
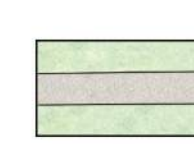
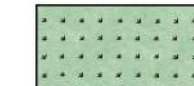
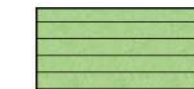







LEGEND

-  NATURAL TRAIL - NO COMPACTION OR ADDITIONAL MODIFICATIONS
-  STABILIZED PEDESTRIAN PATH SURFACE SUCH AS PERMEABLE CONCRETE, GRANITE, OR SIMILAR
-  STORM WATER TREATMENT AREAS
-  NECTAR / POLLINATOR GARDEN PLANTING
-  RESTORATION AREA - REMOVE EXISTING NON-NATIVE AND INVASIVE PLANTS WITHIN AND ADJACENT TO RESTORATION AREAS. RESTORATION EFFORTS OCCUR ABOVE THE OHWM/HIGH TIDE LINE, OR AT THE TOP EDGE OF THE EXISTING BAND OF NATIVE PICKLEWEED
-  NEW PLANTING - TREES WITH LOW SHRUBS AND GRASSES TO MAINTAIN VISIBILITY FOR SAFETY
-  NEW LOG PLACED FOR SEATING, NATURAL BARRIER, PLAY
-  EXISTING EUCALYPTUS TREE
-  EXISTING TREE

KEY NOTES

- ① OPPORTUNITY FOR NEW PARK MONUMENT SIGN.
- ② OPPORTUNITY TO REPLACE EXISTING BATHROOMS WITH UPDATED PREFAB BATHROOMS, SHOWER, DRINKING FOUNTAIN, AND WASTE AND RECYCLING RECEPTACLES.
- ③ OPPORTUNITY TO UPGRADE PARKING LOT LAYOUT AND PAVING AND INCLUDE STORMWATER TREATMENT FOR PAVED AREA PER 2010 PLAN.
- ④ OPPORTUNITY TO UPGRADE PEDESTRIAN PATH TO PERMEABLE SURFACE SUCH AS PERMEABLE CONCRETE OR GRANITECRETE AND LOCATE PLANTED STORMWATER TREATMENT AREA ADJACENT TO PEDESTRIAN PATH.
- ⑤ OPPORTUNITY FOR NECTAR/POLLINATOR GARDEN PLANTING ALONG UPGRADED PEDESTRIAN PATH FOR POLLINATORS OTHER THAN MONARCH BUTTERFLIES, INCLUDING BEES, HUMMINGBIRDS, OR SIMILAR POLLINATORS.
- ⑥ OPPORTUNITY FOR FOOTBRIDGE, CULVERT, OR FORD-TYPE CROSSING OVER STORMWATER TREATMENT AREA. CIVIL TO CONFIRM APPROPRIATE CROSSING TYPE FOR SPECIFIC LOCATIONS.
- ⑦ OPPORTUNITY FOR STORMWATER TREATMENT AREA TO RECEIVE ADJACENT URBAN RUNOFF. CIVIL ENGINEER TO CONFIRM EXACT PLACEMENT, SIZE, AND GRADING. STORMWATER TREATMENT AREAS TO HAVE A COMBINATION OF SIMPLE INFORMATIVE SIGNS ("KEEP OUT/OFF") AND MORE DETAILED INTERPRETIVE SIGNS ABOUT THE ECOSYSTEM RESTORATION AND BIOLOGICAL RESOURCES.
- ⑧ NEW NATIVE PLANTING (TREES, LOW SHRUBS, AND GRASSES). MAINTAIN VISIBILITY FOR SAFETY.
- ⑨ OPPORTUNITY TO UPGRADE PEDESTRIAN PATH TO PERMEABLE SURFACE SUCH AS PERMEABLE CONCRETE OR GRANITECRETE. STABILIZED PATH TO WIDEN AND TERMINATE WITH BENCH AND INFORMAL LOG SEATING.
- ⑩ OPPORTUNITY TO KEEP EXISTING TRAIL LAYOUT AND SURFACE (LEAVES, WOOD CHIPS, SOIL) UNCOMPACTED AND NATURAL. TRAIL WIDENS AND NARROWS ALONG WEST SIDE OF LAGOON/ CREEK PROVIDING FOR RECREATION, WALKING, AND JOGGING IN A NATURAL SETTING. KEEPING TRAIL UNCOMPACTED AND LESS DISTURBED WILL ALLOW FOR BETTER DRAINAGE AND HEALTHIER SOILS AROUND THE LAGOON.
- ⑪ OPPORTUNITY TO KEEP EXISTING LOGS AND ADD ADDITIONAL LOGS AS TREES ARE TRIMMED OR FALL. LOGS CAN BE USED TO DELINEATE EDGES, AS INFORMAL SEATING, FOR ANIMAL HABITAT, ETC.

- ⑫ OPPORTUNITY TO REMOVE EXISTING NON-NATIVE PLANTS ON STREAM AND LAGOON BANK AND RE-VEGETATE WITH APPROPRIATE NATIVE SPECIES TO INCREASE RIPARIAN HEALTH AND FUNCTION. INVASIVE REMOVAL TO BE COORDINATED WITH THE ENTOMOLOGIST AND INCLUDE REPLACEMENT WITH WINTER-FLOWERING NECTAR SOURCES FOR MONARCHS.
 - ⑬ OPPORTUNITIES FOR WETLAND RESTORATION INCLUDING RE-CONTOURING OF THE LAGOON BANK, REMOVING EXISTING NON-NATIVE AND INVASIVE PLANTS (INVASIVE ICEPLANT (CARPOBROTUS EDULIS)), AND RE-VEGETATING WITH APPROPRIATE NATIVE WETLAND SPECIES (NATIVE PICKLEWEED (SALICORNIA PACIFICA)). RESTORATION OF THIS AREA COULD INCREASE WILDLIFE HABITAT WHILE POTENTIALLY PROVIDING FLOOD ATTENUATION.
 - ⑭ OPPORTUNITIES FOR WETLAND RESTORATION INCLUDING RE-CONTOURING OF THE LAGOON BANK, REMOVING EXISTING NON-NATIVE AND INVASIVE PLANTS, AND RE-VEGETATING WITH APPROPRIATE NATIVE FRESHWATER WETLAND SPECIES, INCLUDING RUSHES AND SEDGES. RESTORATION OF THIS AREA COULD INCREASE WILDLIFE HABITAT WHILE POTENTIALLY PROVIDING FLOOD ATTENUATION.
 - ⑮ LAGOON BANK IS ERODING. REGRADE AND RE-VEGETATE TO STABILIZE BANK AND ENHANCE LAGOON ECOSYSTEM WITH SUITABLE MARSH PLANTS.
 - ⑯ OPPORTUNITY TO SHIFT LAYOUT OF UPGRADED PATH AWAY FROM BANK EDGE.
 - ⑰ OPPORTUNITY FOR SEATING NOOKS - STABILIZED PERMEABLE PATH MATERIAL WITH A MIX OF INFORMAL LOG SEATING AND ADA-COMPLIANT BENCHES.
 - ⑱ OPPORTUNITY FOR IMPROVED BEACH ACCESS AND ROAD CROSSING WITH MARKED CROSSWALK, FLASHERS, AND WIDER PAVED ACCESS TO BEACH.
 - ⑲ NEW POST WAYFINDING SIGN/TRAIL MARKER AT EACH ENTRY (2 TOTAL).
 - ⑳ NEW BICYCLE PARKING
- MORAN WAY PARCEL**
- ㉑ MOST OF THE PARCEL IS COVERED IN EUCALYPTUS TREES. OPPORTUNITY TO MINIMIZE DISTURBANCE TO THE TREE AREA.
 - ㉒ OPPORTUNITY TO IMPROVE NORTH AND EAST STREETS FRONTAGES ON MORAN WAY PARCEL WITH PARKING, CROSSWALK, SIGNAGE, AND POSSIBLY PLANTING IMPROVEMENTS.

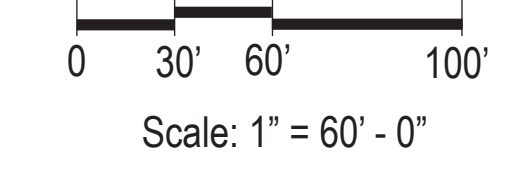


**NOTES FROM RINCON CONSULTANTS, INC. FOR PROJECT SITE AND 40 MORAN WAY SITE
LETTER DATED 01/19/2022**

1. EXISTING AND NEW PLANTING
 - 1.a. PROJECT TO COORDINATE WITH THE FORTHCOMING ARBORIST REPORT AND THE TREE PROTECTION MEASURES PRIOR TO FINALIZING PLANS FOR ANY NEW PLANTINGS. IMPACTS ARE POSSIBLE WITHIN THE CRITICAL ROOT ZONES (CRZS) OF SOME EXISTING TREES. IMPACTS SHOULD NOT OCCUR WITHIN THE CRZS OF ANY TREES THAT WERE DEEMED TO BE IN POOR HEALTH OR MODERATE-POOR HEALTH.
 - 1.b. PROPOSED TREE SPECIES WILL BE DEPENDENT ON RECOMMENDATIONS FROM THE PROJECT ARBORIST AS SPECIES-SPECIFIC HABITAT PREFERENCES AND ROOT SYSTEMS WILL NEED TO BE CONSIDERED, IN CONJUNCTION WITH SITE-SPECIFIC PARAMETERS (E.G., PROXIMITY TO SEWER LINES, SOIL TYPE/SUBSTRATE, SLOPE, ASPECT). ALSO, IT IS RECOMMEND THAT NATIVE SPECIES BE PLANTED WHENEVER POSSIBLE, WITH THE POTENTIAL EXCEPTION OF EUCALYPTUS TREES PLANTED TO REPLACE FALLEN OR DAMAGED TREES WITHIN EXISTING EUCALYPTUS GROVES FOR MONARCH HABITAT ENHANCEMENT.
 - 1.c. IRRIGATION FOR NEW NATIVE PLANTING AND NEW NECTAR/POLLINATOR PLANTING SHOULD ALSO BE CONSIDERED IN RELATIONSHIP TO TREE CRZS, IN PARTICULAR, ANY OAKS AND EUCALYPTUS TREES. NO NEW OR ADDITIONAL WATER WOULD BE RECOMMENDED FOR MATURE NATIVES.
 - 1.d. IF EXISTING TREES ARE REMOVED DURING THE NESTING SEASON (FEBRUARY THROUGH SEPTEMBER), THEN A NESTING BIRD SURVEY NEEDS TO BE CONDUCTED BY A QUALIFIED BIOLOGIST PRIOR TO REMOVAL. IF NO ACTIVE NESTS ARE FOUND, THEN THE TREES CAN BE REMOVED. IF ACTIVE NESTS ARE OBSERVED, THEN TREE REMOVAL WILL NEED TO WAIT UNTIL THE NEST/S WERE NO LONGER ACTIVE (I.E., CHICKS FLEDGED OR NEST FAILED).
2. MONARCH BUTTERFLY HABITAT
 - 2.a. THE UPDATED MONARCH BUTTERFLY HABITAT MANAGEMENT PLAN WILL OUTLINE SPECIFIC DETAILS ON MONARCH HABITAT WITHIN THE PROJECT AREAS THAT CAN BE MAINTAINED AND ENHANCED. GENERALLY, STRATEGIES TO IMPROVE MONARCH HABITAT CAN INCLUDE THE FOLLOWING: REMOVAL OF DEAD AND DOWNED EUCALYPTUS TREES, PLANTING OF REPLACEMENT EUCALYPTUS TREES STRATEGICALLY FOR PROTECTION AROUND KNOWN MONARCH AGGREGATION SITES, IRRIGATION FOR REPLACEMENT EUCALYPTUS TO ENSURE ESTABLISHMENT AND GROWTH, AND PLANTING OF NECTAR/POLLINATOR VEGETATION IN CLOSE PROXIMITY TO EUCALYPTUS GROVES.
 - 2.b. INSTALLATION OF NECTAR/POLLINATOR GARDENS THROUGHOUT THE 40 MORAN WAY SITE IS HIGHLY ENCOURAGED, AS THIS COULD PROVIDE IMPORTANT FOOD RESOURCES FOR OVERWINTERING MONARCHS. ADDITIONALLY, THE U.S. FISH AND WILDLIFE SERVICE (USFWS) FAVOURED THE INSTALLATION OF WINTER FLOWERING NECTAR SOURCES FOR MONARCHS. UPDATED MONARCH MANAGEMENT PLAN WILL PROVIDE SPECIFIC PLANT SPECIES RECOMMENDATIONS.
 - 2.c. ENHANCEMENT OF MONARCH HABITAT WITHIN THE EUCALYPTUS GROVES SURROUNDING THE D.A. PORATH SANITATION FACILITY IS ALSO RECOMMENDED. ENHANCEMENT MAY INCLUDE PLANTING NEW TREES WITHIN THE GROVE TO FILL IN GAPS WHERE WIND MIGHT RESULT IN SUBOPTIMAL MICROCLIMATIC CONDITIONS FOR MONARCHS AND THEREBY CREATE A DISTURBANCE TO WINTER ROOSTING. MORE DETAILED RECOMMENDATIONS WILL BE FORTHCOMING AS A PART OF THE UPDATE TO THE MONARCH BUTTERFLY HABITAT MANAGEMENT PLAN.
3. GENERAL BIOLOGICAL RESOURCES
 - 3.a. INSTALLING ADDITIONAL NATIVE VEGETATION, INCLUDING MARSH SPECIES ALONG THE LAGOON BANKS; MAINTAINING OR INCREASING THE AMOUNT OF PERMEABLE SURFACE AREA; AND IMPROVING STORM WATER FILTRATION WILL ALL HAVE NET BENEFITS TO BIOLOGICAL RESOURCES WITHIN THE VICINITY OF MORAN LAKE.
 - 3.b. EDUCATIONAL SIGNAGE COULD HAVE GREAT BENEFITS FOR EDUCATING THE PUBLIC ON BIOLOGICAL RESOURCES WITHIN THE AREA.
 - 3.c. PRIOR TO ANY GROUND-DISTURBING ACTIVITIES OR VEGETATION CLEARING (DURING THE BLOOMING PERIOD), A QUALIFIED BIOLOGIST SHOULD CONDUCT A SURVEY OF THE AREA TO ENSURE THAT NO SPECIAL-STATUS ANIMAL OR PLANT SPECIES ARE PRESENT.
 - 3.d. MANY BIRD SPECIES ALSO HAVE THE POTENTIAL TO NEST ON-SITE WITHIN TREES AND OTHER VEGETATION, OR ON THE GROUND SURFACE. IF CONSTRUCTION WORK IS CONDUCTED DURING THE NESTING SEASON (FEB 1 - SEPT 15), THEN A SURVEY FOR NESTING BIRDS SHOULD BE CONDUCTED BY A QUALIFIED BIOLOGIST. IF ACTIVE NESTS ARE FOUND, THEN NO-WORK BUFFERS MAY BE REQUIRED.
 - 3.e. OTHER AGENCY PERMIT REQUIREMENTS WILL LIKELY BE REQUIRED PRIOR TO AND DURING WORK, INCLUDING BIOLOGICAL MONITORING AND INSTALLATION OF SEDIMENT BARRIERS AROUND THE LAGOON AND ITS FRESHWATER INLET.

IRRIGATION NOTE:

1. THE IRRIGATION SYSTEM, IN COMPLIANCE WITH STATE AND LOCAL WATER EFFICIENT LANDSCAPE ORDINANCES, WILL BE DESIGNED TO APPLY THE MINIMUM AMOUNT OF WATER REQUIRED TO MAINTAIN GOOD PLANT HEALTH. TO ACCOMPLISH THIS, THE SYSTEM WILL INCLUDE AN AUTOMATIC WEATHER-BASED CONTROLLER, RAIN SHUT-OFF DEVICE, MASTER CONTROL VALVE, FLOW SENSOR, MATCHED PRECIPITATION RATE SPRINKLER HEADS, BUBBLERS OR DRIP EMITTERS, A PROPER SETBACK FROM NON-PERMEABLE SURFACES, AND SEPARATE SOLENOID CONTROL VALVES FOR DIFFERENT HYDROZONES (PLANT WATER USE LEVELS); IT WILL BE DESIGNED TO PREVENT RUNOFF AND OVERSPRAY. THE IRRIGATION SYSTEM WILL INCLUDE WATERING SCHEDULES BASED ON LOCAL EVAPOTRANSPIRATION DATA TAKEN FROM CIMIS AND WILL BE REGULATED BY THE AUTOMATIC IRRIGATION CONTROLLER. THE INTENT FOR NEW PLANTING AROUND THE PARKING LOT, SEATING, AND ENTRY AREAS IS TO INSTALL PERMANENT IRRIGATION. THE INTENT FOR THE RESTORATION PLANTING ALONG THE LAGOON AND STREAM BANKS IS TO INSTALL TEMPORARY IRRIGATION UNTIL THE NEW PLANTING IS ESTABLISHED.



**CONCEPT PLAN
MORAN LAKE RESTORATION PLAN
MAY 14, 2022**

