

## SITE CONCEPT LEGEND

	Asphalt Paving at Road		Play Area Surfacing
	Concrete Paving		4'-0" High Decorative Fence at Play Area
	Speciality Concrete Paving		Outdoor Ping Pong Table
	Permeable Paving		Poolside Furniture
	Site Planting		Concrete Seating Pebbles
	Glass Fence and Gate at Pool Area		Concrete Seat Walls
	New Street Tree		6'-0" High Solid Vinyl Perimeter Fence
	New Shade & Mitigation Trees		Pole Lights
	New Pool Area Trees		Bioretention Area
	New Accent Tree		Colored Asphalt Crosswalks

## SITE PLAN CALLOUTS

- ① Pool Area
- ② Spa Area
- ③ 6'-0" Stucco Wall at Pool Area; Color T.B.D.
- ④ Teen Area with Outdoor Ping Pong Table and Seating
- ⑤ Teen Area with Outdoor Game Tables and Seating
- ⑥ Play Area with Boulders, Pebble Seating, Rubber Surfacing and Sensory Planting
- ⑦ Bioretention Area
- ⑧ Trash Enclosure
- ⑨ Private Patio Area, typical
- ⑩ Sitting Area and Entry Patio
- ⑪ Pet Relief & Sitting Area
- ⑫ 6'-0" Transparent Decorative Fence at Pool
- ⑬ 6'-0" CMU Block Wall, Color TBD
- ⑭ Short Term Bike Parking

## IRRIGATION CONCEPT & STATEMENT OF COMPLIANCE

All irrigation and planting design will comply with the criteria of local and state Water Resources Model Water Efficient Landscape Ordinances and will apply them for the efficient use of water in the landscape design plan.

- Weather based, self-adjusting irrigation controller with a weather sensor.
- Emitters to include subsurface drip irrigation and tree bubblers.
- Trees to be placed on separate valves.
- Isolation valves to be installed at point of connection and before each valve or manifold.
- Pressure regulation to be installed.
- Separate valves to be installed to irrigate zones of medium and low water use plantings.
- Check valves will be installed to prevent low point drainage.

## TREE MITIGATION

**TREE MITIGATION SUMMARY** Existing Tree to be Removed

Native Trees to mitigate: 267 inches = (45) 24" Box trees, Native species to be Quercus lobata/Valley Oak, Quercus wislizeni/Interior Live Oak and Arbutus menziesii/Pacific Madrone.

Non-Native Trees to mitigate: 222" = (74) 15 Gallon replacements, species to be a combination of ornamental street tree, shade tree and accent tree as shown on the planting legend

\*Offsite trees (not shown) that overhang the project site are to be protected per Santa Rosa City Tree Ordinance. See arborist report for more information.

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June 2023

Petaluma Hill Road  
Santa Rosa, CA  
Concept Site Design

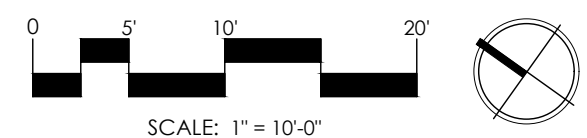
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CONCEPT SITE DESIGN

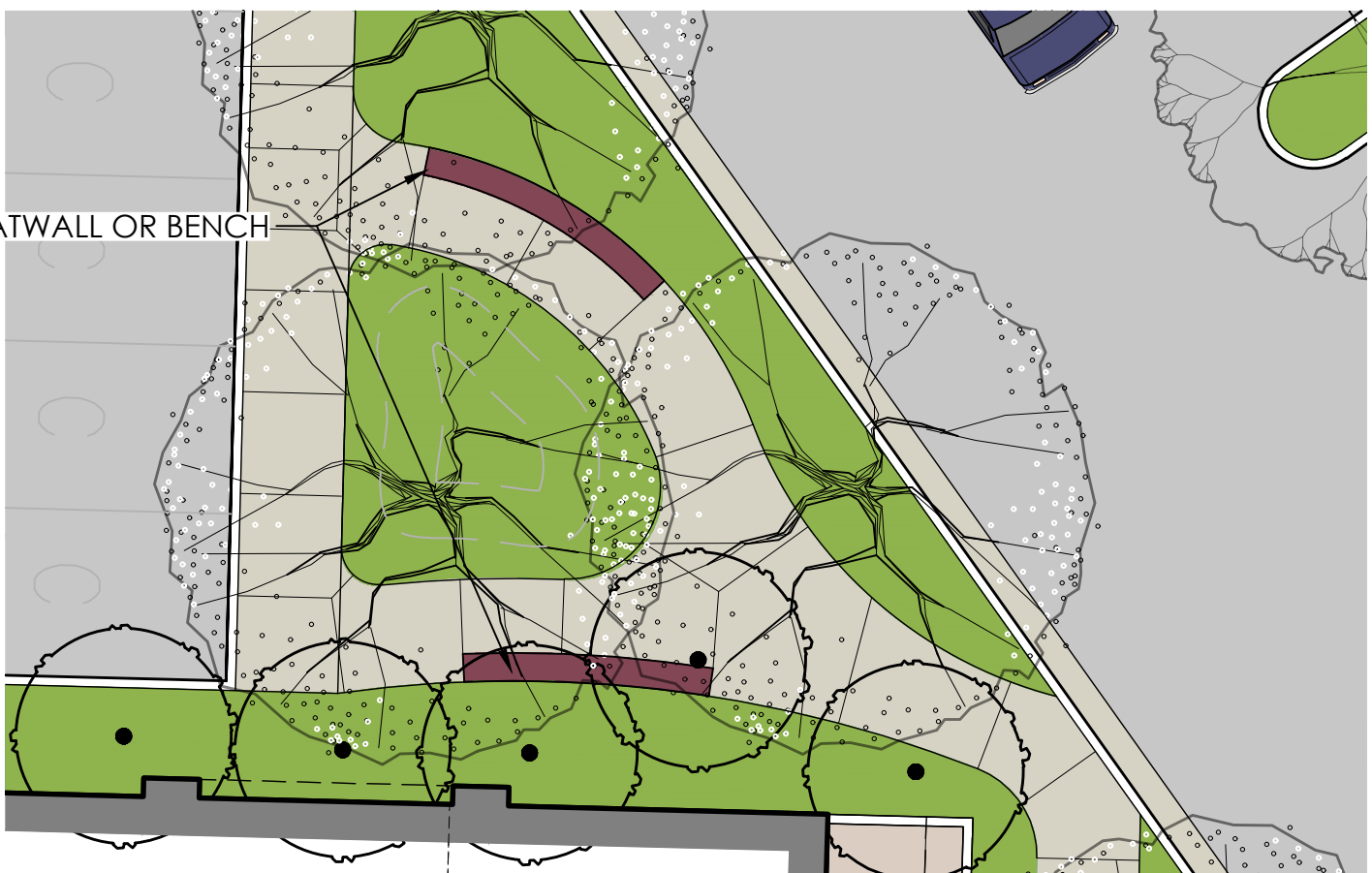
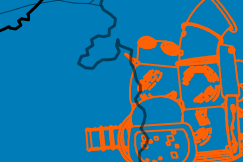
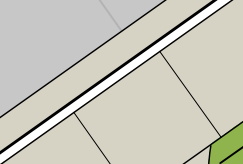
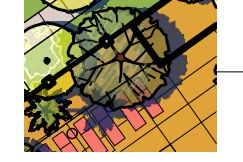
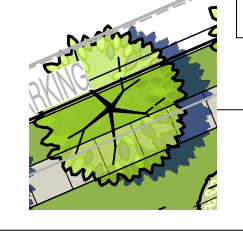
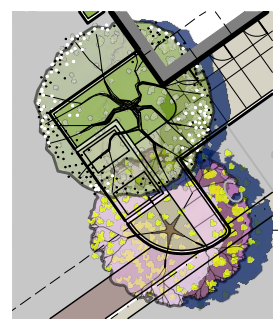


POOL AND TEEN AREA ENLARGEMENT

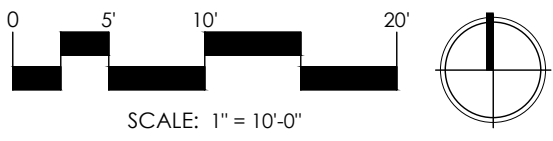


SITE CONCEPT LEGEND

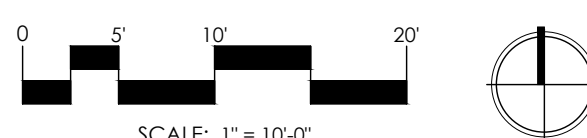
- Asphalt Paving at Road
- Concrete Paving
- Speciality Concrete Paving
- Permeable Paving
- Site Planting
- Glass Fence and Gate at Pool Area
- New Street Tree
- New Shade and Mitigation Trees
- New Pool Area Trees
- New Accent Tree
- Play Area Surfacing
- 4'-0" High Decorative Fence at Play Area
- Outdoor Ping Pong Table
- Poolside Furniture
- Concrete Seating Pebbles
- Concrete Seat Walls
- 6'-0" High Solid Vinyl Perimeter Fence
- Pole Lights
- Bioretention Area
- Colored Asphalt Crosswalks



PET RELIEF AND SITTING AREA



PLAY AREA AND PET RELIEF/SITTING AREA



SITE PLAN CALLOUTS

- ① Pool
- ② Spa
- ③ 6'-0" Stucco Wall at Pool Area; Color T.B.D.
- ④ Teen Area with Outdoor Ping Pong Table and Seating
- ⑤ Teen Area with Outdoor Game Tables and Seating
- ⑥ Play Area with Pebble Seating, Poured in Place Rubber Surfacing and Sensory Planting
- ⑦ Private Patio Area, typical
- ⑧ Pool Equipment Building
- ⑨ Bike Parking
- ⑩ Covered Outdoor Kitchen and TV Lounge Area
- ⑪ Outdoor BBQ and Counter
- ⑫ Covered Lounge Area with Outdoor Fire Place
- ⑬ 6'-0" High Transparent Decorative Fence at Pool
- ⑭ Glass Fence and Gate Entrance to Pool
- ⑮ 3 SHORT TERM BIKE RACKS (6 SPACES)

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June 2023

Petaluma Hill Road  
 Santa Rosa, CA  
 Site Plan - Enlargements

## CANDIDATE PLANT LIST

Botanical Name	Common Name	HxW	Spacing	Water Use	Size
<b>Trees: Street</b>					
Fraxinus holotricha 'Moraine'	Moraine Ash	40'x40'	Per Plan	Medium	15 Gal
Ginkgo biloba 'Autumn Gold'	Autumn Gold Ginkgo	40'x30'	Per Plan	Medium	15 Gal
Platanus x. hispanica 'Bloodgood'	Bloodgood Plane Tree	40'x30'	Per Plan	Medium	15 Gal

<b>Trees: Shade &amp; Mitigation</b>					
Arbutus menziesii	Pacific Madrone	25'x25'	Per Plan	Low	24" Box
Cercidiphyllum japonicum	Katsura Tree	40'x25'	Per Plan	Medium	24" Box
Nyssa sylvatica	Desert Willow	45'x45'	Per Plan	Medium	24" Box
Quercus lobata	Valley Oak	40'x60'	Per Plan	Low	24" Box
Quercus coccinea	Scarlet Oak	40'x60'	Per Plan	Medium	24" Box
Quercus wislizeni	Interior Live Oak	40'x60'	Per Plan	Low	24" Box
Ulmus parviflora 'Drake'	Drake Elm	45'x40'	Per Plan	Low	24" Box
Zelkova serrata 'Village Green'	Sawleaf Zelkova	50'x50'	Per Plan	Medium	24" Box

<b>Trees: Small/Accent</b>					
Acer buergerianum	Trident Maple	20'x40'	Per Plan	Medium	15 Gal.
Carpinus betulus 'Fastigiata'	Pyramidal Hornbeam	20'x40'	Per Plan	Medium	15 Gal.
Chilopsis linearis	Desert Willow	20'x20'	Per Plan	Low	15 Gal.
Chionanthus retusus	Chinese Fringe Tree	10'x8'	Per Plan	Medium	15 Gal.
Chitalpa tashkentensis 'Morning Cloud'	Chitalpa Tree	20'x20'	Per Plan	Low	15 Gal.
Cornus nuttallii 'Eddie's White Wonder'	Dogwood Tree	20'x20'	Per Plan	Medium	15 Gal.
Vitex agnus-castus	Chaste Tree	10'x15'	Per Plan	Low	15 Gal.

<b>Trees: Accent at Pool Area</b>					
Citrus 'Meyer Lemon'	Meyer Lemon Tree	8'x8'	Per Plan	Medium	15 Gal.
Citrus 'Bears Lime'	Bears Lime Tree	8'x8'	Per Plan	Medium	15 Gal.
Olea europaea 'Frantz Fruitless'	Frantz Fruitless Olive (Std and Multi)	20'x20'	Per Plan	Very Low	24" Box
Parkinsonia florida	Palo Verde Tree	15'x15'	Per Plan	Low	24" Box
Phoenix Roebelenii	Pygmy Date Palm	6'x6'	Per Plan	Low	15 Gal.
Punica granatum 'Wonderful'	Pomegranate	20'x15'	Per Plan	Low	15 Gal.

<b>Shrubs: Site</b>					
Atriplex lentiformis breweri	Brewer's Salt Bush	8'x8'	Per Plan	Low	5 Gal.
Arctostaphylos 'Howard McMin'	Manzanita	4'x4'	Per Plan	Low	5 Gal.
Berberis aquifolium var. repens	Creeping Oregon Grape	2'x4'	Per Plan	Low	5 Gal.
Callistemon citrinus 'Little John'	Dwarf Bottle Brush	3'x3'	Per Plan	Low	5 Gal.
Ceanothus griseus 'Yankee Point'	CA Lilac	3'x6'	Per Plan	Low	5 Gal.
Cotinus coggygria 'Pink Champagne'	Smoke Bush	6'x5'	Per Plan	Low	5 Gal.
Eriogonum giganteum	St. Catherine's Lace	4'x4'	Per Plan	Low	5 Gal.
Grevillea 'Superb'	Grevillea	4'x4'	Per Plan	Low	5 Gal.
Olea europaea 'Montra'	Little Olive Dwarf Olive	5'x5'	Per Plan	Low	5 Gal.
Physocarpus opulifolius 'Monro'	Diablo Purple Ninebark	8'x8'	Per Plan	Low	5 Gal.
Punica granatum 'Nana'	Dwarf Pomegranate	3'x3'	Per Plan	Low	5 Gal.
Rhamnus californica 'Mound San Bruno'	CA Coffeeberry	6'x6'	Per Plan	Low	5 Gal.
Ribes sanguineum 'Claremont'	Claremont Flowering Currant	4'x8'	Per Plan	Low	5 Gal.
Vaccinium ovatum	Evergreen Huckleberry	4'x4'	Per Plan	Low	5 Gal.

<b>Perennials, Grasses &amp; Succulents: Site</b>					
Agave x 'Blue Flame'	Blue Flame Agave	4'x4'	Per Plan	Low	5 Gal.
Beschomera y. 'Flamingo Glow'	Beschomera	4'x4'	Per Plan	Low	1 Gal.
Dianella revoluta 'Little Rev'	Dianella	3'x3'	Per Plan	Low	1 Gal.
Grevillea lanigera 'Prostrate'	Prostrate Woolly Grevillea	1'x4'	Per Plan	Low	1 Gal.
Hesperaloe parviflora 'Yellow'	Yellow Yucca	2'x4'	Per Plan	Low	1 Gal.
Lomandra longifolia 'Platinum Beauty'	Platinum Beauty Mat Rush	3'x3'	Per Plan	Low	5 Gal.
Mahonia 'Soft Caress'	Oregon Grape	3'x3'	3' O.C.	Low	5 Gal.
Muhlenbergia dubia	Pine Muhly Grass	4'x4'	Per Plan	Low	1 Gal.
Perovskia atriplicifolia	Russian Sage	4'x4'	Per Plan	Low	1 Gal.
Polystichum munifolium	Western Sword Fern	4'x4'	Per Plan	Medium	5 Gal.
Salvia clevelandii 'Winifred Gillman'	Cleveland Sage	3'x3'	Per Plan	Low	1 Gal.
Sedum spectabile 'Autumn Joy'	Autumn Joy Sedum	2'x2'	Per Plan	Low	1 Gal.
Teucrium chamaedrys	Germander	18"x18"	Per Plan	Low	1 Gal.
Verbena bonariensis	Purpletop Vervain	2'x2'	Per Plan	Very Low	1 Gal.
Yucca gloriosa 'Bright Star'	Yellow Spanish	2'x5'	Per Plan	Low	1 Gal.
Zauschneria californica 'Catalina'	California Fuchsia	2'x2'	Per Plan	Low	1 Gal.

<b>Groundcovers: Site</b>					
Acacia redolens 'Desert Carpet'	Bank Catclaw	2'x6'	Per Plan	Low	1 Gal.
Arctostaphylos x. 'Pacific Mist'	Pacific Mist Manzanita	1'x4'	Per Plan	Low	1 Gal.
Eriogonum fasciculatum 'Warriner Lytle'	Warriner Lytle Buckwheat	1'x4'	Per Plan	Low	1 Gal.

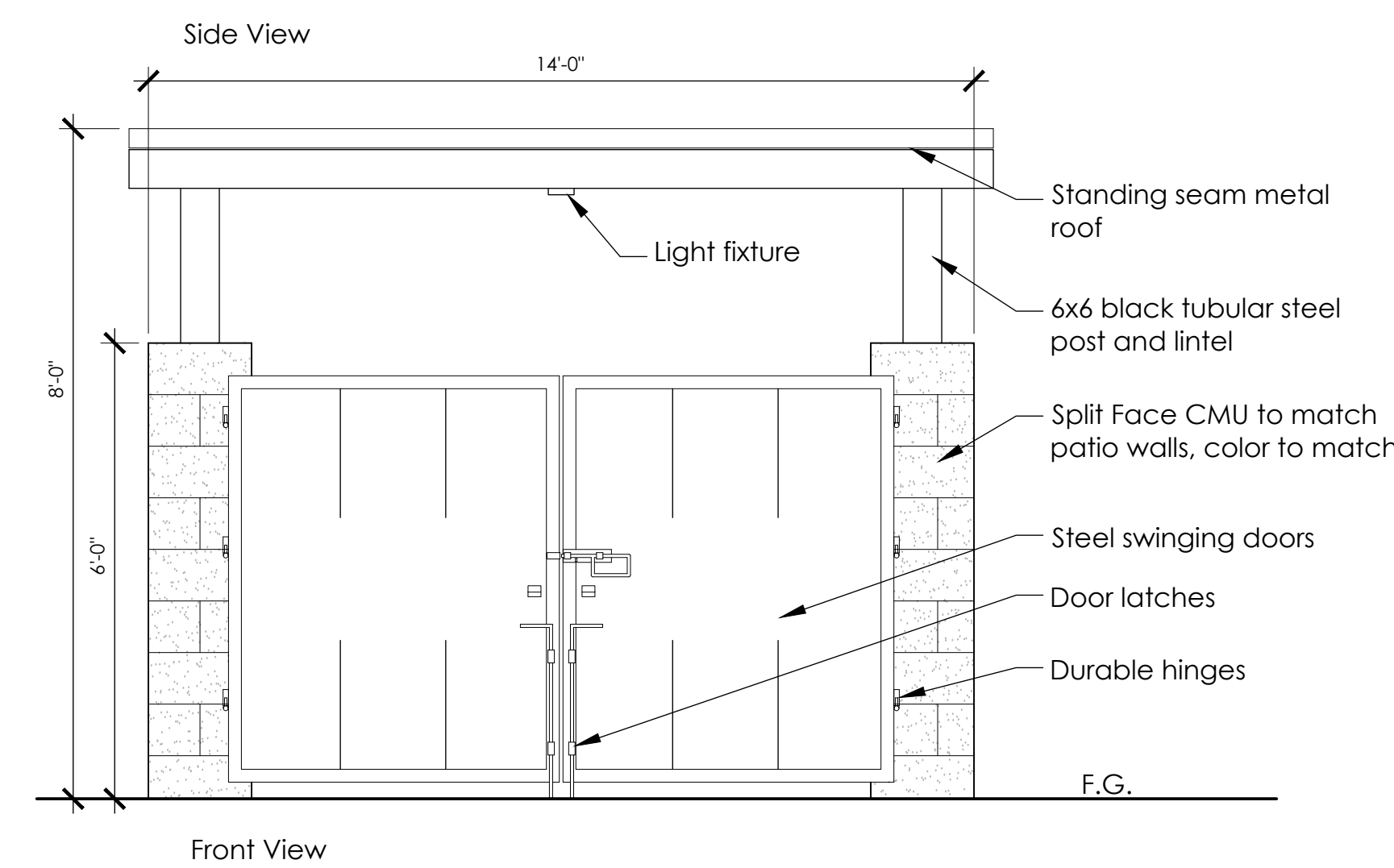
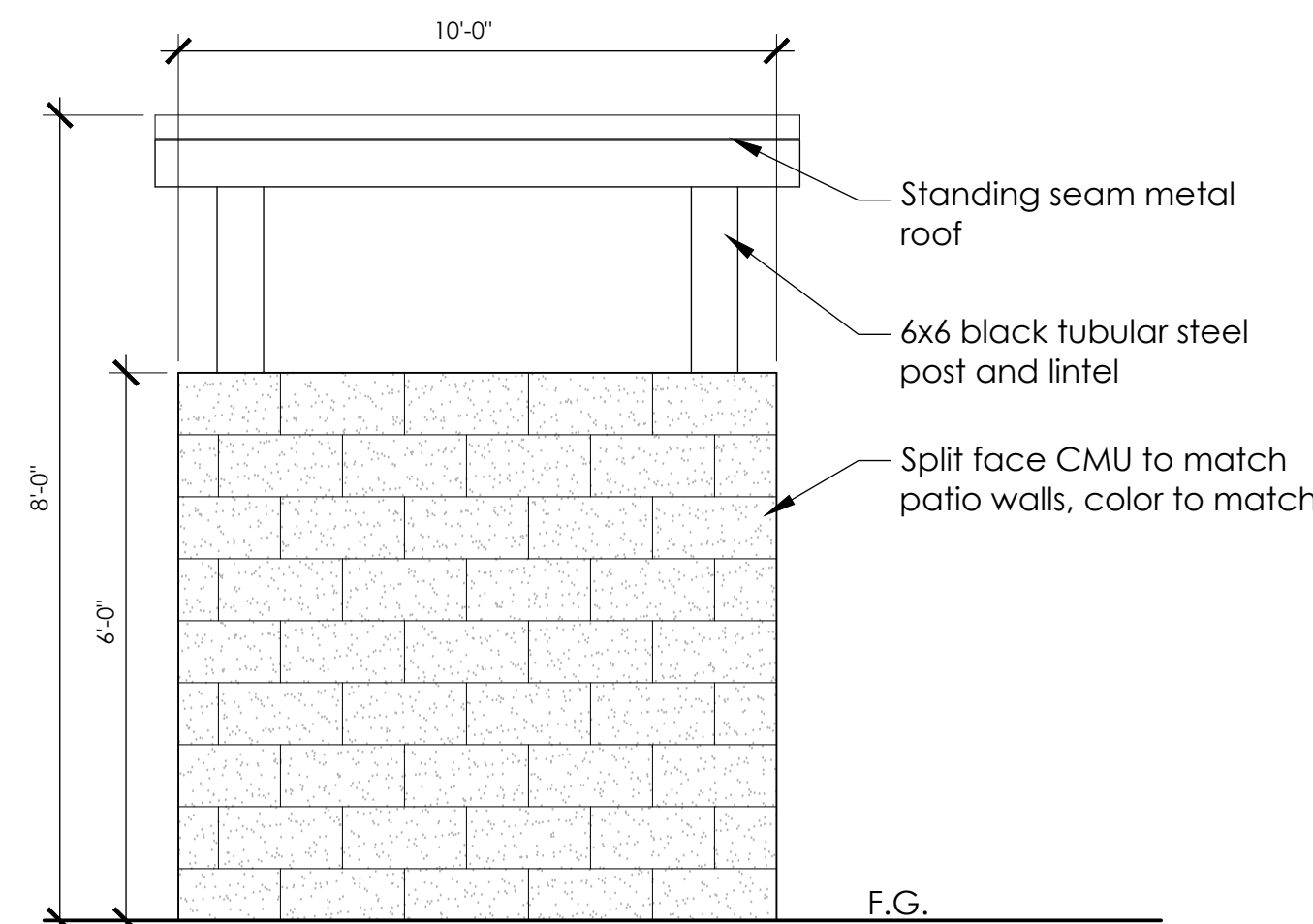
<b>Vines: Site</b>					
Clematis armandii	Evergreen Clematis	15'-20'	Per Plan	Medium	5 Gal.
Gelsemium sempervirens	Carolina Jessamine	10'-15'	Per Plan	Medium	5 Gal.
Hardenbergia violacea	Lilac Vine	10'-15'	Per Plan	Medium	5 Gal.
Parthenocissus tricuspidata	Boston Ivy	10'-15'	Per Plan	Medium	5 Gal.

<b>Stormwater L.I.D. Planting Areas</b>					
Achillea millefolium	Common Yarrow	3'x3'	3' O.C.	Low	1 Gal.
Calamagrostis 'Karl Foerster'	Feather Reed Grass	3'x4'	3' O.C.	Medium	1 Gal.
Carex divulsa	Berkeley Sedge	3'x3'	3' O.C.	Low	1 Gal.
Chondropetalum tectorum	Cape Rush	3'x3'	3' O.C.	Low	1 Gal.
Elymus condensatus 'Canyon Prince'	Canyon Prince Wild Rye	3'x3'	3' O.C.	Low	1 Gal.
Eschscholzia californica	California Poppy	1'x1'	1' O.C.	Low	4" Pot
Garrya elliptica 'Evie'	Silk Tassel	8'x8'	8' O.C.	Low	1 Gal.
Iris douglasiana	Douglas Iris	2'x2'	2' O.C.	Low	1 Gal.
Juncus patens 'Elk Blue'	Spreading Rush	3'x3'	3' O.C.	Low	1 Gal.
Ribes sanguineum 'White Icicle'	White-flowering Currant	6'x6'	6' O.C.	Low	1 Gal.
Satureja douglasii	Yerba Buena	1'x3'	3' O.C.	Low	1 Gal.

## MAWA CALCULATIONS

Maximum Applied Water Allowance			
The following calculation will help you determine your site specific water budget and establish a planting mix that will allow you to meet your water budget. Your Estimated Total Water Use must be less than your Maximum Applied Water Allowance.			
<b>1.) Maximum Applied Water Allowance (MAWA) COMMERCIAL</b>			
MAWA = (ETo) (0.67)(0.45x LA) + (0.55 x SLA)			
Where:			
ETo = Annual Net Reference Evapotranspiration (inches)			
0.45 = ET Adjustment Factor			
LA = Landscaped Area (square feet)			
0.62 = Conversion factor (in gallons per square foot)			
SLA = Portion of the landscape area identified as Special Landscape Area (square feet)			
0.55 = the additional ET adjustment factor for Special Landscape Area (1.0 - 0.45 = 0.55)			
<b>A.) Net Evapotranspiration Calculation</b>			
Annual ETo			
43.9			
ET Adjustment Factor	x	0.45	=
19.745			
Effective Rainfall			
6.80			
Net Evapotranspiration Calculation	=	Annual ETo	-
		Effective Rainfall	=
			37.10
<b>B.) Adjusted Landscape Area Calculation</b>			
Landscaped Area	x	Adjustment Factor	=
48832	x	0.45	=
			21614.4
Special Landscaped Area	x	Adjustment Factor	=
0	x	0.55	=
			0
Sum of Adjusted Landscape Area			=
			21614.4
MAWA	=	37.10	x
			0.62
			x
			21614.4
			=
			497174 gallons
<b>2.) Estimated Total Water Use (ETWU)</b>			
<b>A.) Net Evapotranspiration Calculation</b>			
Net Evapotranspiration Calculation	=	Annual ETo	-
		Effective Rainfall	=
			37.10
<b>B.) Adjusted Landscape Area Calculation</b>			
Area	x	Adjustment Factor	=
0	x	0.1	=
			0
Area	x	Adjustment Factor	=
41832	x	0.3	=
			12549.6
Area	x	Adjustment Factor	=
3000	x	0.6	=
			1800
Area	x	Adjustment Factor	=
1200	x	1.0	=
			1200
Sum of Adjusted Landscape Area			=
			15550
ETWU	=	37.10	x
			0.62
			x
			15550
			/
			0.80
			=
			446084 gallons
<b>Irrigation Efficiency Factor</b>			
Square footage of landscape on drip			41471
Square footage of landscape on spray			45601
Total square footage of landscape			48832
Adjusted Irrigation Efficiency Factor			0.80

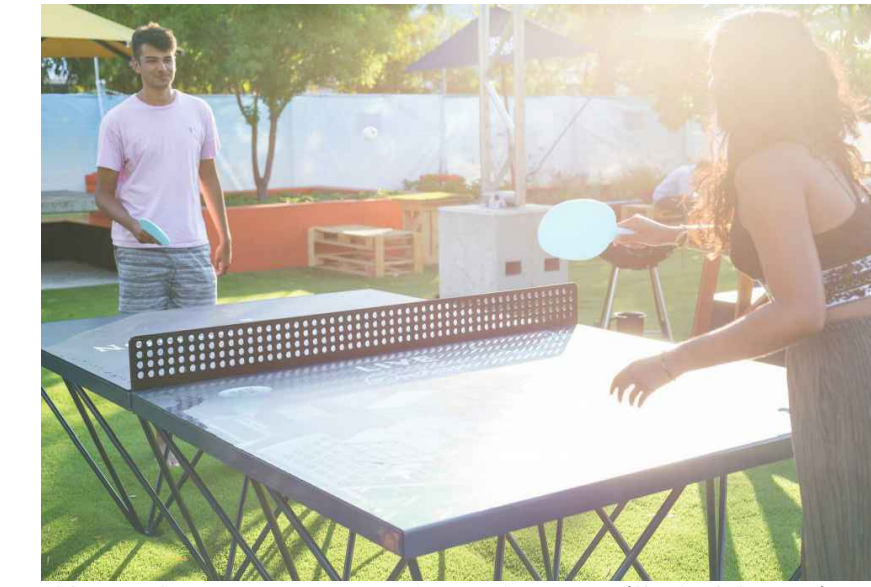
The ETWU (446,084) is less than MAWA (497,174), therefore this design complies with the California Code of Regulations Title 23, Waters - Model Efficient Landscape Ordinance. See Sheet L1.0 for Irrigation Concept.



## 1 TRASH ENCLOSURE ELEVATION

SCALE: 1/2"=1'-0"

## CHARACTER IMAGES



Character Image - Teen Open Space with Outdoor Ping Pong



Character Image - Teen Open Space with Game Tables



Solid Vinyl 6'-0" Fence at Property Boundary



Transparent Fence at Pool Area



Character Image - Play Area and Poured in Place Rubber Surface



Seating Pebbles at Play Area



Pole Light, EcoForm LED Site and Area Luminaires



Character Image - Pool Area with lush plantings



Decorative Fence at Play Area



Glass Fence at Pool Area



Short Term Bike Parking

Model: Post and Ring  
Manufacturer: Madrax Bike Rack  
Items: 7 total racks - 14 parking spaces

\*5% of 140 vehicular parking spaces = 7, short term bike parking exceeds requirements

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June 2023

Petaluma Hill Road  
Santa Rosa, CA

Planting Palette, Irrigation Calc's  
and Images

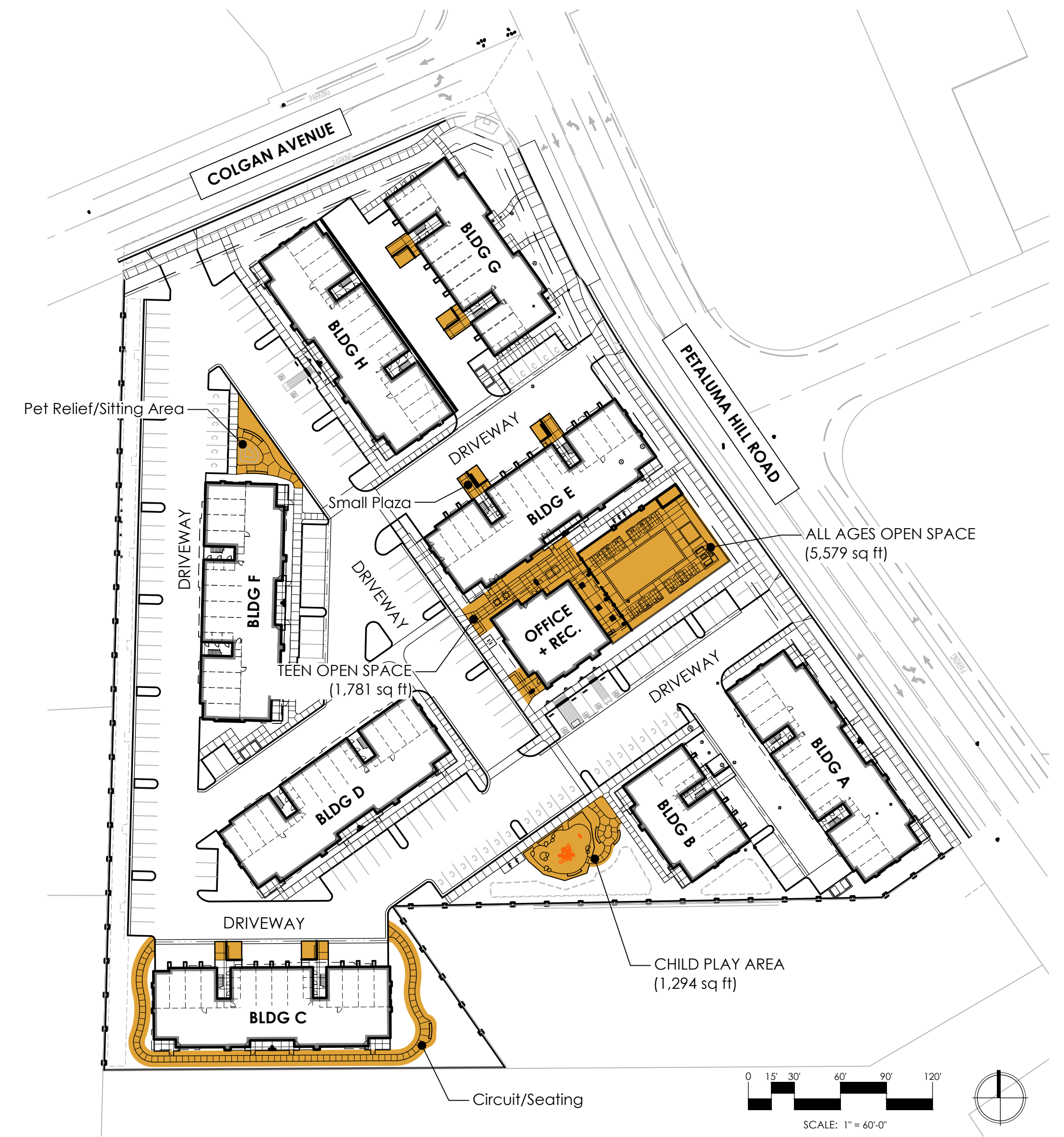
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OPEN SPACE (less buildings, parking, driveways, and accessible paths)  
**51,166 square feet of Open Space**



SITE PLANTED AREA  
**44,663 square feet (87% of Open Space)**



TOTAL COMMON OPEN SPACE - 15,706 square feet  
**All Ages Common Area: 5,579 square feet**  
**Teen Area: 1,781 square feet**  
**Child Play Area (ages 5 and under): 1,294 square feet**