub Spray (Low)	4.0	4	1.00	0.2	17
Inline Drip Area (High)	0.2	5	1.56	0.8	20
Tree Bubbler (Low)	1.5	6	1.93	0.2	12
Inline Drip Area (Low)	10.0	7	1.56	0.2	15
Shrub Spray (Moderate)	4.6	8	1.00	0.5	42
4.1 AVG.					

TOTAL MINUTES PER DAY =	209.1 minutes
TOTAL HOURS PER DAY =	3.48 hrs

Landscape Irrigation Water Analysis

Native/Habitat Typical Home Landscape Plan for San Diego	MAWA	Estimated Total Water Usage	Hydrozones				Total Usage
			High Water Use Vegetable Garden with Drip	Moderate Water Use Shrub Planting with Spray	Low Water Use Shrub Planting with Spray	Low Water Use Shrub Planting with Drip	
Total Landscape Area (Square Feet)	2,958.00	Hydrozone Area S.F. Irrigation Efficiency (IE)	73.00 0.80	412.50 0.50	242.00 0.80	2,230.50 0.80	
Reference Evapotranspiration (Eto)	57.33	Ref ET (Eto)	57.33	57.33	57.33	57.33	
ET Adjustment Factor (ETAF)	0.7	Plant Factor / Kc	0.8	0.5	0.2	0.2	
Conversion Factor (inches to Gallons)	0.62	Conversion Factor	0.62	0.62	0.62	0.62	
Eto x .62 x (ETAF x Land Area + (.3 x SLA))		Eto x .62 x (PF x HA/IE)	2,595	14,662	2,150	19,821	39,228
Total Gallons per year	73,599						

Anticipated evapotranspiration rates for the site are based on historical averages. Data from the C.I.M.I.S Station # 153 in Escondido was used. Eto=57.33
This data is collected from C.I.M.I.S.(California Irrigation Management Information System) IE = Drip/ Bubblers/ Micro Spray at .8; Rotors at .7; Spray at .5

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NATIVE / HABITAT IRRIGATION PLAN

TYPICAL WATER SMART HOME LANDSCAPING PLAN

SAN DIEGO

