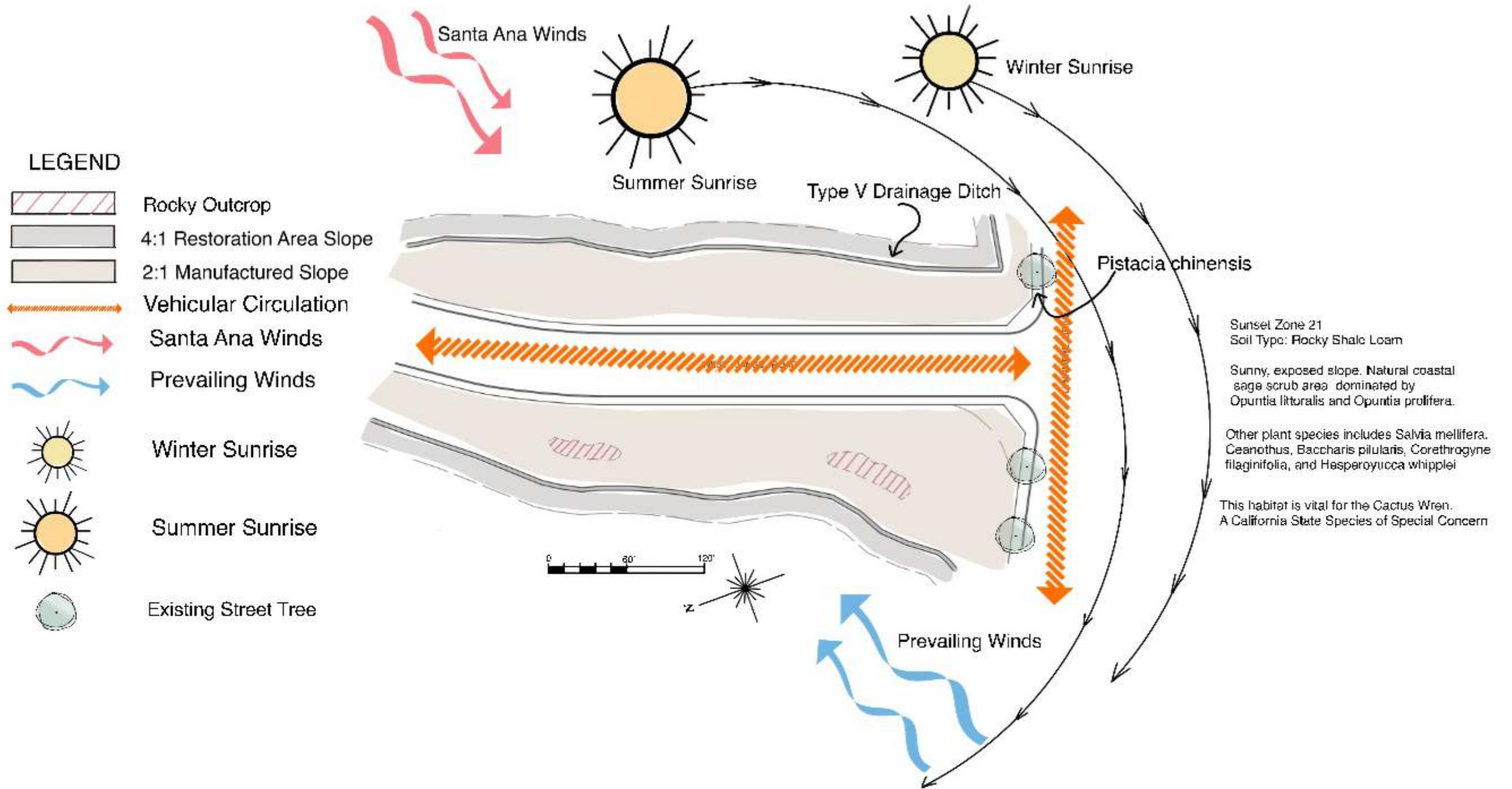


THOUSAND OAKS COASTAL SAGE SCRUB SLOPE DESIGN

TRACY WOLK
LANDSCAPE DESIGN 5
SPRING 2023
PAMELA BRIEF, INSTRUCTOR

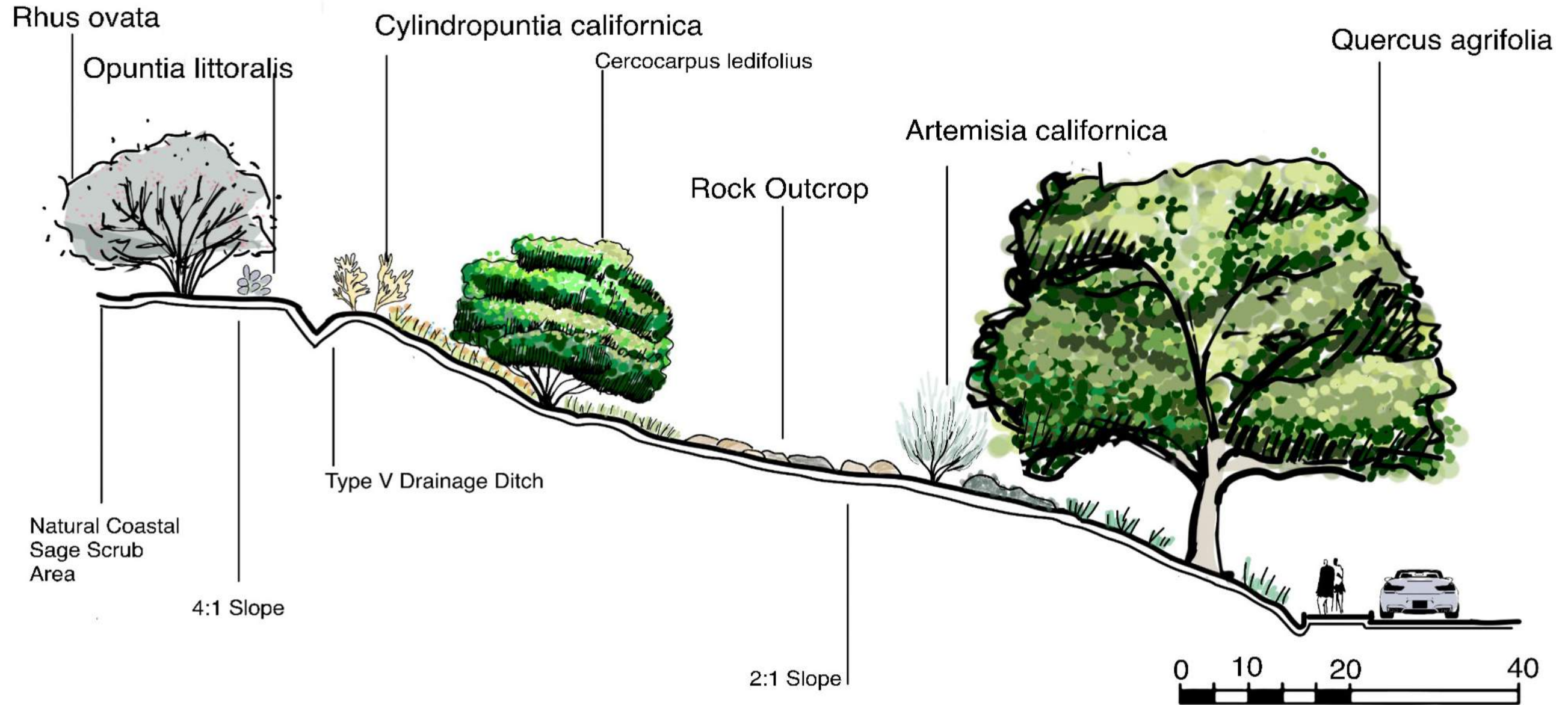
SITE ANALYSIS

EXISTING CONDITIONS



SITE ANALYSIS

SECTION



INSPIRATION
COASTAL SAGE SCRUB



INSPIRATION

COASTAL SAGE SCRUB



PLANTING PLAN

CONCEPT

Located in a quiet single-family residential neighborhood in Thousand Oaks this site is comprised of two slopes flanking West Janns Road. The slope gradient on both sides is 2:1 until it reaches a concrete "V" drainage ditch, after which the slope is 4:1 until it joins an existing natural coastal Sage scrub area.

Understanding the differences between east and west facing slopes was important for selecting appropriate plant species for ecological restoration and management projects. At our slope location we have one slope that is east facing with the other west facing. The orientation of the slope, whether it faces east or west, can significantly influence the plant ecology and the environmental conditions experienced by the vegetation. Different plant species have specific adaptations to cope with varying light levels, temperature ranges, and moisture availability. Sunlight exposure on east-facing slopes is direct light in the morning with cooler temperatures in the afternoon. West-facing slopes receive direct sunlight in the afternoon, making them warmer during the latter part of the day. With this in mind I chose a palette of 100 percent California Native plants that can thrive in both full sun and or part shade.

Native plant ecologies play a crucial role in slope stabilization and restoration due to their inherent adaptability and compatibility with the local environment. Native plants contribute to the process in these ways:

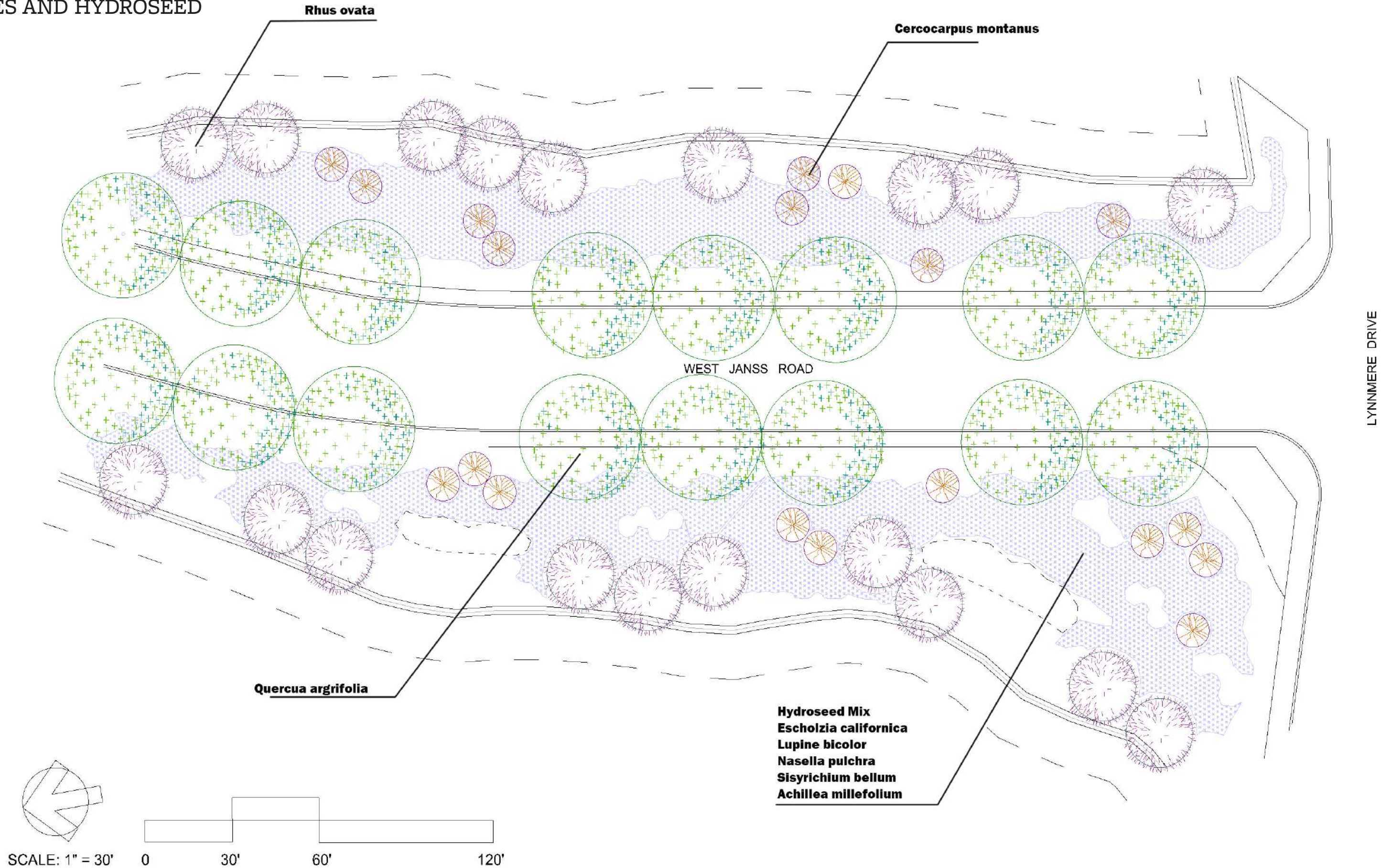
1. Erosion control: With extensive root systems that help bind the soil together native plants prevent erosion caused by runoff and wind.
2. Soil stabilization: The roots of native plants enhance soil stability by promoting better water infiltration and reducing water runoff.
3. Nutrient cycling: Native plant communities have evolved in California over a long period, establishing intricate nutrient cycling processes. Their leaf litter and organic matter contribute to soil fertility and enhance the nutrient holding capacity of the soil.
4. Soil reinforcement: The dense network of roots created by California native plants reinforces the structural integrity of slopes. The roots physically reinforce the soil, improving its sheer strength and stability. California native plants have deep taproots or fibrous root systems that are particularly effective in slope stabilization.
5. Water management: Native plant communities of Southern California have adapted to our local climate and hydrological conditions. They help regulate water flow on slopes by reducing storm water runoff and increasing water infiltration.
6. Biodiversity promotion: Restoring native plant ecologies on slopes encourages the return of diverse plant species, which, in turn, supports a wide range of wildlife.

By choosing plant materials endemic to the local area will give establishing a chance in the otherwise hostile environment of the rocky slope.



PLANTING PLAN

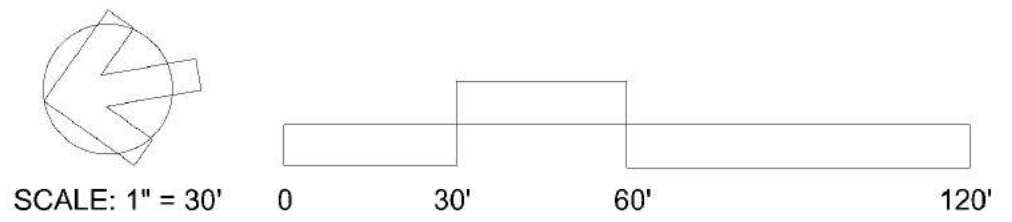
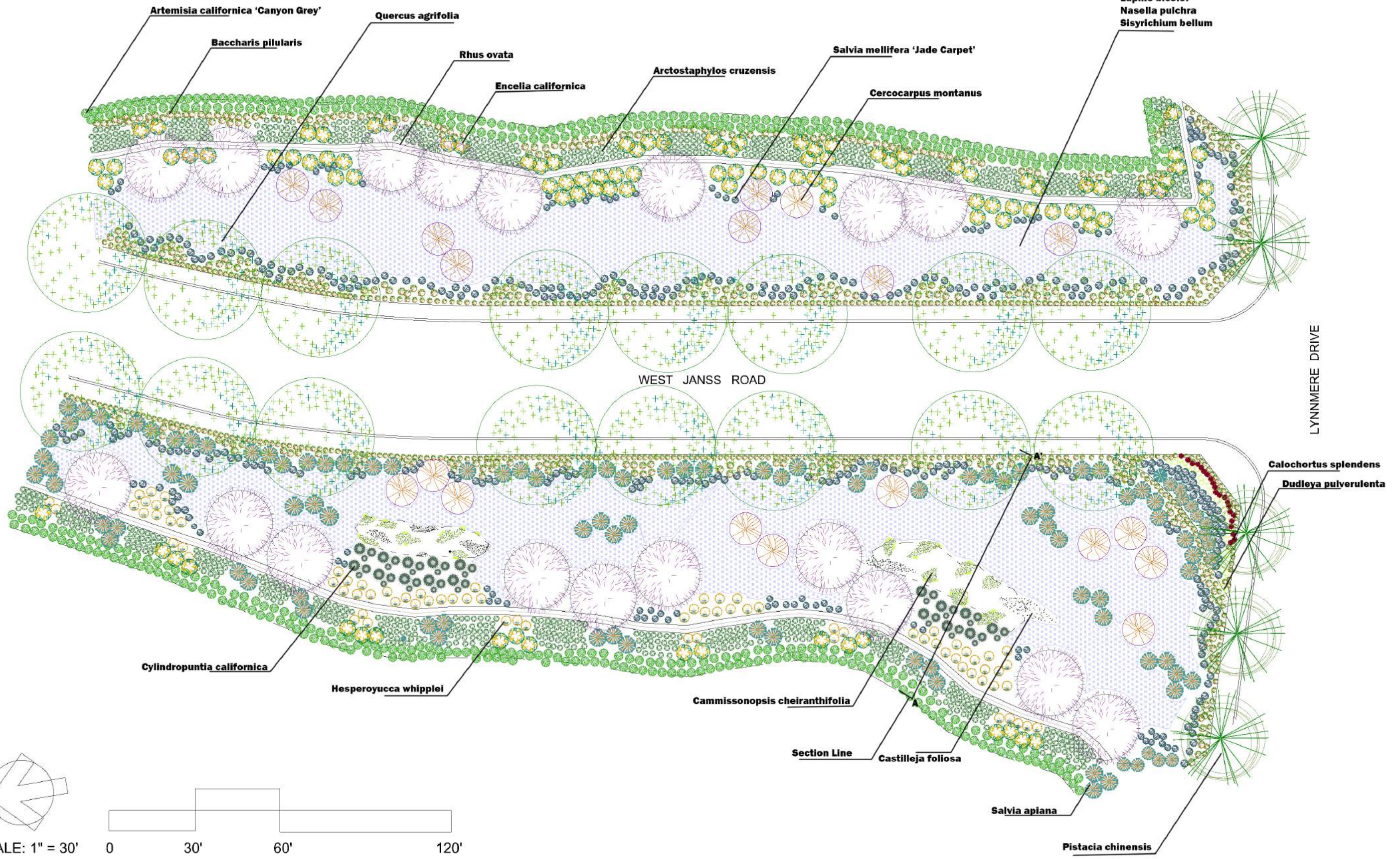
TREES AND HYDROSEED



PLANTING PLAN

FULL PLAN

Hydroseed Mix
 Melina imperfecta
 Achillea millefolium
 Eschscholzia californica
 Lupine bicolor
 Nasella pulchra
 Sisyrichium bellum



PLANTING PLAN

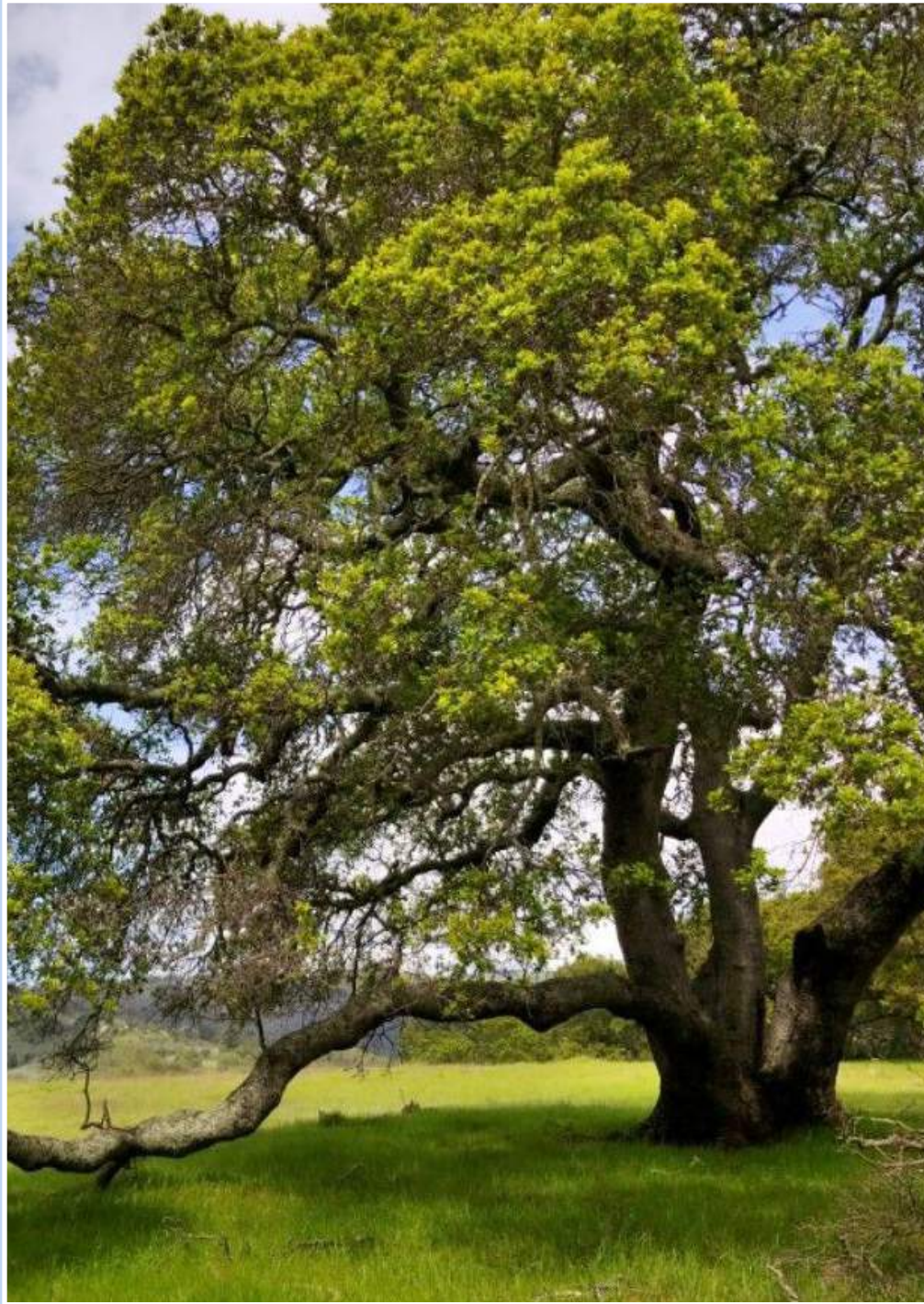
PLANT SCHEDULE

Plant list

| | <u>ID</u> | <u>Species</u> | <u>Common name</u> |
|---|-----------|---|-----------------------------|
|  | 1 | Arctostaphylos cruzensis | De La Cruz Manzanita |
|  | 2 | Artemisia californica var 'Canyon Grey' | California Grey Sagebrush |
|  | 3 | Baccharis pilularis | Coyote Brush |
|  | 4 | Calochortus splendens | Splendid Mariposa Lily |
|  | 5 | Camissoniopsis cheiranthifolia | Beach Evening Primrose |
|  | 6 | Castilleja foliosa | Woolly Indian Paintbrush |
|  | 7 | Cercocarpus montanus | Alderleaf mountain mahogany |
|  | 8 | Cylindropuntia californica | California Cholla |
|  | 9 | Dudleya pulverulenta | Chalk Dudleya |
|  | 10 | Encelia californica | Bush Sunflower |
|  | 11 | Hesperoyucca whipplei 'RBG' | Chapparal Yucca |
|  | 12 | Pistacia chinensis | Chinese Pistache |
|  | 13 | Quercus agrifolia | Coast Live Oak, Encina |
|  | 14 | Rhus ovata | Sugar Bush |
|  | 15 | Salvia apiana | White Sage |
|  | 16 | Salvia mellifera 'Jade Carpet' | Jade Carpet Black Sage |

PLANT PALETTE

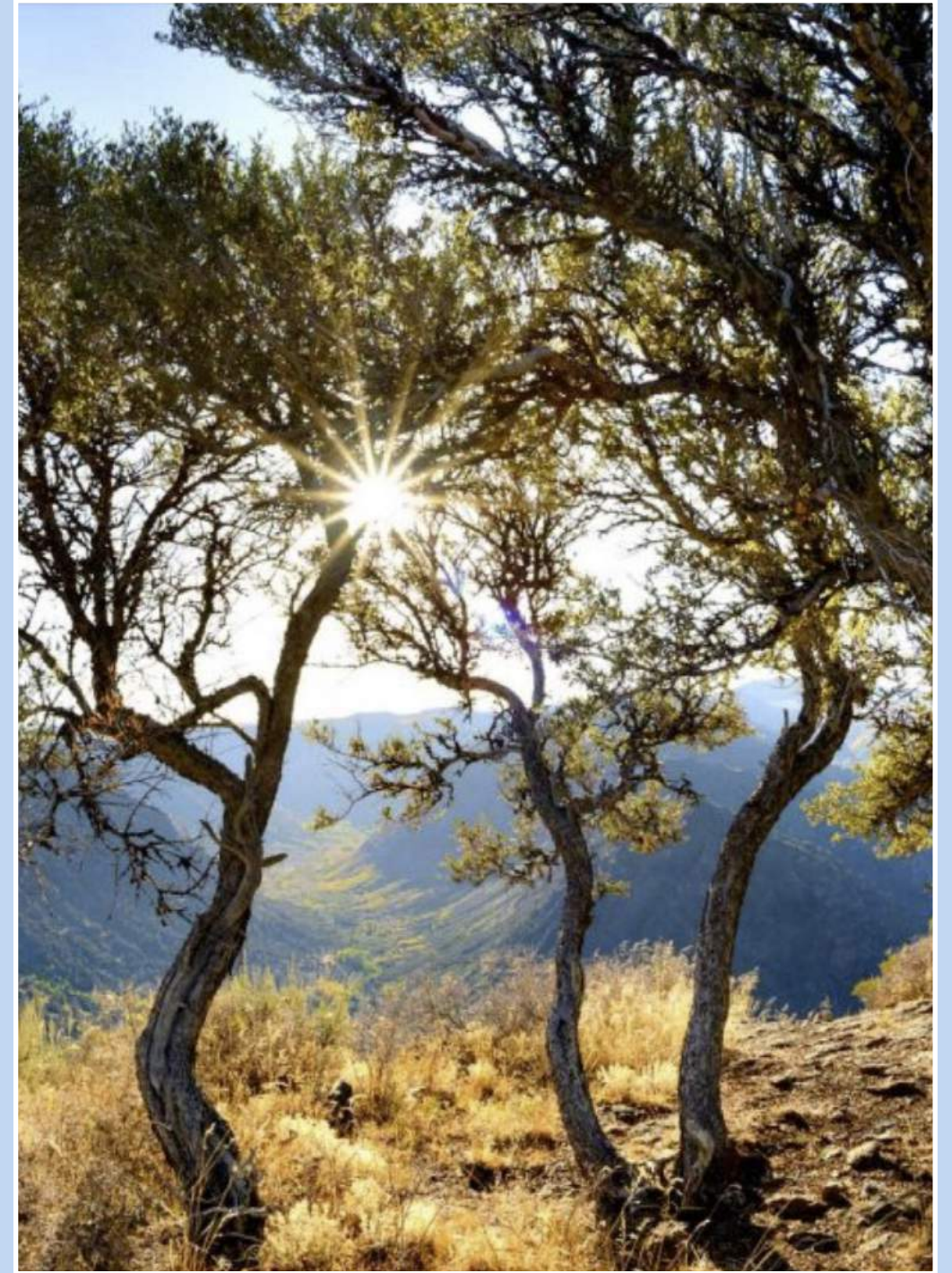
TREES



Quercus agrifolia
Coast Live Oak



Pistacia chinensis
Chinese Pistache (existing)



Cercocarpus montanus
Mountain Mahogany

PLANT PALETTE

SHRUBS



Encelia californica
Bush Sunflower



Cylindropuntia californica
California Cholla



Salvia apiana
White Sage

PLANT PALETTE

SHRUBS



Salvia mellifer 'Jade Carpet'
Jade Carpet Black Sage



Hesperoyucca whipplei
Our Lord's Candle Yucca



Baccharis pilularis 'Pigeon Point'
Dwarf Coyote Brush



Artemisia californica var Canyon Gray
California Gray Sagebrush

PLANT PALETTE

SHRUBS



Arctostaphylos cruzensis
Arroyo de la cruz manzanita



Calochortus splendens
Splendid Mariposa Lily



Camissoniopsis cheiranthifolia
Beach Evening Primrose



Rhus Ovata
Sugar Bush



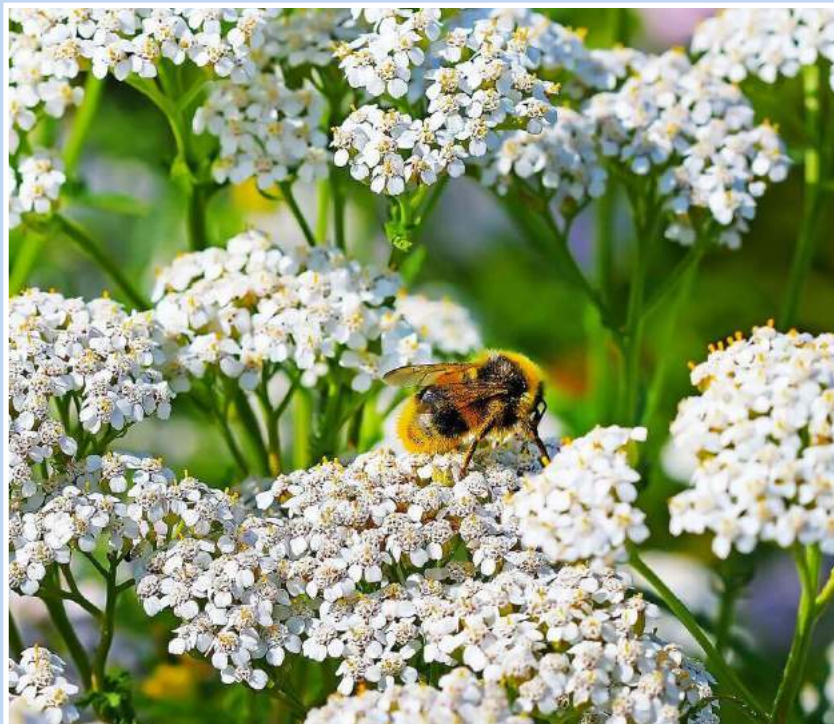
Castilleja foliosa
Woolly Indian Paintbrush

PLANT PALETTE

HYDROSEED MIX



Nasella pulchra
Purple Needle Grass



Achillea millefolium
White Yarrow



Eschscholzia californica
California Poppy



Mellica imperfecta
Coast Range Melic



Lupine biocolor
Miniature Lupine



Sisyrichium vellum
Blue Eyed Grass

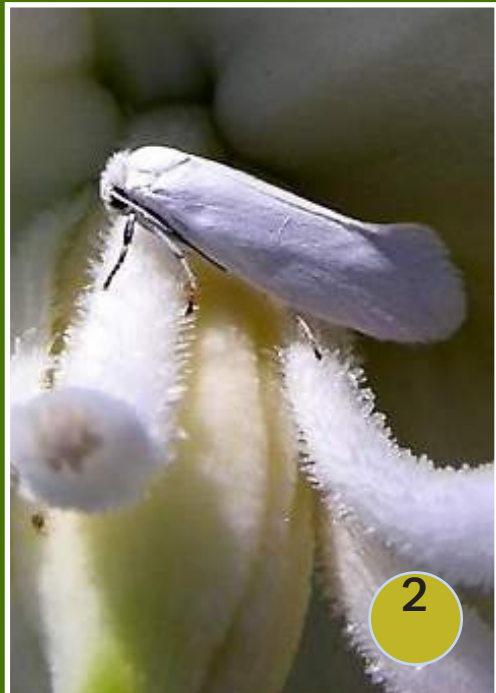
PLANT DETAILS

| Scientific Name | Comon Name | Height | Spread | Hydrozone | Wucols | Soil | Bloom Season | Color | Notes |
|---|--------------------------|--------|--------|----------------|---------------|--------------|---------------|--------|----------------------------------|
| 1 <i>Arctostaphylos cruzensis</i> | De La Cruz Manzanita | 1'-2' | 5'-10' | Sun/Part Shade | Low,SWR1 | Adaptable | Spring | Pink | Supports Ceanothus Moth |
| 2 <i>Baccharis pilularis</i> | Dwarf Coyote Brush | 1'-3' | 6'-12' | Sun/Part Shade | Low,SWR1 | Adaptable | Fall | White | Supports White-Lined Sphinx Moth |
| 3 <i>Cammissoniopsis cheiranthifolia</i> | Beach Evening Primrose | 1"-4" | .5'-3' | Full Sun | Low,SWR1 | Sandy | Winter-Summer | Yellow | Supports Clarks Day Moth |
| 4 <i>Dudley's pulverulenta</i> | Chalk Dudleya | .33-1' | 1' | Sun/Part Shade | Very Low,SWR1 | Sandy | Spring-Summer | Orange | Supports Sonoran Blue Butterfly |
| 5 <i>Castilleja foliolosa</i> | Woolly Indian Paintbrush | 2' | 2' | Full Sun | Very Low,SWR1 | Rocky Slopes | Winter-Spring | Red | Supports Chlosyne leanira |
| 6 <i>Cylindropuntia californica</i> | California Cholla | 9.8' | | Full Sun | Very Low,SWR1 | Sandy | SPring-Summer | Yellow | Supports Cactus Wren |



PLANT DETAILS

| Scientific Name | Common Name | Height | Spread | Hydrozone | WUCOLS | Soil | Bloom Season | Bloom Color | Notes |
|---|---------------------------|---------|--------|---------------------|----------------|-----------|---------------|-------------|------------------------------------|
| 1 <i>Artemisia californica</i> var 'Canyon Gray' | California Gray Sagebrush | 1'-2' | 4'-6' | Full Sun/Part Shade | Low,SWR1 | Adaptable | | | Supports California Gnatcatcher |
| 2 <i>Hesperoyucca whipplei</i> | Our Lord's Candle | 2'-12' | 2'-3' | Full Sun | Very Low,SWR1 | Rocky | Spring | Cream | Supports Yucca Moth |
| 3 <i>Salvia apiana</i> | White Sage | 3'-5' | 3'-8' | Full Sun | Very Low,SWR1 | Adaptable | Winter-Spring | White | Supports Carpenter Bees |
| 4 <i>Salvia mellifera</i> Jade Carpet' | Jade Carpet Black Sage | 1'-2' | 4'-6' | Full Sun/Part Shade | Low,SWR1 | Sandy | Spring | Lavender | Supports White Lined Sphinx Moth |
| 5 <i>Encelia californica</i> | Bush Sunflower | 1.6'-5' | 3'-7' | Full Sun/Part Shade | Very Low,SWR1 | Adaptable | Winter-Spring | Yellow | Supports Fatal Metalmark Butterfly |
| 6 <i>Calochortus splendens</i> | Splendid Mariposa Lily | 2' | 6" | Full Sun/Part Shade | Very Low, SWR1 | Sandy | Spring | Pink | Supports Native Fairy Bees |



HYDROSEED MIX DETAILS

| PLANT | HEIGHT | FLOWER TYPE | GROWTH TYPE | FLOWER SIZE | GROWTH SEASON | NATIVE TO CA. | COMMENTS | PERCENT OF MIX |
|--|--------|-------------|-------------|-------------|---------------|---------------|--|----------------|
| 1 Achillea millefolium White Yarrow | 1'-3' | Perennial | Shrub | Small | Spring | Yes | Underground runners provide erosion control. | 20% |
| 2 Eschscholzia californica California Poppy | -1' | Annual | Flower | Large | Spring/Summer | Yes | Fire retardent properties. Freely reseeds | 15% |
| 3 Lupinus bicolor Miniature Lupine | -1' | Annual | Flower | | Spring | Yes | Fire retardent properties. | 15% |
| 4 Melica imperfecta Coast Range Melic | 1'-3' | Annual | Grass | | Cool | Yes | Prefers dry hillsides. Ornamental bunch grass. | 20% |
| 5 Nasella pulchra Purple Needle Grass | 1'-3' | Perennial | Grass | | Cool | Yes | Drought tolerant tufted bunch grass | 15% |
| 6 Sisyrinchium bellum Blue Eyed Grass | 1'-3' | Perennial | Flower | Small | Spring | Yes | Fire retardent properties. Great ground cover | 15% |



TREE DETAILS

| Scientific Name | Common Name | Height | Crown | Hydrozone | WUCOLS | Soil | Bloom Season | Bloom Color | Notes |
|-----------------------------|-------------------|----------|---------|---------------------|---------------|-----------|---------------|-------------|--|
| 1 | | | | | | | | | |
| <i>Cercocarpus montanus</i> | Mountain Mahogany | 8'-20' | 10'-12' | Full Sun | Very Low,SWR1 | Adaptable | Winter-Spring | Cream | Supports Satyrium tetra butterfly |
| 2 | | | | | | | | | |
| <i>Rhus ovata</i> | Sugar Bush | 6.6'-32' | 30' | Full Sun/Part Shade | Very Low,SWR1 | Adaptable | Winter-Spring | White/Pink | Native Bees |
| 3 | | | | | | | | | |
| <i>Quercus agrifolia</i> | Coast Live Oak | 25-82' | 35' | FullSun/Part Shade | Low,SWR1 | Adaptable | | | Host Plant for California Sister Butterfly |
| | | | | | | | | | |
| | | | | | | | | | |



THANK YOU

**TRACY WOLK
LD 5 SPRING 2023
PAMELA BRIEF, INSTRUCTOR**