

CAL POLY FOUNDATION BUILDING LANDSCAPE

PLANT MANAGEMENT PLAN

Amelia Aarestad, Emerson Goo, Amber O'Rourke, Sarah Richelieu, & Ashlie Zinn

TABLE OF CONTENTS

Intro / Statement of Purpose - 3
Existing Site plan / Plant Schedule - 5
Proposed Planting + Maintenance Plan - 7
A: Parking Entry Experience - 9
B: Australian Display - 11
C: Safety Way Edge - 13
D: Courtyard Entry Experience - 15
E: Truckee Road Edge - 17
General Plant Management Guidelines - 18
Year-long Calendar: Maintenance Plan + Irrigation Schedule - 24

INTRODUCTION & STATEMENT OF PURPOSE

This landscape serves several functions and is divided into bed areas based on these functions as well as the plants that are found there (see Figure 1). The overarching intent is a landscape that looks good with a reasonable level of maintenance and resource inputs, such as water. The intent of the original design, as we see it, was to offer a detailed courtyard for entry and for outdoor seating (D), a pleasing walk-by experience (B), a pleasing drive-by experience (B, C, & E), and a welcoming planted approach from the adjacent parking lot that deals with some of the runoff without flooding the building (A). We propose to keep these intentions intact without change.

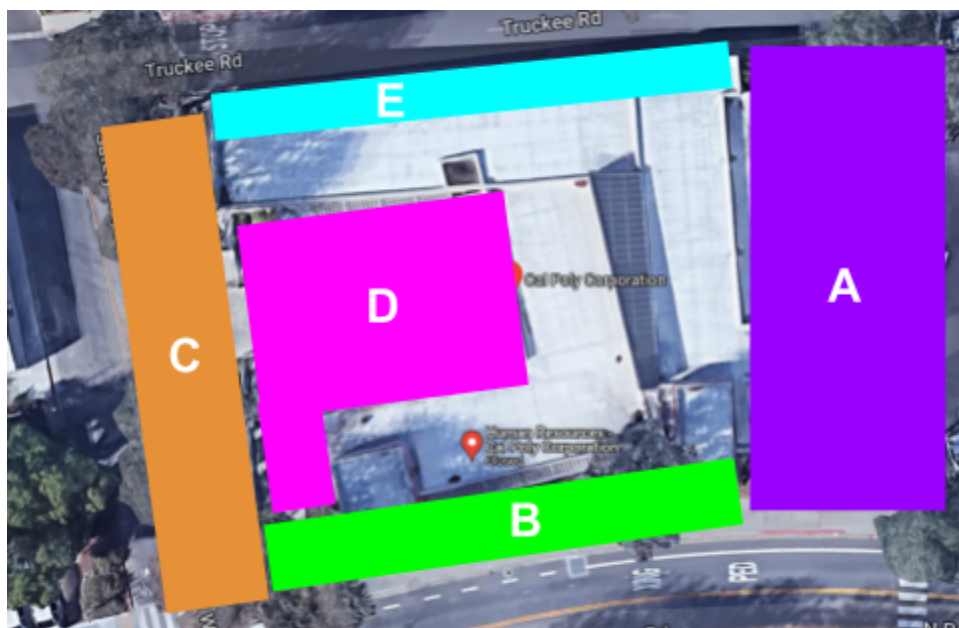


Figure 1: Planting bed areas.

From a utilitarian perspective, areas A, B, C, & D contribute significantly to the entry and exit experience of this building, which mainly serves as office space. Paving must be used and remain clear for walking or rolling into the space. Area D serves as an outdoor gathering space for small groups, and there is evidence that people eat lunch there. However, Area E is experienced most often passing by in a motor vehicle as no sidewalk exists along that segment of roadway.

From an ecological perspective, these areas, especially A, B, & D, help deal with stormwater from the building's roof and from air conditioning outflow. Plants in most bed areas help shade the building throughout the day. In some places they unintentionally serve as a buffet for passing deer. Since most plants in the existing design were exotic, the wildlife value of the landscape is somewhat limited, although it is clear that bees and other pollinators visit the flowers found there.

The aesthetic perspective is intertwined with the utilitarian and ecological perspectives, since the appearance and function are the guides to the look. Area B is the most visible to the most people since

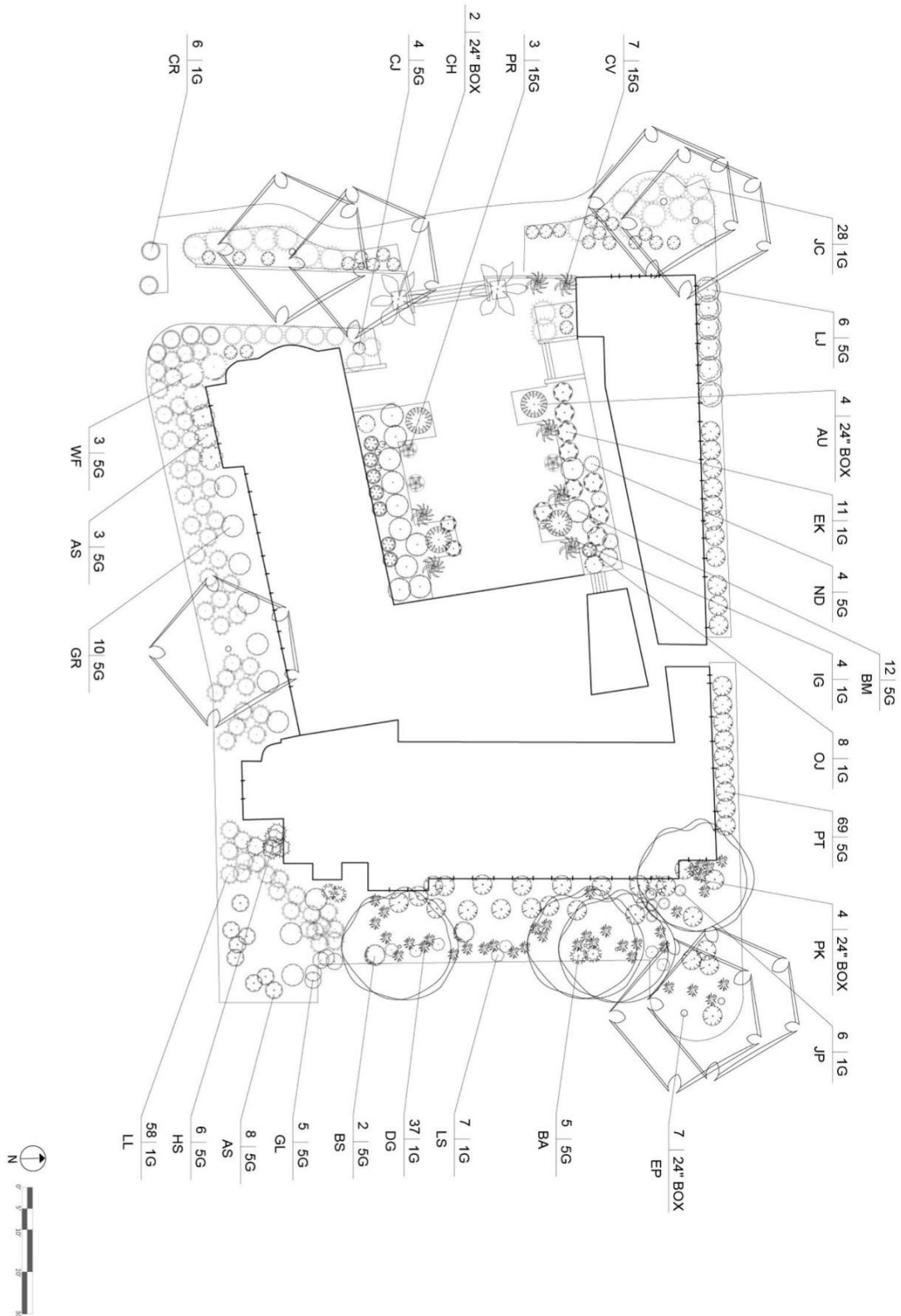
it is along a highly traveled road and sidewalk and is currently in the best shape. Our proposal modifies aspects of all the other beds, but this one should be maintained as it is.

We believe that the most sustainable way to achieve our goals is to minimize the need for pest control and other maintenance tasks through plant choices while recognising that work and inputs are still required for a pleasing landscape that will experience a fair amount of close observation. Changes should not create more work than the landscape originally intended would have needed.

We found it useful to refer to the areas as follows:

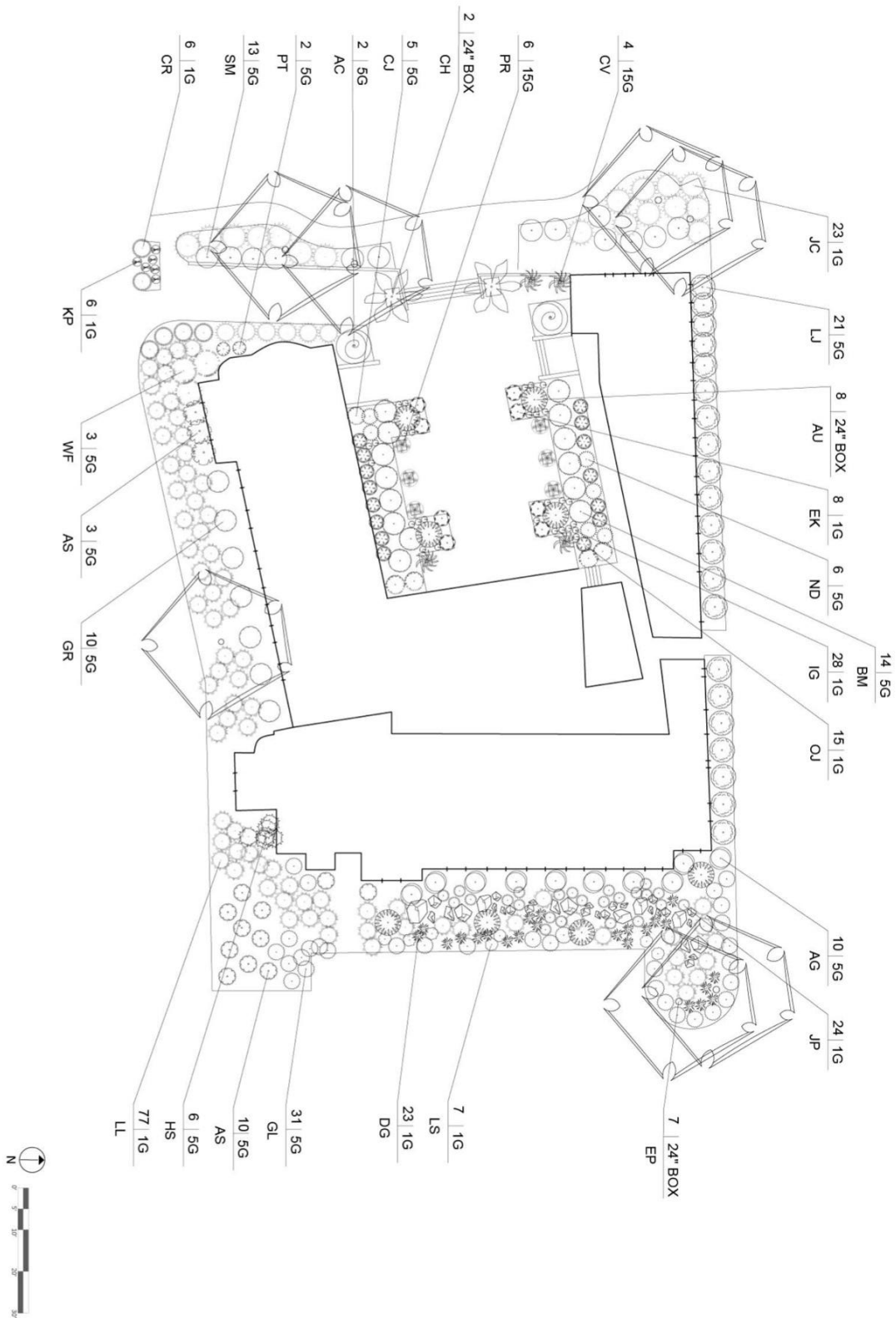
- A: Parking Entry Experience
- B: Australian Display
- C: Safety Way Edge
- D: Courtyard Entry Experience
- E: Truckee Road Edge

EXISTING PLANTING + PLANTING SCHEDULE



Plant Schedule					
Symbol	Botanical Name	Common Name	Quantity	Size	Season of Interest
Trees					
AB	<i>Acacia boormanii</i>	Snowy river wattle	3	15G	Spring & Fall
AU	<i>Arbutus unedo</i>	Strawberry tree	4	24" Box	year-round
CH	<i>Chamaecyparis humilis</i>	Mediterranean fan palm	2	24" Box	year-round
CV	<i>Cycas revoluta</i>	Sago palm	7	15G	year-round
EP	<i>Eucalyptus polyanthemus</i>	Silver dollar gum	7	24" Box	year-round
GR	<i>Grevillea 'Spider Flower'</i>	Spider flower grevillea	10	15G	Spring & Summer
PR	<i>Phoenix robelenii</i>	Pygmy date palm	3	15G	year-round
PK	<i>Pyrus kawakamii</i>	Evergreen pear	4	24" Box	Winter
Shrubs					
AS	<i>Arctostaphylos</i> sp.	Manzanita	8	5G	year-round
BA	<i>Berberis aquifolium</i>	Oregon grape holly	5	5G	Winter & Spring
BM	<i>Buxus microphylla</i> var. <i>japonica</i>	Japanese boxwood	12	5G	year-round
BS	<i>Buxus sempervirens</i>	Common box	2	5G	year-round
CJ	<i>Camellia japonica</i>	Japanese camellia	4	5G	Spring
GL	<i>Grevillea lanigera</i>	Woolly grevillea	5	5G	Winter & Spring
HS	<i>Hakea sericea</i>	Bushy needlebush	6	5G	Summer
LJ	<i>Ligustrum japonicum</i>	Japanese privet	6	5G	Summer
ND	<i>Nandina domestica</i>	Heavenly bamboo	4	5G	year-round
PT	<i>Pittosporum tobira</i>	Japanese pittosporum	69	5G	year-round
WF	<i>Westringia fruticosa</i> 'Wynabbie Gem'	Wynabbie gem coast rosemary	3	5G	year-round
Perennials					
DG	<i>Diets grandiflora</i>	Wild iris	37	1G	Summer
EK	<i>Erigeron karvinskianus</i>	Santa barbara daisy	11	1G	year-round
IG	<i>Iris germanica</i>	Bearded iris	4	1G	Spring & Summer
JP	<i>Juncus patens</i>	Spreading rush	6	1G	year-round
LL	<i>Lomandra longifolia</i>	Spiny-headed mat rush	58	1G	Spring & Summer
LS	<i>Lantana</i> sp.	Lantana	7	1G	Spring
Groundcover					
JC	<i>Juniperus chinensis</i>	Chinese juniper	29	1G	year-round
OJ	<i>Ophiopogon japonicus</i>	Mondo grass	8	1G	year-round
CR	<i>Westringia fruticosa</i>	Coast rosemary	6	1G	year-round

PROPOSED PLANTING + MAINTENANCE PLAN



Plant Schedule					
Symbol	Botanical Name	Common Name	Quantity	Size	Season of Interest
Trees					
AB	<i>Acacia boormanii</i>	Snowy river wattle	3	15G	Spring & Fall
AU	<i>Arbutus unedo</i>	Strawberry tree	8	24" Box	year-round
CH	<i>Chamaerops humilis</i>	Mediterranean fan palm	2	24" Box	year-round
CV	<i>Cycas revoluta</i>	Sago palm	4	15G	year-round
EP	<i>Eucalyptus polyanthemus</i>	Silver dollar gum	7	24" Box	year-round
GR	<i>Grevillea 'Spider Flower'</i>	Spider flower grevillea	10	15G	Spring & Summer
PR	<i>Phoenix robelinii</i>	Pygmy date palm	6	15G	year-round
Shrubs					
AG	<i>Abelia x grandiflora 'Mardi Gras'</i>	Mardi gras glossy abelia	10	5G	Summer & Fall
AC	<i>Acca sellowiana</i>	Pineapple guava	2	5G	year-round
AS	<i>Arctostaphylos</i> sp.	Manzanita	10	5G	year-round
BM	<i>Buxus microphylla</i> var. <i>japonica</i>	Japanese boxwood	14	5G	year-round
BS	<i>Buxus sempervirens</i>	Common box	2	5G	year-round
CJ	<i>Camellia japonica</i>	Japanese camellia	5	5G	Spring
GL	<i>Grevillea lanigera</i>	Woody grevillea	31	5G	Winter & Spring
HS	<i>Hakea sericea</i>	Bushy needlebush	6	5G	Summer
LJ	<i>Ligustrum japonicum</i>	Japanese privet	21	5G	Summer
ND	<i>Nandina domestica</i>	Heavenly bamboo	6	5G	year-round
PT	<i>Pittosporum tobira</i>	Japanese pittosporum	69	5G	year-round
SM	<i>Salvia mellifera</i> 'Terra Seca'	Terra Seca Black Sage	13	5G	Spring
WF	<i>Westringia fruticosa</i> 'Wynabbie Gem'	Wynabbie gem coast rosemary	3	5G	year-round
Perennials					
KP	<i>Anigozanthos</i> 'Bush Lantern'	Kangaroo paw	6	1G	Spring & Summer
DG	<i>Diets grandiflora</i>	Wild iris	23	1G	Summer
EK	<i>Erigeron karvinskianus</i>	Santa barbara daisy	8	1G	year-round
IG	<i>Iris germanica</i>	Bearded iris	28	1G	Spring & Summer
JP	<i>Juncus patens</i>	Spreading rush	24	1G	year-round
LL	<i>Lomandra longifolia</i>	Spiny-headed mat rush	77	1G	Spring & Summer
LS	<i>Lantana</i> sp.	Lantana	7	1G	Spring
Groundcover					
JC	<i>Juniperus chinensis</i>	Chinese juniper	23	1G	year-round
OJ	<i>Ophiopogon japonicus</i>	Mondo grass	15	1G	year-round
CR	<i>Westringia fruticosa</i>	Coast rosemary	6	1G	year-round

A_Parking Entry Experience

The Parking Entry experience was previously overcrowded with Iris and unruly overgrown shrubs. Eucalyptus leaf litter also prevented the landscape from looking its best. We removed sad looking evergreen pears and saplings of silk oaks, choosing to have Eucalyptus and Strawberry Trees as the dominant species. We replaced overgrown pittosporum in front of windows with lower forming Glossy Abelia., and filled in the bed with shrubs and perennials for a fuller, more balanced composition.

Plants in this bed

Trees

Eucalyptus polyanthemos | Silver Dollar Gum
Arbutus unedo | Strawberry Tree

Shrubs

Abelia x grandiflora 'Mardi Gras' | Mardi Gras Glossy Abelia
Arctostaphylos spp. | Manzanita
Grevillea lanigera | Woolly Grevillea
Hakea sericea | Bushy Needlebush

Perennials

Anigozanthos 'Bush Lantern' | Kangaroo paw
Dietes grandiflora | Wild Iris
Juncus patens | Spreading Rush
Lomandra longifolia | Spiny-Headed Mat Rush

Fertility Management

Soils lean towards heavier clay content. Intense Eucalyptus debris likely impacting soil fertility and nutrient availability in this bed. **Cleaning** needed more frequently to ensure quality. No added fertilizers should be necessary for bed's success. Conduct soil tests before planting. Apply compost in later years per soil test results.

Integrated Pest Management

All plants are relatively hardy. Inspect routinely for pests and pest damage. Ants and aphids may be most common. If it becomes problematic, combat with beneficial insects (such as ladybugs) and organic insecticide (like light neem oil applications).

All plants should be deer resistant but monitor for signs of browsing.
See also the **General Integrated Pest Management** section.

Irrigation Techniques

Use the existing inline drip irrigation system, making repairs as needed. See **General Irrigation** section and **Irrigation Schedule**.

Special Protocols / Procedures / Drought Contingency Plan

Routinely Inspect and clear debris from this bed, especially in the drain area, after heavy wind events.
Clear drain in advance of storms.

Pruning

- Thin out Eucalyptus branches late fall, early winter, or whenever necessary (e.g. hazardous branch)

- Trim groundcovers if sprawling over onto pavement.

- Selectively prune shrubs to maintain natural forms.

- Divide Iris and remove or transplant to avoid sprawl and/or keep intentional plantings lush.

Low water plants in this bed can survive with lowered irrigation if needed.

B_Australian Display

The Australian Display Bed was the most successful, all plants looking healthy and balanced. We chose to keep it as is, and based the rest of our design off of matching this planting style. All plants are hardy and receive adequate light and sun.

Plants in this bed

Trees

Acacia boormanii | Snowy River Wattle
Eucalyptus polyanthemus | Silver Dollar Gum

Shrubs

Grevillea spp. | Spider Flower
Westringia fruticosa 'Wynyabbie Gem' | Wynyabbie Gem Coast Rosemary

Perennial

Lomandra longifolia | Spiny-Headed Mat Rush

Groundcover

Westringia fruticosa 'Mundi' | Coast Rosemary

Fertility Management

Soils lean towards heavier clay content. No added fertilizers should be necessary for bed's success. Conduct soil tests before planting. Apply compost in later years per soil test results. Eucalyptus debris cleared to ensure soil fertility.

Integrated Pest Management

All plants are relatively hardy. Inspect routinely for pests and pest damage. Ants and aphids may be most common. If it becomes problematic, combat with beneficial insects (such as ladybugs) and organic insecticide (like light neem oil applications).

All plants should be deer resistant but monitor for signs of browsing.
See also the **General Integrated Pest Management** section.

Irrigation Techniques

Use existing inline drip irrigation system, making repairs as needed. See **General Irrigation** section and **Irrigation Schedule**.

Special Protocols / Procedures / Drought Contingency Plan

Inspect and clear debris from this bed routinely and after heavy wind events.

Pruning

Thin out Eucalyptus branches late fall, early winter, or whenever necessary (e.g. hazardous branch)

Trim groundcovers if sprawling over onto pavement.

Selectively prune shrubs to maintain natural forms.

Low water plants in this bed can survive with lowered irrigation if needed, but as one of the most visible areas this bed should still receive at least minimal irrigation when needed.

C_Safety Way Edge

The existing conditions of the Safety Way Edge also appeared healthy and of good composition, with the exception of a few *Pittosporum* species that had been heavily browsed by deer. We replaced the *Pittosporum* with deer resistant *Salvia mellifera*.

Plants in this bed

Trees

Eucalyptus polyanthemos | Silver Dollar Gum

Shrubs

Salvia mellifera 'Terra Seca' | Terra Seca Black Sage

Perennial

Anigozanthos 'Bush Lantern' | Kangaroo paw

Groundcover

Juniperus chinensis | Chinese juniper

Fertility Management

Soils lean towards heavier clay content. No added fertilizers should be necessary for bed's success. Conduct soil tests before planting. Apply compost in later years per soil test results. Eucalyptus debris cleared to ensure soil fertility.

Integrated Pest Management

All plants are relatively hardy. Inspect routinely for pests and pest damage. Ants and aphids may be most likely pests. If it becomes problematic, combat with beneficial insects (such as ladybugs) and organic insecticide (like light neem oil applications).

All plants should be deer resistant but monitor for signs of browsing.
Juniper susceptible to blight. Monitor and remove dead and diseased parts.
See also the **General Integrated Pest Management** section.

Irrigation Techniques

Use existing inline drip irrigation system, making repairs as needed. See **General Irrigation** section and **Irrigation Schedule**.

Special Protocols / Procedures / Drought Contingency Plan

Pruning

Thin out Eucalyptus branches late fall, early winter, or whenever necessary (e.g. hazardous branch)

Flowering parts of *Salvia sp.* And *Anigozanthos sp.* need not be removed immediately. *Salvia* pods can remain into winter as part of the aesthetic.

D_Courtyard Entry Experience

The Courtyard Experience had great Mediterranean plants as part of its existing plant palette. Some of the palms in the containers weren't doing so great. We've removed plants that weren't and replaced with either a new palm, or more suitable plant. Though existing species worked well together, they had gotten unruly. We've removed weeds, and adjusted some of the planting arrangements for restored and balanced composition. Over-browsed Pittosporums were replaced with Camellias or a Pineapple Guava. Daisies and Boxwoods are better managed.

Plants in this bed

Trees

Acca sellowiana | Pineapple Guava
 Arbutus marina | Strawberry Tree
 Chamaerops humilis | Mediterranean Fan Palm
 Cycas revoluta | Sago Palm
 Phoenix robellini | Pygmy Date Palm

Shrubs

Buxus microphylla japonica | Japanese Boxwood
 Camellia japonica | Japanese Camellia
 Nandina domestica | Heavenly Bamboo

Perennial

Erigeron karvinskianus | Santa Barbara Daisy
 Iris spp. | Bearded Iris

Groundcover

Ophiopogon japonicus | Mondo Grass

Fertility Management

Soils lean towards heavier clay content. No added fertilizers should be necessary for bed's success. Conduct soil tests before planting. Apply compost in later years per soil test results.

Acca sellowiana will benefit from added compost / organic matter. Will also yellow if soil pH is too high. Monitor and conduct soil tests if showing signs of nutrient deficiency.

Palms will likely need fertilizer applied at least once a year, but could be applied up to 4 times a year. Monitor plant health and feed accordingly (after checking and correcting any irrigation issues).

Integrated Pest Management

All plants are relatively hardy. Inspect routinely for pests and pest damage. Ants and aphids may be most likely pests. If it becomes problematic, combat with beneficial insects (such as ladybugs) and organic insecticide (like light neem oil applications).

All plants should be deer resistant but monitor for signs of browsing.

Palms susceptible to fungal spots, be sure not to overwater.

See also the **General Integrated Pest Management** section.

Irrigation Techniques

Use a combination of drip emitters (for palms in the planters) and inline drip. Use existing inline drip irrigation system, making repairs as needed. Some of the drip emitters are very old and may need to be replaced. See **General Irrigation** section and **Irrigation Schedule**.

Special Protocols / Procedures / Drought Contingency Plan

Inspect and sweep up debris once a month or after a heavy wind event.

Pruning

- Prune dead / aging leaves of palms.

- Selectively prune shrubs to maintain natural forms.

- Dead head Santa Barbara Daisy during bloom seasons

- Divide, remove, and/or transplant Iris.

Many plants in the courtyard area will show stress if irrigation is lowered too far. As a highly used area, it is recommended that this space still receive at least minimal irrigation when needed.

E_Truckee Road Edge

The Truckee Road Edge was almost entirely lined with *Pittosporum* which had been fully browsed by deer. We removed the *Pittosporum* and replaced it with deer resistant *Ligustrum*.

Plants in this bed

Shrubs

Ligustrum japonicum | Wax-Leaf Privet

Fertility Management

Soils lean towards heavier clay content. No added fertilizers should be necessary for bed's success. Conduct soil tests before planting. Apply compost in later years per soil test results.

Integrated Pest Management

All plants are relatively hardy. Inspect routinely for pests and pest damage. Ants and aphids may be most likely pests. If it becomes problematic, combat with beneficial insects (such as ladybugs) and organic insecticide (like light neem oil applications).

All plants should be deer resistant but monitor for signs of browsing. See also the **General Integrated Pest Management** section.

Irrigation Techniques

Use pop-up heads underneath the shrubs. See **General Irrigation** section and **Irrigation Schedule**.

Special Protocols / Procedures / Drought Contingency Plan

Shear hedge to control size and spread each time the plants have put out 6" of growth beginning in Spring and ceasing at the end of Summer.

Plants in this area will tolerate significant water restriction. As the least visible area of this landscape, this area should be the first place where significant irrigation reduction or shut-offs take place in drought.

GENERAL PLANT MANAGEMENT GUIDELINES

Per LEED standards, the planting plan minimizes the use of synthetic fertilizers, pesticides, and herbicides in favor of organic compounds, biological control programs, and integrated pest management strategies. (Ocred, n.d.)

Fertility Management

Fertilizer use is dependent on soil nutrient level, therefore soil should be tested routinely and recorded to monitor fertilizer application. Environmental factors should also be routinely assessed in order to ensure optimum nutrient uptake. Though the calendar may serve as a guideline, soil test results shall always inform fertilizer applications.

- Factors affecting nutrient uptake
 - Too much or too little moisture in the soil
 - Too high or too low pH levels
 - Competition from other plants
 - Insufficient pore space for air/moisture exchange
- Soil tests
 - Conducted routinely to understand soil health and thus any symptoms present in beds.
 - Used to determine nutrient applications
- Nutrient applications
 - Soil amendments / modifications
 - Organic amendments: compost. composted wood shavings / bark fines
 - Fertilizer
 - Overall fertilizer use will be kept to minimum. Always opting for organic.
- Mycorrhizal fungi
 - Worth mentioning in case the college wanted to conduct further research: Robust mycorrhizal network correlates with healthier plants.
 - Symbiotic fungi
 - Attach to roots and assist with nutrient availability / uptake (improved root system)
 - Improves host plants disease resistance
 - Improves drought tolerance
 - Sensitive to high nitrogen (use fertilizers with nitrogen + carbon, low levels, slow release)

Best Practices

- Soil testing
- Use of compost / organic amendment
- Use of organic fertilizers

Integrated Pest Management

IPM uses the least-toxic chemical pesticides and herbicides, and restricts their use to only targeted locations and species. IPM requires routine inspection and monitoring.

Making use of monitoring and non-toxic preventative measures (like proper site inspection and maintenance) proactively manages and minimizes pest issues. If pesticide becomes necessary, the least toxic option will be used.

All measures taken must be recorded.

Possible Pests

Ants: diatomaceous earth (DE) is recommended (especially in gravel mulched areas) to suppress ants and other insects.

Aphids: use predatory mites, ladybugs, and lacewings several times within a span of weeks. Use parasitic wasps for scale. Always opt for beneficial insects as the first solution, though can be combined with an organic insecticidal soap such as neem oil applications when necessary.

Slugs / Snails: shouldn't be as likely, but use salt around plants if they become a problem. Take care not to use too much to impact the soil.

Wasps: found throughout campus seasonally especially near trash cans and eating areas. If becomes much of a problem, consider traps (jars of sweet liquid in planting beds to detract them from problematic areas (i.e. courtyard).

Other Insects / arthropods: Always opt for green / eco friendly option. Insecticidal soups, low toxicity chemicals, biological controls (beneficial insects, amended soils / environment) Maintain healthy living conditions / fertility as best preventative measure

Birds: minor grazing on shrub and tree berries. waste deposition. no real impact.

Gophers: few herbaceous plants, shouldn't be much of an issue. Should they be, use mesh cages / steel hardware cloth around plants. Will oxidize + deteriorate in soil with no long-term impact. Should traps become necessary (they shouldn't) use humane handling.

Deer: enjoy many of the plants on campus including some of the site's previous *Pittosporum* sp. Though deer resistant plants have been selected, should they again become a problem for any plant, it may be best to consider a replacement.

Best Practices

Preventative / Good maintenance
Beneficial insects (ladybugs)
Organic insecticide / horticulture oil (neem oil, diatomaceous earth)

Possible Diseases

Twig & Tip Blights

Best Practices

Preventative / Good maintenance
Properly sited plants / proper environmental conditions
Sufficient watering (no overwatering or underwatering)
Remove dead & diseased parts

Irrigation Techniques**GENERAL INFO**

- For hedges and shrubs in rows with groundcover, use pop-up heads that extend at least 3” above the ground, so that the spray pattern is not obstructed by foliage.
- Avoid using pop-up heads that rely on gravity to pull them back down, because they can get mowed over or trampled during maintenance tasks. Use heads that have a spring to retract them after watering is completed.
- Generally, inline drip irrigation saves water compared to a sprinkler system with the same GPM due to water that is aerosolized by the sprinklers and immediately evaporated. However, that doesn’t mean you shouldn’t use sprinklers - it’s contextual.
- Sprinklers work best on flat areas due to their range and overlap requirements. Sloped areas will require adjusting the overlap patterns.
 - Adjust the nozzle arcs of sprinklers and rotators to eliminate overspray onto paved areas, saving water and reducing slip hazards.
- Plants growing in shady areas (north/east side) will generally require less water than the same plants in full sun. Plants can be kept in a more compact form if it is kept at the low end of water use, and may grow large if given ample water.
- Landscape should be watered during the night or early morning when the sun is down and the temperature is cooler.

- Established plants in the landscape should thrive with watering one to two days per week. New plantings need more frequent watering. After installing new plants in an existing garden, remember to hand water them to give them ample water during their establishment period.
 - Keep the root ball moist but not soggy during the first three months after planting. If planting during the rainy season, no supplemental water may be needed, but if there's no rainfall right after planting, you'll probably have to water several times per week. As plants become more established, give them a deeper but less frequent watering.
 - CA natives and drought-tolerant plants do well with infrequent watering, because this allows them to stretch their roots out to adjacent areas of moisture in the soil. Therefore, make sure the root ball is almost totally dry before each new watering. This could mean waiting 2-3 weeks between each watering if there's no rain. During the rainy season, you can generally rely mostly or entirely on natural rainfall.
- Clay soil cannot absorb water as fast as sprinklers and some drip systems apply it. Instead of watering one long cycle per night, set it to water three shorter cycles per night. Cycles can be rotated between different irrigation zones. This will allow the water to soak in thoroughly and encourage deeper root establishment.
- A few times each year, inspect sprinklers and drip systems while they are on. Look for sprinklers that are broken, bent or misaligned, and holes or breaks in the drip system.
 - If the drip system is totally underground, inspection may be difficult. Look and/or listen for water bubbling to the surface, which may indicate a leak. Regular inspection and prompt repairing will help save water and prevent plants from dying.
- If you are growing drought-tolerant CA native plants in their natural geographic range and they are properly sited, they should thrive entirely on rainfall. If they look brown and drought stressed in the summer and early fall, this is natural and not necessarily a cause for concern.

(Sources: California Native Plant Society, Contra Costa Water District, UC Agriculture & Natural Resources)

Special Protocols / Procedures / Drought Contingency Plan

PROCEDURES

Mulch

Mulch is used for the following:

- weed suppression
- erosion control
- moisture retention
- thermal insulation
- general appearance

Applied at 2" thickness in all planting beds.

Pruning

Pruning impacts tree aesthetic + functional characteristics by the following:

- shape and balance, density, and size
- flower or fruit production
- structural integrity of branches / overall
- liability: maintaining clearances, influencing the strength, reducing potential live loads (wet foliage or wind)

Always use sterile tools

This helps limit the spread of disease

Cleaning

Plant debris is removed from hardscapes and beds for the following:

- Safety
- Appearance
- Soil health / fertility
- Plant health fertility

Cleaning occurs in all planting beds and hardscapes and is done so frequently, and routinely for best quality landscape.

Trees**Mulch**

At time of planting + when needed seasonally / every so many years after

Pruning**Always use sterile tools**

Cuts must be made in support of the tree / shrubs natural growth habit

Remove aesthetic outliers or any branches that are hazardous and/or pose any risks to tree or public health

Remove all dead and diseased wood

Assess cuts from all angles and prune to both direct and support future growth.

Refrain from unnecessary and untimely pruning.

Do not prune during growing seasons. Make cuts during dormant periods, before buds emerge on flowering trees; best in early Spring, then early Summer. Be mindful and careful into late Summer, Fall.

With onsite mature trees, use drop-crotch or flush cut pruning, making cuts evenly parallel with the supporting branch.

Take all trimmings to compost or recycling, unless diseased, in which case take to facility that can remove pathogens

Woody Shrubs + Groundcovers

Mulch

At time of planting + when needed every so many years after

Pruning

Always use sterile tools

Cuts must be made in support of the tree / shrubs natural growth habit

Remove aesthetic outliers or any branches that are hazardous and/or pose any risks to tree or public health

Remove all dead and diseased wood

Assess cuts from all angles and prune to both direct and support future growth.

Refrain from unnecessary and untimely pruning.

Do not prune during growing seasons. Make cuts during dormant periods, before buds emerge on flowering trees; best in early Spring, then early Summer. Be mindful and careful into late Summer, Fall.

For shrubs, use drop-crotch techniques, making cuts evenly parallel with supporting branches at the origin, to create balanced thinning, unless specified otherwise.

Check routinely to be sure sitelines and circulation are not blocked by shrubs at road edges (i.e. manzanita and privet).

Check routinely to be sure sitelines and circulation are not blocked by shrubs at walkways, entries, and windows.

Use selective pruning to assist growth of shrubs in relation to overall composition of planting bed.

Selective pruning will be preferred over shearing to promote plant's natural form

Take all trimmings to compost or recycling, unless diseased, in which case take to facility that can remove pathogens

Perennials / Grasses

Divide

Rhizome grasses (like *Iris spp.*) must be divided and either transplanted or removed to maintain best appearance. They have taken over the parking entry experience in the past. Their growth must be monitored and controlled accordingly. Dividing may not have to be done every season. Some years may benefit from transplanting while others may not need it.

Sources:

Pruning - <https://www.backyardgardener.com/plantname/acacia-boormanii-snowy-river-wattle/>

Maintenance Calendar

24

Irrigation Schedule

		MONTHLY CALENDAR												
		Winter	Winter	Spring	Spring	Spring	Summer	Summer	Summer	Summer	Fall	Fall	Fall	Winter
PLANTING BED		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Bed A														
	north end bed	OFF	OFF	OFF	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	OFF	OFF	OFF
south end bed (along N Perimeter Rd)														
	OFF	OFF	OFF	OFF	OFF	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	OFF	OFF	OFF	OFF
Bed B														
	all areas	OFF	OFF	OFF	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	OFF	OFF	OFF
Bed C														
	all areas	OFF	OFF	OFF	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 1-2 days/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	OFF	OFF	OFF
Bed D														
	courtyard beds	OFF	OFF	OFF	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 2 days/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	DRIP INLINE 1 day/wk 20 min 3 cycles	OFF	OFF	OFF
palms in planters														
	OFF	OFF	OFF	OFF	DRIP EMIT 1 day/wk 30 min 3 cycles	DRIP EMIT 1 day/wk 30 min 3 cycles	DRIP EMIT 1-2 days/wk 30 min 3 cycles	DRIP EMIT 2 days/wk 30 min 3 cycles	DRIP EMIT 1-2 days/wk 30 min 3 cycles	DRIP EMIT 1 day/wk 30 min 3 cycles	DRIP EMIT 1 day/wk 30 min 3 cycles	OFF	OFF	OFF
Bed E														
	all areas	OFF	OFF	OFF	POP-UP 1 day/wk 3-6 min 3 cycles	POP-UP 1-2 days/wk 3-6 min 3 cycles	POP-UP 2 days/wk 3-6 min 3 cycles	POP-UP 2 days/wk 3-6 min 3 cycles	POP-UP 2 days/wk 3-6 min 3 cycles	POP-UP 1 day/wk 3-6 min 3 cycles	POP-UP 1 day/wk 3-6 min 3 cycles	OFF	OFF	OFF