

RIPLEY

RIPLEY DESIGN GROUP, INC. Landscape Architecture Land Planning

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**DEVELOPER:** 

#### NUVERA HOMES

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SUITE 170
PLEASANTON, CA
94566

TEL. 925.309.8888 FAX. 888.589.4937

**PROJECT:** 

EDEN VILLAGE

HAYWARD, CALIFORNIA

COLOR SITE PLAN



PROJECT #:

DATE: APR. 29, 2019

SCALE: 1''=20'

DRAWN BY: TV

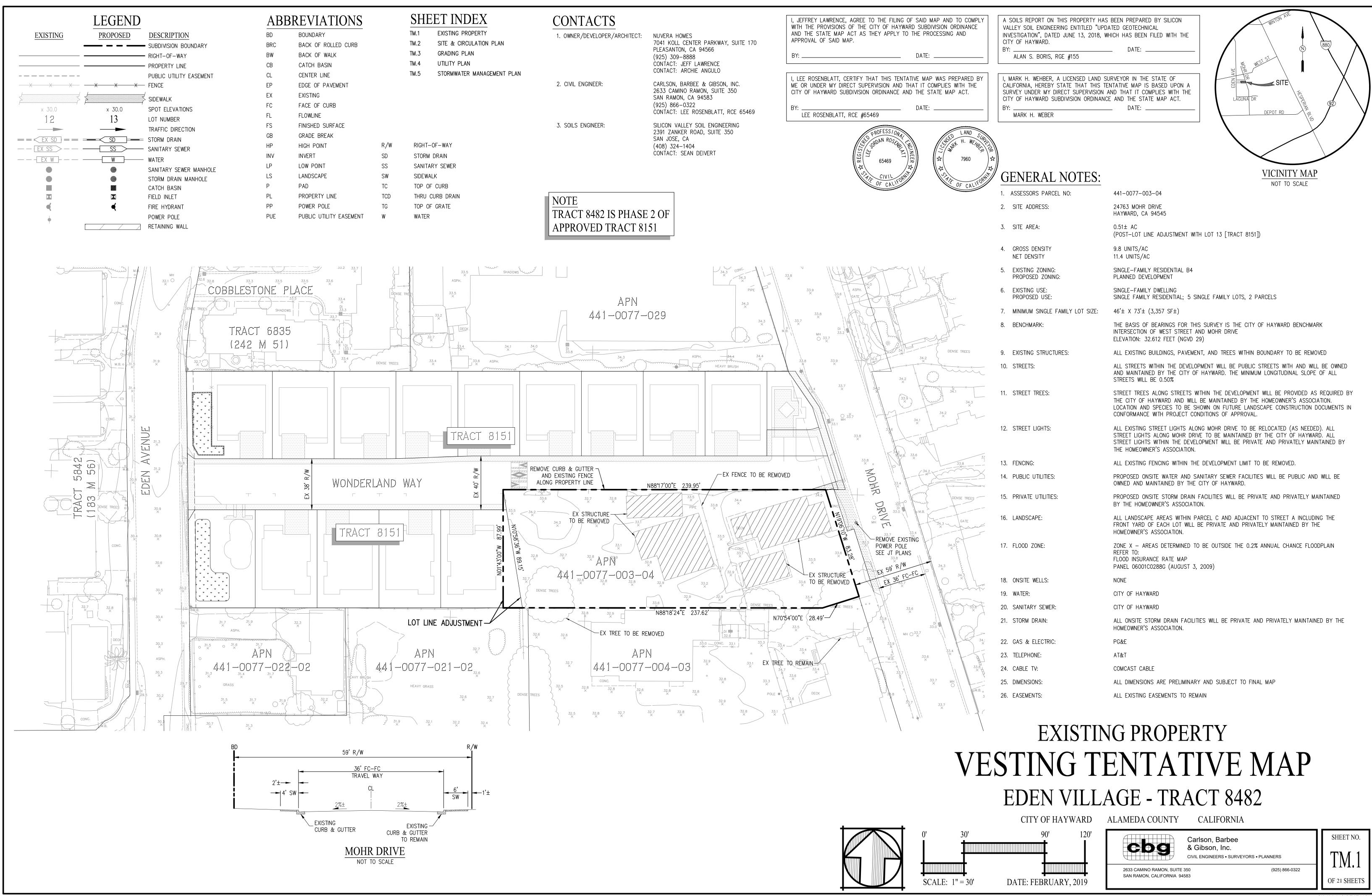
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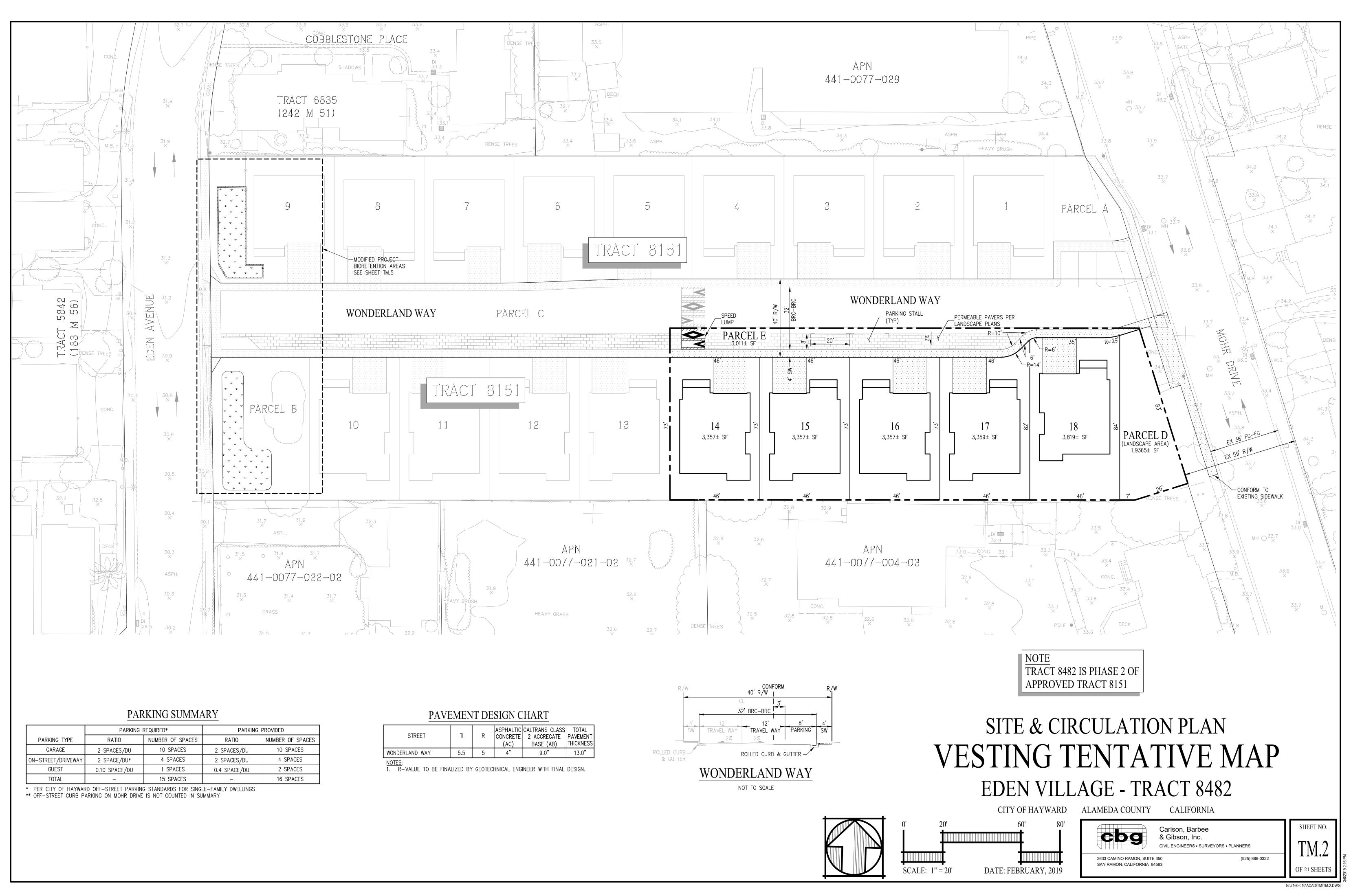
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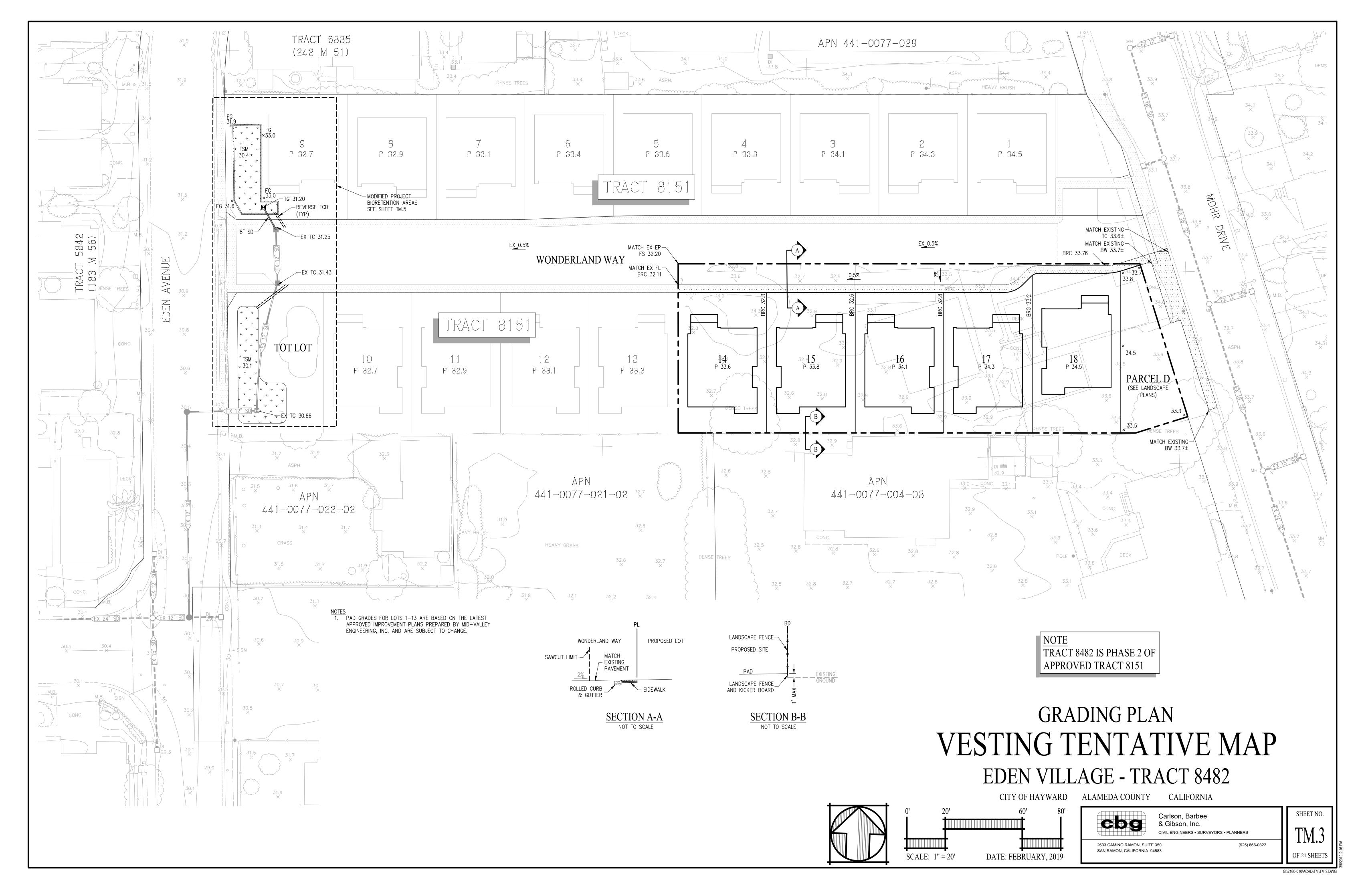
SHEET

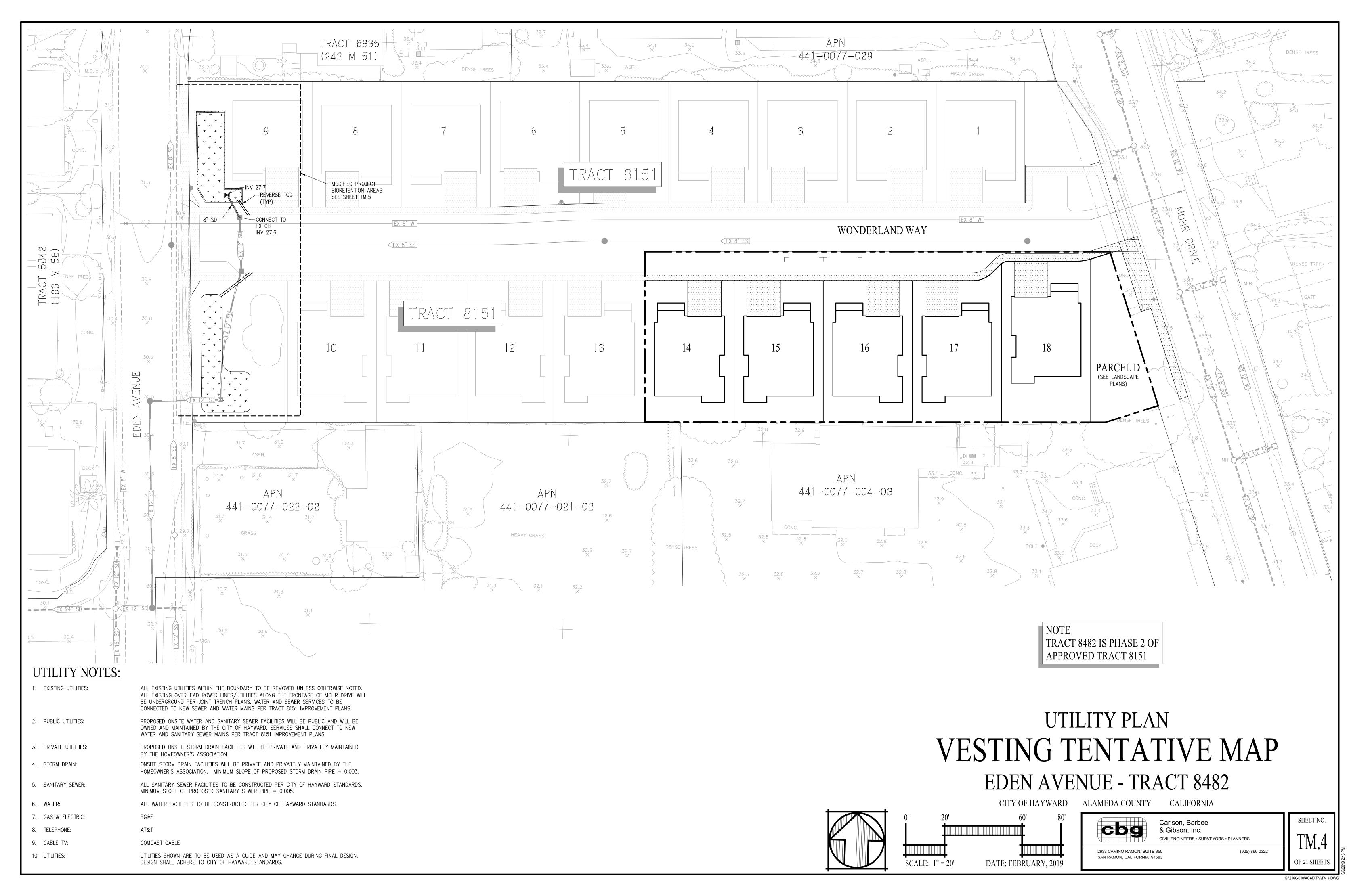
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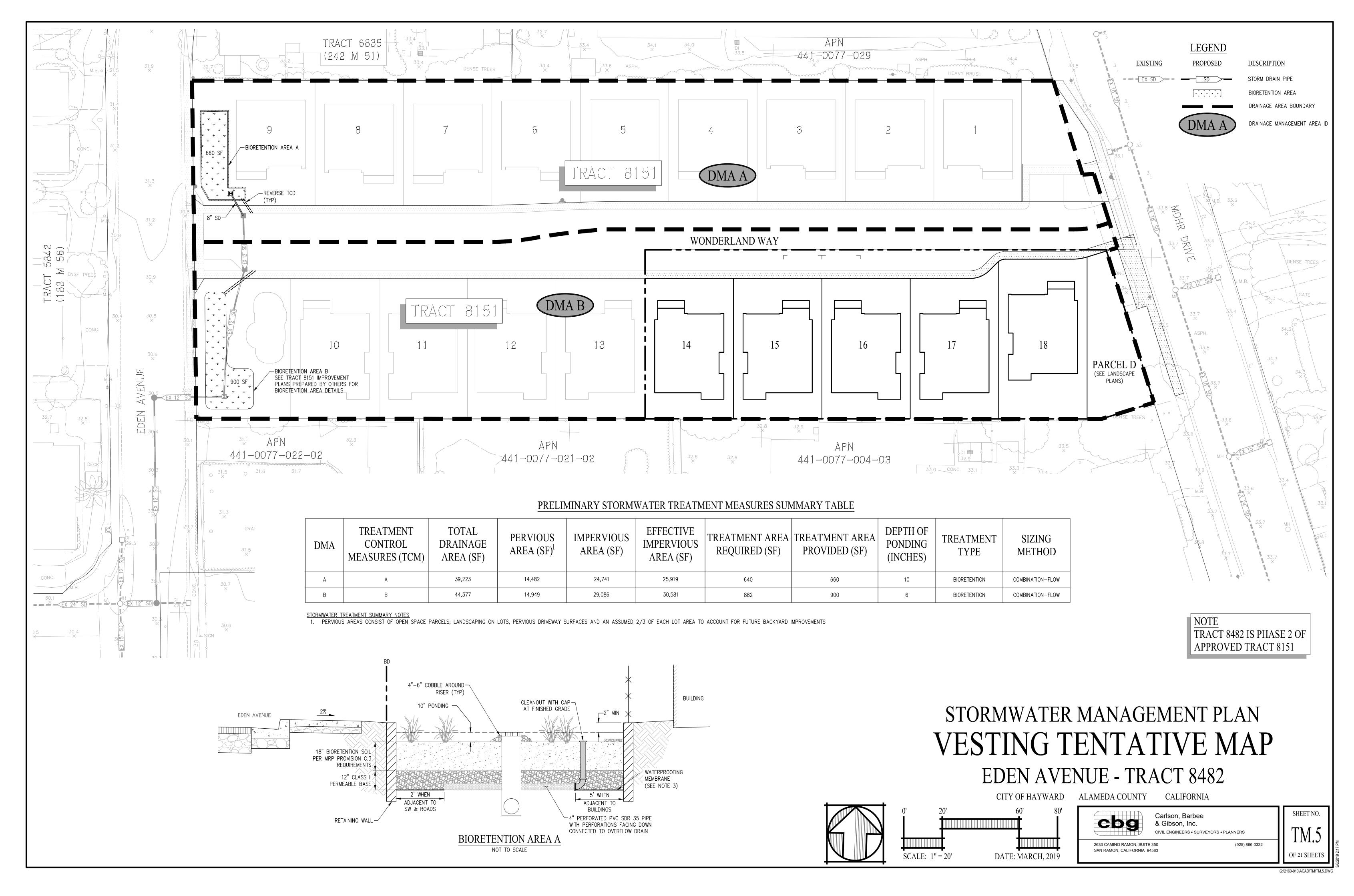
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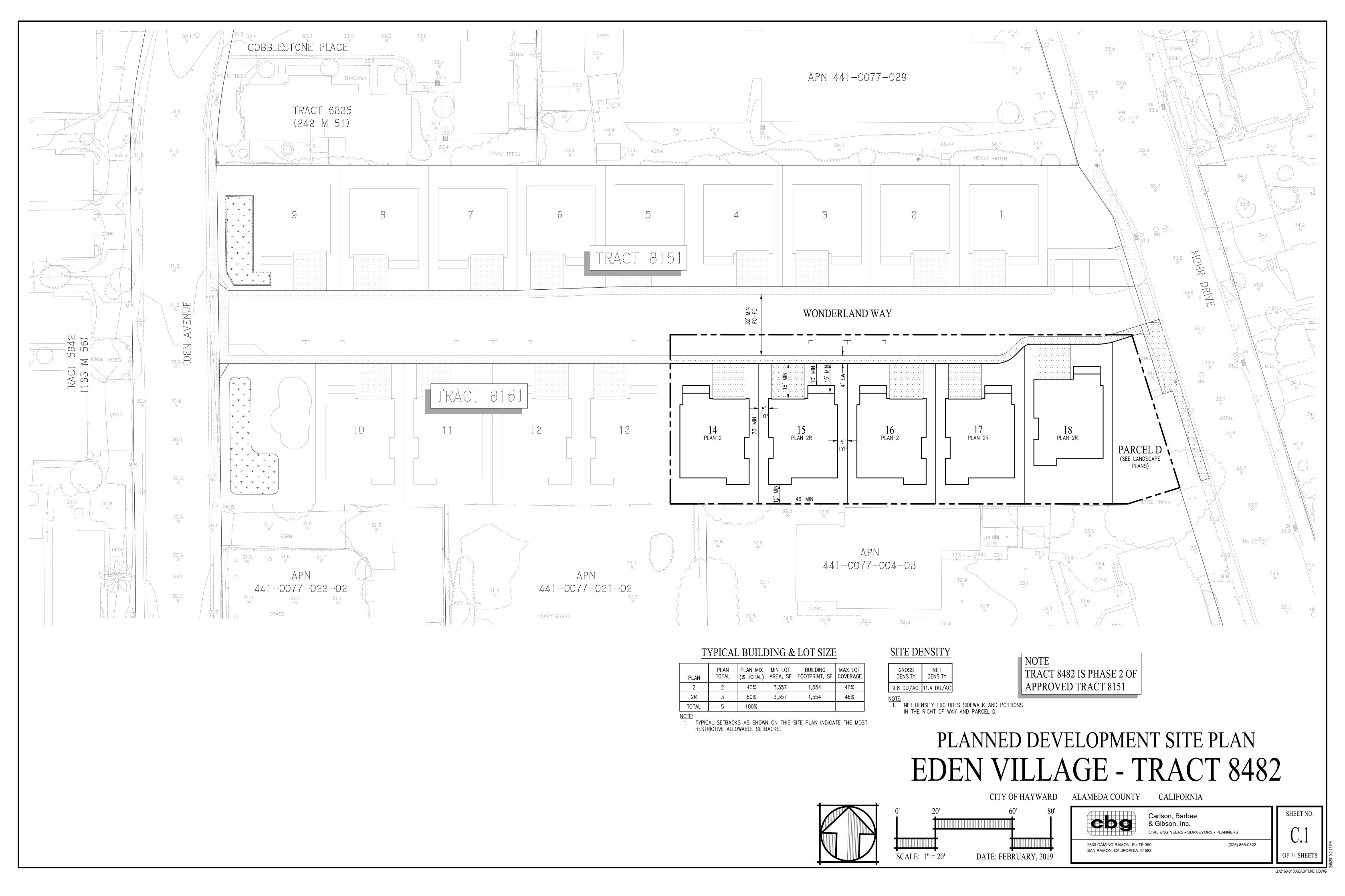












# EDEN VILLAGE

# HAYWARD, CALIFORNIA PHASE 2 PRECISE PRELIMINARY LANDSCAPE PACKAGE

## **DEVELOPER:**

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## CIVIL ENGINEER:

CBG ENGINEERING
2633 CAMINO RAMON
SUITE 350
SAN RAMON, CA 94583
TEL. (925) 866-0322

## LANDSCAPE ARCHITECT:

RIPLEY DESIGN GROUP, INC. 1615 BONANZA STREET SUITE 314 WALNUT CREEK, CA 94596 TEL. (925) 938-7377 FAX (925) 938-7436

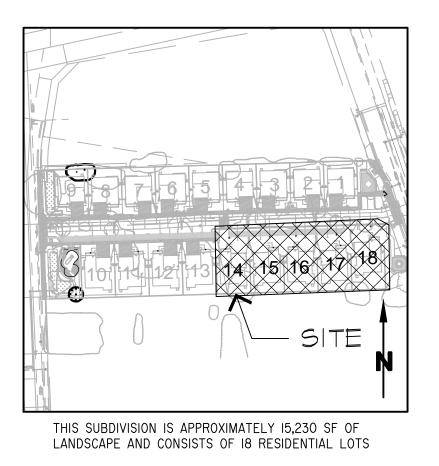
# SITE LOCATION:



## SHEET INDEX:

1 OF 9	LC1.	<b>CONSTRUCTION PLAN LOTS 14-18</b>
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5 OF 9	LI1.	IRRIGATION PLAN LOTS 14-18
6 OF 9	LI2.	IRRIGATION DETAILS
<b>7 OF 9</b>	LI2.	W.E.L.O CALCULATIONS & MAINTENANCE NOTES
8 OF 9	LP1.	TREE MITIGATION PLAN 14-18
9 OF 9	LP2.	PLANTING PLAN LOTS 14-18

## **SITE MAP:**

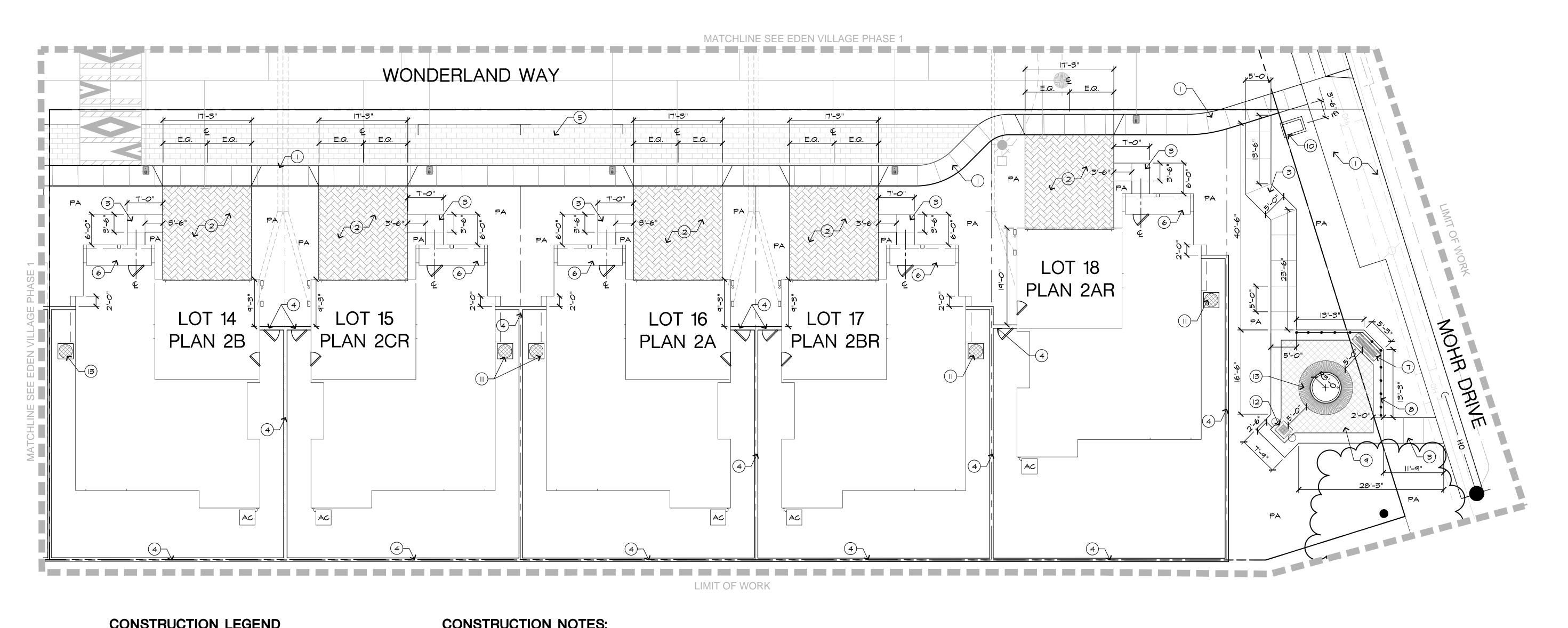








**APRIL 29, 2019** 



#### CONSTRUCTION LEGEND

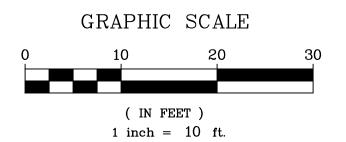
- I. CONCRETE SIDEWALK PER ENGINEER'S IMPROVEMENT PLANS.
- 2. DRIVEWAY WITH PERMEABLE PAVERS: TO BE HYDRO-FLOW UNIVERSAL 'HOLLAND' 80MM INTERLOCKING. PERMEABLE PAVERS TO BE INSTALLED IN HERRINGBONE PATTERN. COLOR TO BE COUNTY LOAM (B-IO). REFER TO DETAIL L, SHEET LC2.
- 3. CONCRETE WALK W/ SCORE PATTERN: 3.5" THICK CONCRETE WITH #3 REBAR 24" O.C. EACH WAY ON 2" CRUSHER ROCK BASE OVER COMPACTED SUBGRADE. INSTALL 8" WIDE SCORED BANDS AND/OR SCORE LINES AS SHOWN. CONCRETE FINISH: BROOM. CONCRETE COLOR: NATURAL.
- 4. 6'-0" WOOD PRODUCTION FENCE W/ GATE: INSTALL PER DETAIL A & B, SHEET
- 5. PERMEABLE PAVERS @ PARKING STALLS: TO BE HYDRO-FLOW UNIVERSAL; 80MM 'HOLLAND' INTERLOCKING PAVERS. PAVERS TO BE INSTALLED IN RUNNING BOND PATTERN. COLOR TO BE MONTEREY SANDS (B-7). REFER TO DETAIL E, SHEET LC2.
- 6. CONCRETE STOOP PER ARCHITECTURAL PLANS.
- 7. CONCRETE MOSAIC BENCH REFER TO DETAIL I, SHEET LC3.
- 8. ORNAMENTAL STEEL FENCE REFER TO DETAIL C, LC3.
- 9. INTERLOCKING PAVERS W/ 2'-0" CONCRETE BAND: PAVERS TO BE 12"X12" 'ESTATE' SERIES BY PACIFIC INTERLOCKING PAVERS OR EQUIVALENT. AVAILABLE FROM WWW.PACINTERLOCK.COM OR (408) 379-1436. COLOR TO BE MONTEREY SANDS (B7). INSTALL PER DETAIL F, SHEET LC2.
- IO. ENTRY MONUMENT STONE PILASTERS REFER TO DETAIL G, SHEET LC2.
- II. RAIN BARREL W/ CONCRETE PAD: INSTALL PER DETAIL H, SHEET LC2. REFER TO ARCHITECTURE PLANS FOR LOCATION OR REQUIRED PLUMBED 'LAUNDRY TO LANDSCAPE' SYSTEM IN ACCORDANCE WITH THE STATE OF CALIFORNIA MWELO CODE, SECTION 10-12-14.
- 12. PRECAST CONCRETE GAME TABLE WITH PEDESTAL SEATING. TABLE AVAILABLE FROM BRAVADO OUTDOOR PRODUCTS OR EQUIVALENT, WWW.CONCRETETABLETENNIS.COM OR (541) 671-6318.REFER TO DETAIL K, SHEET
- 13. CIRCULAR METAL BENCH: BENCH TO BE 'CIRCULAR BENCH TREE BENCH' BY BELSON OUTDOORS OR EQUIVALENT. AVAILABLE FROM WWW.BELSON.COM OR (800) 323-5664. COLOR TO BE SELECTED BY CLIENT. REFER TO DETAIL J, SHEET LC.3. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- PA = PLANTING AREA

#### **CONSTRUCTION NOTES:**

- I. ALL DIMENSIONS ARE TAKEN FROM FACE OF BUILDING, FACE OF WALL OR EDGE OF PAVING, UNLESS OTHERWISE NOTED ON THE PLAN. THE DIMENSIONS SHOWN ARE FOR APPROXIMATE LINE ONLY. ALL RADII AND CURVES SHALL HAVE SMOOTH CONTINUOUS TRANSITIONS WITHOUT ABRUPT CHANGES OR
- 2. ALL FORMS AND ALIGNMENT OF PAVING AND WALL FOOTINGS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PAVING, A MINIMUM OF 24 HOUR NOTICE REQUIRED. RIPLEY DESIGN GROUP, INC. WILL NOT BE RESPONSIBLE FOR FIELD CHANGES, QUALITY OF CONSTRUCTION, AND PLAN CONFORMANCE UNLESS APPROVED AND/OR REVIEWED BY RIPLEY DESIGN GROUP, INC.
- 3. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE HELD LIABLE FOR ALL DAMAGES INCURRED.
- 4. CONTRACTOR SHALL NOTE AND INSTALL ALL SLEEVES AS INDICATED ON THE IRRIGATION PLANS.
- 5. SEE PLANTING PLANS FOR ANY BOXED TREE TO BE INSTALLED PRIOR TO PAVING.
- 6. ALL HARDWARE, NAILS, LAGS, MACHINE BOLTS, ETC. SHALL BE GALVANIZED.
- 7. CONTRACTOR SHALL CHECK ALL DIMENSIONS, FRAMING CONDITIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES OR POSSIBLE DEFICIENCIES.
- 8. CONTRACTOR SHALL INSTALL STEPS AS REQUIRED PER INDIVIDUAL LOT CONDITIONS. CONTRACTOR SHALL NOT INSTALL ANY SINGLE RISERS ON WALKS. CONTRACTOR SHALL NOT INSTALL MORE THAN THREE (3) RISERS IN A SET. SETS OF RISERS SHALL BE SEPARATED BY A LANDING A MINIMUM OF 4'-0" IN LENGTH. INSTALL STEPS PER DETAIL A, SHEET LC3.
- 9. CONTRACTOR TO INSTALL ONE LIDDED RAINWATER CATCHMENT DEVICE (MINIMUM 50 GALLONS) FOR EACH NEW SINGLE FAMILY HOME IN ACCORDANCE WITH SECTION 10-12-15.

PHASE ONE: LOT 1-13 PHASE TWO: LOT 14-18





**Attachment IV** 

G R O U P

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**DEVELOPER:** 

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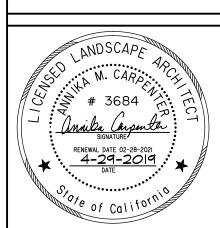
TEL. 925.309.8888 FAX. 888.589.4937

**PROJECT:** 

**EDEN VILLAGE** 

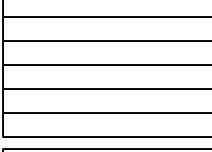
HAYWARD, **CALIFORNIA** 

CONSTRUCTION **PLAN LOTS 14-18** 

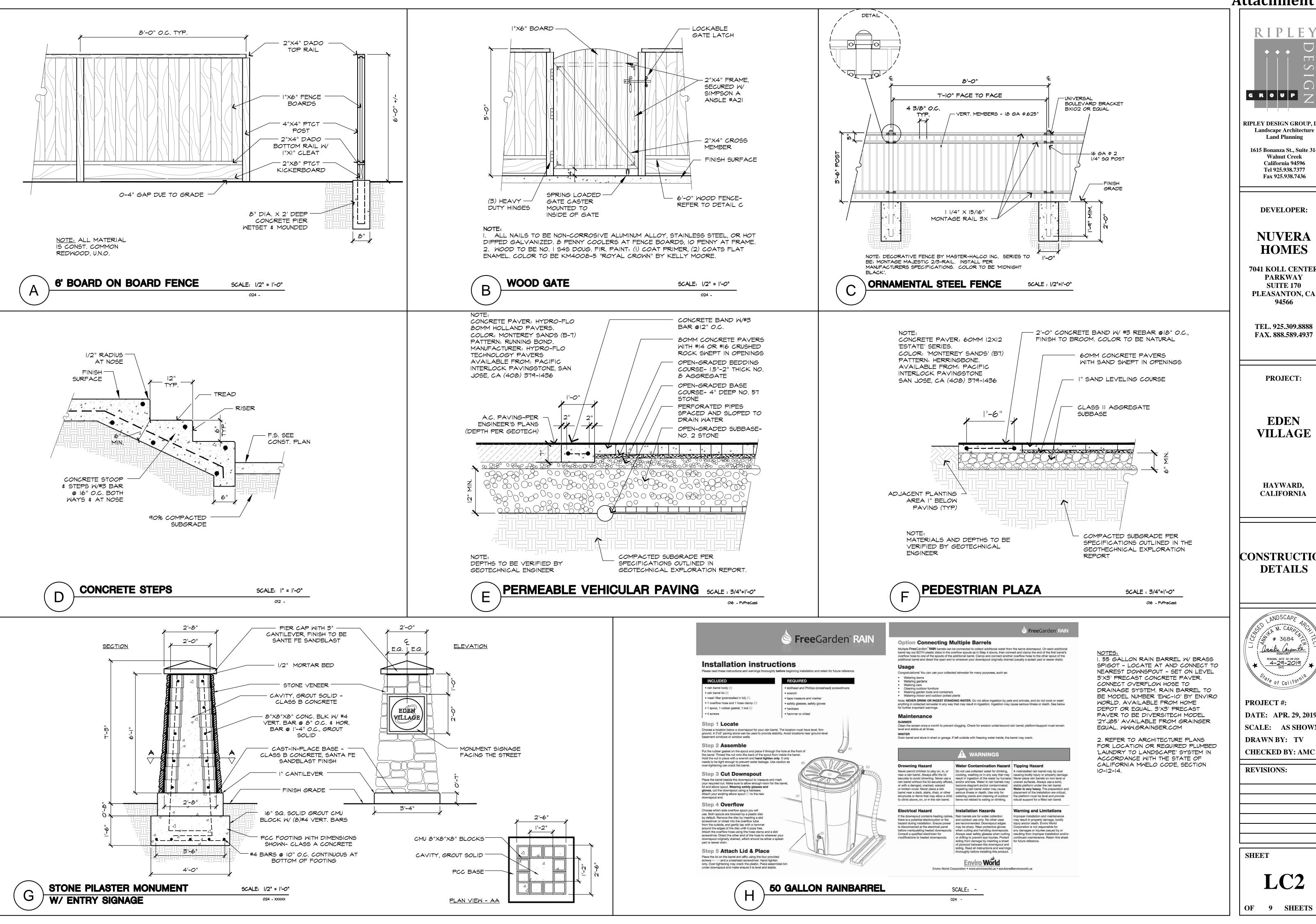


PROJECT #: DATE: APR. 29, 2019 **SCALE:** 1"=10' DRAWN BY: TV **CHECKED BY: AMC** 

**REVISIONS:** 



**SHEET** 



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HAYWARD, **CALIFORNIA** 

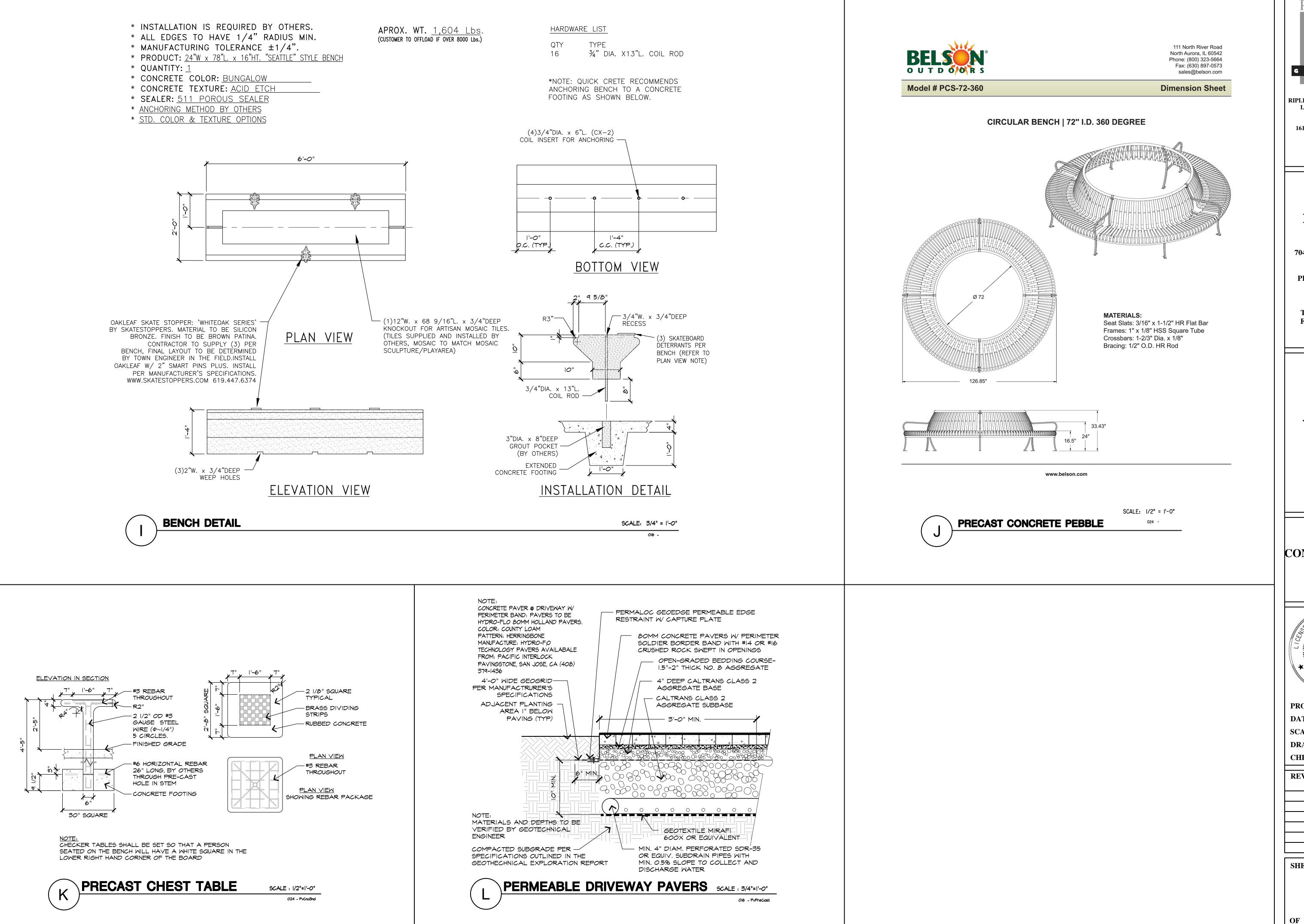
CONSTRUCTION **DETAILS** 



PROJECT #: **DATE:** APR. 29, 2019 **SCALE: AS SHOWN DRAWN BY: TV** 

**REVISIONS:** 

**SHEET** 



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**PROJECT:** 

EDEN VILLAGE

HAYWARD, CALIFORNIA

CONSTRUCTION DETAILS

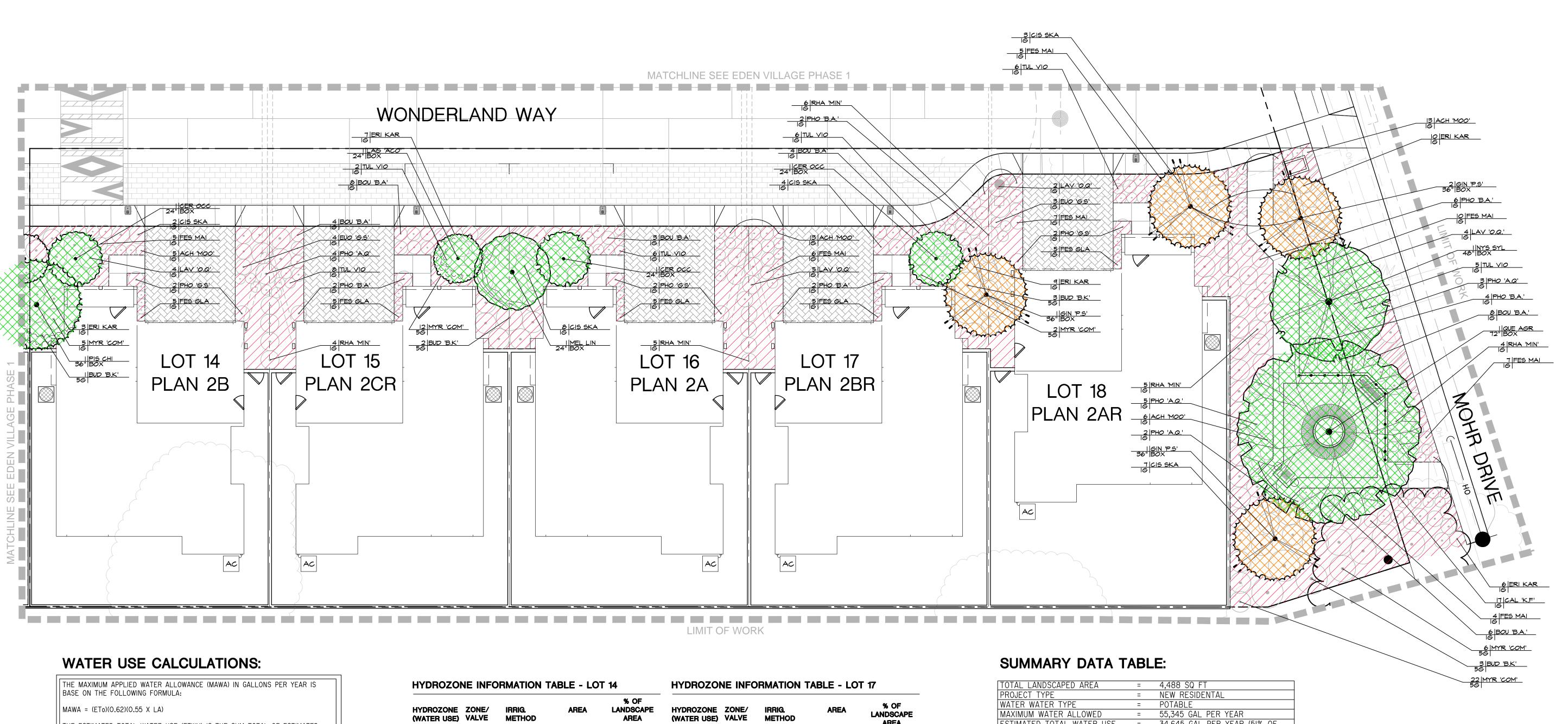


PROJECT #:
DATE: APR. 29, 2019
SCALE: AS SHOWN
DRAWN BY: TV
CHECKED BY: AMC

REVISIONS:

SHEET

LC3



T-2

HYDROZONE ZONE/ (WATER USE) VALVE

BUBBLER

**HYDROZONE INFORMATION TABLE - LOT 18** 

BUBBLER

527 SF

2,469 SF

2,504 SF

97%

100%

LANDSCAPE

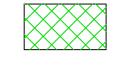
99%

THE MAXIMUM APPLIED WATER ALLOWANCE (MAWA) IN GALLONS PER YEAR IS BASE ON THE FOLLOWING FORMULA:					
$MAWA = (ETo)(O.62)(O.55 \times LA)$					
THE ESTIMATED TOTAL WATER USE (ETWU) IS THE SUM TOTAL OF ESTIMATED WATER USE FOR EACH HYDROZONE IN GALLONS PER YEAR AND IS BASED ON THE FOLLOWING FORMULA:					
ETWU = (ETo)(0.62)[ <u>(PF X HA)</u> + SLA] IE					
ETO = REFERENCE EVAPOTRANSPIRATION (INCHES PER YEAR)  LA = LANDSCAPE AREA  HA = HYDROZONE AREA (SQUARE FEET)  PF = PLANT FACTOR FROM WUCOLS  E = IRRIGATION EFFICIENCY (0.7I)  0.45 = ET ADJUSTMENT FACTOR  0.62 = CONVERSION FACTOR (TO GALLONS)					
REFERENCE EVAPOTRASNPIRATION (ETo): 44.2					
MAXIMUM APPLIED WATER ALLOWANCE:					
MAWA = (44.2) X (0.62) X (0.45 X 4,488) = 55,345 GAL/YR					
STIMATED TOTAL WATER USE:					
TTWU = (44.2) X (0.62) X ( <u>0.20 X 4,488)</u> = 34,645 GAL/YR 0.7I					

#### **HYDROZONE KEY**

#### SYMBOL DESCRIPTION







HYDROZONE (WATER USE)	ZONE/ VALVE	IRRIG. METHOD	AREA	% OF LANDSCAPE AREA
LOW	Q-I	DRIP	478 SF	97%
LOW	Q-2	BUBBLER	I4 SF	3%

HYDROZONE	<b>INFORMATION</b>	TABLE	- LOT	1
	•			•

HYDROZONE (WATER USE)	ZONE/ VALVE	IRRIG. METHOD	AREA	% OF LANDSCAPE AREA
LOW	R-I	DRIP	472 SF	99%
LOW	R-2	BUBBLER	7 SF	1%
		TOTAL	479 SF	100%

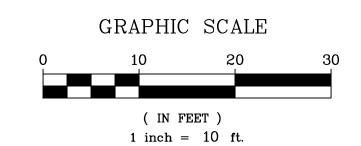
#### **HYDROZONE INFORMATION TABLE - LOT 16**

HYDROZONE (WATER USE)	ZONE/ VALVE	IRRIG. METHOD	AREA	% OF LANDSCAPE AREA
LOW	S-I	DRIP	472 SF	97%
LOW	S-2	BUBBLER	I4 SF	3%
		TOTAL	486 SF	100%

TOTAL LANDSCAPED AREA	=	4,488 SQ FT
PROJECT TYPE	=	NEW RESIDENTAL
WATER WATER TYPE	=	POTABLE
MAXIMUM WATER ALLOWED	=	55,345 GAL PER YEAR
ESTIMATED TOTAL WATER USE	=	34,645 GAL PER YEAR (51% OF
		MAX. ALLOWED)

PHASE ONE: LOT I-I3 PHASE TWO: LOT 14-18





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**Attachment IV** 

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**PROJECT:** 

**EDEN VILLAGE** 

HAYWARD, **CALIFORNIA** 

**HYDROZONE PLAN LOTS 14-18** 



PROJECT #: **DATE: APR. 29, 2019 SCALE:** 1''=10' **DRAWN BY: TV CHECKED BY: AMC** 

**REVISIONS:** 

**SHEET** LH1



## **HYDROZONES**

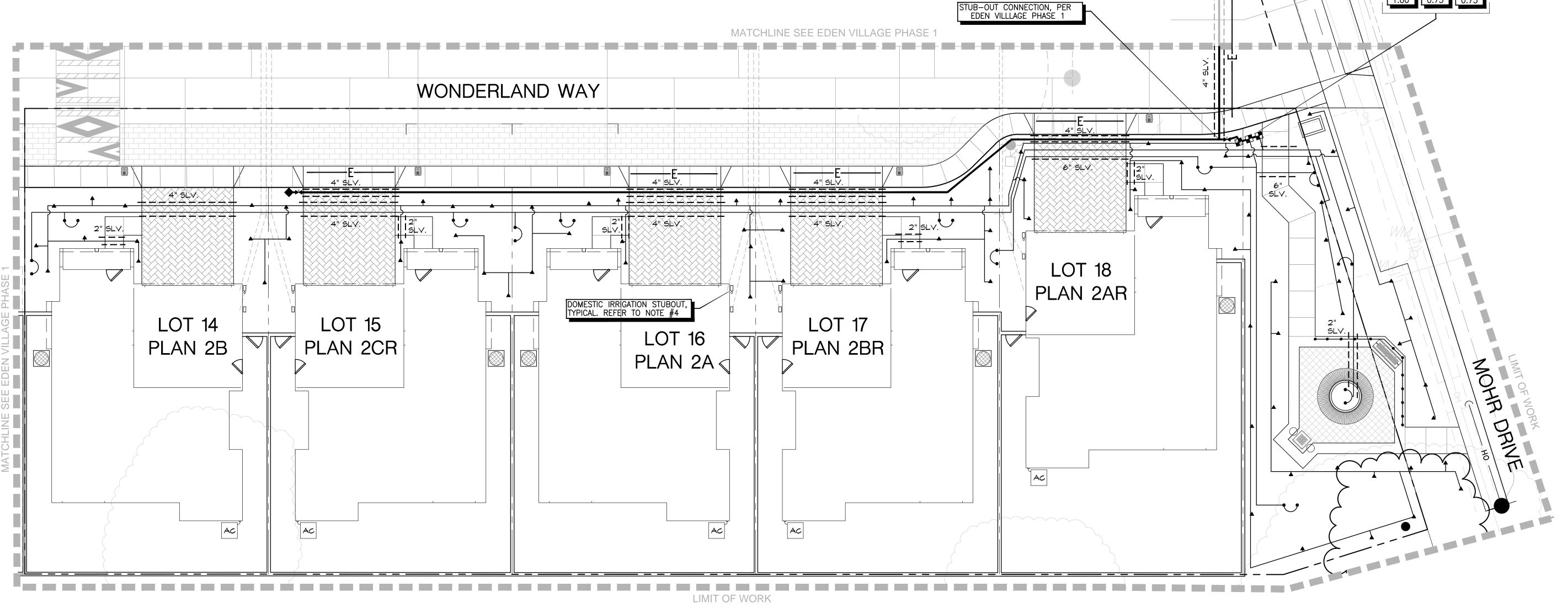
WATER USE DESCRIPTION

BUBBLER

A-II

SHRUBS - FRONTAGE & ALONG MOHR DRIVE MED LOW A-IO BUBBLER

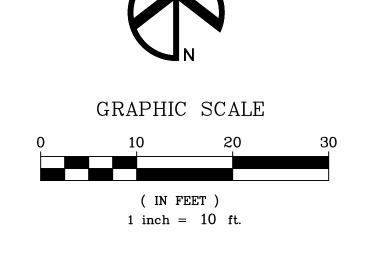
TREES - LOTS 17 & 18 TREES - FRONTAGE & ALONG MOHR DRIVE



#### IRRIGATION SYSTEM LEGEND

SYMBOL	DESCRIPTION	SPECIFICATION	NOZZLE GPM	OPERATING PSI
M	IRRIGATION WATER METER	-BY OTHER SECTION OF CONTRACT		1
А	ELECTRIC CONTROLLER	-TORO-EVO-4ID/EMOD-4/EMOD-4/EUO-SC/EVO-WS	(ET-BASED)	
	BACKFLOW PREVENTOR	-WILKINS 1" 975XL - REFER TO CIVIL PLANS & CITY OF HAYWARD STANDARD DETAIL SD-202		
•	MASTER VALVE	-TORO REMOTE CONTROL ELECTRIC GLOBE VALVE W/ FLOW CONTROL NO. 220-26-06		
F	FLOW SENSOR	-TORO FLOW SENSOR-TFS-150 OR EQUIVALENT		
	REMOTE CONTROL VALVES	-TORO 700 SERIES		
	REMOTE CONTROL VALVES	-TORO 700 SERIES W/REGULATOR & FILTER		
×	BALL VALVE (master shut off)	-NIBCO-T-560-BR-20-IRR-LINE SIZE		
•	QUICK COUPLER	-RAINBIRD-44LRC OR EQUAL		
•	BUBBLER (TREE)	-HUNTER AFB (2 PER TREE)	.25	30
<b>A</b>	BUBBLER (SHRÚB)	-PEPCO-OCTA-BUBBLER	.16	30
	IRRIGATION SUPPLYLINE - 1"	-1120/SCHFDULF 40 PVC PIPF -18" COVFR		
	IRRIGATION SPRINKLERLINE	-1120/SCHEDULE 40 PVC PIPE -18" COVER -1120/CLASS 200 PVC PIPE -12" COVER -1120/SCHEDULE 80 PVC PIPE -24" COVER		
<u>-</u> -	ELECTRICAL CONDUIT SLEEVING	-1120/SCHEDULE 80 PVC PIPE -24" COVER		
	SLEEVING	-1120/SCHEDULE 80 PVC PIPE -24" COVER		
STA GPM	CONTROLLER STATION NUMBER GALLONS PER MINUTE THROUGH VALVE			
STA GPM SIZE				

PHASE ONE: LOT 1-13 PHASE TWO: LOT 14-18



**Attachment IV** 

RIPLEY **\* \* \*** G R O U P

POINT OF CONNECTION, PER PHASE 1, REFER TO NOTE #3

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**PROJECT:** 

**EDEN VILLAGE** 

HAYWARD, CALIFORNIA

**IRRIGATION PLAN LOTS** 14-18

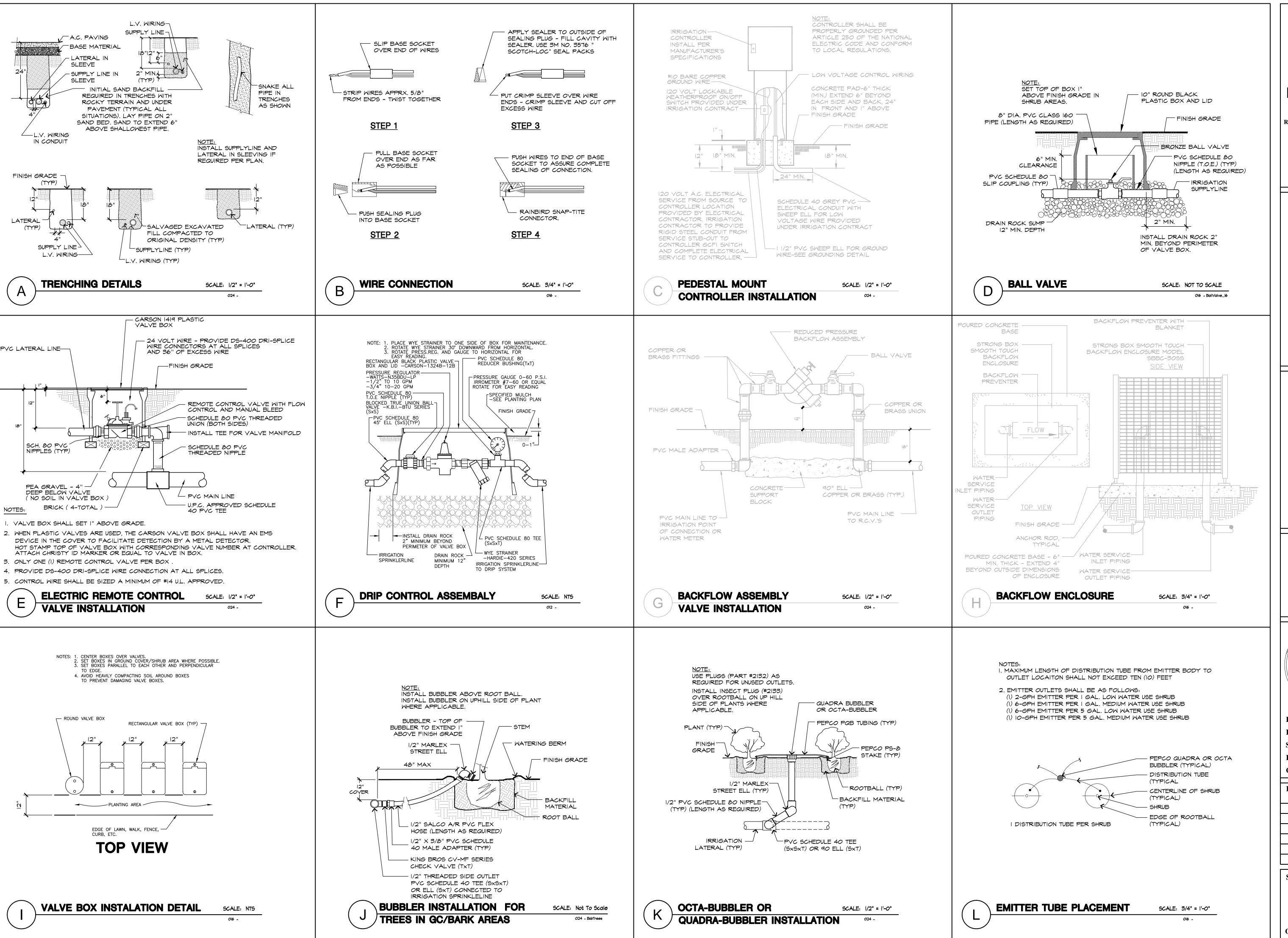


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SHEET

LI1



\_\_\_\_Attachment IV

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EDEN VILLAGE

HAYWARD, CALIFORNIA

IRRIGATION DETAILS



PROJECT #:
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**REVISIONS:** 

SHEET

LI2

#### WATER EFFICIENT LANDSCAPE CALCULATIONS

#### PHASE II - HOA

EDEN VILLAGE - PHASE II Frontage PAGE 1 of 3

Water Efficient Landscape Worksheet for projects in Hayward, CA

This worksheet shall be filled out by the project applicant for each Point of Connection This form will help you determine your site specific water budget and establish a planting mix that will meet your water budget. Your Estimated Total Water Use must be less than your Maximum Applied Water Allowance

MAWA=(Eto)(0.62)[(0.55xLA)+(0.45xSLA)]ETWU=(Eto)(0.62)[(PFxHA/IE)+SLA]

MAWA = Maximum Applied Water Allowance (gallons per year) Eto = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons)

0.45 = ET Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet) 0.45 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

ETWU = Estimated Total Water Use (gallons per year)

PF = Plant Factor from WUCOLS

HA = Hydrozone Area [high, medium and low water use areas] (square feet)

IE = Irrigation Efficiency (minimum 0.71)

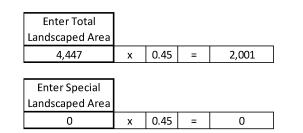
#### Net Evapotranspiration (inches per year)

These numbers have been modifed to remove effective precipitation (Eppt) from the affected months

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total Annual Eto
Net Eto	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2

#### **Maximum Applied Water Allowance Calculation** MAWA=(Eto)(0.62)[(0.55xLA)+(0.45xSLA)]

Include SLA in Total Landscaped Area.



MAWA = 44.2 x 0.62 x 2,001 = 54,840 gallons per year

#### PAGE 2 of 2 Water Efficient Landscape Worksheet

**Estimated Total Water Use Calculation** 

#### ETWU=(Eto)(0.62)[(PFxHA/IE)+SLA]

**HYDROZONE INFORMATION TABLE** 

	Plant Water Use	Plant				Irrigation	
	Туре	Factor(PF)	Hydrozone	% of	Type of Irrigation	Efficiency (IE)	
	(low, medium	(0-1.0, see	Area(HA)	Total	(rotors, spray, drip,	(71-100%, see	
Hydrozone	or high)	below)	(sq ft)	Area	bubblers, etc.)	below)	PFxHA/IE
A-9	low	0.15	4,363	98%	drip	81%	808
A-10	medium	0.40	28	1%	bubblers	81%	14
A-11	low	0.15	56	1%	bubblers	81%	10
		SUM	4 447	100%			832

#### ETWU= 44.2 x 0.62 x 832 = 22,805 gallons per year

Estimated Total Adjustment F	actor Calcul	ations
Total ETAF(PF/IE) x Area	832	

4447 Total Area

Average ETAF\* 0.19

\*Average ETAF must be less than 0.55 for residential \*Average ETAF must be less than 0.45 for non-residential

#### Plant Factor Typical Ranges (PF)

To calculate plant factor see "Guide to Estimating Irrigation Water Needs of Landscape Plantings in California and WUCOL

www.owue.water.ca.gov/docs/v	vucols00.pdf
Low Water Use	0.0-0.3
Medium Water Use	0.4-0.6
High Water Use	0.7-1.0

ant Factor Formula - Plants With a Factor over 1.0 are prohibited. Plant Factor (PF) = K<sub>s</sub> x K<sub>d</sub> x K<sub>mc</sub> \( \s = \text{Species Factor (range 0.1-0.9, see WUCOLS list)} \) K<sub>d</sub> = Density Factor (range 0.5-1.3, see WUCOLS list)

mc = Microclimate Factor (range 0.5-1.4, see WUCOLS list)

#### Irrigation Efficiency Ranges (IE)

Irrigation efficiency will vary by soil type, weather conditions, design, head type, construction quality, maintenance, etc. Please estimate irrigation efficiency somewhere in the ranges listed below.

Stream Rotor Heads	71-75%	
Spray Heads	71-75%	
Bubblers	75-85%	
Drip Emitters	80-90%	
Subsurface Irrigation	80-90%	

#### PAGE 1 of 1

#### Monthly Water Use Calculation

This spreadsheet is optional, but will help you determine your run times for each valve on a monthly basis. The Landscape Schedule must determine, the number, frequency and duration of run times during each month.

Calculations are based on information inputted on Water Efficient Worksheet - Pages 1 and 2.

					Run	Times	in Mi	nutes	Per Mo	onth				
Hydrozone	Precipitation Rate from Manufacturer (inches/hour)	January	February	March	April	Мау	June	yılıy	August	September	October	November	December	Annual Irrigation Run Time Needed
A-9	0.7	22.2	28.6	49.2	66.7	85.7	93.7	101.6	90.5	69.8	49.2	23.8	19.0	700
A-10	3	13.8	17.8	30.6	41.5	53.3	58.3	63.2	56.3	43.5	30.6	14.8	11.9	436
A-11	3	5.2	6.7	11.5	15.6	20.0	21.9	23.7	21.1	16.3	11.5	5.6	4.4	163
Total Combined Run Time Per Month (in hours)		0.7	0.9	1.5	2.1	2.7	2.9	3.1	2.8	2.2	1.5	0.7	0.6	

#### SCHEDULE - CONTROLLER A (ESTABLISHMENT PERIOD) STA RUNTIME JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC RUNTIME A-10 20 2 2 3 3 5 6 6 5 5 3 2 880 A-11 8 1 1 2 2 5 6 6 5 5 3 3

NOTE: RUN TIME EQUALS TOTAL MINUTES PER DAY OF IRRIGATION, STATIONS MAY HAVE MULTIPLE CYCLES NOTE: THE NUMBER IN THE MONTH COLUMN EQUALS TOTAL DAYS OF IRRIGATION PER MONTH

#### SCHEDULE - CONTROLLER A (ESTABLISHED SHRUBS)

														ANNUAL
STA	RUN TIME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	RUN TIME
A-9	14	2	2	4	4	5	6	6	6	5	4	4	2	700
A-10	10	2	2	3	3	5	6	6	5	5	3	2	2	440
A-11	4	1	1	2	2	5	6	6	5	5	3	3	2	164
TOTAL	. MINUTES													1,304

NOTE: RUN TIME EQUALS TOTAL MINUTES PER DAY OF IRRIGATION, STATIONS MAY HAVE MULTIPLE CYCLES NOTE: THE NUMBER IN THE MONTH COLUMN EQUALS TOTAL DAYS OF IRRIGATION PER MONTH

#### **IRRIGATION SYSTEM NOTES**

- I. IRRIGATION SYSTEMS ARE DESIGNED FOR A MAXIMUM OF 18 G.P.M. AT AN OPERATING PRESSURE OF 50 P.S.I. STATIC PRESSURE, VERIFY PRESSURE OF 50 P.S.I. AT THE POINT OF CONNECTION PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM. NOTIFY OWNERS REPRESENTATIVE IF MEASURED PRESSURE IS MORE THAN 70 P.S.I. OR LESS THAN 45 P.S.I.
- 2. NOTIFY OWNERS REPRESENTATIVE SIX (6) DAYS PRIOR TO INSTALLATION TO SCHEDULE ANY REQUIRED PRE-INSTALLATION CONFERENCE AND FIELD REVIEW COORDINATION FOR TRENCH DEPTHS, ASSEMBLY REVIEW, PRESSURE TESTS, COVERAGE TESTS, PRE-MAINTENANCE AND FINAL REVIEWS. A CONTINUITY TEST WILL BE REQUIRED FOR CONTROL WIRE STUBOUTS. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNERS REPRESENTATIVE.
- 3. IRRIGATION WATER STUBOUT IS PROVIDED FOR IN IMMEDIATE VICINITY BY PLUMBING SECTION OF CONTRACT. CONNECT TO DISCHARGE SIDE OF STUBOUT.
- 4. DOMESTIC WATER STUBOUT IS PROVIDED FOR IN IMMEDIATE VICINITY BY PLUMBING SECTION OF CONTRACT. CONNECT TO DISCHARGE SIDE OF STUBOUT
- 5. ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE PLANS SHALL BE PROVIDED TO INSURE A COMPLETE AND FUNCTIONAL SYSTEM. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH LOCAL CODES, MANUFACTURERS INSTRUCTIONS AND AS INDICATED ON THE PLANS. AVOID ANY CONFLICTS BETWEEN SPRINKLER SYSTEM, PLANTING OR OTHER ARCHITECTURAL FEATURES. NOTIFY IRRIGATION CONSULTANT, PRIOR TO INSTALLATION, OF ANY AREA OR GRADE DIFFERENCES OR OBSTRUCTIONS NOT INDICATED ON THE PLANS.
- 6. PRIOR TO COMMENCING WORK, CONTRACTOR TO LOCATE ALL CABLES, CONDUITS, SEWERS, AND OTHER UTILITIES OR ARCHITECTURAL FEATURES THAT ARE COMMONLY ENCOUNTERED UNDERGROUND AND TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS. ANY DAMAGE MADE DURING THE INSTALLATION OF THE IRRIGATION SYSTEM OF THE AFOREMENTIONED ITEMS SHALL BE REPAIRED AND/OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTORS OWN EXPENSE.
- 7. INSTALL PEDESTAL MOUNTED CONTROLLER, APPROXIMATELY WHERE INDICATED. EXACT LOCATION OF WALL MOUNT CONTROLLERS TO BE DETERMINED AT JOBSITE BY ARCHITECT. 120 VOLT ELECTRICAL SUPPLY IS PROVIDED FOR IN IMMEDIATE VICINITY BY ELECTRICAL SECTION OF CONTRACT. MAKE FINAL 120 VOLT ELECTRICAL CONNECTION TO CONTROLLER. USE THIN WALL METAL CONDUIT ABOVE GRADE. PROGRAM CONTROLLERS TO NOT EXCEED MAXIMUM FLOW RATE STATED IN NOTE NO. I. INSTALL PER MANUFACTURERS SPECIFICATIONS, CONTROLLERS SHALL BE PROPERLY GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND CONFORM TO LOCAL REGULATIONS. INSTALL AS DETAILED. SEAL ALL CONDUIT HOLES WITH SILICONE OR EQUAL. PROGRAM CONTROLLERS PER MANUFACTURERS SPECIFICATIONS.
- 8. USE APPROPRIATE SOLVENT AND APPLICATOR, AND PRIMER IF REQUIRED, FOR PIPE SIZE AND TYPE APPLICATIONS. APPLY PER MANUFACTURERS RECOMMENDATIONS. PIPE JOINT COMPOUND FOR THREADED JOINTS SHALL BE WHITLAM BLUE MAGIC INDUSTRIAL GRADE THREAD SEALING COMPOUND. APPLY PER MANUFACTURERS RECOMMENDATIONS.
- 9. INSTALL ALL EQUIPMENT AS DETAILED.
- IO. ALL HEADS SHALL HAVE RISER ASSEMBLIES AS DETAILED. INSTALL CHECK VALVES AS SHOWN ON BUBBLER RISER ASSEMBLY DETAIL WHERE LOW HEAD DRAINAGE OCCURS. NOTE ESPECIALLY TO AVOID DRAINAGE AT SIDEWALKS AND OTHER POINTS WHERE PUDDLING WILL CAUSE DAMAGE OR HAZARD. LEAN SPRINKLER HEADS ON SLOPES (ANGLE VARIES DEPENDING UPON TRAJECTORY OF SPRAY AND DEGREE OF SLOPE) TO MAXIMIZE UPHILL THROW. INSTALL FLOOD BUBBLERS ON UP HILL SIDE OF TREES.
- II. ADJUST ALL BUBBLERS AT TREES AS REQUIRED FOR DEEP ROOT WATERING. OVERHEAD IRRIGATION SHALL BE SCHEDULED BETWEEN 8:00PM AND 10:00AM UNLESS WEATHER CONDITIONS PREVENT.
- 12. ALL PIPE UNDER PAVEMENT SHALL BE SCHEDULE 40 PVC. ALL WIRING UNDER PAVEMENT TO BE INSTALLED IN PVC SCHEDULE 40 ELECTRICAL CONDUIT AT A TWENTY FOUR INCH (24") DEPTH BELOW GRADE. SURROUND PIPES WITH SAND IN AREAS WHERE ROCKY TERRAIN IS ENCOUNTERED.
- 13. ALL VALVE CONTROL WIRE SHALL BE MINIMUM NO. 14 AWG COPPER UL APPROVED FOR DIRECT BURIAL IN GROUND. CONNECT WIRES USING 3M DBY CONNECTORS PER MANUFACTURERS SPECIFICATIONS. TAPE WIRES IN BUNDLES EVERY TEN FEET (10').
- 14. MULTI-OUTLET EMITTERS SHOWN ARE DIAGRAMMATIC ONLY. INSTALL EMITTER IN GROUPS OF PLANTS AND RUN DISTRIBUTION TUBING TO PLANTS. INSTALL OUTLETS AS FOLLOWS:

I PCC-2 GPH EMITTER AT EACH I-GALLON LOW WATER USE PLANT

I PCC-6 GPH EMITTER AT EACH I-GALLON MEDIUM WATER USE PLANT

I PCC-6 GPH EMITTER AT EACH 5-GALLON LOW WATER USE PLANT I PCC-IO GPH EMITTER AT EACH 5-GALLON MEDIUM WATER USE PLANT

INSTALL EMITTERS ON UP GRADE SIDE OF PLANTS ABOVE ROOTBALL

15. PROVIDE LITERATURE OF ALL DRIP SYSTEM COMPONENTS INCLUDING ANY PREVENTATIVE MAINTENANCE AND TROUBLE SHOOTING GUIDES TO OWNER AND REVIEW MAINTENANCE PROCEDURES INCLUDING:

CLEANING FILTER IN WYE STRAINER(S)

REPAIRING BREAKS IN PIPE(S) ADDING EMITTERS AND TUBING FOR EXPANSION/INSTALLING PLUGS INSPECTION OF EMITTERS AND OUTLETS

- IG. MAINTENANCE CONSIDERATIONS: FILTER CLEANING AND FLUSHING SHOULD START OUT AS A MONTHLY PROCEDURE(MORE FREQUENT FOR DIRTY WATER SITUATIONS) AND ADJUST TIMING AS APPROPRIATE, VISUALLY CHECK FOR INDICATIONS OF PIPE BREAKS OR CLOGGED EMITTERS ON A REGULAR BASIS. DURING WINTER MONTHS, WHEN THE SYSTEM IS NOT IN USE, THE DRIP SYSTEM(S) SHOULD BE RUN ABOUT EVERY 2 WEEKS FOR 2-4 MINUTE MINIMUM RUNTIME.
- 17. ALL SUPPLYLINE PIPES SHALL BE TESTED HYDRAULICALLY AT 125% OF DESIGN PRESSURE AND SPRINKLER LINE PIPES SHALL BE TESTED AT LINE PRESSURE. THERE SHALL BE NO LEAKS FOR A PERIOD OF TWO (2) HOURS. CENTER LOAD PIPING (BUT DO NOT COVER FITTINGS) TO PREVENT ARCHING OR SLIPPING UNDER PRESSURE.
- 18. ALL BACKFILL MATERIAL SHALL BE FREE OF ROCKS, CLODS, AND OTHER EXTRANEOUS MATERIALS. COMPACT BACKFILL TO ORIGINAL DENSITY OF SOIL.
- 19. AT JOB COMPLETION, SUPPLY OWNER WITH TWO (2) KEYS FOR CONTROLLER.
- 20. OBTAIN CLEAN SET OF IRRIGATION PLANS FROM ARCHITECT AND ACCURATELY AND NEATLY MARK ALL CHANGES MADE DURING CONSTRUCTION. ALL DRAFTING TO BE DONE BY A COMPETENT DRAFTSPERSON. SUBMIT TO OWNER FOR ACCEPTANCE.
- 21. GUARANTEE THE IRRIGATION SYSTEM AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.
- 22. THE IRRIGATION SCHEDULES ARE BASED ON THE IRRIGATION SYSTEM'S ATTRIBUTES AND ARE ONLY GUIDELINES FOR PROGRAMMING CONTROLLERS. THESE SCHEDULES TAKE INTO ACCOUNT HISTORICAL WEATHER DATA AND ESTIMATES OF SOIL COMPOSITION, PLANT TRANSPIRATION CHARACTERISTICS AND IRRIGATION SYSTEM UNIFORMITY. SINCE RUN TIMES ARE BASED ON AVERAGE HISTORICAL WEATHER DATA FOR A PARTICULAR REGION. THE PROGRAMS SHOULD BE ADJUSTED TO REFLECT ACTUAL VARIATIONS IN THE WEATHER. IDEALLY ADJUSTMENTS SHOULD BE MAKE FOR EACH WATERING CYCLE; HOWEVER, WEEKLY ADJUSTMENTS ARE ACCEPTABLE, MONTHLY ADJUSTMENTS BEING THE MINIMUM REQUIREMENT, IN ORDER TO AFFECT SIGNIFICANT WATER SAVINGS. IN ADDITION TO MAKING THESE ADJUSTMENTS, THE GROUNDS SHOULD BE MONITORED REGULARLY TO ASSESS THE ESTIMATED SCHEDULE AND THE CONTROLLER PROGRAMS SHOULD BE 'TUNED' TO ADJUST TO SITE CONDITIONS.
- 23. 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 IRRIGATION DESIGN PLAN.
- 24. AFTER INSTALLATION CONTRACTOR SHALL ARRANGE AN IRRIGATION WATER USE ANALYSIS/WATER AUDIT TO BE CONDUCTED BY A CERTIFIED LANDSCAPE IRRIGATION AUDITOR. CONTACT THE LANDSCAPE ARCHITECT TO COMPLETE THE CERTIFICATE OF COMPLETION FOR SUBMITTAL TO CITY FOR OCCUPANCY PERMIT.
- 25. LOCAL WATER PURVEYOR: CITY OF HAWARD 777 'B' STREET HAYWARD, CALIFORNIA 94541 PH. (510) 583-4000

#### LANDSCAPE MAINTENANCE GUIDELINES & SCHEDULE

A. WEEDING AND PEST CONTROL:

WEEDING SHALL BE DONE ON A WEEKLY BASIS, PEST CONTROL AS NEEDED. KEEP BASINS AND AREAS BETWEEN PLANTS FREE OF WEEDS. IF ANY PLANTS SHOW SIGNS OF PEST INFESTATION OR DISEASE, PRUNE OFF A SMALL PORTION OF THE INFECTED AREA FOR ANALYSIS BY A QUALIFIED NURSERY. APPLY THE APPROPRIATE TREATMENT TO CORRECT THE PROBLEM AS RECOMMENDED BY THE NURSERY.

B. LITTER, LEAF AND TRASH REMOVAL:

ALL LITTER, LEAVES, DEBRIS AND TRASH SHALL BE PICKED UP WEEKLY AND THE SITE SHALL BE LEFT IN A NEAT AND CLEAN CONDITION.

C. TREE, SHRUB, VINE AND GROUND COVER CARE:

- I. FERTILIZATION: APPLY FERTILIZER AND PRE-EMERGENT TO ALL AREAS IN SEPTEMBER AND MARCH. WATERING ALL MATERIALS IN THOROUGHLY ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. RATES AND EXACT FREQUENCY OF FERTILIZATION SHALL BE OBTAINED FROM LANDSCAPE SPECIFICATIONS AND SOILS ANALYSIS REPORT. ON A YEARLY BASIS, OBTAIN THREE SOIL SAMPLES FROM DIFFERENT PARTS OF THE PROJECT AND SEND TO A CERTIFIED SOIL AND PLANT LABORATORY FOR FERTILITY TESTING. REQUEST TEST REPORT SHALL CONTAIN FERTILIZATION AND CONDITIONING RECOMMENDATIONS FOR THE EXISTING LANDSCAPING AND FOLLOW ALL REPORT RECOMMENDATIONS FOR THE NEXT YEAR'S MAINTENANCE PROGRAM.
- 2. WATERING: WATER THOROUGHLY AND DEEPLY AS DESCRIBED IN ITEM E- WATERING.
- 3. EDGING: EDGE GROUND COVER TO KEEP IN BOUNDS AND TRIM TOP GROWTH AS NECESSARY TO ACHIEVE AN OVERALL EVEN APPEARANCE. KEEP AN 18" TO 24" DIAMETER CIRCLE AROUND THE BASE OF TREES CLEAR OF GROUND COVER TO REDUCE COMPETITION FOR NUTRIENTS BETWEEN. MAINTAIN BARK MULCH IN CLEAR ZONE.
- 4. PRUNING: TREES & SHRUBS: SEE ITEM G PRUNING BELOW FOR GUIDELINES. GROUND COVERS: WOODY GROUND COVERS SHOULD BE PRUNED TO MAINTAIN DENSITY AND HEIGHT AND MINIMIZE BUILD-UP OF DEAD, WOODY BRANCHES BELOW THE SURFACE THROUGH ANNUAL OR EVERY OTHER YEAR PRUNING AND THINNING. CUT BACK PERENNIALS YEARLY OR AS NEEDED TO REMOVE DEAD GROWTH, RETAIN SHAPE AND REVITALIZE PLANT. DIVIDE TUBEROUS PLANTS IN FALL OR WINTER BUT ONLY WHEN PLANTS BECOME OVERCROWDED OR TOO LARGE.
- 5. REPLACEMENT PLANTS: DEAD AND MISSING PLANTS SHALL BE REPLACED IMMEDIATELY. REPLACEMENT PLANTS SHALL BE OF SAME SIZE AND PLANTED AT SAME SPACING AS ORIGINALLY CALLED OUT ON PLANTING PLANS.
- 6. VINES: AS VINES GROW. ADD ADDITIONAL VINE TIES TO SPREAD VINE OUT AND TRAIN TO THEIR SUPPORT, IF VINES GET TANGLED OR HEAVY. THIN AND PRUNE TO SHAPE AND RE-ATTACH TO SUPPORT SURFACE AS NEEDED.

#### D. LAWN CARE:

- I. MOWING AND EDGING: MOW GRASS TO A MINIMUM HEIGHT OF TWO INCHES IN WARM WEATHER AND ONE AND ONE HALF INCHES DURING THE RAINY SEASON. MOWING SHALL BE DONE AS NEEDED IN ORDER TO MAINTAIN SPECIFIED HEIGHTS. ALL TREES PLANTED IN LAWN AREAS SHALL HAVE A 12" DIAMETER CIRCLE AROUND TRUNK OF TREE FREE OF LAWN. THIS CIRCULAR AREA SHALL RECEIVE 2" DEPTH OF BARK MULCH. THIS WILL REDUCE DAMAGE TO TRUNKS AND ROOTS BY MACHINERY.
- 2. WATERING: LAWNS SHALL BE WATERED AT SUCH FREQUENCY AS WEATHER CONDITIONS REQUIRE, TO REPLENISH SOIL MOISTURE BELOW ROOT ZONE. SEE ITEM <u>E - WATERING</u> FOR MORE DETAILED INFORMATION.
- 3. FERTILIZATION: LAWNS SHOULD BE FERTILIZED APPROXIMATELY EVERY 6 TO 8 WEEKS OR AS NEEDED TO MAINTAIN HEALTHY VIGOROUS GROWTH. SEE C ABOVE FOR FERTILIZER.
- 4. WEED CONTROL: CONTROL BROAD-LEAFED WEEDS WITH SELECTIVE HERBICIDES. FOR CRABGRASS, APPLY A SELECTIVE POST-EMERGENT HERBICIDE IN THE SPRING. PRE-EMERGENT HERBICIDES CAN BE APPLIED PRIOR TO CRABGRASS GERMINATION. ALL HERBICIDES SHALL BE APPLIED ONLY AS NECESSARY AND PER MANUFACTURER RECOMMENDATIONS.
- 5. INSECT & DISEASE CONTROL: IF NECESSARY, APPLY APPROVED INSECTICIDES AND FUNGICIDES WHEN NEEDED. THIS SHALL BE DONE ON AN AS NEEDED BASIS ONLY, AND PER MANUFACTURER RECOMMENDATIONS.
- RENOVATING: TO PROMOTE HEALTHY GROWTH, LAWNS SHOULD BE DE-THATCHED AND AERATED PERIODICALLY. DE-THATCHING REMOVES THE THICK LAYER OF DEAD GRASS STEMS THAT ACCUMULATE OVER TIME AT THE SOIL LEVEL. HEAVY THATCH CAN REDUCE A LAWNS VIGOR AND GROWTH. DE-THATCHING SHOULD BE DONE IN FALL OR EARLY SPRING. AERATION IS DONE WITH EITHER HAND OR GAS POWERED TOLLS THAT REMOVE SMALL CORES OF GRASS AND SOIL FROM THE LAWN AREA. THIS INCREASES WATER PENETRATION AND AIR CIRCULATION AND IMPROVES PLANT GROWTH. THIS SHOULD BE DONE ANNUALLY, OR CAN BE DONE IN SPECIFIC AREAS ANY TIME AS NEEDED. SECTIONS OF LAWN THAT ARE IN POOR HEALTH, DISEASED OR DEAD CAN BE CUT OUT AND REPLACED WITH NEW SOD OR RE-SEEDED AS NECESSARY. BE SURE YOUR REPLACEMENT SOD OR SEED IS THE SAME SPECIES.

#### E. WATERING :

- I. LAWNS. WAIT TO WATER A LAWN UNTIL YOU NOTICE ITS COLOR CHANGE FROM BRIGHT GREEN TO A DULL BLUE-GREEN. ALSO WHEN WALKING ON THE LAWN AND LOOKING BACK. YOU WILL NOTICE YOUR FOOTPRINTS. THESE ARE ALL SIGNS OF WATER STRESS. INDICATING IT'S TIME TO WATER. CAREFULLY MONITOR LAWN APPEARANCE TO DEVELOP THE PROPER WATERING SCHEDULE AT EACH SEASON.
- SHRUBS AND GROUND COVERS: REGULAR WATERING ENCOURAGES DEEP ROOTING. TREES AND SHRUBS WITH DEEP ROOTS CAN GO LONGER BETWEEN WATERING AND WITHSTAND DROUGHT BETTER. PLANTS WITH DEEP ROOTS HAVE A GREATER SOIL RESERVOIR OF MOISTURE. A SIMPLE TEST TO SEE IF SHRUBS AND GROUND COVERS NEED WATER IS TO STICK A PENCIL 4 TO 6 INCHES INTO THE GROUND. IF THE TIP IS DAMP OR WET. THEY DON'T NEED WATER. REMEMBER TO CHECK SEVERAL AREAS IN THE LANDSCAPE; AS SUNNY AREAS WILL TEND TO DRY-OUT MORE FREQUENTLY THAN SHADY AREAS. CAREFULLY MONITOR SHRUB AREAS IN THIS WAY TO DETERMINE THE PROPER WATERING SCHEDULE AT EACH SEASON.
- 3. GENERAL TIPS: DON'T OVER WATER. OVER WATERING WILL DAMAGE OR KILL PLANTS. DON'T CONTINUE TO WATER AN AREA IF RUN-OFF OCCURS, INSTEAD, WATER THE AREA SEVERAL TIMES WITH SHORTER DURATIONS, ALLOWING AN HOUR OR SO BETWEEN WATERING'S. THIS GIVES THE WATER A CHANCE TO PENETRATE INTO THE SOIL. THE IRRIGATION CONTROLLER CAN BE PROGRAMMED WITH REPEAT CYCLES TO ALLOW THIS TYPE OF WATERING. CAREFULLY MONITOR THE SOIL TO DEVELOP PROPER IRRIGATION SCHEDULES. THE SOIL IN THIS AREA TENDS TO RETAIN MOISTURE, SO IT IS IMPORTANT TO ALLOW THE SOIL TO DRY OUT BETWEEN WATERING CYCLES.
- 4. WATERING TIMES: WATERING SHALL BE DONE AT NIGHT OR APPLY WATER EARLY IN THE MORNING

#### F. IRRIGATION SYSTEM CARE:

- THE IRRIGATION SYSTEM SHALL BE CHECKED AND ADJUSTED AS FOLLOWS:
- I. WEEKLY: THE IRRIGATION SYSTEM SHALL BE VISUALLY INSPECTED BY RUNNING ALL VALVE STATIONS FROM THE IRRIGATION CONTROLLER AND LOOKING FOR LEAKS, BROKEN PIPES, MISSING SPRAY HEADS, SPRAY HEADS OUT OF ADJUSTMENT, OVER SPRAYING, MISTING OR CLOGGED, OR OTHER DAMAGE. REPAIR ANY DAMAGE, LEAKS, ETC., AND ADJUST SPRAY HEADS SO THAT IRRIGATION SYSTEM HAS OPTIMUM HEAD TO HEAD SPRAY COVERAGE WITHOUT OVER SPRAYING PLANTING AREA. ALL REPAIRS AND ADJUSTMENTS SHALL BE COMPLETED BEFORE THE NEXT SCHEDULED WATERING PERIOD, AND IN NO CASE SHALL DOWN TIME EXCEED ONE WEEK.
- WEEKLY: AS PART OF VISUAL INSPECTION NOTED ABOVE, CHECK FOR LOW HEAD DRAINAGE. REPAIR AND/OR ADD CHECK VALVES AS NECESSARY TO ELIMINATE LOW HEAD DRAINAGE.
- 3. MONTHLY: CHECK VALVE BOXES TO SEE THAT THEY DRAIN PROPERLY AND CLEAN OUT DEBRIS, MUD OR PLANT GROWTH.
- 4. MONTHLY: IRRIGATION CONTROLLERS SHALL BE ADJUSTED MONTHLY TO PROVIDE OPTIMUM WATERING TIMES FOR THE LANDSCAPE PLANT MATERIALS. MAKE WEEKLY INSPECTIONS OF LANDSCAPE PLANT MATERIALS AND CHECK SOIL MOISTURE LEVELS (SEE ITEM E- WATERING) AND ADJUST WATERING TIMES AS NECESSARY TO PROVIDE OPTIMUM PLANT GROWTH AND WATER CONSERVATION. UNUSUAL VARIATIONS IN WEATHER MAY REQUIRE THE CONTROLLER WATERING TIMES BE ADJUSTED MORE OR LESS FREQUENTLY
- 5. TWICE YEARLY: CHECK ALL QUICK COUPLERS AND MAKE ALL REPAIRS NECESSARY, AND REPAIR VALVE BOXES AS NECESSARY.
- 6. IN WINTER: COVER OR PROTECT ALL BACKFLOW DEVICES DURING FREEZING WEATHER.
- 7. DRIP MAINTENANCE CONSIDERATIONS: FILTER CLEANING AND FLUSHING SHOULD START OUT AS A MONTHLY PROCEDURE (MORE FREQUENTLY FOR DIRTY WATER SITUATIONS) AND ADJUST TIMING AS APPROPRIATE. VISUALLY CHECK FOR INDICATIONS OF PIPE BREAKS OR CLOGGED EMITTERS OR OUTLETS ON A REGULAR BASIS. DURING WINTER MONTHS, WHEN THE SYSTEM IS NOT IN USE, THE DRIP VALVES SHOULD BE RUN TWICE MONTHLY FOR A 2-4 MINIMUM MINUTE PERIOD (EXCEPT IN FREEZING AREAS).

PRUNE SHRUBS AND TREES TO ENHANCE THEIR NATURAL SHAPE, DEVELOP PROPER LIMB AND BRANCH STRUCTURES, KEEP CLEAR OF TRAFFIC, AND REMOVE DISEASED, INJURED, AND DEAD WOOD IN THE FALL. IN PRUNING OR EDGING, DO NOT SHEAR OR CREATE VERTICAL EDGES. PRUNE AND REMOVE DEAD FLOWERS FROM PERENNIALS, SUCH AS AGAPANTHUS AND HEMEROCALLIS, AS NEEDED TO KEEP THEM LOOKING GOOD. PRUNE TREES FOR PROPER FORM AND TO ELIMINATE DEAD, CROSSING OR BROKEN BRANCHES. DO NOT ALLOW TREES TO BECOME TOP HEAVY. PRUNE AS NEEDED TO ALLOW WIND PENETRATION THROUGH CANOPY. ALL TREE PRUNING SHALL BE DONE UNDER THE GUIDANCE OF A CERTIFIED ARBORIST FOLLOWING NURSERYMAN ASSOCIATION APPROVED PRUNING STANDARDS.

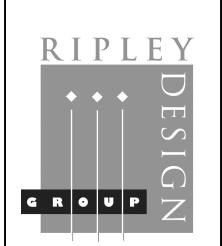
TWICE YEARLY ALL TREE AND SHRUB AREAS WITH BARK MULCH SHALL BE CHECKED AND MULCH ADDED AS NECESSARY TO RETAIN A MINIMUM 3" MULCH DEPTH.

ADJUST OR REMOVE STAKES AS NECESSARY TO PROVIDE THE BEST GROWING ENVIRONMENT FOR THE TREES. DO NOT ALLOW ANY STAKES TO LEAN OR BECOME LOOSE SO AS NOT TO PROVIDE NECESSARY SUPPORT FOR THE TREES. REPLACE RUBBER TIES WHICH ARE BROKEN OR DAMAGED; DO NOT US WIRE TYPE TIES. LOOSEN TIED AS NEEDED TO ALLOW FOR PROPER TRUNK GROWTH. TRIM TREE STAKES AS NECESSARY TO ELIMINATE RUBBING AGAINST TREE BRANCHES. REMOVE STAKES FROM TREES ONCE A STRONG TRUNK HAS DEVELOPED IN APPROXIMATELY 2 TO 3 YEARS AFTER INSTALLATION.

J. REPLACEMENT OF PLANTS:

DEAD PLANTS AND THOSE IN A STATE OF DECLINE SHALL BE REPLACED. REPLACEMENT PLANTS SHALL BE OF SAME SIZE, CONDITION AND VARIETY AS ORIGINALLY CALLED OUT ON PLANTING PLANS.

**Attachment IV** 



RIPLEY DESIGN GROUP, IN Landscape Architecture Land Planning

1615 Bonanza St., Suite 314 Walnut Creek California 94596 Tel 925.938.7377 Fax 925.938.7436

**DEVELOPER**:

#### **NUVERA HOMES**

7041 KOLL CENTER **PARKWAY SUITE 170** PLEASANTON, CA 94566

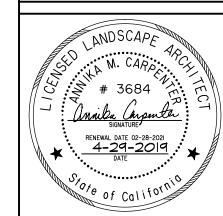
> TEL. 925.309.8888 FAX. 888.589.4937

> > **PROJECT:**

**EDEN VILLAGE** 

> HAYWARD, **CALIFORNIA**

**IRRIGATION CALCULATIONS** 

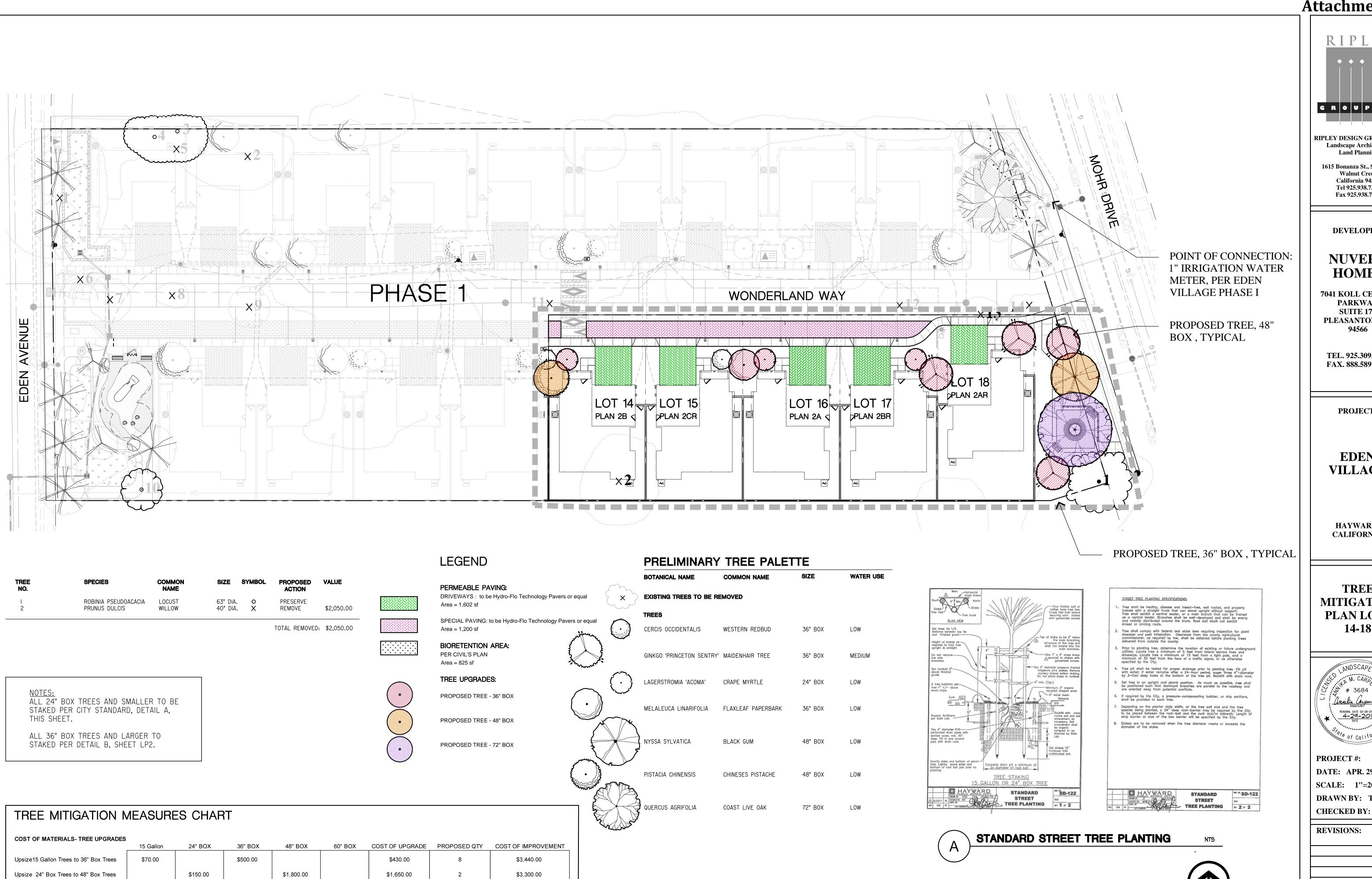


PROJECT #: **DATE: APR. 29, 2019** SCALE: NONE **DRAWN BY: BAC** 

**CHECKED BY: AMC** 

**REVISIONS:** 

**SHEET** 



\$70.00

\$4,000.00

\$3,930.00

TOTAL MATERIAL UPGRADES=

\$3,930.00

\$10,670.00

TOTAL PROPOSED MITIGATION COSTS = \$ 10,670.00

Upsize 15G Trees to 60" Box Trees

**Attachment IV** RIPLEY

RIPLEY DESIGN GROUP, INC Landscape Architecture Land Planning

1615 Bonanza St., Suite 314 Walnut Creek California 94596 Tel 925.938.7377 Fax 925.938.7436

**DEVELOPER:** 

#### **NUVERA HOMES**

7041 KOLL CENTER PARKWAY SUITE 170 PLEASANTON, CA 94566

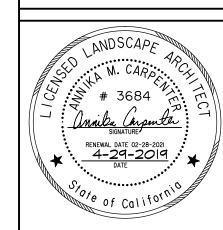
TEL. 925.309.8888 FAX. 888.589.4937

**PROJECT:** 

**EDEN VILLAGE** 

HAYWARD, **CALIFORNIA** 

TREE **MITIGATION PLAN LOTS** 14-18



PROJECT #: **DATE: APR. 29, 2019 SCALE:** 1"=20' DRAWN BY: TV CHECKED BY: AMC

**REVISIONS:** 

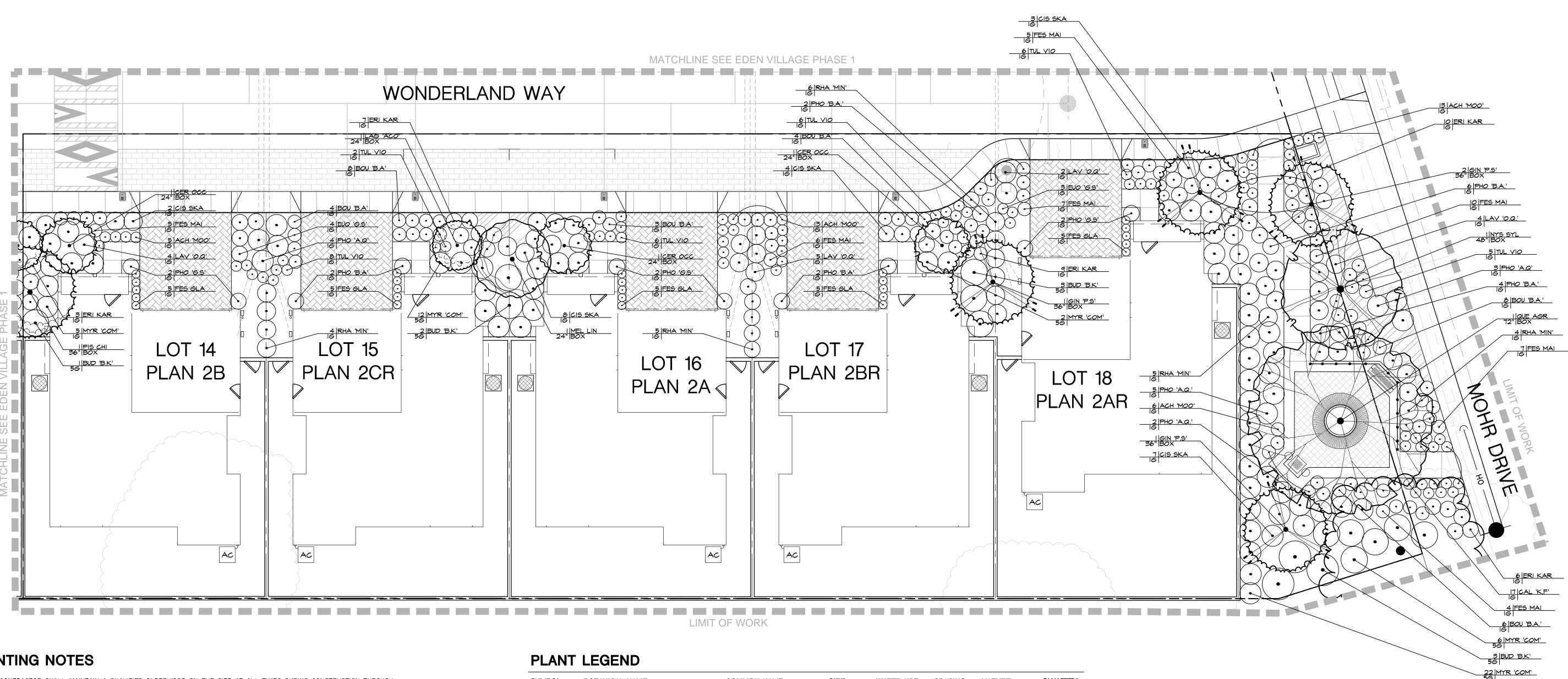
GRAPHIC SCALE

( IN FEET ) 1 inch = 20 ft.

PHASE ONE: LOT I-I3

PHASE TWO: LOT 14-18

**SHEET** 



#### PLANTING NOTES

- I. THE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES DURING CONSTRUCTION THROUGH COMPLETION OF PICK-UP WORK.
- 2. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL FORMS OF PLANT MATERIALS AND SPECIFIED INSTALLATIONS, INCLUDING FLATTED GROUNDCOVER.
- 3. 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.
- 4. 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. COMPOST 35 LBS. 6-20-20 COMMERCIAL FERTILIZER

50 LBS. IRON SULFATE (20% Fe)

5. 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

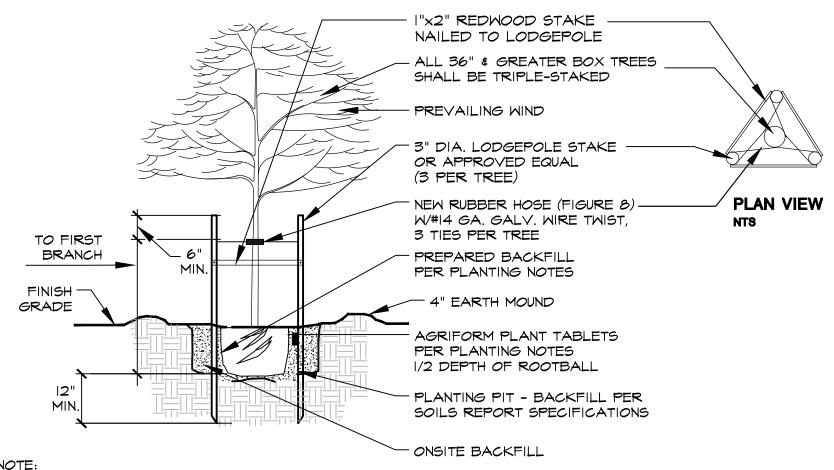
2LB./CU.YD. OF MIX IRON SULFATE PER CU.YD. OF MIX

- 6. 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.
- 7. 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.
- 8. 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, 1/4" TO I" DIAMETER FROM WASTE MANAGEMENT, INC., SACRAMENTO, (916-452-0142).
- 9. CONTRACTOR SHALL SPRAY ALL EXISTING WEEDS IN PLANTING AREAS PRIOR TO RIPPING AND APPLY PRE-EMERGENT TO ALL SHRUB AREAS AFTER PLANTING.
- IO. CONTRACTORS SHALL APPLY FERTILIZER AND PRE-EMERGENT AT END OF MAINTENANCE PERIOD.
- II. LANDSCAPE ARCHITECT AND/ OR OWNER RESERVES THE RIGHT TO SELECT OR REJECT ANY OR ALL PLANT MATERIAL.
- 12. FOR 24" BOX TREES OR SMALLER REFER TO TREE PLANTING/STAKING DETAIL A, SHEET LPI. FOR 36" BOX TREES OR LARGER REFER TO TREE PLANTING/STAKING DETAIL B, SHEET LP2.
- 13. 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.

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	WATER USE	<b>SPACING</b>	MATURE	QUANTITY
TREES					(H	EIGHT/WIDTH)	
CER OCC GIN 'P.S' LAG 'ACO' MEL LIN NYS SYL PIS CHI QUE AGR	CERCIS OCCIDENTALIS GINKGO BILOBA 'PRINCETON SENTRY' LAGERSTROMIA 'ACOMA' MELALEUCA LINARIIFOLIA NYSSA SYLVATICA PISTACIA CHINENSIS QUERCUS AGRIFOLIA	WESTERN REDBUD MAIDENHAIR TREE CRAPE MYRTLE FLAXLEAF PAPERBARK BLACK GUM CHINESE PISTCHE COAST LIVE OAK	36" BOX 36" BOX 24" BOX 36" BOX 48" BOX 48" BOX 72" BOX	LOW MEDIUM LOW LOW LOW LOW	18 30' 8' 25' 30' 25' 30'	18'/18' 50'/30' 8'/8' 30'/25' 50'/30' 25'/25' 30'/30'	3 4         
SHRUBS							
ACH 'MOO' BOU 'B.A' BUD 'B.K' CAL 'K.F' CIS SKA ERI KAR EUO 'G.S' FES GLA FES MAI LAV 'O.Q' MYR 'COM' PHO 'A.Q' PHO 'B.A' PHO 'G.S' RHA 'MIN' TUL VIO	ACHILLEA 'MOONSHINE' BOUTELOUA G. 'BLONDE AMBITION' BUDDLEJA DAVIDII 'BLACK KNIGHT' CALAMAGROSTIS x A. 'KARL FOERESTER CISTUS SKANBERGII ERIGERON KARVINSKIANUS EUONYMUS J. 'GREEN SPIRES' FESTUCA GLAUCA FESTUCA MAIREI LAVANDULA STOECHES 'OTTO QUAST' MYRTUS C. 'COMPACTA' PHORMIUM 'APRICOT QUEEN' PHORMIUM T. 'BLACK ADDER' PHORMIUM T. 'GOLDEN SWORD' RHAPHOLEPIS UMBELLATA 'MINOR' TULBAGHIA VIOLACEA	YARROW GRAMA GRASS PURPLE BUTTERFLY BUSH FEATHER REED GRASS PINK CORAL ROCKROSE SANTA BARBARA DAISY GREEN SPIRES BLUE FESCUE MAIRE'S FESCUE SPANISH LAVANDER DWARF MYRTLE NEW ZEALAND FLAX DWARF YEDDO HAWTHORN SOCIETY GARLIC	I GAL	LOW	1' 2' 6' 2' 3' 2' 10" 3' 4' 4' 4' 4' 4'	2'/l' 2'/2' 8'/6' 7'/2' 3'/3' 20"/3' 6'/2' 10"/10" 3'/3' 4'/4' 4'/4' 4'/4' 6'/3' 2'/l'	37 35 9 17 24 35 6 25 44 15 47 14 16 6 24 33
GROUNDCO'	VERS						
ARCTOSTAPH I GALLON @	YLOS D. 'EMERALD CARPET' BEARBERRY 36" O.C.		38 SF	LOW			
THYMUS PSE	UDOLANUGINOSUS WOLLY THYME		148 SF	LOW			

#### PLANT CALLOUT SYMBOL KEY

PLANT QTY	PLANT SYMBOL
SIZE	UNITS



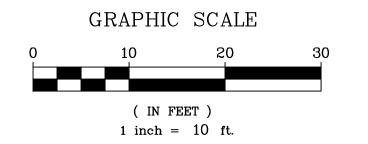
I. ROOT CONTROL PLANTER BOXES SHALL BE REQUIRED ON ALL STREET TREES. EWING STANDARD PLANTER, UNIVERSAL PLANTER, ROOT BARRIER UB-24-2 OR EQUAL MAY BE USED CENTERED ON TREE.

I. ALL HARDWARE TO BE GALZANIZED PER CITY STANDARDS.



PHASE ONE: LOT 1-13 PHASE TWO: LOT 14-18





**Attachment IV** 

RIPLEY G R O U P

RIPLEY DESIGN GROUP, IN **Landscape Architecture** Land Planning

1615 Bonanza St., Suite 314 Walnut Creek California 94596 Tel 925.938.7377 Fax 925.938.7436

**DEVELOPER:** 

#### **NUVERA HOMES**

**7041 KOLL CENTER PARKWAY SUITE 170** PLEASANTON, CA 94566

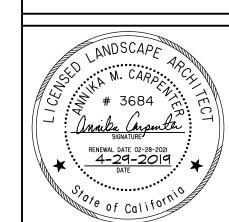
TEL. 925.309.8888 FAX. 888.589.4937

**PROJECT:** 

**EDEN VILLAGE** 

HAYWARD, **CALIFORNIA** 

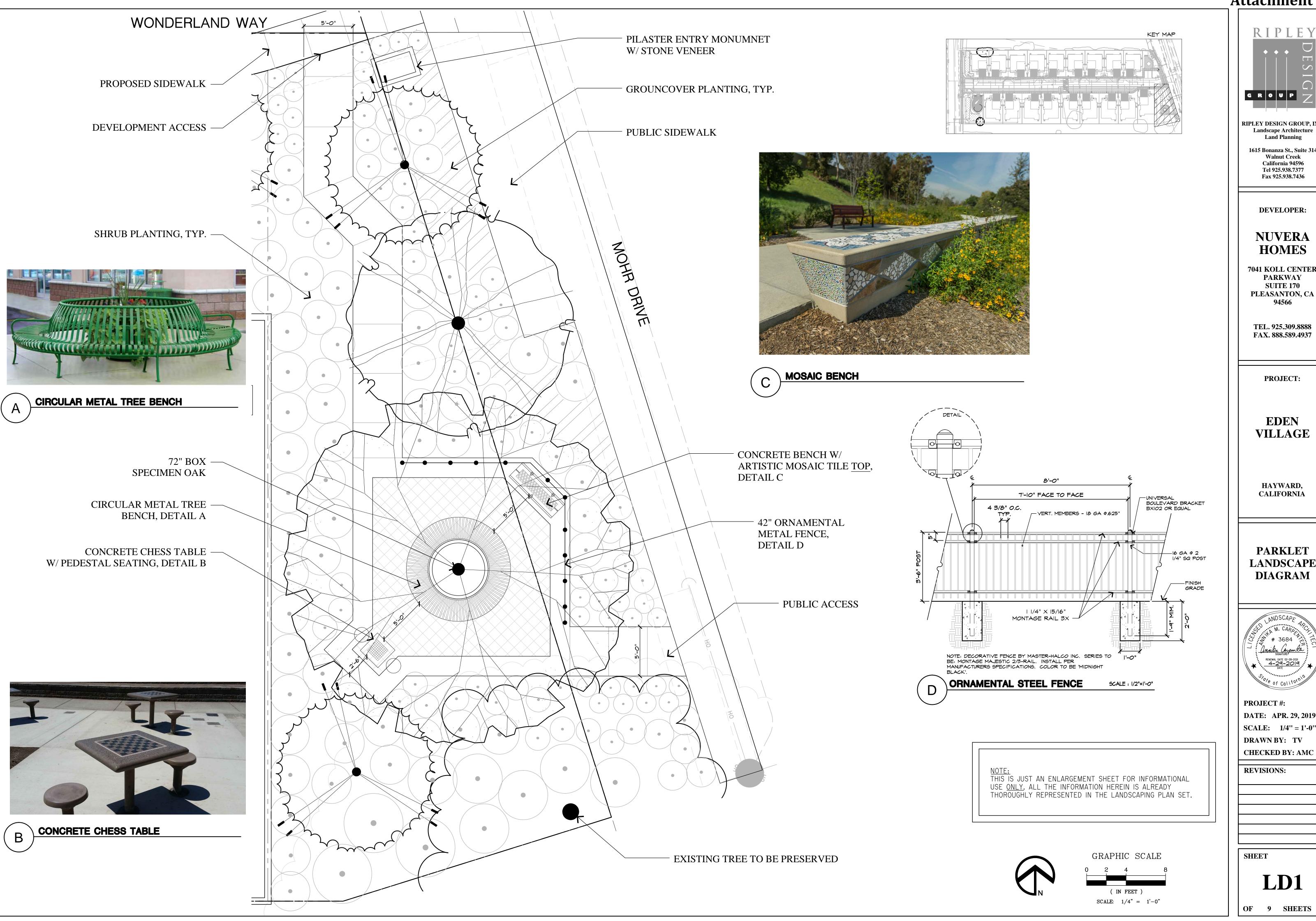
**PLANTING PLAN LOTS 14-18** 



PROJECT #: **DATE:** APR. 29, 2019 **SCALE:** 1''=10' DRAWN BY: TV CHECKED BY: AMC

**REVISIONS:** 

**SHEET** 



RIPLEY G R O U P

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**DEVELOPER:** 

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7041 KOLL CENTER **PARKWAY SUITE 170** PLEASANTON, CA 94566

TEL. 925.309.8888 FAX. 888.589.4937

**PROJECT:** 

## **EDEN VILLAGE**

HAYWARD, CALIFORNIA

**PARKLET** LANDSCAPE **DIAGRAM** 



PROJECT #: **DATE:** APR. 29, 2019 **SCALE:** 1/4'' = 1'-0''DRAWN BY: TV

**REVISIONS:** 

**SHEET** 

LD1



ELEVATION '2A' - Farmhouse



ELEVATION '2B' - Cottage



ELEVATION '2C' - Craftsman

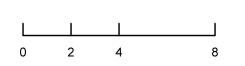


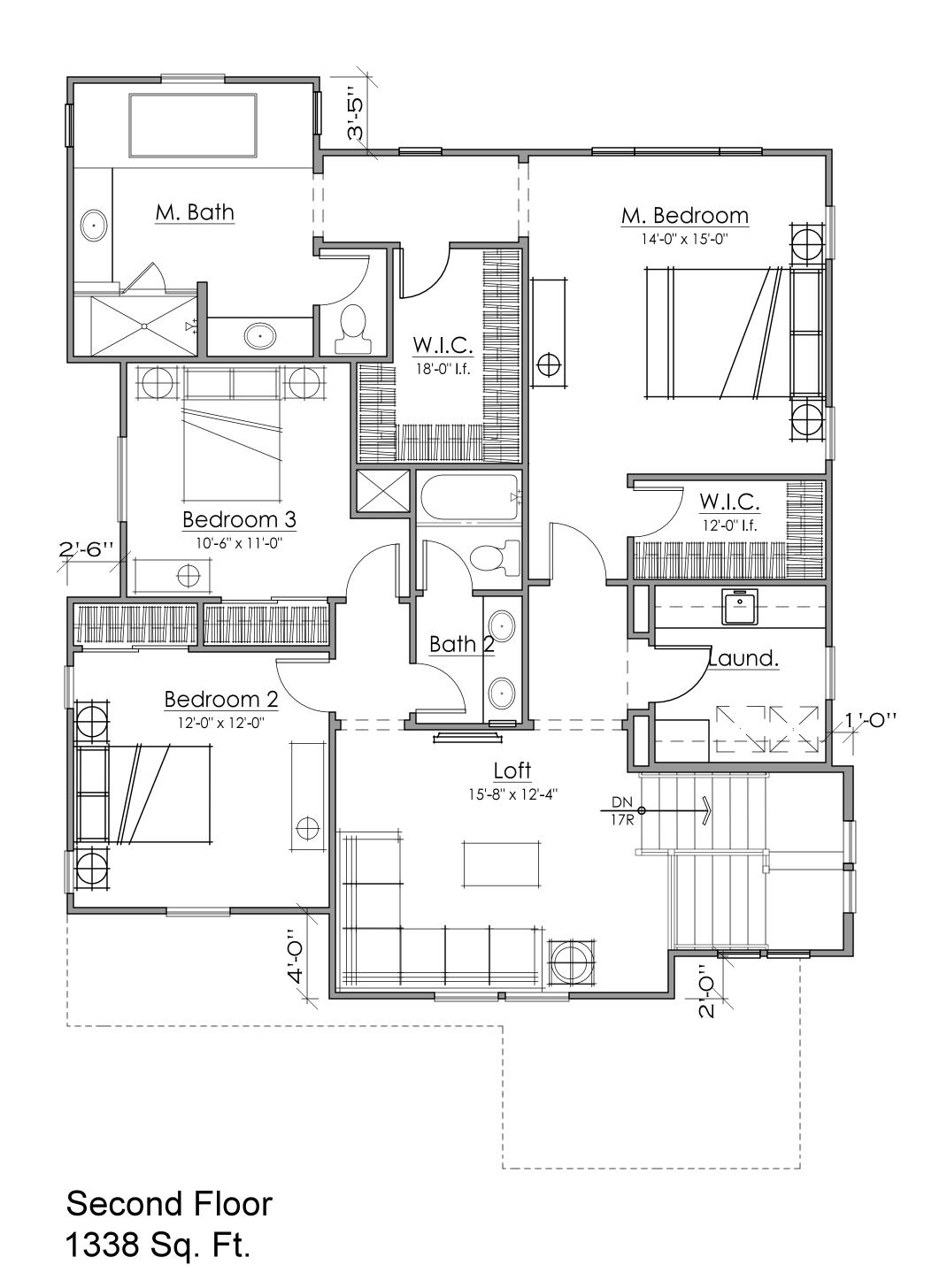


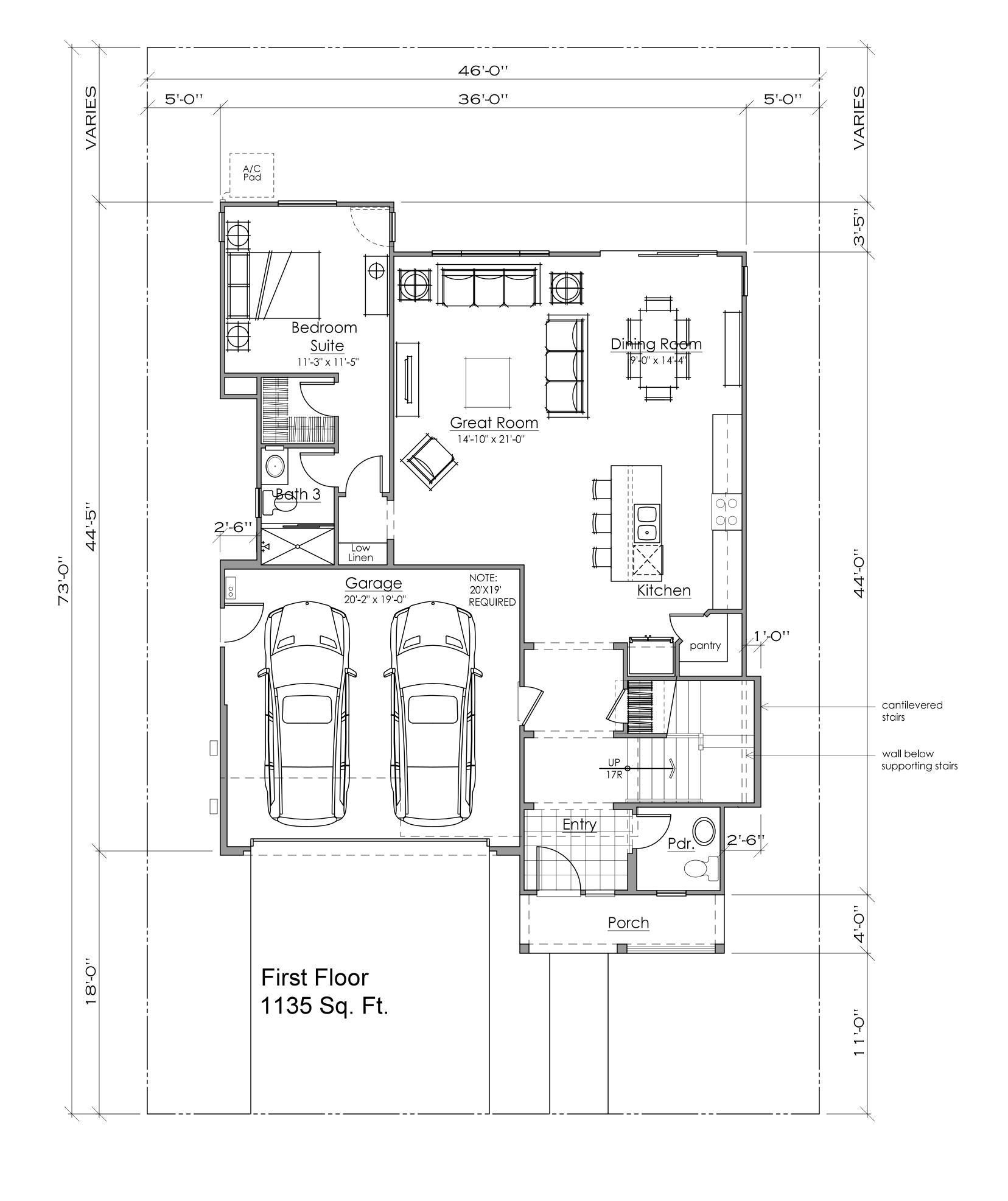










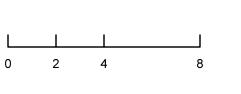


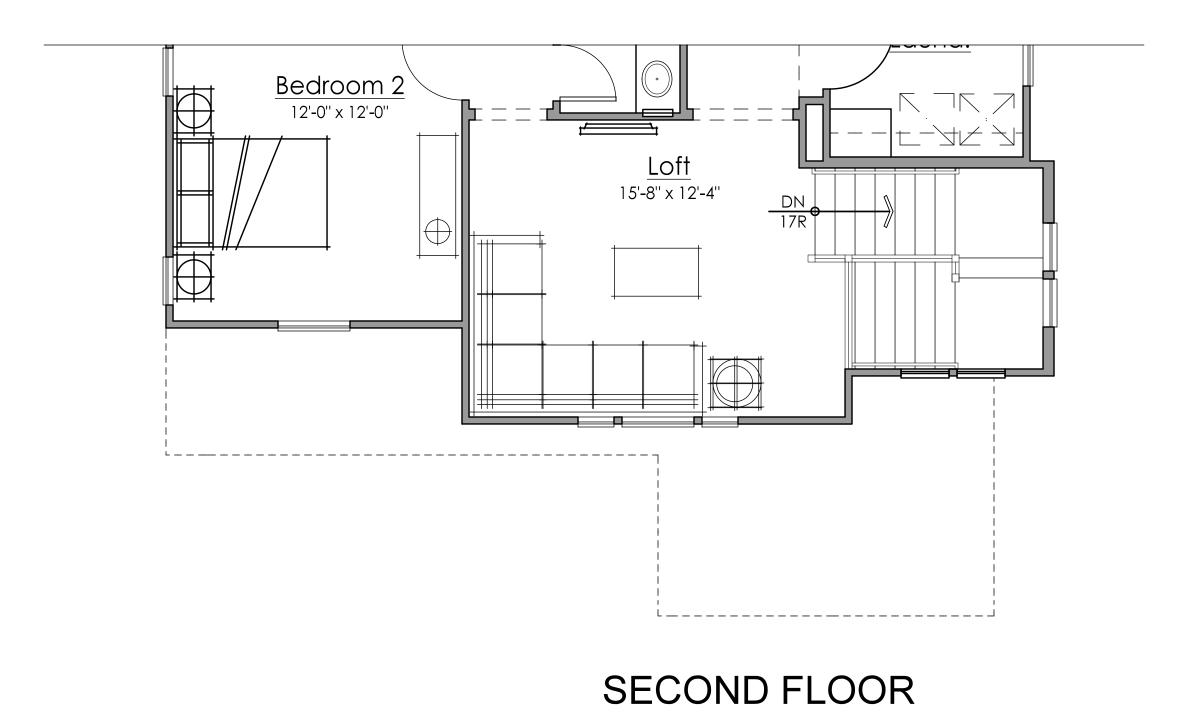


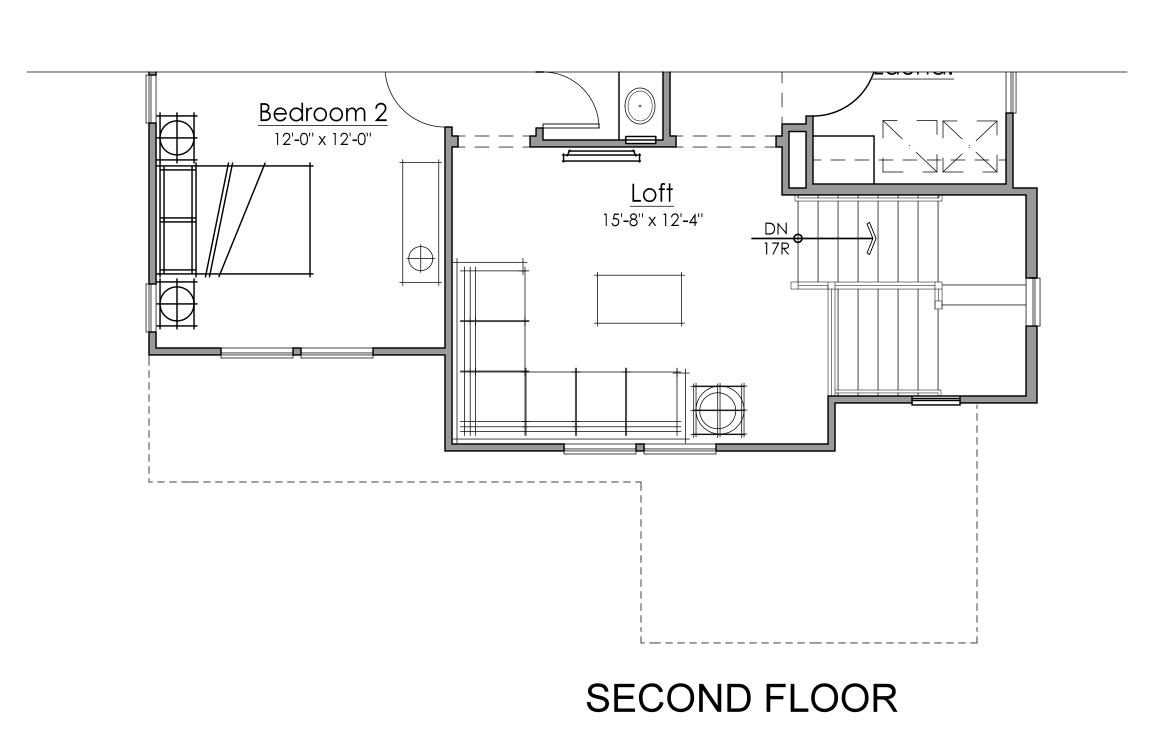


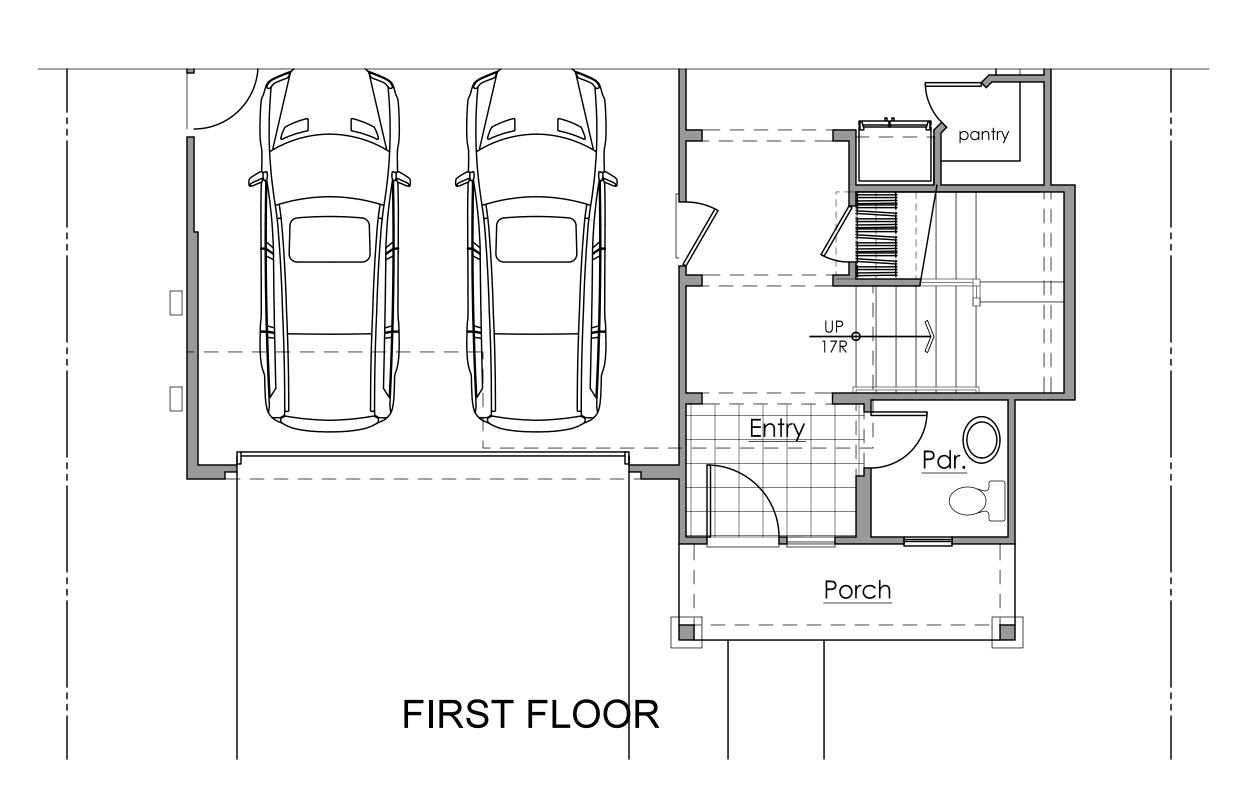




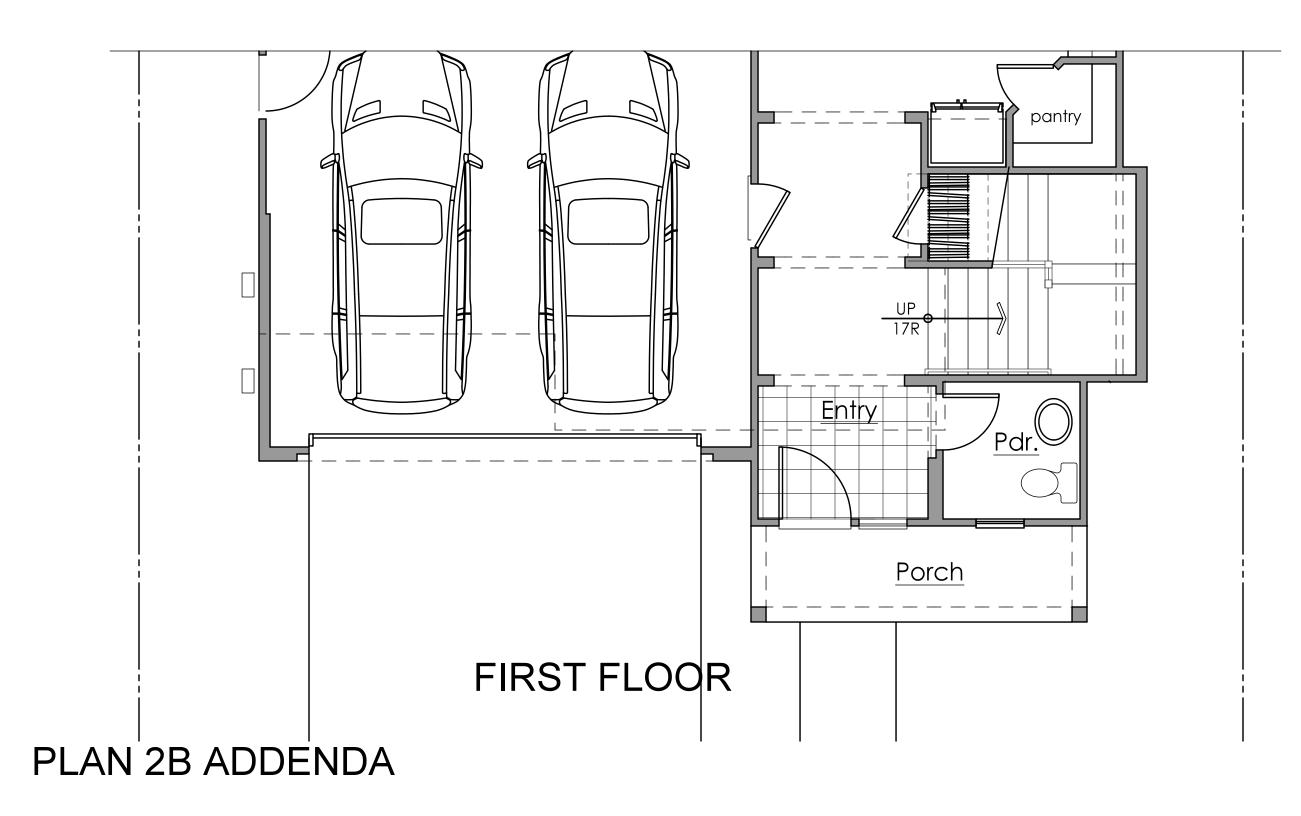








## PLAN 2C ADDENDA





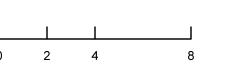




**EDEN VILLAGE** 

HAYWARD, CA





2A - FARMHOUSE Material Legend: Flat Concrete Tile Roofing

Stucco Finish

Cementitious Board & Batt Sidng / Lap Siding

Shutters

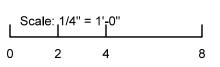
Decorative Railing & Wood Posts

Enhanced Sills

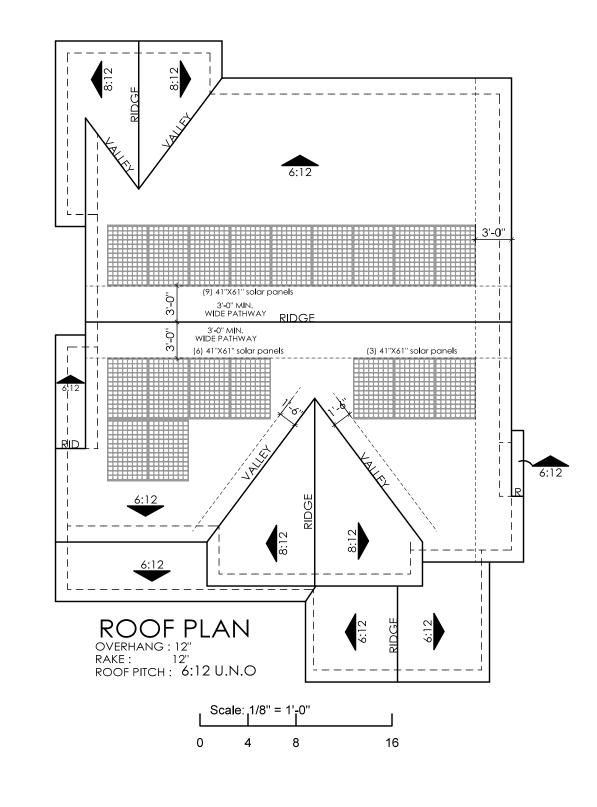
1x Stucco Finish Trim



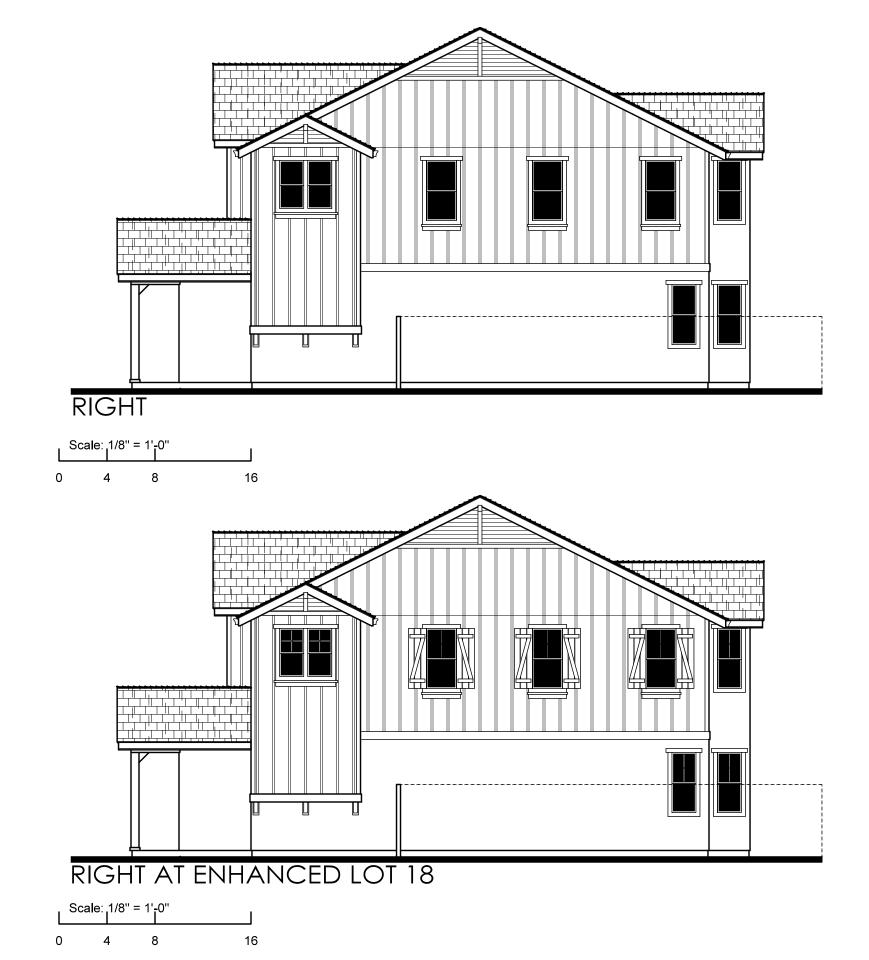
## ELEVATION '2A' - Farmhouse











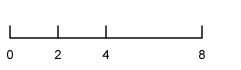












2B - COTTAGE Material Legend: Flat Concrete Tile Roofing

Stucco Finish

Cementitious Siding / Shingles

Shutters

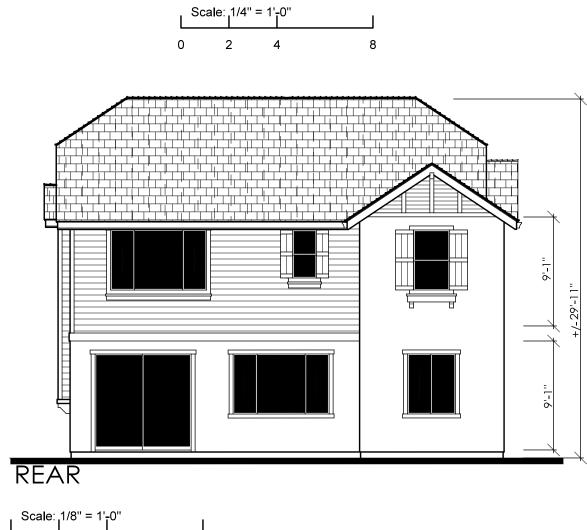
Decorative Wood Posts & Kickers

Enhanced Sills

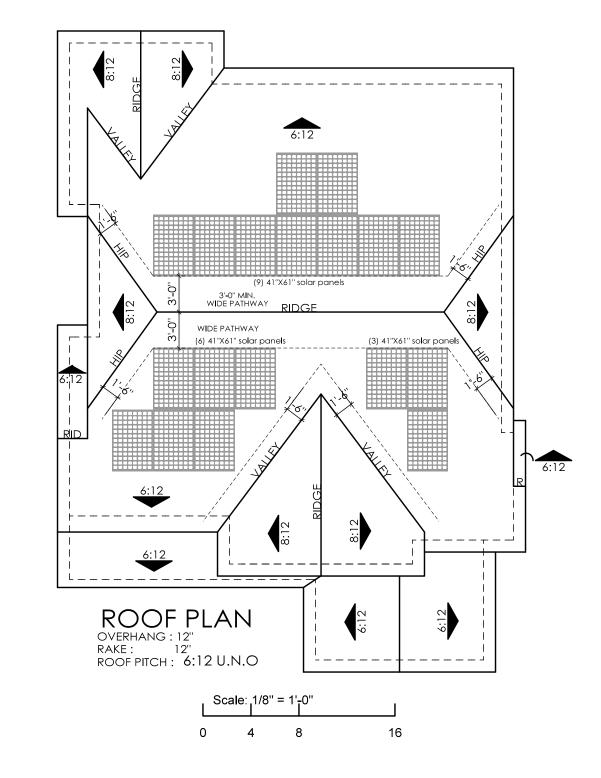
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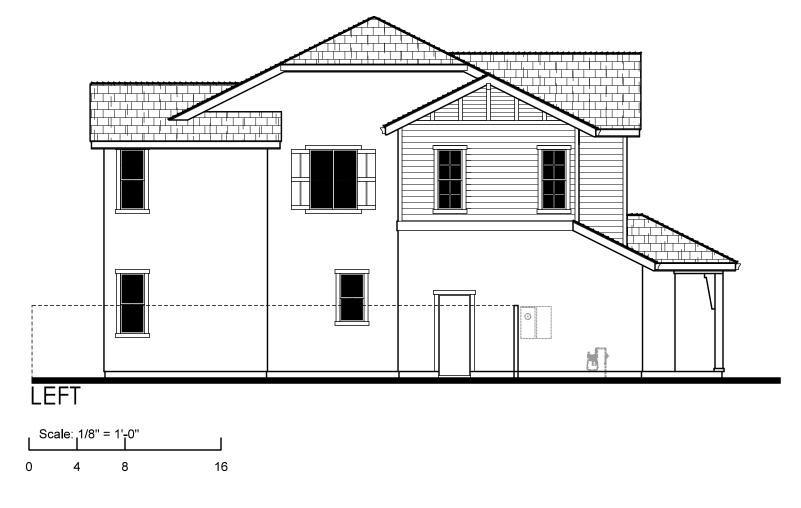


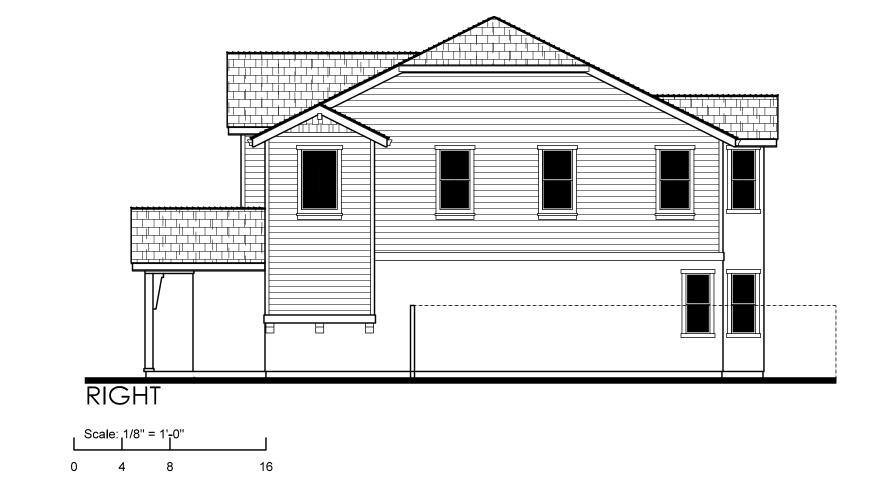
# ELEVATION '2B' - Cottage















2C - FRENCH Material Legend: Flat Concrete Tile Roofing

Stucco Finish

Stone Veneer

Shutters

Decorative Wood Posts & Kickers

Enhanced Sills

1x Stucco Finish Trim



## ELEVATION '2C' - Craftsman

