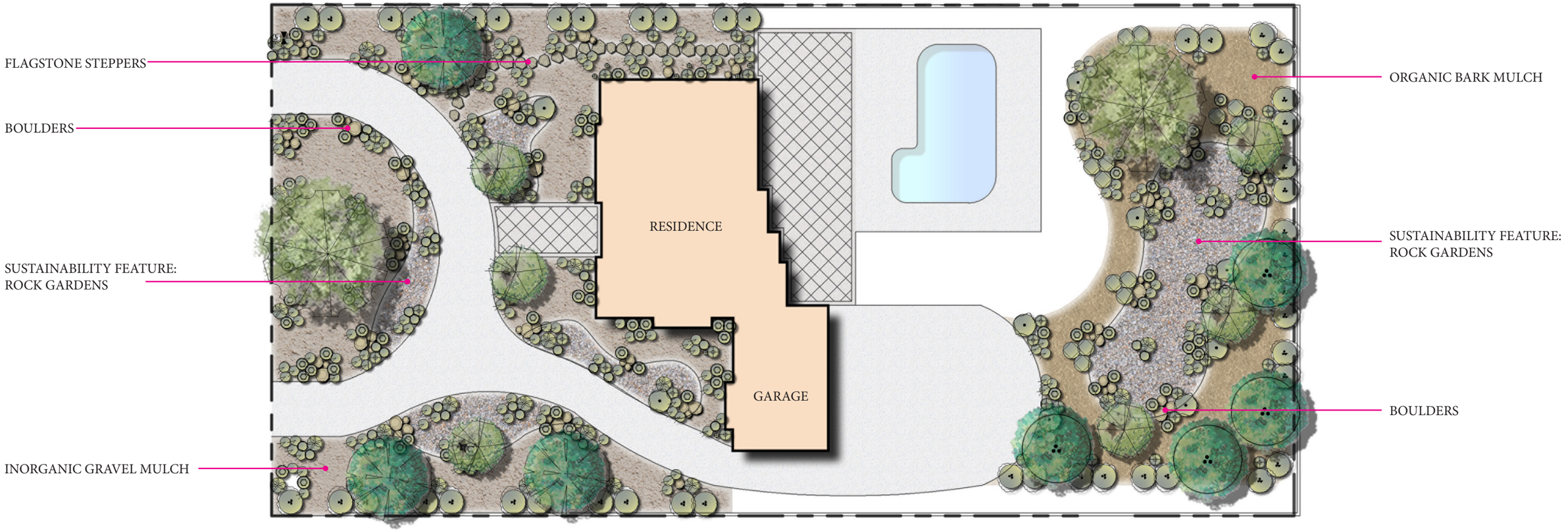
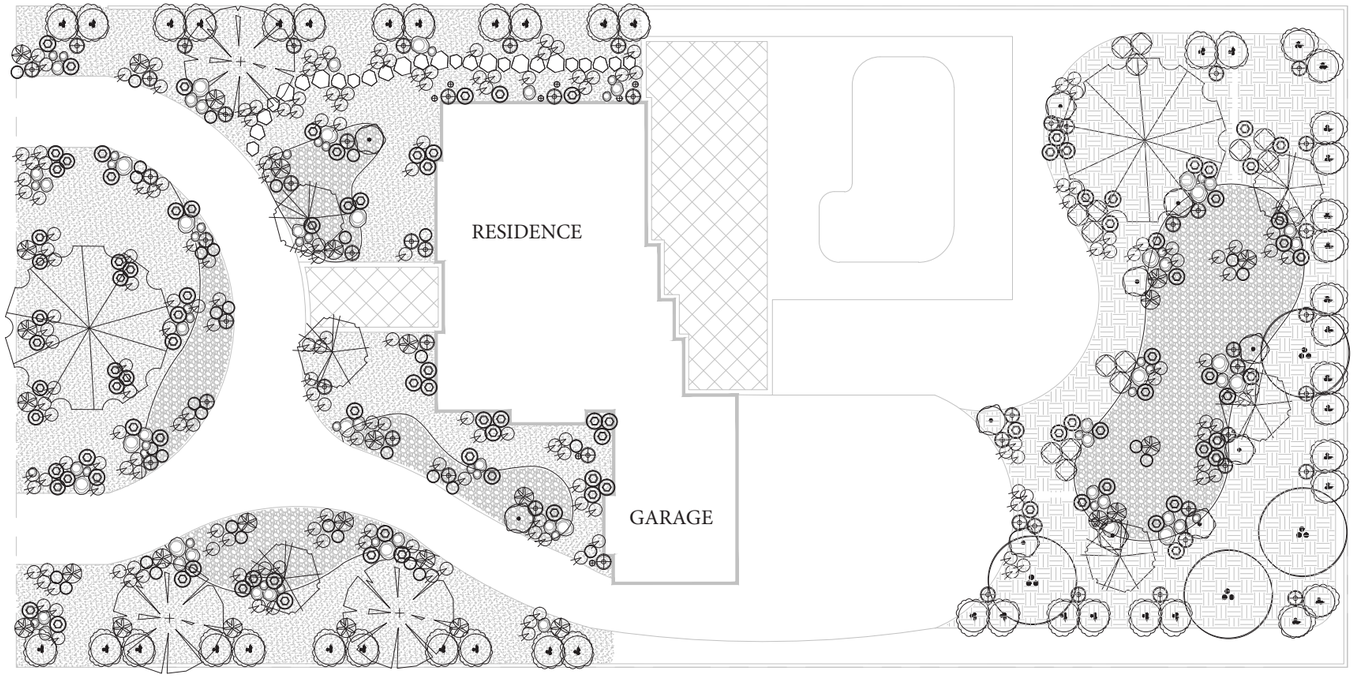


TerraWorks Studio

MWDOC

CONCEPTUAL LANDSCAPE PLAN

Municipal Water District of Orange County



SHRUB LEGEND

(USDA ZONE 9b)(SUNSET 15)

FORM	SYM.	BOTANICAL NAME	COMMON NAME	SIZE	QTY	CODE	WIDTH	HEIGHT	WUCOLS	ISHB
SHRUB		ARCTOSTAPHYLOS GLANDULOSA SSP.	EASTWOOD MANZANITA	15 GAL.	11	O	8'	3'-12'	VERY LOW	
SHRUB		CAMISSONIOPSIS CHEIRANTHIFILOA	BEACH EVENING PRIMROSE	1 GAL.	54	O	3'	1"-4"	VERY LOW	
SUCCULENT		DUDLEYA PULVERULENTA	CHALK DUDLEYA	1 GAL.	188	O	1'	1'	VERY LOW	
SHRUB		EPILOBIUM CANUM	CALIFORNIA FUSCHIA	1 GAL.	15	O	2'-3'	1.5'	VERY LOW	
PERENNIAL		JUNCUS ACUTUS	SPINY RUSH	1 GAL.	105	O	5'	5'	MODERATE	
GRASS		LEYMUS CONDENSATUS	CANYON PRINCE WILD RYE	1 GAL.	37	O	2'-3'	2'-3'	LOW	
ANNUAL		LUPINUS BICOLOR	SKY LUPINE	1 GAL.	8	O	1'	1'	LOW	
SHRUB		RHAMNUS CALIFORNICA	CALIFORNIA COFFEE BERRY	5 GAL.	45	O	6'-8'	6'-8'	VERY LOW	
SHRUB		YUCCA WHIPPLEI	YUCCA	5 GAL.	28	O	2'-3'	2'-12'	VERY LOW	
16,351 sq. ft. TOTAL TURF AREA REMOVED (491 PLANTS REQUIRED)					491 TOTAL PLANT PROVIDED					

TREE LEGEND

(USDA ZONE 9b)(SUNSET 15)

SYM.	BOTANICAL NAME	COMMON NAME	SIZE	QTY	CODE	WIDTH	HEIGHT	WUCOLS	ISHB
	SAMBUCUS MEXICANA	MEXICAN ELDERBERRY	24" BOX	6	O	10'- 25'	10' - 25'	LOW	
	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	2	O	30' - 40'	25' - 45'	VERY LOW	*
	POPULUS FREMONTII	WESTERN COTTONWOOD	24" BOX	4	O	30' - 40'	60' - 80'	LOW	*
	ALNUS RHOMBIFOLIA	BIG LEAF MAPLE	24" BOX	3	O	5' - 10'	10' - 30'	HIGH	*

NOTES:
- REFERENCE THE OCFA FUEL MODIFICATION ZONE PLANT LIST ATTACHMENT 8 FOR THE FULL LIST OF PLANT MATERIAL AT THE LINK BELOW.
  https://ocfa.org/Uploads/CommunityRiskReduction/OCFA%20Guide-C05-Fuel%20Modification.pdf

SYMBOLS
★ PLANT SPECIES SUSCEPTIBLE TO INVASIVE SHOT HOLE BORERS (ISHB) INFESTATION.
○ PLANT SPECIES NATIVE TO ORANGE COUNTY.

HARDSCAPE AND MULCH LEGEND

SYMBOL	DESCRIPTION	QUANTITY	COLOR	FINISH
	SUSTAINABLE FEATURE: ROCK GARDEN A rock garden is a shallow depression filled with 1-3 inch diameter gravel. This shallow depression should have enough of a side slope that the difference between level ground and the lowest point in the rock garden is visible to the eye. Rainwater is stored in the space between the stones and eventually percolates into the soil. Plants are distributed throughout the rock garden and there is no ponding area – so one can walk on it.	APPROX. 3,531 SQ. FT.	SIERRA COBBLE	N.A.
	DECORATIVE BOUDLERS	APPROX. 94	DESERT SAND	N.A.
	DECOMPOSED GRANITE INORGANIC MULCH	APPROX. 7,687 SQ. FT.	DESERT GOLD	STABILIZED
	ORGANIC CHIP BARK MULCH	APPROX. 4,693 SQ. FT.	WOOD OVERS	N.A.
	FLAGSTONE STEPPERS	APPROX. 26	CAMERON	N.A.

VEGETATION MANAGEMENT NOTES:

1. REMOVE ALL DEAD OF DYING PLANTS WITHIN 100 FEET OF YOUR HOME.
2. IDENTIFY AND REMOVE PLANTS FOUND ON OCFA'S UNDESIRABLE PLANT LIST.
3. REMOVE DRY LEAVES, BARK, AND PINE NEEDLES FROM THE YARD, ROOF, AND RAIN GUTTERS.
4. KEEP ALL SHRUBS WITHIN 10 FEET OF YOUR HOME TRIMMED TO 2 FEET TALL OR LOWER.
5. PRUNE OR REMOVE PLANTS NEAR WINDOWS.
6. KEEP ANNUAL GRASSES AND WEEDS CUT TO 4 INCHES OR LESS.
7. TRIM PALM TREES REGULARLY TO REMOVE DEAD OF DYING LEAVES AND BRANCHES.
8. ELIMINATE COMBUSTIBLE MULCH, COMPOST, AND WOOD PILES WITHIN 2 FEET OF ALL COMBUSTIBLE FENCES, DECKS, PLAY STRUCTURES, GAZEBOS, SHEDS, PATIO COVERS, TRELLISES, DETACHED GARAGES, DETACHED A.D.U.'S, AND BUILDINGS. WOOD PILES SHOULD BE MOVED TO AT LEAST 30' FROM HOME OR TO PROPERTY LINE.

GENERAL PLANTING NOTES

1. ALL BOXED TREES SHOULD BE SELECTED AND TAGGED BY THE HOMEOWNER.
2. ALL LOCAL JURISDICTION STANDARDS AND SPECIFICATIONS SHOULD BE REVIEWED PRIOR TO PLANTING.
3. THE CONTRACTOR SHOULD VERIFY ALL PLANT MATERIAL QUALITY AND QUANTITIES PRIOR TO INSTALLATION. THE CONTRACTOR IS BE RESPONSIBLE FOR THE CONTINUOUS PROTECTION OF ALL PLANT MATERIALS UPON ARRIVAL TO THE SITE.
4. ALL TREES, SHRUBS, VINES AND GROUNDCOVER SHALL BE SPOTTED UNDER THE DIRECTION OF THE HOMEOWNER.
5. CONTRACTOR IS TO SPOT ALL PLANT MATERIAL AND HAVE THE HOME OWNER APPROVE LOCATION PRIOR TO EXCAVATION OF ANY PLANT PIT. ALLOW 48 HOURS LEAD TIME. ANY TREE, SHRUB OR VINE THAT IS PLANTED WITHOUT APPROVAL OF THE HOMEOWNER MAY BE MOVED AT THE CONTRACTOR'S EXPENSE.
6. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE CORRECT HEIGHT OF ROOT BALL ABOVE GRADE.
7. LANDSCAPE CONTRACTOR SHOULD ADJUST TREE LOCATIONS IF THERE IS A CONFLICT WITH SUBSURFACE DRAIN LINES OR STORM DRAINS.
8. THIRTY (30) DAYS AFTER INSTALLATION, ALL LANDSCAPE AREAS SHALL BE FERTILIZED WITH A COMMERCIAL GRADE FERTILIZER OF 16-6-8 OR HOMEOWNER APPROVED EQUAL, APPLIED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
9. ALL LANDSCAPE AREAS SHOULD SHEET FLOW @ 2% MINIMUM OR DRAIN TO "SUSTAINABLE FEATURE".
10. ALL TREES THAT ARE CLOSER THAN FIVE FEET (5') TO HARDSCAPE ELEMENTS SHOULD BE PLANTED WITH A HOMEOWNER AND AGENCY APPROVED LINEAR ROOT BARRIER.
11. LANDSCAPE CONTRACTOR SHOULD SUBMIT MULCH SAMPLE TO HOMEOWNER PRIOR TO DELIVERY AND INSTALLATION.

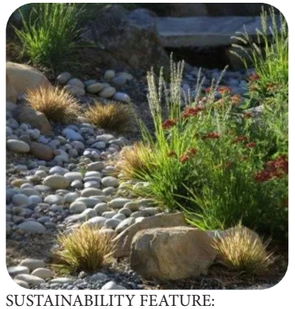
SUSTAINABILITY LEGEND

***All Turf Removal Program projects must include a minimum of 3 plants per 100 square feet of turf removed and at least one approved sustainability feature. Refer to the MWDOC Turf Removal Program's website for more information.

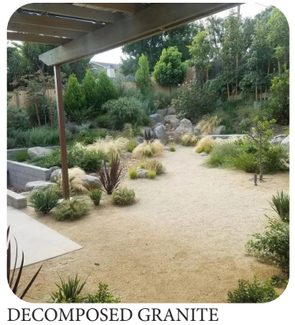
CONCEPTUAL IMAGERY


SUSTAINABILITY FEATURE:
ROCK GARDEN


SUSTAINABILITY FEATURE:
ROCK GARDEN


SUSTAINABILITY FEATURE:
ROCK GARDEN


FLAGSTONE PATHWAYS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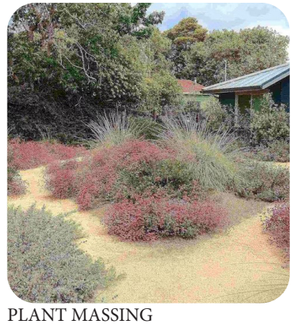
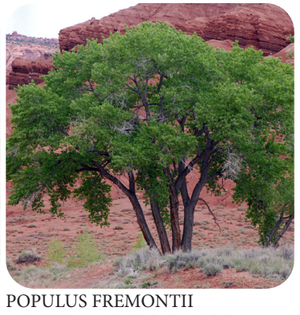

PLANT MASSING


PLANT MASSING

TREES

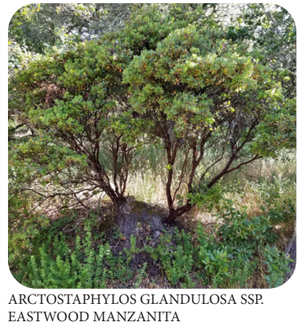

SAMBUCUS MEXICANA
MEXCICAN ELDERBERRY


QUERCUS AGRIFOLIA
COAST LIVE OAK


POPULUS FREMONTII
WESTERN COTTONWOOD


BIG LEAF MAPLE
ALNUS RHOMBIFOLIA

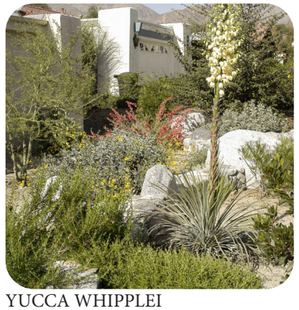
LARGE SHRUBS

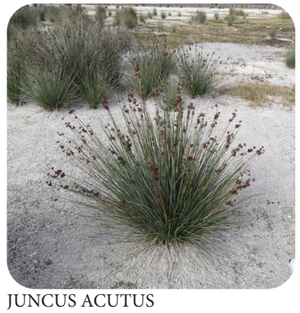

ARCTOSTAPHYLOS GLANDULOSA SSP.
EASTWOOD MANZANITA


EPILOBIUM CANUM
CALIFORNIA FUCHSIA

MEDIUM SHRUBS / SUCCULENT'S


DUDLEYA PULVERULENTA
CHALK DUDLEYA


YUCCA WHIPPLEI
YUCCA


JUNCUS ACUTUS
SPINY RUSH


LEYMUS CONDENSATUS
CANYON PRINCE WILD RYE


RHAMNUS CALIFORNICA
CALIFORNIA COFFEEBERRY

SMALL SHRUBS / GROUNDCOVERS


CAMISSONIOPSIS CHEIRANTHIFOLIA
BEACH EVENING PRIMROSE

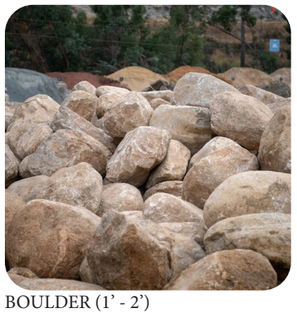

LUPINUS BICOLOR
SKY LUPINE

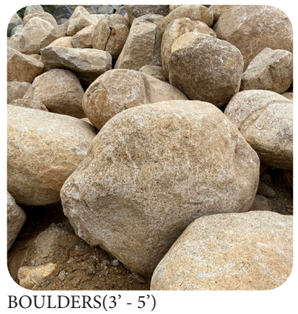
MATERIALS


ORGANIC CHIP BARK MULCH
(0-2' FROM HOME IS PROHIBITED)

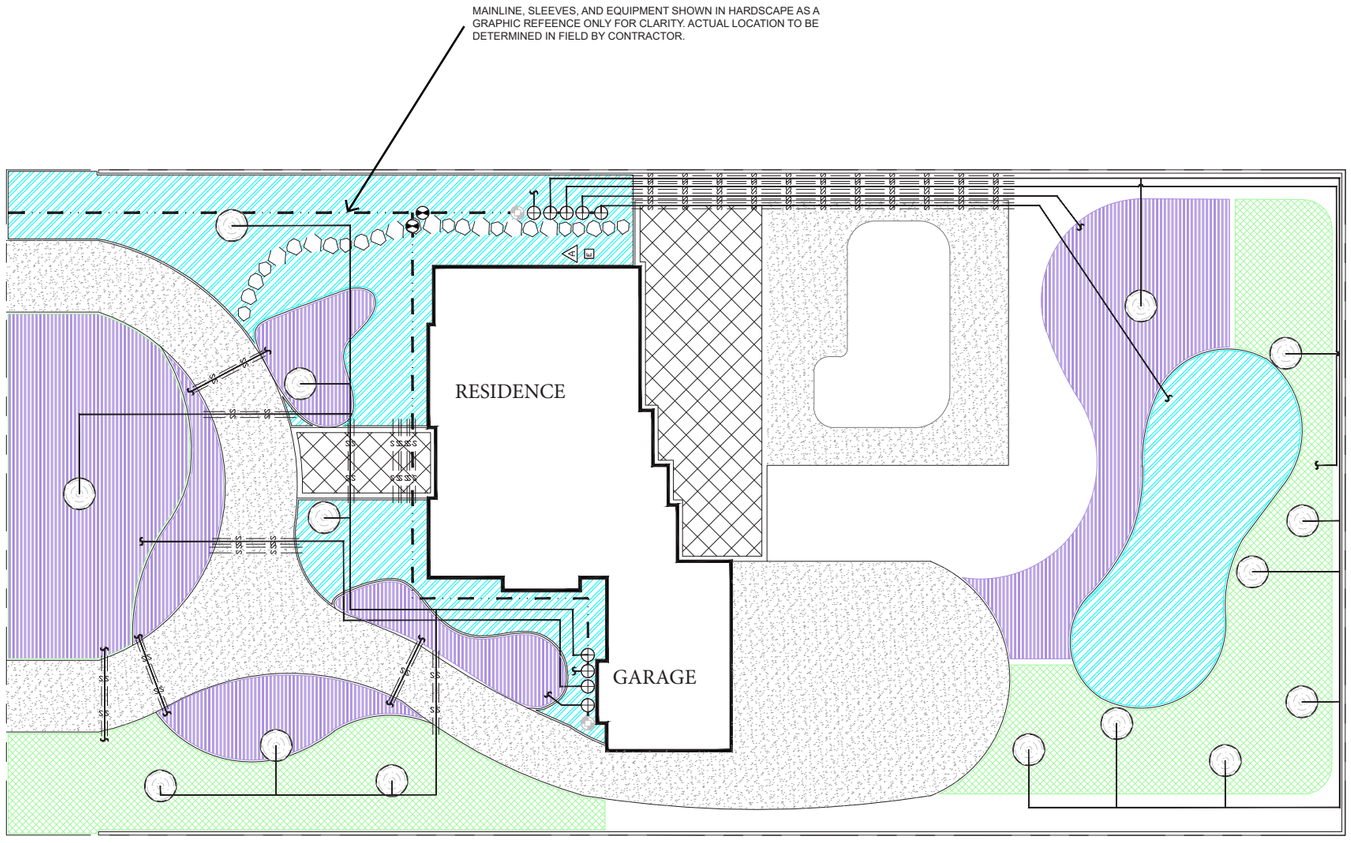

INORGANIC D.G. MULCH
DESERT GOLD


ROCK GARDEN
SIERRA COBBLE


BOULDER (1' - 2')
DESERT SAND


BOULDERS(3' - 5')
DESERT SAND


FLAGSTONE STEPPERS
CAMERON



GENERAL IRRIGATION NOTES

1. THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 70 PSI AT THE POC. CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. IF A DIFFERENT PRESSURE IS FOUND, REPORT IMMEDIATELY TO HOMEOWNER.
2. THE IRRIGATION DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR CLARIFICATION ONLY AND SHALL BE INSTALLED WITHIN PLANTING AREAS WHEREVER POSSIBLE.
3. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BECOME FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, STRUCTURES, AND UTILITIES. ALL CONTRACTORS SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY THEIR WORK. WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, AND ETC.
4. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES ON SITE EXIST THAT ARE NOT SHOWN ON THE PLANS. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE HOMEOWNER. IN THE EVENT THAT NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
5. ALL SPRINKLER EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

IRRIGATION UTILITIES

		POINT OF CONNECTION (P.O.C) TO DOMESTIC SERVICE LINE.
M	EXISTING	METER TO REMAIN.
	EXISTING	GATE VALVE TO REMAIN.
	EXISTING	HOSE BIB TO REMAIN.
	EXISTING	REMOTE CONTROL VALVE TO REMAIN.

IRRIGATION CONTROLLER

A	HUNTER	PRO-C PC-400 WALL MOUNT CONTROLLER with (1) PCM-300 and ROAM REMOTE.
E	BY OTHERS	120 VOLT ELECTRICAL POWER for CONTROLLER PROVIDED BY ELECTRICIAN, HOMEOWNER TO VERIFY AND APPROVE FINAL LOCATION.

SUB-SURFACE IRRIGATION

	HUNTER	$\frac{3}{4}$" PGV-ASV VALVE WITH $\frac{3}{4}$" HFR SYSTEM WITH 25 PSI REGULATOR
	AS APPROVED	GATE VALVE - BLOCKED TRUE UNION PVC - 2" & SMALLER (LOCATE IN PLANTING AREAS - SHOWN FOR CLARITY ONLY)
	HUNTER	HDL-06-12-100-CV DRIPLINE TUBING 0.6 GPH EMITTERS AT 12" ON CENTER SPACING - ALL TUBING SHALL BE INSTALLED ON GRADE W/ 9" WIRE STAKES TWO (2) FEET ON CENTER; VERIFY THE LAYOUT AND CENTER SPACING IN THE FIELD PRIOR TO STARTING WORK. INSTALL ON GRADE DRIP IRRIGATION SYSTEM per MANUFACTURER'S SPECIFICATIONS. CUT AND INSTALL TUBING TO ALLOW FOR MINIMUM OF 2 EMITTERS PER SHRUB, PREFERABLY 3 IN A TRIANGULAR PATTERN.
		USE HUNTER PLD and PLD-LOC FITTINGS FOR CONNECTION BETWEEN PVC LATERAL LINES AND INLINE DRIP TUBING.
*		**DRIP LINE LAYOUT NOTE:** NOT ALL SUPPLY/EXHAUST LATERALS SHOWN ON PLAN for GRAPHIC CLARITY - INSTALL LATERALS per *MANUFACTURER'S* SPECIFICATIONS and RECOMMENDATIONS TO AVOID LOW PRESSURE THROUGH DRIPPERLINE and CONNECTIONS.
	HUNTER	DRIPLINE TREE RING - HDL-06-12-100-CV DRIPLINE TUBING .6 GPH EMITTERS AT 12" ON CENTER SPACING. TUBING SHALL BE INSTALLED ON GRADE W/ 9" WIRE STAKES TWO (1) FEET ON CENTER; VERIFY THE LAYOUT AND CENTER SPACING IN THE FIELD PRIOR TO STARTING WORK. INSTALL ON GRADE DRIP IRRIGATION SYSTEM PER MANUFACTURER'S SPECIFICATIONS. CUT AND INSTALL TUBING TO ALLOW FOR MINIMUM OF 2 EMITTERS PER SHRUB, PREFERABLY 3 IN A TRIANGULAR PATTERN.
NO SYMBOL	HUNTER	AFV-T FLUSH VALVE. INSTALL VALVE INSIDE 6" ROUND VALVE BOX, ONE AT THE FAR END/LOW SIDE OF EACH PLANTER DRIP LINE LATERAL. INSTALL MINIMUM OF ONE FLUSH VALVE PER MAXIMUM OF 800' OF TUBING. MULTIPLE FLUSH VALVES MAY BE REQUIRED WITHIN DRIP LINE LAYOUT. ALWAYS INSTALL VALVES IN OPPOSITE DIRECTIONS OF THE PVC/DRIP CONNECTION MANIFOLD. REFER TO MANUFACTURER SPECIFICATIONS AND INSTALLATION GUIDELINES.
NO SYMBOL	HUNTER	PLD-ARV AIR/VACUUM RELIEF VALVE - INSTALL AIR RELIEF ASSEMBLY INSIDE A 6" ROUND VALVE BOX AT THE HIGH POINT OF EACH PLANTER, MIN. 1 ARV PER 500' OF DISTRIBUTION TUBING. USING AIR RELIEF LATERAL, CONNECT AIR RELIEF VALVE TO ALL DRIP LINE LATERALS WITHIN THE ELEVATED AREA. REFER TO MANUFACTURER SPECIFICATIONS AND INSTALLATION GUIDELINES. MULTIPLE ARV'S MAY BE REQUIRED PER RCV WITHIN UNDULATING AREAS, VERIFY QUANTITY PRIOR TO STARTING WORK, FLUSH VALVES and AIR RELIEF VALVES SHOWN DIAGRAMMATICALLY, INSTALL VALVE BOX 18" FROM PAVING AND AT HIGH POINTS OF PLANTER AREA.
NO SYMBOL	HUNTER	ECO-INDICATOR INSTALLED ON EVERY STATION.
NO SYMBOL	HUNTER	WSS-SEN WIRELESS SOLAR SYNC SENSOR with WIRELESS RECEIVER. INSTALL per MANUF. SPECIFICATIONS. NOTE: WHENEVER POSSIBLE HARD WIRE MODEL PREFERRED (MODEL #: SOLAR-SYNC).

IRRIGATION PIPING

	AS APPROVED	NON-PRESSURE LATERAL SCH. 40 PVC PIPE. FOR SIZES 3/4" - 2" W/ PVC SCH. 40 FITTINGS - BURY MIN. 12" BELOW GRADE, SEE DETAIL FOR SLEEVING AND DEPTHS. SEE SYMBOL AND PLAN FOR SLEEVING LOCATIONS.
	AS APPROVED	EXISTING MAINLINE TO REMAIN. **NOTE:** PRESSURE RELIEF VALVES SHALL BE INSTALLED AT ALL IRRIGATION MAINLINE PIPING "DEAD-ENDS" AND "RIGHT ANGEL" TURNS TO PREVENT WATER HAMMER DAMAGE TO PIPE AND FITTINGS. USE THRUST BLOCKS TO PREVENT WATER HAMMER WHERE NECESSARY.
SS	AS APPROVED	PVC PIPE SCH. 40 SLEEVING, TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED - EXTEND 12" BEYOND EDGE OF PAVING & PLACE BELOW ALL PAVING, HARDSCAPE, ETC. AS DEPICTE DON PLAN OR REQUESTED BY HOMEOWNER.

IRRIGATION MISCELLANEOUS EQUIPMENT

NO SYMBOL	N/A	IRRIGATION 'COMMON' WIRE #14UF AWG DIRECT BURIAL
NO SYMBOL	N/A	IRRIGATION 'CONTROL' WIRE #14UF AWG DIRECT BURIAL
NO SYMBOL	N/A	IRRIGATION 'SPARE' WIRE #14UF AWG DIRECT BURIAL
NO SYMBOL	3M	DBR/Y-6 DIRECT BURIAL WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE CONNECTIONS