

**GENERAL REVEGETATION NOTES:**

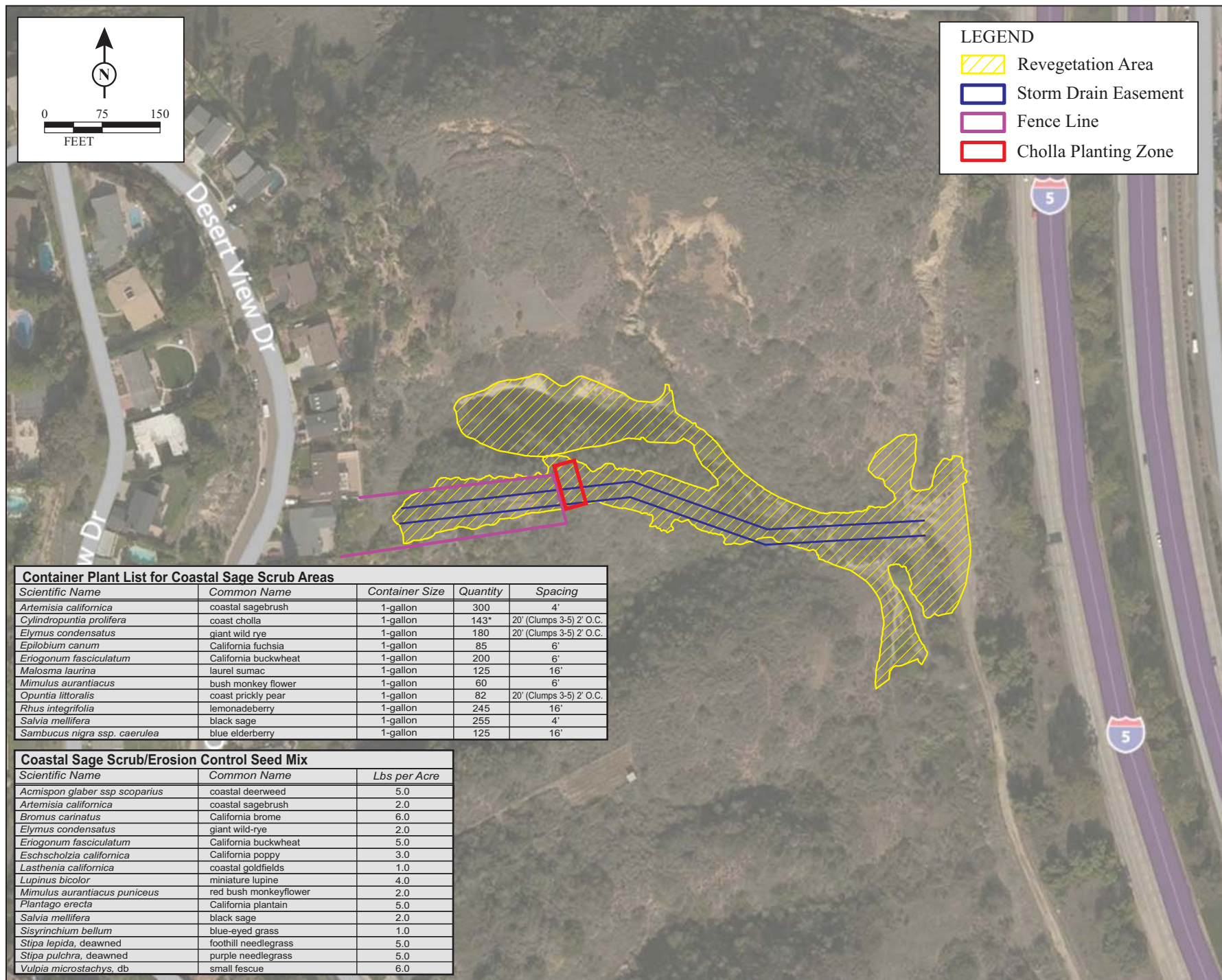
1. Revegetation of the project area shall be in accordance with the latest edition of the City of San Diego Landscape Standards and City Specifications under the direction of the Resident Engineer (RE) and Project Biologist.
2. Prior to revegetation and/or plant installation, the Project Biologist shall provide written recommendations to the RE as to the topsoil relocation, re-compaction (e.g. max 75 percent within the top 8 inches), and/or preparation for revegetation purposes to be done by the contractor. Clean and weed-free class "A" topsoil will be provided and installed by contractor.
3. Seed mix and/or container stock used for erosion control and on slopes shall achieve 70 % (or as approved by the Project Biologist and City representative based on site conditions if lesser % coverage) vegetation cover within 25 months of being installed after the 120 day plant establishment period (PEP). At the end of Year 1, plant coverage shall meet 50 percent coverage, as verified by the Project Biologist (Table 1).
4. Revegetation of manufactured slopes and other disturbed areas adjacent to areas of native vegetation shall be accomplished in a manner so as to provide visual and horticultural compatibility with the indigenous native plant materials.
5. Invasive plant species including but not limited to those listed in the City's Landscape Standards are prohibited and shall be eradicated and removed by contractor and native plant species shall be used in naturalized areas.
6. Revegetation and erosion control timing – all required revegetation and erosion control shall be completed within 90 calendar days of the completion of grading or disturbance in order to start the 120 day PEP, or as recommended by the RE and the Project Biologist.
7. All slopes 3:1 or greater shall require biodegradable erosion control blanket or other slope protection methods provided by contractor as recommended by the Project Biologist prior to the installation of the revegetation, or in the event of slope or restoration failure. All mulch groundcover used shall be created from onsite vegetation, if feasible and shall be clean, free from weeds, seeds, and debris as certified by the supplier, as applicable.
8. Contractor shall correct all soil erosion, and shall repair and/or replace all above ground erosion control Best Management Practices damaged during the 120 day PEP and throughout the 25 month maintenance and monitoring period. Any above ground erosion control measures such as but not limited to silt fencing, gravel bags, fiber rolls and/or hay bales shall be removed by the contractor following acceptance of the 25 month maintenance and monitoring period by the RE and Project Biologist. All hay/straw products shall be un-decaying, clean and free of weeds, seeds, and debris.
9. Contractor shall remove all trash and/or debris from the revegetation site prior to and following the revegetation installation, and until the end of the 25 month maintenance and monitoring period. Contractor shall remove all temporary irrigation lines and appurtenances following acceptance of revegetation by the RE and the City Representative.

**Temporary Irrigation:**

1. Under the direction of the RE and Project Biologist, temporary irrigation will be applied as follows:
2. Hydroseed and/or container plants shall be planted between October 1 and February 15 during the rainy season, with the exception of hydroseed for the new storm drain pipe area, which will be applied upon completion of fine grading for that portion of the project site.
3. The contractor shall install a temporary irrigation system in accordance with the approved comprehensive irrigation plan. Contractor shall provide all irrigation lines and appurtenances to function automatically and in accordance with the plan and make any adjustments necessary to meet the success criteria per Project Biologist recommendations.
4. Temporary irrigation via irrigation lines and appurtenances shall be provided by the contractor for a period sufficient to establish plant material and to provide vegetative cover that prevents soil erosion. Project Biologist and landscape contractor shall monitor to determine success and added requirement for temporary irrigation.
5. Irrigation shall be performed in a manner that avoids runoff, seepage, and overspray onto adjacent properties, non-irrigated areas, walls, roadways, or structures.
6. The water delivery rate shall be matched to the slope gradient and the percolation rate of the soil.
7. Irrigation shall deliver water sufficiently and uniformly and shall be appropriate to the needs of the plant materials. Recommended reference materials for irrigation system design are listed in Appendix A of the City's Landscape Standards.
8. Overwatering as evidenced by soggy soils, standing water, runoff in street gutters and other similar conditions shall be managed and prevented.
10. Temporary irrigation materials shall be placed so that they can be driven over or do not impede access to utilities (i.e. manholes).

**Seed Mixes:**

1. The specified seed mix shall be applied to the entire Revegetation Area. The seed shall be installed via hydroseed methods, unless otherwise directed by the Project Biologist. Seed applied between October – March shall be covered by contractor with suitable biodegradable cover as approved by the Project Biologist.
2. All seeds shall meet the minimum number of live seed per pound (#LS/lb) as noted in the tables. If minimum #LS/lb count cannot be met, contractor to coordinate and obtain written approval from the Project Biologist for alternative compliance.
3. All seeds shall originate from within the vicinity (e.g. 10 mile radius) of the project site or contractor to provide evidence that the seed is not available and notify the City Representative and the Project Biologist for alternative compliance. Contractor shall retain and submit all seed tags for seed products to be used to the RE and Project Biologist prior to application.



**Container Plant List for Coastal Sage Scrub Areas**

Scientific Name	Common Name	Container Size	Quantity	Spacing
<i>Artemisia californica</i>	coastal sagebrush	1-gallon	300	4'
<i>Cylindropuntia prolifera</i>	coast cholla	1-gallon	143*	20' (Clumps 3-5) 2' O.C.
<i>Elymus condensatus</i>	giant wild rye	1-gallon	180	20' (Clumps 3-5) 2' O.C.
<i>Epilobium canum</i>	California fuchsia	1-gallon	85	6'
<i>Eriogonum fasciculatum</i>	California buckwheat	1-gallon	200	6'
<i>Malosma laurina</i>	laurel sumac	1-gallon	125	16'
<i>Mimulus aurantiacus</i>	bush monkey flower	1-gallon	60	6'
<i>Opuntia littoralis</i>	coast prickly pear	1-gallon	82	20' (Clumps 3-5) 2' O.C.
<i>Rhus integrifolia</i>	lemonadeberry	1-gallon	245	16'
<i>Salvia mellifera</i>	black sage	1-gallon	255	4'
<i>Sambucus nigra ssp. caerulea</i>	blue elderberry	1-gallon	125	16'

**Coastal Sage Scrub/Erosion Control Seed Mix**

Scientific Name	Common Name	Lbs per Acre
<i>Acmispon glaber ssp scoparius</i>	coastal deerweed	5.0
<i>Artemisia californica</i>	coastal sagebrush	2.0
<i>Bromus carinatus</i>	California brome	6.0
<i>Elymus condensatus</i>	giant wild-rye	2.0
<i>Eriogonum fasciculatum</i>	California buckwheat	5.0
<i>Eschscholzia californica</i>	California poppy	3.0
<i>Lasthenia californica</i>	coastal goldfields	1.0
<i>Lupinus bicolor</i>	miniature lupine	4.0
<i>Mimulus aurantiacus puniceus</i>	red bush monkeyflower	2.0
<i>Plantago erecta</i>	California plantain	5.0
<i>Salvia mellifera</i>	black sage	2.0
<i>Sisyrinchium bellum</i>	blue-eyed grass	1.0
<i>Stipa lepida, deawned</i>	foothill needlegrass	5.0
<i>Stipa pulchra, deawned</i>	purple needlegrass	5.0
<i>Vulpia microstachys, db</i>	small fescue	6.0

\*60 out of the 143 cholla are to be planted in the cholla planting zone.  
 \*\*Container plant tags shall be submitted to the RE and Project Biologist prior to the installation of container stock.  
 \*\*\*Seed tags shall be submitted to the RE and Project Biologist prior to application of seed.  
 \*\*\*\*Planting locations will be indicated in the field with the use of color-coded (by species) pin flags to be installed by the Contractor pursuant to the Conceptual Planting Layout detail under the direction of the Project Biologist.  
 \*\*\*\*\*The seed mix is comprised of native plant species. Any potential substitutions must be approved by the Project Biologist prior to application of seed.  
 \*\*\*\*\*Soil shall be presoaked within 3 days of seeding to a depth of 6 inches, or as recommended by the Project Biologist.

**Table 1: Success Criteria\***

Parameter	Percent Vegetation Cover Hydroseed/Container Plants	Plant Survival Container Plants**
Performance Standard - Impact Area***	Year 1: 50 percent 25 months: 70 percent	Year 1: 100 percent 25 months: 80 percent

\*See General Revegetation note #3 if lower percent approved by Project Biologist. At the end of Year 1, target goal is 50% vegetative cover from container plants and seed mix.  
 \*\*Container plants not meeting plant survival success criteria, as verified and recommended by the Project Biologist, shall be replaced and maintained at contractor's expense until the success criteria have been met.  
 \*\*\*Vegetative cover shall contain no more than 5 percent of nonnative species.

**Table 2: Summary and Schedule for Maintenance, Monitoring, and Reporting for Project**

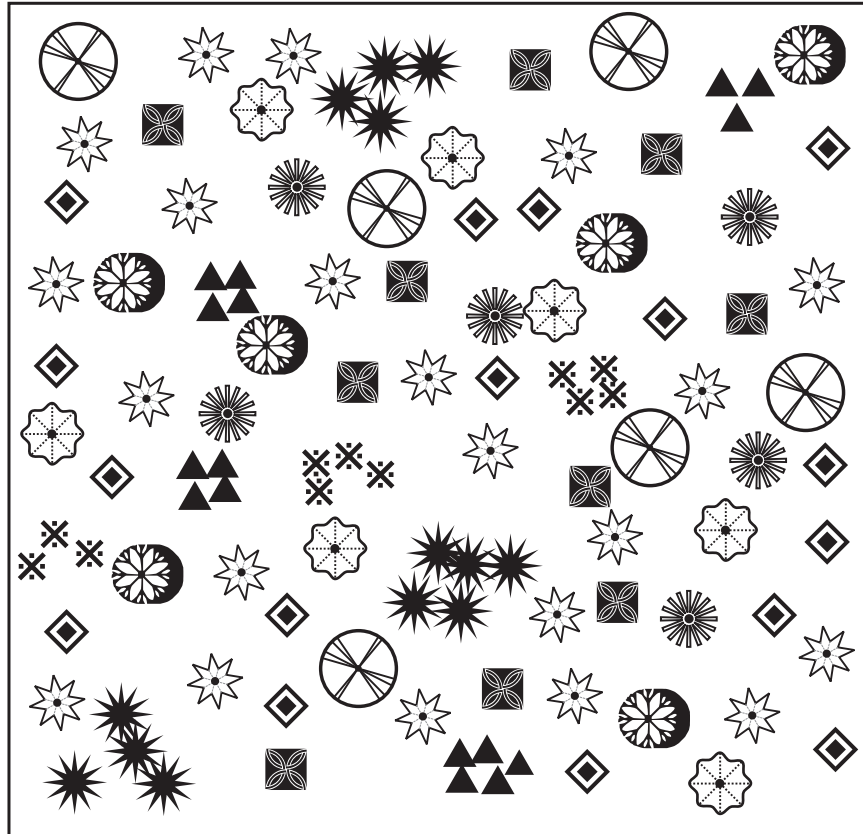
Period	Activity for Project Biologist/Contractor	Biologist Site Visit Frequency	Submittals/ Checklist	Reporting Frequency
Revegetation Installation	Project Biologist will be responsible for monitoring/ Landscape contractor will be responsible for installation and maintenance	As needed or at least once every two weeks.	Reports prepared by the Biologist (based on the revegetation plan criteria)	At successful installation (as determined by the Project Biologist)
120 day PEP	Project Biologist will be responsible for monitoring/ Landscape contractor will be responsible for maintenance	Months 1 & 2 - biweekly, months 3 & 4 - at least once a month	Reports prepared by the Biologist (based on the revegetation plan criteria)	At the end of PEP**
25 month long Term maintenance & monitoring	Project Biologist will be responsible for monitoring/ Landscape contractor will be responsible for maintenance	Every 3 months	Reports prepared by the Biologist (based on the revegetation plan criteria)	Every 3 months for the first 9 months Year 1** 25 months**

Note: If 25 month success criteria are not met, the Maintenance and Monitoring (M&M) Program will be extended as required. Quarterly maintenance and monitoring with yearly reporting shall continue as needed.  
 \*\*PEP, Year 1 and 25 month final report(s) required to include above information.

**DESERT VIEW STORM DRAIN OUTFALL  
 EMERGENCY PROJECT (LSA Project No. LAA1501)  
 REVEGETATION PLAN**

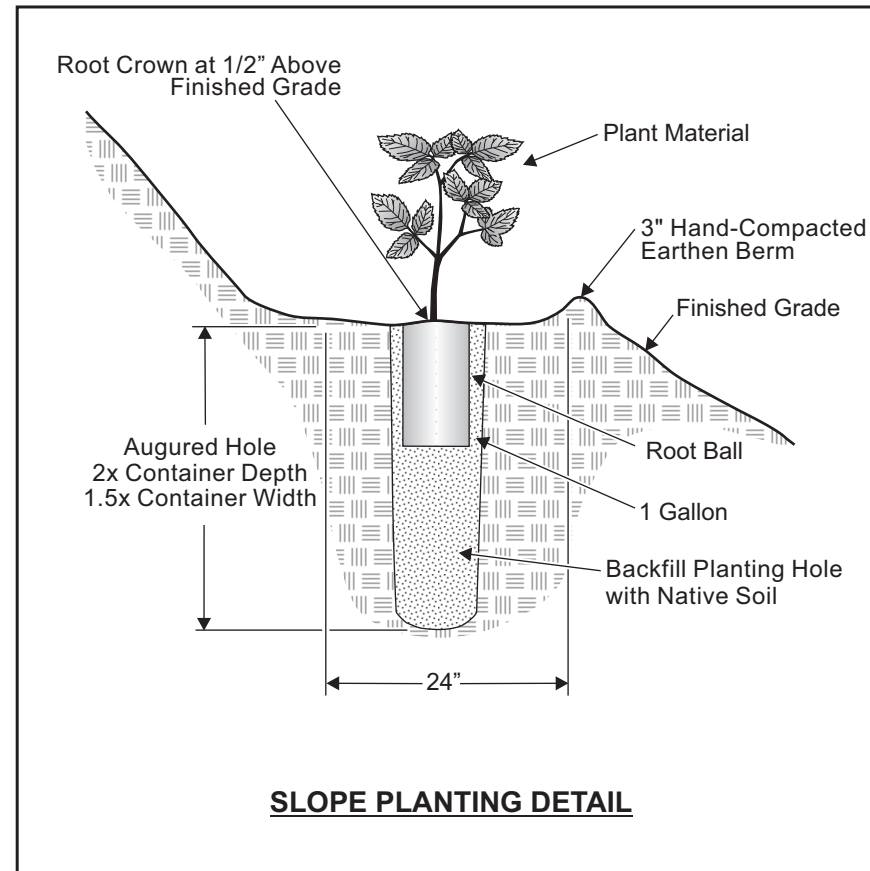
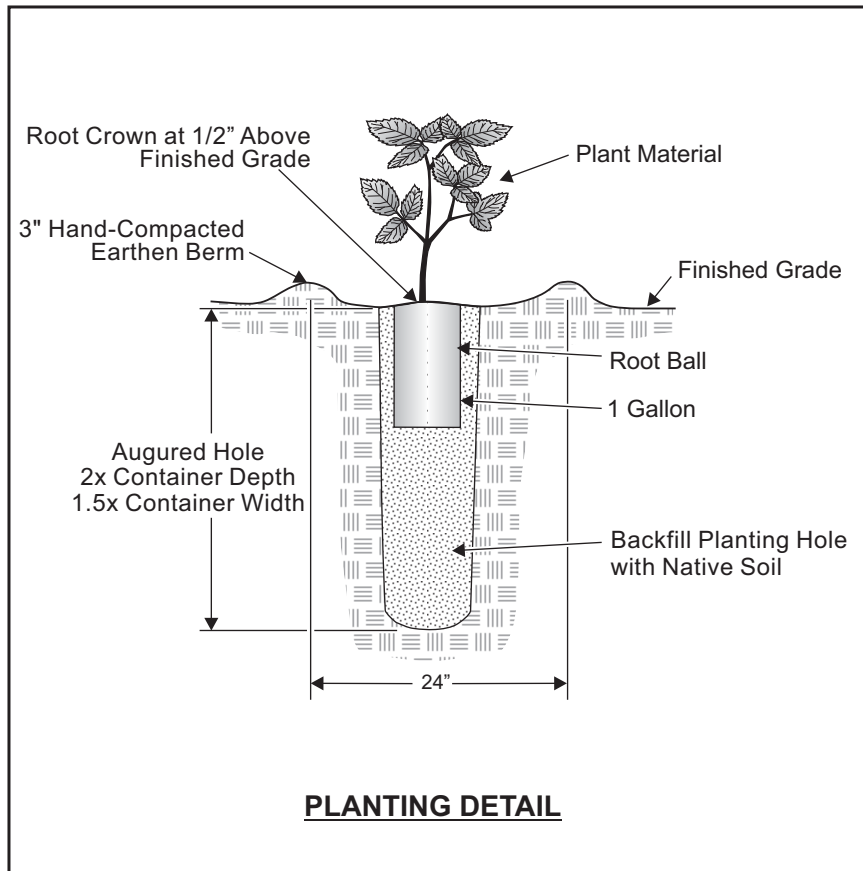
## CONCEPTUAL PLANTING LAYOUT

Not to Scale: Shows Representative Spacing and Placement



	<i>Artemisia californica</i>	coastal sagebrush
	<i>Cylindropuntia prolifera</i>	coast cholla
	<i>Elymus condensatus</i>	giant wild rye
	<i>Epilobium canum</i>	California fuchsia
	<i>Malosma laurina</i>	laurel sumac
	<i>Mimulus aurantiacus</i>	bush monkey flower
	<i>Opuntia littoralis</i>	coast prickly pear
	<i>Rhus integrifolia</i>	lemonadeberry
	<i>Salvia mellifera</i>	black sage
	<i>Sambucus nigra</i> <i>ssp. caerulea</i>	blue elderberry

## CONTAINER PLANT DETAILS



## GENERAL REVEGETATION NOTES (Cont):

### Hydroseed Procedures:

1. Seeding shall occur only after the Project Biologist has observed and approved that the site has been properly prepared. Hydroseeding shall occur after container plant installation.
2. Only as directed by the RE and Project Biologist, Bonded Fiber Matrix (BFM) shall be applied at the minimum rate of 1,500 pounds per acre; hydropost premium compost, or equal, shall be applied at the minimum rate of 1,000 pounds per acre; Biosol mix 7-2-3 organic fertilizer, or equal, shall be applied at the minimum rate of 800 pounds per acre; AM 120 Mycorrhizal inoculum, or equal, shall be applied at the minimum rate of 60 pounds per acre.
3. BFM and hydropost compost shall be uniformly spread and "tacked" with Type 10 mulch (stabilizing emulsion) binder at a minimum rate of 150 pounds per acre. The binder shall be an organic derivative or processed organic adhesive, or as directed by the Project Biologist.
4. A wetting agent consisting of one ton per acre agricultural gypsum (95% Alkyl Polyethylene Glycol Ether or as approved by the Biologist) shall be applied as per manufacturer's recommendations, or as recommended by the Biologist.
5. Equipment used for the application of slurry shall have a built-in agitation system to suspend and homogeneously mix the slurry, the slurry mix shall be dyed green. The equipment must have a pump capable of applying slurry uniformly.

### Container Plant Procedures:

1. In addition to hydroseed in the tables, contractor shall supply and install at least 1,600 container plants in the Revegetation Area pursuant to the Container Plant List and Revegetation Plan specifications. Project Biologist shall consider the 120 day PEP, and 25 month maintenance and monitoring period, success criteria, in the event that additional container plants are recommended by the Biologist for installation.
2. Container plants shall be procured from a nursery qualified to propagate and care for plant species. Source for any native container plant materials shall originate within 25-miles from the vicinity within San Diego County to the extent practical (e.g. within a 25 mile radius), or as approved by the RE and Project Biologist.
3. Container plant material must be delivered to the project site at the appropriate time, in a healthy and vigorous condition and labeled clearly. The Project Biologist will reject plant material delivered prior to its planting date. Specimens showing evidence of disease, mishandling, defects or damage, over or under-watering, or other deficiency at the time of delivery will be rejected.
4. Container plants will be placed by the contractor for the review and approval by the Project Biologist in the revegetation areas. Container plants shall be installed in accordance with the Container Plant Details.
5. Contractor shall install coastal cholla (*Cylindropuntia prolifera*) in the area depicted as "cholla planting zone" on the revegetation figure. No other species are to be planted in the cholla planting zone.

### Maintenance Requirements:

1. Revegetation area shall be maintained for a period of not less than 25 months (Table 2) or as determined by the RE and Project Biologist. All revegetated areas shall be maintained by the contractor until final approval by the City. The maintenance period begins on the first day following acceptance (at the end of 120 day PEP) and may be extended at the determination of the City Representative and RE.
2. Prior to final approval, the City Representative may require corrective action including but not limited to weed eradication and removal, replanting, the provision or modification or irrigation systems, and the repair of any soil erosion or slope slippage, in consultation with the Project Biologist.
3. The 120 day PEP follows hydroseed application and plant installation. The PEP and start of 25 month maintenance, as well as acceptance following the maintenance period, is determined by City representative in consultation with Project Biologist.
4. Weeding, herbicide, and/or pesticide application shall be done regularly by contractor. Weeding shall be done at a minimum of bi-weekly until the end of the 120 day PEP, and monthly throughout the 25 months of maintenance. Weeds shall be properly disposed of offsite. Contractor shall obtain approval from City Representative and Project Biologist prior to herbicide/pesticide application, and shall apply herbicide/pesticide per manufacturer's recommendation and any State or California guidelines. Contractor must possess a valid State pesticide and/or herbicide license at all times.
5. Contractor shall control weeds as identified by the Project Biologist such that no weed cover exceeds 5% of the project site, before they exceed twelve inches (12") in height, and before they set seed. Areas where weeding creates in excess of 25 square feet of bare soil shall be replanted and maintained by contractor.
6. In areas where non-native grasslands (NNG) have been disturbed, all coverage requirements can be achieved by establishment of native or non-native grasses or forbs that 1) are not listed in the City of San Diego Landscape Standards as invasive plant species and 2) are not rated by the California Invasive Plant Council (Cal-IPC) as highly invasive.

### Other Notes:

1. Prior to installation of plant and seed materials, the contractor shall remove, and properly dispose of all orange construction fencing from the perimeter of the Revegetation Area.
2. Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.
3. Contractor will prevent the release of toxins, chemical, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment of ecosystem processes within the MHPA.
4. No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.
5. Uses in, or adjacent to, the MHPA should be designed to minimize noise impacts. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species.