

COLORED DRIVEWAY & DRIVEWAY APRON, TYP.

PARKWAY PLANTING AND GROUNDCOVER, TYP.

COMMUNITY MAILBOXES, REFER TO DETAIL B, SHEET L4.

ENHANCED HOME SETBACKS ALONG DIANA AVE.

CONCRETE WALK WITH SCORING, TYP.

NEIGHBORHOOD PARK WITH COMMUNITY GARDEN, HORSESHOE PITS, TOT LOT, AND BBQ PICNIC AREA. REFER TO PARK ENLARGEMENT, SHEET L2.

SEE ENLARGEMENT, SHEET L2.

STORM WATER STORAGE PIPE PER CIVIL'S IMPROVEMENT PLANS

PRELIMINARY TREE PALETTE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
	ACER BUERGERIANUM	TRIDENT MAPLE	15 GALLON	MED
	ACER P. 'BLOODGOOD'	JAPANESE MAPLE	15 GALLON	MED
	ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	24" BOX	LOW
	LAGERSTROEMIA I. 'TUSCORORA'	GRAPE MYRTLE	24" BOX	LOW
	NYSSA SYLVATICA	SOUR GUM	24" BOX	MED
	PISTACHIA CHINENSIS	CHINESE PISTACHE	24" BOX	LOW
	RHUS LANCEA	AFRICAN SUMAC	15 GALLON	LOW
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	LOW

COLORED DRIVEWAY & DRIVEWAY APRON, TYP.

EXISTING OAK TREE TO BE PRESERVED, TYP.

FRONT YARD PLANTING AND GROUNDCOVER, TYP.

STREET TREE, TYP.

SIDEWALK PER CIVIL, TYP.

AC UNIT BEHIND FENCE, TYP.

6'-0" WOOD PRODUCTION FENCE, TYP. REFER TO DETAIL A, SHEET L4. @ ALL SIDE & BACK YARDS

NOTES:

1. ALL TREES SHALL BE PLANTED AND STAKED PER CITY STANDARDS.
2. TREES BE PLANTED WITHIN 8' 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".
6. ALL MECHANICAL EQUIPMENT WILL BE SCREENED BY EITHER FENCE OR SHRUBS THROUGH PROJECT.
7. THERE SHALL BE A BREAK AT THE FENCE WHERE EXISTING OAK TREE (#12029) INTERSECTS THE PROPERTY BOUNDARY

NOTE: SEE SHEET L3 FOR TREE PLANTING/STAKING DETAIL.

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.

ENTRYWAYS 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. FOR EXAMPLE, NARROW UPRIGHT EVERGREEN SHRUBS ARE PROPOSED AT THE SIDES OF THE GARAGE DOOR. TALLER SHRUBS WILL ALSO BE LOCATED AT SOLID BUILDING SURFACES AND FENCES. WHILE LOWER SHRUBS WILL BE LOCATED WHERE GROUND LEVEL WINDOWS AND WHERE ARCHITECTUAL FEATURES OCCUR, AND AT CORNERS TO MAINTAIN SITE LINE DISTANCES. 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.

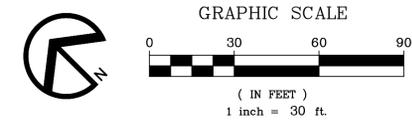
THE TREES HAVE BEEN SELECTED TO HAVE NON-INVASIVE ROOT SYSTEMS, AND PLACED WITH ADEQUATE SETBACKS TO ENSURE NO CONFLICT WITH UTILITIES AND HARDSCAPE, OR CONFLICT WITH ANY SITE LINE DISTANCES. ROOT BARRIERS WILL BE INSTALLED ON ALL TREES NEAR PAVING AND UTILITIES. WHERE FEASIBLE, TREES HAVE BEEN PLACED TO MITIGATE SOLID BUILDING SURFACES AND FENCES.

THE PROJECT FEATURES A COMMON PARK SPACE THAT ENHANCES CIRCULATION BY PROVIDING OPPORTUNITIES FOR ADULTS AND CHILDREN TO TRAVERSE THROUGHOUT THE PARK. PLAY EQUIPMENT 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.

NOTE: TURF AREA (HIGH WATER USE) IS LIMITED TO THE PARK. ALL PROPOSED SHRUBS AND GROUNDCOVER PLANTS ARE RATED AS LOW WATER USE TO PROMOTE THE DROUGHT TOLERANT DESIGN.



RIPLEY DESIGN GROUP
LANDSCAPE ARCHITECTURE
LAND PLANNING
 1615 BONANZA STREET
 SUITE 314
 WALNUT CREEK, CA 94596
 TEL: 925.938.7377
 FAX: 925.9387436

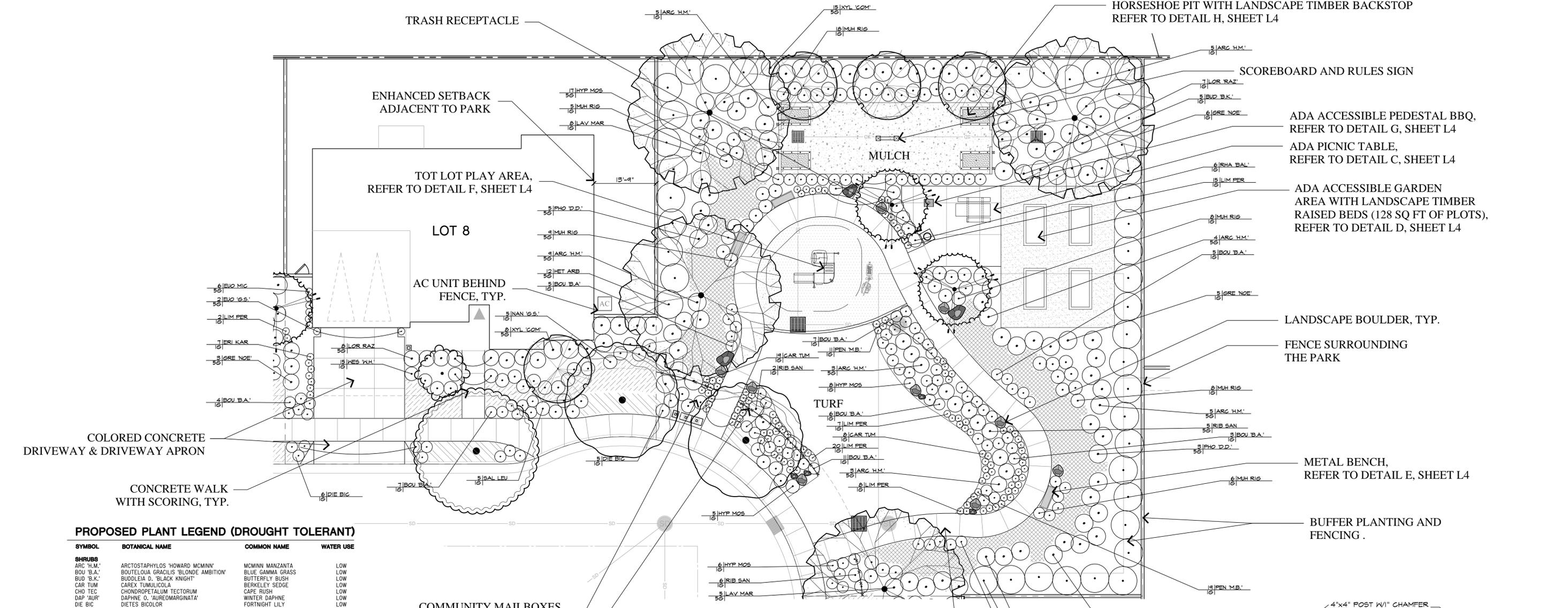
MANA HANA LEI, LLC

Montecito Estates
 Morgan Hill, California

Preliminary Drought Tolerant Landscape Plan

July 16, 2019

L1



PROPOSED PLANT LEGEND (DROUGHT TOLERANT)

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE
SHRUBS			
ARC 'H.M.'	ARCTOSTAPHYLOS 'HOWARD MCMINN'	MCMINN MANZANTA	LOW
BOU 'B.A.'	BOUQUET GRASS	BLUE GAMMA GRASS	LOW
BUD 'B.K.'	BUTTERFLY BUSH	BUTTERFLY BUSH	LOW
CAR 'TUM'	CAREX TOMULICOLA	BERKLEY SEDGE	LOW
CHO 'TEC'	CHONDROPETALUM TECTORUM	CAPE RUSH	LOW
DAP 'AUR'	DAPHNE O. 'AUREOMARGINATA'	WINTER DAPHNE	LOW
DIE 'BIC'	DIETES BICOLOR	FORTNIGHT LILY	LOW
DIE 'IRI'	DIETES IRIDIODES	FORTNIGHT LILY	LOW
ERI 'KAR'	ERIGON KAPVINSKIANS	SANTA BARBARA DAISY	LOW
EUO 'G.S.'	EUONYMUS J. 'GREEN SPIRES'	GREEN SPIRES EUONYMUS	LOW
EUO 'MIC'	EUONYMUS J. 'MICROPHYLLUS'	BOXLEAF EUONYMUS	LOW
EUO 'SIE'	EUONYMUS JAPONICUS 'SIEBE'	EUONYMUS GOLDEN FLAIR	LOW
FES 'MAI'	FESTUCA MAIREI	ATLAS FESCUE	LOW
GRE 'NOE'	GREVILLEA 'NOELLII'	WOOLY GREVILLEA	LOW
HET 'ARB'	HETEROMELES ARBUTIFOLIA	TOYON	LOW
HYP 'MOS'	HYPERICUM X MOSERIANUM	GOLD FLOWER	LOW
JUN 'PAT'	JUNCO PATENS	CALIFORNIA GREY RUSH	LOW
LAV 'MAR'	LAVATERA MARITIMA	TREE MALLOW	LOW
LIM 'PER'	LIMONIUM PEREZII	SEA LAVENDER	LOW
LOR 'E.S.'	LOROPETALUM 'EMERALD SNOW'	CHINESE FRINGE FLOWER	LOW
LOR 'RAZ'	LOROPETALUM C. 'RAZZELBERRI'	CHINESE FRINGE FLOWER	LOW
MUH 'RIG'	MUHLENBERGIA RIGENS	DEER GRASS	LOW
MYR 'CAL'	MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	LOW
MYR 'COM'	MYRTUS C. 'COMPACTA'	DWARF MYRTLE	LOW
NAN 'H.D.'	NANDINA D. 'HARBOR DWARF'	HEAVENLY BAMBOO	LOW
NAN 'G.S.'	NANDINA D. 'GULF STREAM'	HEAVENLY BAMBOO	LOW
OLE 'L.O.'	OLEA E. 'LITTLE OLLIE'	DWARF OLIVE	LOW
RHA 'BAL'	RHAPHOLEPIS I. 'BALLERINA'	INDIA HAWTHORN	LOW
RIB 'SAN'	RIBES SANGUINEUM	PINK FLOWERING CURRANT	LOW
ROS 'T.B.'	ROSMARINUS O. 'TUSCAN BLUE'	ROSEMARY	LOW
PEN 'M.B.'	PENSTEMON 'MARGARITA BOP'	FOOTHILLS PENSTEMON	LOW
PHO 'B.A.'	PHORMIUM T. 'BLACK ADDER'	NEW ZEALAND FLAX	LOW
PHO 'D.D.'	PHORMIUM T. 'DARK DELIGHT'	NEW ZEALAND FLAX	LOW
PHO 'M.M.'	PHORMIUM T. 'MAORI MAIDEN'	NEW ZEALAND FLAX	LOW
PHO 'Y.W.'	PHORMIUM T. 'YELLOW WAVE'	NEW ZEALAND FLAX	LOW
SAL 'LEU'	SALVIA LEUCANTHA	MEXICAN SAGE	LOW
STA 'BYZ'	STACHYS BYZANTINA	LAMB'S EARS	LOW
WES 'W.H.'	WESTRINGIA F. 'WYABBBIE HIGHLIGHT'	COAST ROSEMARY	LOW
XYL 'COM'	XYLOSMA C. 'COMPACTA'	COMPACT XYLOSMA	LOW
GROUNDCOVERS			
[Symbol]	BACCHARIS P. 'PIGEON POINT'	DWARF COYOTE BRUSH	LOW
[Symbol]	MYOPORUM PARVIFOLIUM	MYOPORUM	LOW
[Symbol]	ROSMARINUS O. 'HUNTINGTON CARPET'	TRAILING ROSEMARY	LOW
[Symbol]	TURF	TALL FESCUE TURF	HIGH

COMMUNITY MAILBOXES, REFER TO DETAIL H, SHEET L4

LOW WOOD CORRAL FENCE FUNCTIONS AS BUFFER ALONG W/ SHRUBS, SEE DETAIL A THIS SHEET

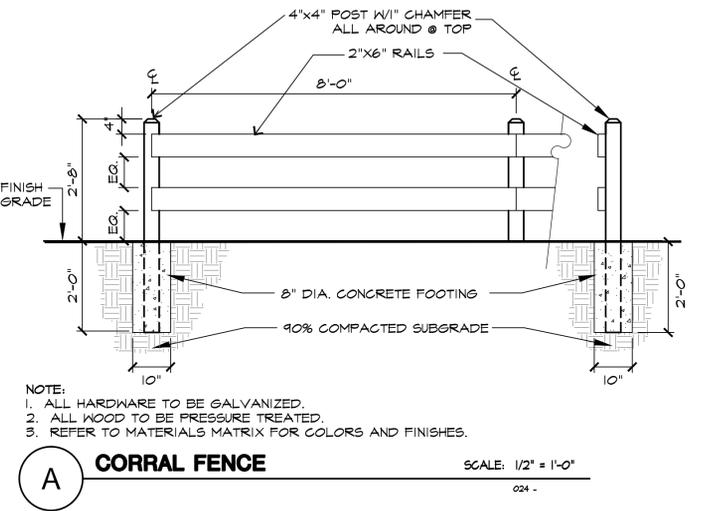
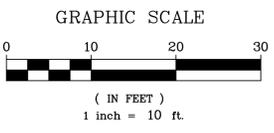
NOTE:
SEE SHEET L3 FOR TREE PLANTING/STAKING DETAIL
SEE SHEET L1 FOR TREE LEGEND.

LOT 8 AND PARK ENLARGEMENT

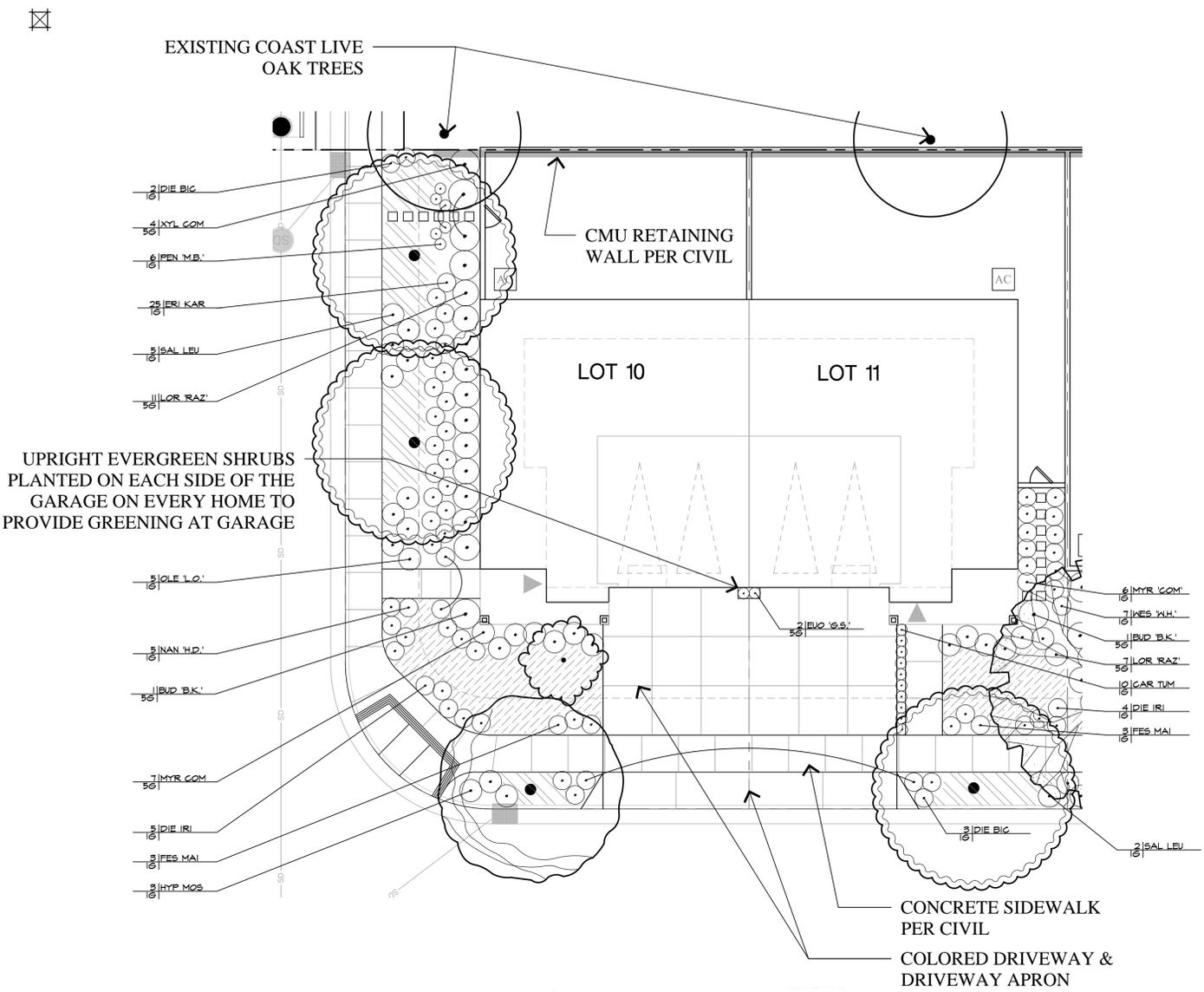
PROPOSED AMENITIES:
POINTS AWARDED PER RDCS PROJECT COMPLETION
TIER ONE:
HORSESHOE PITS (2 POINTS)
PICNIC AREA/BBQ AREA (1 POINTS)
PASSIVE REC AREA/GARDEN AREA (2 POINTS)
TIER THREE:
TOT LOT: AGE 3 APPROPRIATE (4 POINTS)
TOTAL PROPOSED AMENITIES = 9 POINTS

PLANT CALLOUT SYMBOL KEY

PLANT QTY	PLANT SYMBOL	PLANT SIZE	UNITS
1	[Symbol]	36" O.C.	
1	[Symbol]	36" O.C.	
1	[Symbol]	36" O.C.	



NOTE:
1. ALL HARDWARE TO BE GALVANIZED.
2. ALL WOOD TO BE PRESSURE TREATED.
3. REFER TO MATERIALS MATRIX FOR COLORS AND FINISHES.
A CORRAL FENCE SCALE: 1/2" = 1'-0"
024



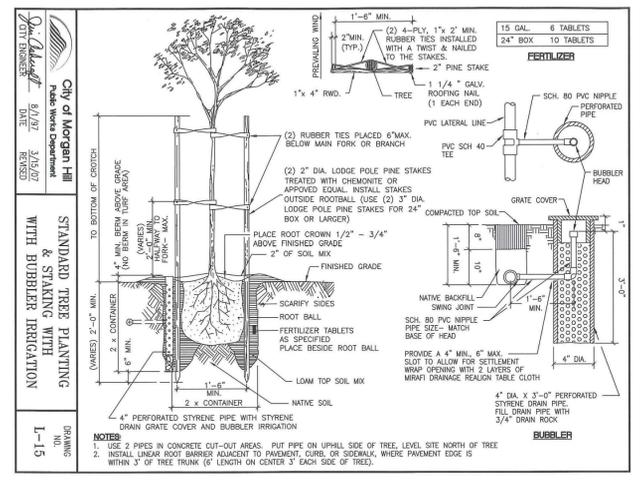
PROPOSED PLANT LEGEND (DROUGHT TOLERANT)

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE
SHRUBS			
ARC 'H.M.'	ARCTOSTAPHYLOS 'HOWARD MCMINN'	MCMINN MANZANTA	LOW
BOU 'B.A.'	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLUE GAMMA GRASS	LOW
BUD 'B.K.'	Buddleia D. 'BLACK KNIGHT'	BUTTERFLY BUSH	LOW
CAR TUM	CAREX TUMULICOLA	BERKLEY SEDGE	LOW
CHO TEC	CHONDROPETALUM TECTORUM	CAPE RUSH	LOW
DAP 'AUR'	DAPHNE O. 'AUREOMARGINATA'	WINTER DAPHNE	LOW
DIE BIC	DIETES BICOLOR	FORTNIGHT LILY	LOW
DIE IRI	DIETES IRIODES	FORTNIGHT LILY	LOW
ERI KAR	ERIGERON KARVINSKIANUS	SANTA BARBARA DAISY	LOW
EUNO 'G.S.'	EUONYMUS J. 'GREEN SPIRES'	GREEN SPIRES EUONYMUS	LOW
EUNO 'MIC'	EUONYMUS J. 'MICROPHYLLUS'	BOXLEAF EUONYMUS	LOW
EUNO 'SIE'	EUONYMUS JAPONICUS 'SIEBE'	EUONYMUS GOLDEN FLAIR	LOW
FES MAI	FESTUCA MAIREI	ATLAS FESCUE	LOW
GRE 'NOE'	GREVILLEA 'NOELLI'	WOOLY GREVILLEA	LOW
HET ARB	HETEROMELES ARBUTIFOLIA	TOYON	LOW
HYP MOS	HYPERICUM X MOSERIANUM	GOLD FLOWER	LOW
JUN PAT	JUNCUS PATENS	CALIFORNIA GREY RUSH	LOW
LAV MAR	LAVATERA MARITIMA	TREE MALLOW	LOW
LIM PER	LIMONIUM PEREZII	SEA LAVENDER	LOW
LOR 'E.S.'	LOROPETALUM 'EMERALD SNOW'	CHINESE FRINGE FLOWER	LOW
LOR 'RAZ'	LOROPETALUM C. 'RAZZELBERRY'	CHINESE FRINGE FLOWER	LOW
MUH RIG	MUHLENBERGIA RIGENS	DEER GRASS	LOW
MYR CAL	MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	LOW
MYR 'COM'	MYRTUS C. 'COMPACTA'	DWARF MYRTLE	LOW
NAN 'H.D.'	NANDINA D. 'HARBOR DWARF'	HEAVENLY BAMBOO	LOW
NAN 'G.S.'	NANDINA D. 'GULF STREAM'	HEAVENLY BAMBOO	LOW
OLE 'L.O.'	OLEA E. 'LITTLE OLLIE'	DWARF OLIVE	LOW
RHA 'BAL'	RHAPHIOLEPIS L. 'BALLERINA'	INDIA HAWTHORN	LOW
RIG SAN	RIGES SANGUINEUM	PINK FLOWERING CURRANT	LOW
ROS 'T.B.'	ROSMARINUS O. 'TUSCAN BLUE'	ROSEMARY	LOW
PEN 'M.B.'	PENSTEMON 'MARGARITA BOB'	FOOTHILLS PENSTEMON	LOW
PHO 'B.A.'	PHORMIUM T. 'BLACK ADDER'	NEW ZEALAND FLAX	LOW
PHO 'D.D.'	PHORMIUM T. 'DARK DELIGHT'	NEW ZEALAND FLAX	LOW
PHO 'M.M.'	PHORMIUM T. 'MAORI MAIDEN'	NEW ZEALAND FLAX	LOW
PHO 'W.'	PHORMIUM T. 'YELLOW WAVE'	NEW ZEALAND FLAX	LOW
SAL LEU	SALVIA LEUCANTHA	MEXICAN SAGE	LOW
STA BYZ	STACHYS BYZANTINA	LAMB'S EARS	LOW
WES 'W.H.'	WESTRINGIA F. 'WINYABBIE HIGHLIGHT'	COAST ROSEMARY	LOW
XYL 'COM'	XYLOSMA C. 'COMPACTA'	COMPACT XYLOSMA	LOW

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE
GROUNDCOVERS			
[Pattern]	BACCHARIS P. 'PIGEON POINT'	DWARF COYOTE BRUSH	LOW
[Pattern]	1 GALLON @ 36" O.C.		
[Pattern]	MYOPORUM PARVIFOLUM	MYOPORUM	LOW
[Pattern]	1 GALLON @ 36" O.C.		
[Pattern]	ROSMARINUS O. 'HUNTINGTON CARPET'	TRAILING ROSEMARY	LOW
[Pattern]	1 GALLON @ 36" O.C.		
[Pattern]	BOLERO SODDED	TALL FESCUE TURF	HIGH
[Pattern]	AVAILABLE FROM DELTA BLUE GRASS		

PLANTING NOTES

- THE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES DURING CONSTRUCTION THROUGH COMPLETION OF PICK-UP WORK.
- THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL FORMS OF PLANT MATERIALS AND SPECIFIED INSTALLATIONS, INCLUDING FLATTED GROUNDCOVER.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND STAKING ALL SEWER, UTILITY AND WATER MAIN LINES PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COSTS INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES. CALL COMMON GROUND ALLIANCE (CGA) AT 811 TO LOCATE AND MARK UTILITIES PRIOR TO EXCAVATION.
- SOIL PREPARATIONS: GROUNDCOVER AND TURF AREAS SHALL BE CROSSRIPPED OR TILLED TO A DEPTH OF NINE (9) INCHES. THE AMENDMENT SHALL BE UNIFORMLY BROADCAST PER 1,000 S.F. AND THOROUGHLY INCORPORATED TO A DEPTH OF 9" BY MEANS OF ROTOTILLER OR EQUAL. THE FOLLOWING FORMULA SHALL BE USED FOR BIDDING PURPOSES ONLY:
 6 CU.YDS. ORGANIC COMPOST
 35 LBS. 6-20-20 COMMERCIAL FERTILIZER
 50 LBS. IRON SULFATE (20% Fe)
- BACKFILL FOR TREES AND SHRUBS: THE PLANTING PITS FOR TREES AND SHRUBS SHALL BE EXCAVATED TO TWICE THE DIAMETER AND TO THE DEPTH OF THE ROOTBALL. ON SITE SOIL SHALL BE USED FOR BACKFILL PURPOSES. THE FOLLOWING MIX SHALL BE USED FOR BIDDING PURPOSES ONLY:
 6 PARTS BY VOLUME ON SITE SOIL
 4 PARTS BY VOLUME ORGANIC AMENDMENT PER ABOVE
 2LB./CU.YD. OF MIX 6-20-20
 2LB./CU.YD. OF MIX IRON SULFATE PER CU.YD. OF MIX
- ALL SOIL AMENDMENTS SPECIFIED ARE FOR BIDDING PURPOSES ONLY. ONCE SITE HAS BEEN ROUGH GRADED, CONTRACTOR SHALL OBTAIN A SOILS REPORT FROM WAYPOINT ANALYTICAL CALIFORNIA, INC. (408-727-0330) FOR SOIL AMENDMENTS. CONTRACTOR TO SUBMIT ONE COPY OF THE SOILS REPORT TO THE CITY, ONE COPY TO THE OWNER, AND ONE COPY TO THE LANDSCAPE ARCHITECT FOR USE IN PROVIDING UPDATED IRRIGATION SCHEDULING RECOMMENDATIONS TO BE INCLUDED PRIOR TO APPROVAL OF CERTIFICATE OF COMPLIANCE. CONTRACTOR SHALL FOLLOW THE SOIL PREPARATION AND BACKFILL MIX PER THE REPORT.
- ALL 5 GALLON SHRUBS SHALL RECEIVE TWO (2) 21 GRAM AGRIFORM PLANTING TABLETS, ALL 15 GALLON TREES SHALL RECEIVE FOUR (4) 21 GRAM AGRIFORM PLANTING TABLETS AND ALL BOX TREES SHALL RECEIVE EIGHT (8) 21 GRAM AGRIFORM TABLETS.
- ALL SHRUB AND GROUNDCOVER PLANTING AREAS SHALL BE MULCHED TO A MINIMUM DEPTH OF 3". MULCH TO BE RECYCLED WOOD WASTE, COLOR TO BE BLACK, 1/2" TO 1" DIAMETER FROM WASTE MANAGEMENT, INC., SACRAMENTO, (916-452-0142).
- CONTRACTOR SHALL SPRAY ALL EXISTING WEEDS IN PLANTING AREAS PRIOR TO RIPPING AND APPLY PRE-EMERGENT TO ALL SHRUB AREAS AFTER PLANTING.
- CONTRACTORS SHALL APPLY FERTILIZER AND PRE-EMERGENT AT END OF MAINTENANCE PERIOD.
- LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO SELECT OR REJECT ANY OR ALL PLANT MATERIAL.
- REFER TO TREE PLANTING/STAKING DETAIL, THIS SHEET.
- THIS PLAN COMPLIES WITH THE CRITERIA OF THE CITY'S WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIES THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.
- TURF SHALL NOT BE INSTALLED ON SLOPES GREATER THAN 25% (1:4).



PRELIMINARY WATER CALCULATIONS

MANA HANA LEI, LLC
 1515 BONANZA STREET, SUITE 314
 WALNUT CREEK, CA 94596
 TEL: 925.938.7377
 FAX: 925.938.7436

DATE: 08/14/2024
 PAGE 1 OF 2
 Worksheet: Landscape Workbook for projects in Morgan Hill, CA

This worksheet is provided for each project in connection with the landscape design.
 This form determines the specific water budget.
 This form demonstrates that the estimated total water use is less than the maximum applied water allowance.

Where:
 MAWA = Maximum Applied Water Allowance (gallons per year)
 EA = Estimated Evapotranspiration (gallons per year)
 CF = Conversion Factor (gallons per year)
 LA = Landscape Area (square feet)
 ET = ET Adjustment Factor (ETAF)
 LA = Landscape Area (square feet)
 EA = Additional Water Allowance for LA
 EA = Estimated Total Water Use (gallons per year)
 ET = ET Adjustment Factor (ETAF)
 EA = Evapotranspiration (gallons per year)
 EA = Hydrozone Area (High, Medium and Low water use areas) (square feet)
 ET = Irrigation Efficiency (minimum 0.7)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Annual
Net Use	1.5	1.8	2.4	4.2	8.5	7.9	7.1	6.0	5.1	3.7	1.9	1.4	49.4

Maximum Applied Water Allowance Calculation
 MAWA = (EA) x (CF) x (LA) = 33,536

Estimated Total Water Use Calculation
 ETWA = (EA) x (ETAF) x (LA) = 721,168

HYDROZONE INFORMATION TABLE

Hydrozone	Plant Water Use Type (Low, medium or high)	Plant Factor (PF) (0.5 to 1.0)	Hydrozone Area (sq. ft.)	% of Total Area	Type of Irrigation (Drip, bubblers, etc.)	Irrigation Efficiency (IE) (70-90%)	PF x IE
Non-Turf Areas	Low	0.50	42,700	9%	Drip	85%	0.425
Turf	High	1.00	2,800	6%	BUBBLERS	75%	0.75
Turf Area	High	1.00	2,800	6%	Drip	75%	0.75
ETWA			49.4	0.52		0.75	35,536

Estimated Total Adjustment Factor Calculations
 Total Area = 1,281
 Total Area = 4,281
 Average ETAF = 0.69

Plant Factor Physical Ranges (PF)
 To calculate plant factor use "Scale to Existing Irrigation Water Needs of Landscape Plantings" in California and Workbook.
 www.water.ca.gov/irrigation/irrigation

Plant Factor Physical Ranges (PF)	Plant Factor Physical Ranges (PF)
Low Water Use: 0.5-0.7	Plant Factor Physical Ranges (PF) - 0.5 to 0.7
Medium Water Use: 0.8-0.9	Plant Factor Physical Ranges (PF) - 0.8 to 0.9
High Water Use: 1.0-1.1	Plant Factor Physical Ranges (PF) - 1.0 to 1.1

Irrigation Efficiency Ranges (IE)
 Irrigation efficiency will vary by soil type, weather conditions, design, plant type, construction quality, maintenance, etc.
 Please refer to the "Scale to Existing Irrigation Water Needs of Landscape Plantings" in California and Workbook.

Irrigation Efficiency Ranges (IE)	Irrigation Efficiency Ranges (IE)
Subsurface: 70-85%	Irrigation Efficiency Ranges (IE) - 70-85%
Drip Emitters: 80-90%	Irrigation Efficiency Ranges (IE) - 80-90%
Surface Irrigation: 60-70%	Irrigation Efficiency Ranges (IE) - 60-70%

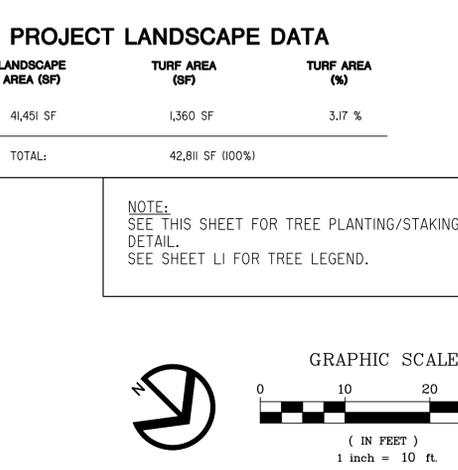
WATER SAVINGS:

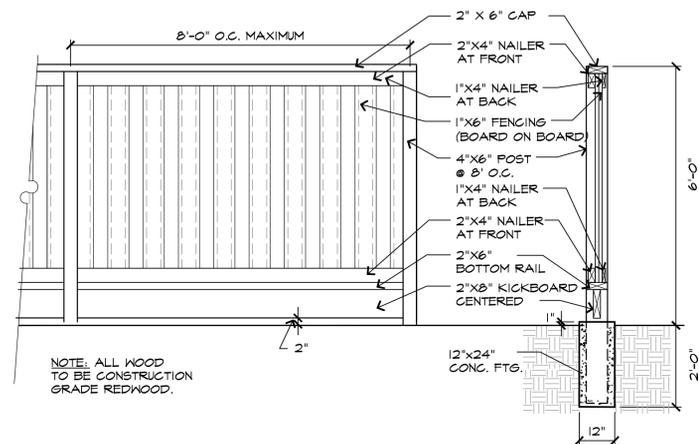
MAXIMUM APPLIED WATER ALLOWANCE:	PROPOSED WATER USAGE:	WATER SAVINGS:
721,168 GALLONS (PER YEAR)	375,520 GALLONS (PER YEAR)	721,168 - 375,520 = 345,648 GALLONS PER YEAR
		345,648 / 721,168 = 48%

PROJECT LANDSCAPE DATA

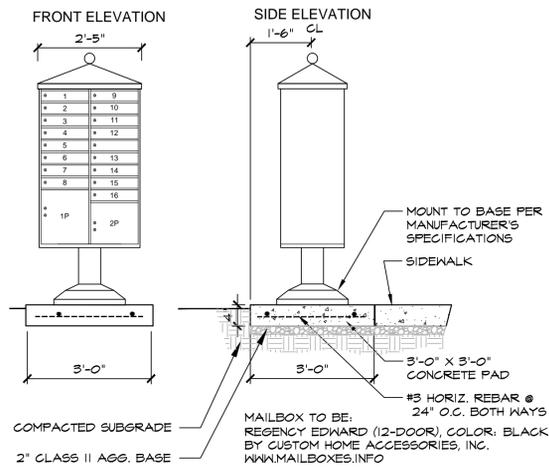
LANDSCAPE AREA (SF)	TURF AREA (SF)	TURF AREA (%)
41,451 SF	1,360 SF	3.17 %
TOTAL:	42,811 SF (100%)	

NOTE:
 SEE THIS SHEET FOR TREE PLANTING/STAKING DETAIL.
 SEE SHEET LI FOR TREE LEGEND.

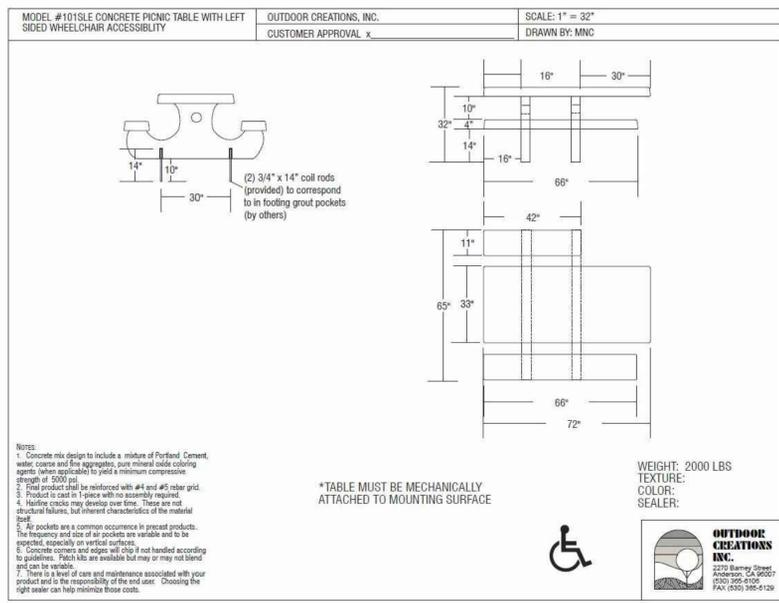




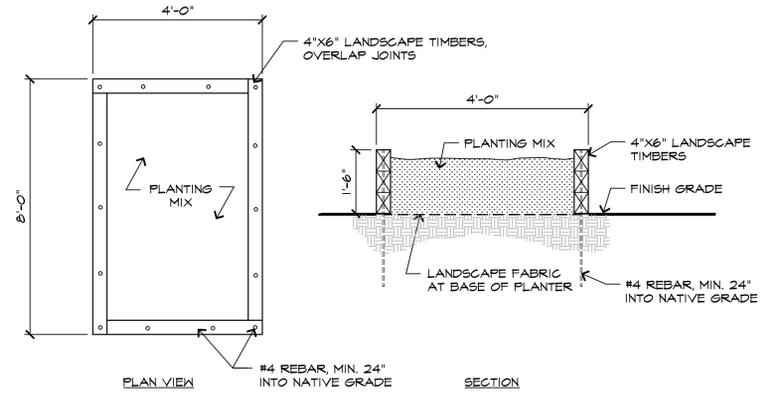
A WOOD FENCE W/KICKBOARD SCALE: 1/2" = 1'-0"
024 - fncRur



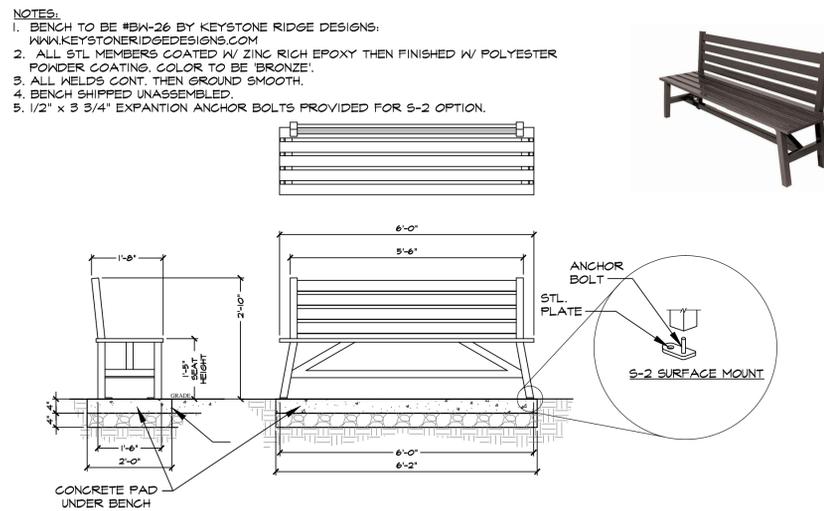
B COMMUNITY MAILBOXES



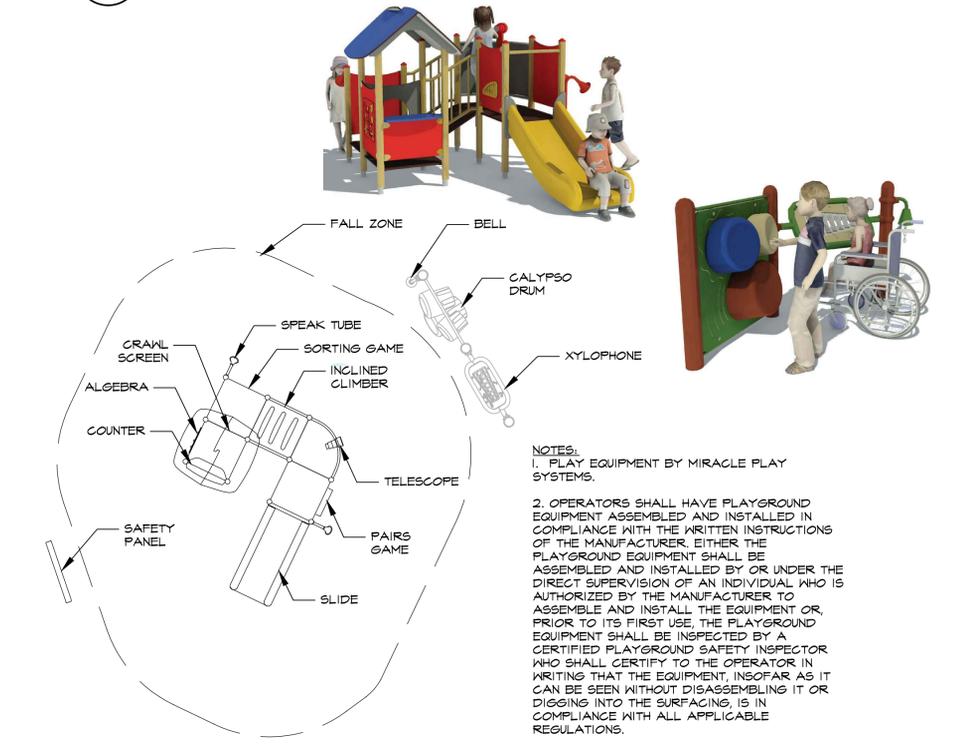
C ADA PICNIC TABLE NO SCALE
024 - TreedPng



D RAISED PLANTER SCALE: 1/2" = 1'-0"
024 - PlanRaid



E METAL BENCH SCALE: 1/2" = 1'-0"
024 -



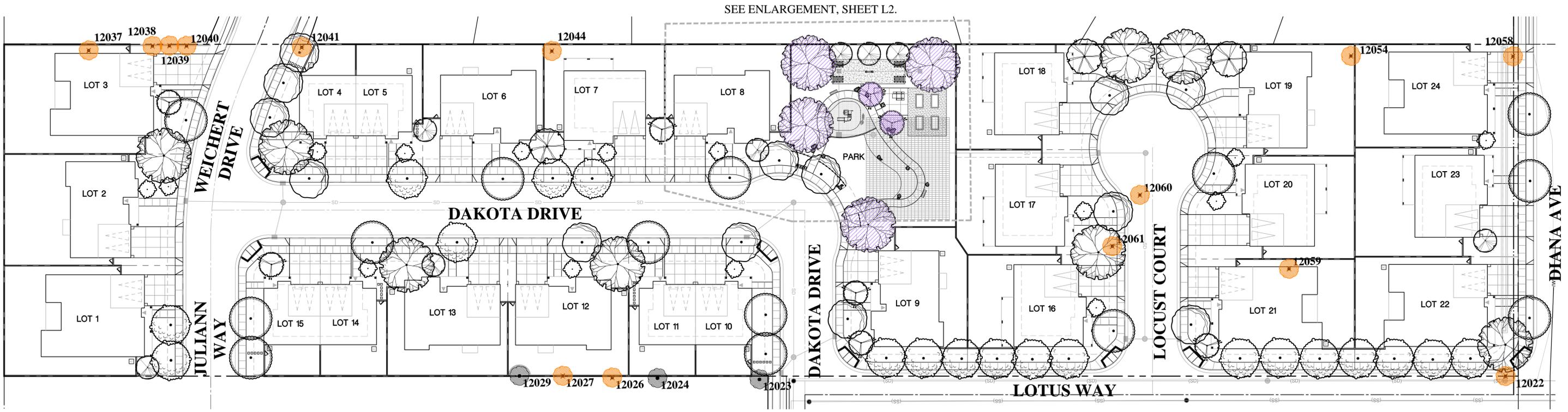
F PLAY EQUIPMENT BY MIRACLE PLAY SYSTEMS SCALE: 1/4" = 1'-0"
046 - WITH 3 AGE APPROPRIATE ACTIVITIES



G ADA PEDESTAL BBQ UNIT



H HORSESHOE PITS



ONSITE EXISTING TREE MITIGATION LEGEND

TREE NO.	SPECIES	COMMON NAME	SIZE	SYMBOL	PROPOSED ACTION	MITIGATION RECOMMENDATION
12022	QUERCUS AGRIFOLIA	COAST LIVE OAK	16" DIA.	X	REMOVE	24" BOX LIVE OAK
12026	QUERCUS AGRIFOLIA	COAST LIVE OAK	5" DIA.	X	REMOVE	
12027	QUERCUS AGRIFOLIA	COAST LIVE OAK	9.5" DIA.	X	REMOVE	15 GALLON
12029	QUERCUS AGRIFOLIA	COAST LIVE OAK	13" DIA.	O	PRESERVE	
12037	QUERCUS AGRIFOLIA	COAST LIVE OAK	7" DIA.	X	REMOVE	15 GALLON
12038	LIGUSTRUM SP.	PRIVET	24" DIA.	X	REMOVE	
12039	LIGUSTRUM SP.	PRIVET	8" DIA.	X	REMOVE	
12040	LIGUSTRUM SP.	PRIVET	6" DIA.	X	REMOVE	
12041	LIGUSTRUM SP.	PRIVET	2-6" DIA.	X	REMOVE	
12044	ROBINIA SP.	LOCUST	3" DIA.	X	REMOVE	
12054	ALBIZIA JULIBRISSIN	MIMOSA	26" DIA.	X	REMOVE	15 GALLON
12058	MORUS ALBA	MULBERRY	10" DIA.	X	REMOVE	
12059	ACACIA BAILEYANA	BAILEY ACACIA	24" DIA.	X	REMOVE	15 GALLON
12060	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" DIA.	X	REMOVE	24" BOX LIVE OAK
12061	MONTEREY PINE	PINUS RADIATA	24" DIA.	X	REMOVE	

* THIS PLAN PROPOSES TO PROVIDE (4) 24" BOX & (2) 15 GALLON MITIGATION TREES

OFFSITE EXISTING TREE LEGEND

TREE NO.	SPECIES	COMMON NAME	SIZE	SYMBOL	PROPOSED ACTION
12023	QUERCUS AGRIFOLIA	COAST LIVE OAK	17" DIA.	O	PRESERVE
12024	QUERCUS AGRIFOLIA	COAST LIVE OAK	32" DIA.	O	PRESERVE

Scott Murray
Montecito Estates MH, LLC
815 Diana Ave. Morgan Hill
APN # 725-09-001 & 725-09-002

January 30, 2019

Scott Murray
Montecito Estates MH, LLC
815 Diana Ave. Morgan Hill
APN # 725-09-001 & 725-09-002

January 30, 2019

Construction Site - Tree Preservation

- Locate structures, grade changes, etc. as far as feasible from the 'dripline' area of the tree.
- Avoid root damage through grading, trenching, compaction, etc., at least within an area 1.5 times the 'dripline' area of trees. Where root damage cannot be avoided, roots encountered (over 1" diameter) should be exposed approximately 12" beyond the area to be disturbed (towards tree stem), by hand excavation, or with specialized hydraulic or pneumatic equipment, cut cleanly with hand pruners or power saw, and immediately back-filled with soil. Avoid tearing, or otherwise disturbing that portion of the root(s) to remain.
- Construct a temporary fence as far from the tree stem (trunk) as possible, completely surrounding the tree, and 6-8 feet in height. Post no parking or storage signs outside / on fencing. Do not attach posting to the mainstem of the tree.
- Do not allow vehicles, equipment, pedestrian traffic; building materials or debris storage; or disposal of toxic or other materials inside of the fenced off area.
- Avoid pruning immediately before, during, or immediately after construction impact. Perform only that pruning which is unavoidable due to conflicts with proposed development. Aesthetic pruning should not be performed for at least 1-2 years following completion of construction.
- Trees that will be impacted by construction may benefit from fertilization, ideally performed in the fall, and preferably prior to any construction activities, with not more than 6 lbs. of actual nitrogen per 1,000 square feet of accessible 'drip line' area or beyond.
- Mulch 'rooting' area with an acidic, organic compost or mulch.
- Arrange for periodic (Biannual/Quarterly) inspection of tree's condition, and treatment of damaging conditions (insects, diseases, nutrient deficiencies, etc.) as they occur, or as appropriate.
- Individual trees likely to suffer significant impacts may require specific, more extensive efforts and/or a more detailed specification than those contained within these general guidelines.

Aeration and Fertilization: Partners for Growth

I've said it before, but it bears repeating. Before you can have a healthy plant, it must have a healthy root system. Given this, there are a couple of things you can do this fall to strengthen the root systems of plants (and trees) in your landscape: namely, core aeration and fertilization. These two processes used together can do much to insure your plants' health and longevity. They can even help your plants recover from (recent) drought and flooding patterns.

Since the core aeration and fertilization focus on promoting well-being of root systems, fall is the ideal time to take on these projects. This is due to the fact that root systems continue to grow and recover long after top growth ceases for the season. Therefore, fertilization and core aeration at this time of year can do much to help root systems catch up and even get a head start on next year's growing season.

Basically, core aeration allows air to enter the soil around the root system by taking plugs of soil out, allowing the roots to "breathe". Fertilizer adds elements to the soil that become nutrients and are necessary for the plant's life functions to run smoothly. Fertilization without good air circulation in the root zone is helpful, but the two improvements are best used together as complementary processes rather than individual components.

Core aeration can be the saving grace of many of your older trees or plants and it can also help rejuvenate a tired lawn. To obtain maximum benefits for trees, plugs should be removed anywhere from 18 to 36 inches apart depending on soil density. They should also be one to one and a half inches in diameter and about 10 to 14 inches deep. Do a circle of holes at the drip line and 2 more circles outside and inside that area also at 18-36" apart. Core aeration (also called vertical mulching) always helps improve a plant's root zone.

Fertilization is the next logical step. If you are doing it yourself, a granular material is more convenient and it may break down over a longer period of time. Just use the recommended amount (see package directions) for the area of root zone you are going to fertilize and place the material in the core aeration holes. Pay close attention to the application rate because you will probably be putting only a small amount of fertilizer in each hole. To fill the holes to the top with fertilizer could very well burn the plant's roots and create lawn problems.

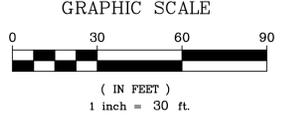
For plants that are slightly frail or are already showing signs of stress, core aeration should be your first reaction. However, fertilization probably shouldn't be your next step. Contrary to popular belief, fertilizer isn't the only thing to pull a sickly plant back from the brink. In reality, fertilizing a frail plant may cause severe damage to the root system. Therefore, if a plant looks weak, go ahead with core aeration and follow up with mulch and watering and an appropriate amount and type of slow release fertilizer.

With these guidelines in mind, the combination of core aeration and fertilization could be just the boost your plants and trees (and even the lawn) may need.

Article by Fred Hower, "The Ohio Nurseryman"
© The Ohio Nursery & Landscape Association

TREE MITIGATION

- EXISTING TREE TO BE PRESERVED
- EXISTING TREE TO BE REMOVED
- PROPOSED MITIGATION TREES



RIPLEY DESIGN GROUP
LANDSCAPE ARCHITECTURE
LAND PLANNING
1615 BONANZA STREET
SUITE 314
WALNUT CREEK, CA 94596
TEL: 925.938.7377
FAX: 925.938.7436



MANA HANA LEI, LLC



Montecito Estates
Morgan Hill, California

Tree Survey & Mitigation Plan

July 16, 2019

L5