

California State University, Los Angeles

# Edible Garden Proposal

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An Edible Garden Aligns with Cal State LA's  
Strategic Plan and CSU Sustainability Policy  
While Addressing Student Basic Needs

**University's Strategic Plan:**

- Engagement, service, and the public good / *Develop cross-campus capacity to support civic learning*
- Welcoming and inclusive campus / *Increase the number of welcoming and healthy spaces on campus*
- Student success / *Promote access to and utilization of student wellness services*<sup>1</sup>

**CSU Sustainability Policy:**

- The CSU will seek to further integrate sustainability into the academic curriculum working within the normal campus consultative process.
- The CSU will develop employee and student workforce skills in the green jobs industry, promote the development of sustainable products and services, and foster economic development.
- The CSU will pursue sustainable practices in all areas of the university, including: a. business operations such as procurement; information technology; student services; food services; facilities operations; design and construction; and b. self-funded entities such as student housing, student unions, parking, children's centers, and auxiliary operations.<sup>2</sup>

**Food Insecurity:**

According to a 2018 study of CSU Basic Student Needs by Dr. Rashida Crutchfield (CSULB), and Dr. Jennifer Maguire (HSU) 20% of students experienced low food security and 21.6% experienced very low food security = 41.6% of Cal State students reported food insecurity. Food insecurity is a problem that universities have a duty to care about and a garden directly helps in a cheap, sustainable way.<sup>3</sup>

**Research Proves the Role of Gardening on Physical Health, Mental Health, and Food Access:**

- According to a 2017 UC San Diego study, community/edible gardens help build university-community trust, deepen civic infrastructure, lead to opportunities for engaged scholarship, help elevate the visibility of local concerns, and supply students with opportunities to apply classroom knowledge to real world challenges.
- A 2012 study by Carney et al. found that community gardening can reduce food insecurity, improve vegetable intake, and strengthen community relationships.
- A 2011 study by Corrigan et al. found that community gardens make people more aware of food access and security issues. Constant supply of fresh produce alleviates food insecurity issues among gardeners, as well as communities the excess is donated to.
- A 2019 review quoted a study participant: "... with gardening comes veggies.. and with food comes good company and the interaction of happy people."
- Among low-income youth, body mass index was significantly lower in schools with a garden compared with schools without due to lower fast food consumption (Utter, Denny, & Dyson, 2016).
- Community gardens increase the number of students who are able to access fresh fruits and vegetables – this was observed on college campuses with open gardens like UNC, Chapel Hill and UC Davis.
- 56 percent of community gardeners consumed fruits and vegetables at least 5 times per day, compared with... 25 percent of nongardeners" (Hale et al, 2011).

**Long Term Plan, Overview:**

- NTRS 4250 Community Gardening and Food Access
- Edible Garden Club established through ASI in January 2020; ensures funding (\$3,000/semester) for ongoing garden maintenance
- Establish campus incentives through service learning hours for public health, nutrition science, environmental studies
- Eventually, students and faculty will be able to rent seasonal plots to increase engagement and funding (future)
- GAship within the nutrition department to maintain edible garden / Student Garden Manager (USDA grant proposal budgeted for this)
- Dr. Kathryn Hillstrom, Professor Samantha Karim, and Professor Maja Broz are long term NTRS faculty that have proven their dedication to maintaining this plot, have experience building, maintaining, and providing education about edible gardening.

<sup>1</sup> <https://www.calstatela.edu/strategicplan>

<sup>2</sup> <http://www.calstate.edu/cpdc/sustainability/policies-reports/documents/JointMeeting-CPBG-ED.pdf>

<sup>3</sup> [https://www2.calstate.edu/impact-of-the-csu/student-success/basic-needs-initiative/Documents/BasicNeedsStudy\\_phasell\\_withAccessibilityComments.pdf](https://www2.calstate.edu/impact-of-the-csu/student-success/basic-needs-initiative/Documents/BasicNeedsStudy_phasell_withAccessibilityComments.pdf)

Edible Garden in Support of Cal State LA Sustainability Goals to Improve STARS Program Rating, Including Opportunities for Long-Term Maintenance and Care

**Academics**

Curriculum

*AC-1 Academic Courses:* Increase percentage of sustainability courses

- NTRS 4540 Community Gardening and Food Access
- Sustainability as a learning outcome within the nutrition department

Research

*AC-9-10 Research and Scholarship / Support for Research:* Opportunities for sustainability-focused research

- Edible garden can act as a lab for public health or nutrition students in community programming, sustainability outreach, and sustainability improvements within communities
- Club or class can act as a research population to address whether a community garden program on campus could increase fruit and vegetable consumption, for example
- Faculty research: “Sikand Faculty Endowment for Research in Urban Sustainability has gifted \$1.25 million to Cal State LA to fund faculty member research on environmental problems afflicting large urban areas... The institute involves faculty and students from across the campus in connecting with each other and the region through dialogue, community-based problems, annual symposia, seminars, short courses, and relevant research projects”

**Engagement**

Campus Engagement

*EN-1 Student Educators Program:* Peer-to-peer sustainability outreach

- Establish year-long GAship or student leader as edible garden lead - USDA Grant includes funding for this
- Edible Garden Club developed through ASI
- Peer-to-peer student program through ASI

Public Engagement

*EN-10 Community Partnerships*

- Master Gardener Program, LA Compost, Enrich LA, Proyecto Jardin, Artemesia Nursery, Fruitstitute, etc.

*EN-13 Community Service:* Increase community service opportunities

- Community nutrition, public health, undergraduate community service hours

**Operations**

Food + Dining

*OP-8 Sustainable Dining*

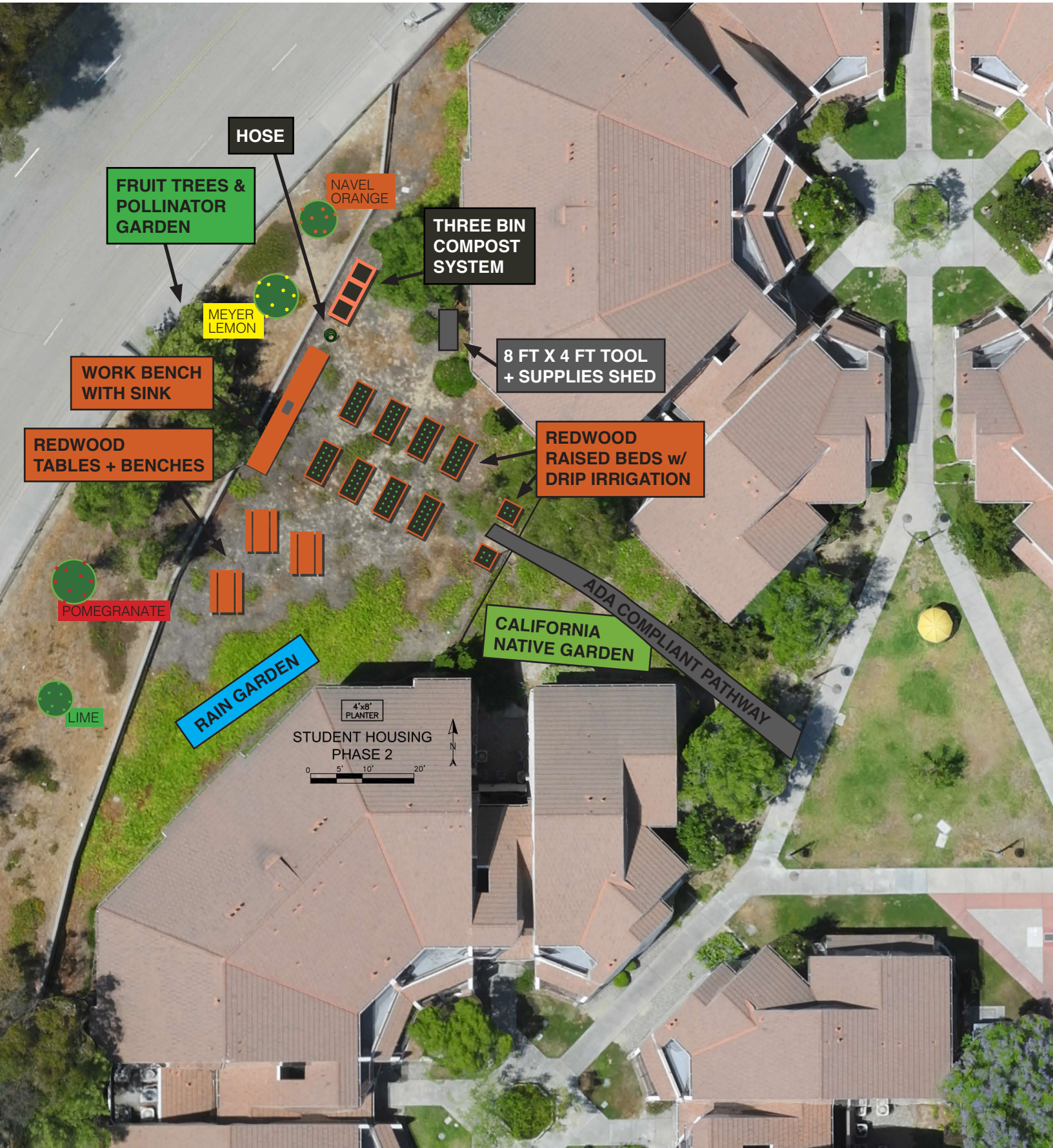
- Offers a space to host and manage pre + post-consumer composting program
- Host sustainably themed meals from garden produce



**Edible Garden Proposal**  
Student Housing  
Northwest Phase 2  
Spring 2020  
Cal State LA

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HOSE

FRUIT TREES & POLLINATOR GARDEN

MEYER LEMON

NAVEL ORANGE

THREE BIN COMPOST SYSTEM

8 FT X 4 FT TOOL + SUPPLIES SHED

WORK BENCH WITH SINK

REDWOOD TABLES + BENCHES

REDWOOD RAISED BEDS w/ DRIP IRRIGATION

ADA COMPLIANT PATHWAY

CALIFORNIA NATIVE GARDEN

RAIN GARDEN

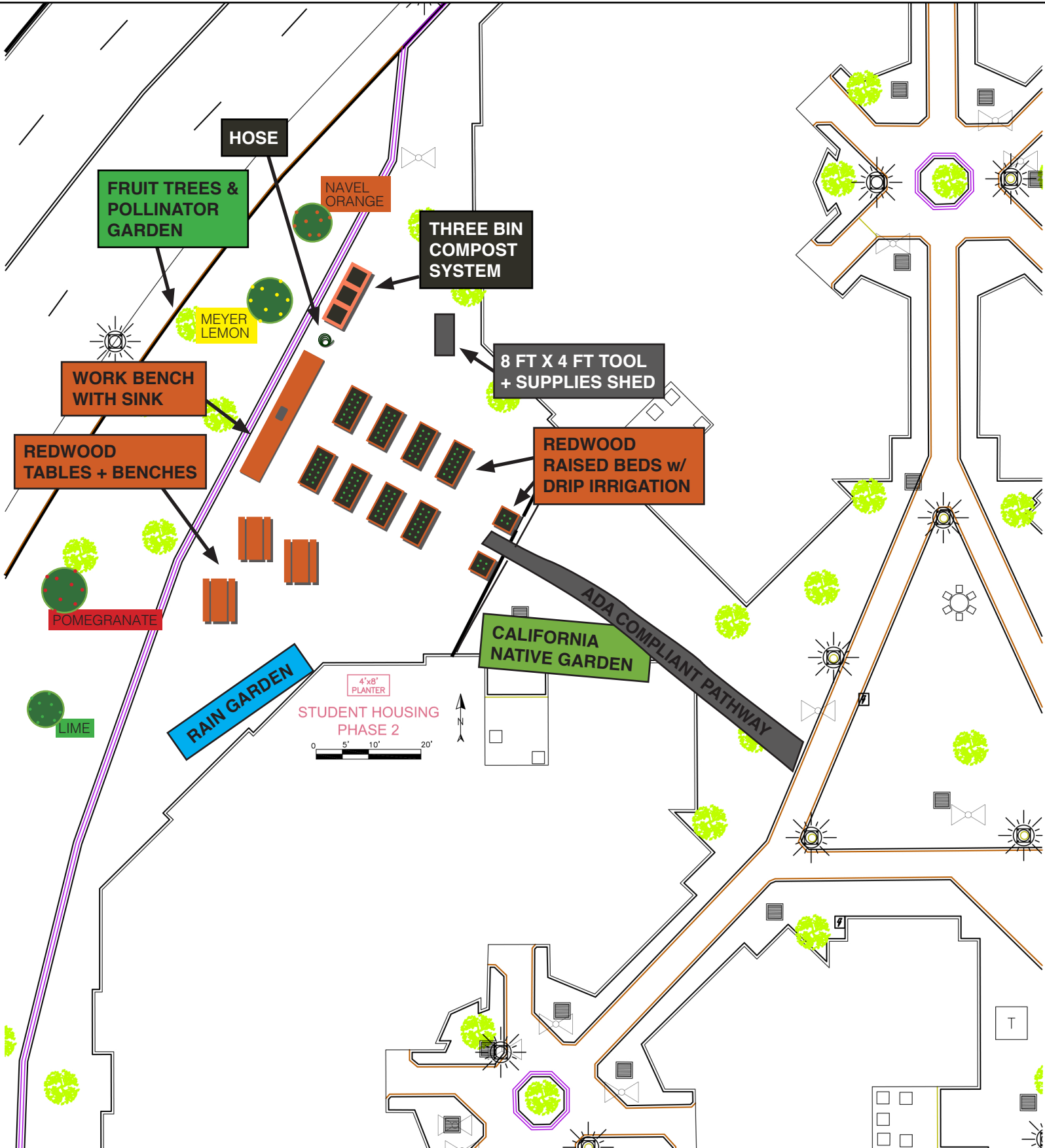
POMEGRANATE

LIME

4'x8' PLANTER  
STUDENT HOUSING PHASE 2

0 5' 10' 20'





The following basic budget describes the necessary funds to start any of the three previously illustrated proposals, not including materials for ADA compicance measures

## BUDGET 1 of 3

Item	Vendor	Quantity	Cost per Unit	Total
<b>Redwood Raised Beds</b>				
1-lb #9 x 2.5-in Countersinking-Head Polymer-Coated Star-Drive Deck Screws	Lowes	5	9.48	47.40
2 x 6 x 12 redwood (Item# 57091)	Lowes	70	21.77	1523.90
2 x 4 x 12 redwood (Item # 24823)	Lowes	20	13.48	269.60
<i>Redwood Raised Bed Subtotal</i>				<b>1840.90</b>
<b>Drip Irrigation + Water</b>				
EZ-ID-CV 17MM Dripline - 1GPH Emitters 500 Foot Roll x 12-inch Spacing	Ewing	500	28.98/100 ft	144.90
17MM Dripline Barbed Insert Elbow	Ewing	50	0.35	17.63
17MM Dripline Barbed Insert Tee	Ewing	50	0.41	20.62
Analog 3 Dial Timer	Ewing	1	68.67	68.67
Rain Bird HT07525PS HT07525PSI 3/4" Fht 25Psi Regulator, Pressure	Ewing	1	5.74	5.74
Garden Hose Splitter	Amazon	1	9.98	9.98
50 ft garden hose w/ spray nozzle	Amazon	2	44.95	89.90
<i>Drip Irrigation + Water Subtotal</i>				<b>357.44</b>
<b>Soil</b>				
Flower + Veggie soil	Soil + Sod Depot	200 cu ft	26/yd	156.00
Compost	LA Compost	200 cu ft	n/a	by donation
Mulch	LA County	100 cu ft	free	free
6 ft. x 100 ft. Woven Contractor Ground Cover Weed Barrier Landscape Fabric, Heavy Duty, Commercial Grade	Home Depot	1	81.48	81.48
<i>Soil Subtotal</i>				<b>237.48</b>

## BUDGET 2 of 3

Item	Vendor	Quantity	Cost per Unit	Total
<b>3 Bin Compost System (<a href="https://www.youtube.com/watch?v=gA6QNLaBEyc">https://www.youtube.com/watch?v=gA6QNLaBEyc</a>)</b>				
1 x 6 x 6 redwood fence boards	Lowe's	35	3.17	110.95
2 x 4 x 8	Lowe's	8	3.18	25.44
2 x 4 x 12	Lowe's	2	6.38	12.76
1 in. x 4 ft. x 75 ft. Poultry Netting	Lowe's	1	50.70	50.70
5' U posts	Lowe's	8	4.48	35.84
1.5" Deck screws	Lowe's	3	3.48	10.44
1.5" Nails	Lowe's	3	3.48	10.44
Blue Hawk 12-ft x 16-ft Plastic Tarp	Lowe's	1	22.48	22.48
<i>3 Bin Compost System Subtotal</i>				<i>279.05</i>
<b>Compost Tumbler</b>				
Hot Frog 37 gal Recycled Plastic Tumbler Composter	Lowe's	1	158.19	158.19
<i>Compost Tumbler Subtotal</i>				<i>158.19</i>
<b>Tools</b>				
24 in. Wood Handle Spade	Home Depot	2	25.98	51.96
Hand trowel	Home Depot	8	9.39	75.12
3-Tine Hand Cultivator	Home Depot	8	4.48	35.84
Hoe	Home Depot	2	19.98	39.96
Weeder Hoe	Home Depot	2	18.98	37.96
Spading	Home Depot	2	27.98	55.96
Rake	Home Depot	1	28.98	28.98
Loppers	Home Depot	2	39.97	79.94
Hand pruner	Home Depot	8	28.66	229.28
Tomato Cages, 10 pk	Home Depot	1	96.60	96.60
60" Wood Trellis	Home Depot	4	15.48	61.92
Wheel Barrow	Home Depot	2	94.98	189.96
Gloves, 6-pair pack	Home Depot	2	14.22	28.44
Tool Shed	Amazon	1	299.00	299.00
<i>Tools Subtotal</i>				<i>1310.92</i>

## BUDGET 3 of 3

Item	Vendor	Quantity	Cost per Unit	Total
<b>Plants and Trees</b>				
Meyer Lemon, 15 gal	Paradise Nursery	1	120.00	120.00
Oroblanco Grapefruit, 15 gal	Paradise Nursery	1	120.00	120.00
Navel Orange, 15 gal	Paradise Nursery	1	120.00	120.00
Pomegranate	Paradise Nursery	1	95.00	95.00
Rain Garden Plants, 5 gal	Theodore Payne	20	15.00	300.00
California Native Garden, 5 gal	Theodore Payne	20	15.00	300.00
Vegetable Heirloom Seeds	Adaptive Seeds	20	3.50	70
Pollinator Garden seeds	Adaptive Seeds	20	3.50	70
<i>Plants Subtotal</i>				<b>1195.00</b>
<b>Furniture</b>				
Wooden Picnic Table	Lowe's	4	99.98	399.92
2-in x 6-in x 8-ft Red-wood for benches	Lowe's	18	11.98	215.64
1-lb #9 x 2.5-in Countersinking-Head Polymer-Coated Star-Drive Deck Screws	Lowe's	2	9.48	18.96
<i>Furniture Subtotal</i>				<b>634.52</b>
<b>Subtotal</b>				<b>5855.31</b>
<b>Taxes</b>				<b>439.15</b>
<b>Total</b>				<b>6294.46</b>