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**January 27, 2012**

**TO: BOARD OF DIRECTORS**

**THROUGH: ARTHUR T. LEAHY** *by fcs*  
**CHIEF EXECUTIVE OFFICER**

**FROM: KRISHNIAH N. MURTHY** *KNM*  
**EXECUTIVE DIRECTOR, TRANSIT PROJECT DELIVERY**

**SUBJECT: METRO NATIVE AND DROUGHT TOLERANT PLANTS CRITERIA**

**ISSUE**

During the January 19, 2012 Construction Committee Meeting, Director Jose Huizar asked staff if there are set guidelines as to what type of vegetation Metro accepts in our capital projects or if designers are free to do their own selection and landscape design for the project. The Director's intent was to ensure that Metro considers drought tolerant and native species in plant selection. Staff committed to respond with specific details of the Metro requirements.

**BACKGROUND**

A number of Metro capital projects require landscaping. To reduce environmental, social, and economic impacts, Metro is committed to construct these projects in the most cost-effective manner; and as related to landscaping, with appropriate measures to reduce landscaping maintenance costs. Providing an opportunity to install native and drought tolerant plants at our projects is encouraged to achieve these goals.

At the Metro Orange Line and its Extension, for example, native and drought tolerant plants are installed. Metro's Bus Rapid Transit Design Criteria (Attachment A) specifically states that as "much as practical, landscaping should be drought tolerant, preferably native species." This requirement is echoed in our Rail Design Criteria (Attachment B). These requirements are rooted in the provisions of our Sustainability and Energy Policy and our Environmental Policy.

Specific plant palettes are selected during the environmental clearance process by seeking input during public outreach meetings. Specific plants installed and eventually maintained are procured during the construction phase. However, it is possible that substitute plants may be installed if the originally selected palettes are unavailable. Substitute plants are typically of related species and watering requirements.

## **DISCUSSION**

The procurement and preliminary engineering documents for the Crenshaw Light Rail Transit, Regional Connector, and Westside Extension projects are currently being developed. It is a requirement for these projects to consider all of Metro's environmental and sustainability related policies as well as the applicable landscaping design criteria. Drought tolerant and native plant species are considered and as much as practical, and if possible, landscaping design would include these plant types.

## **NEXT STEPS**

Staff will continue the monitoring of project document development to ensure that drought tolerant and/or native species plant materials are included in the design and landscape installation for all Metro projects, wherever practical and possible.

## **ATTACHMENT**

Attachment A. Excerpt of Metro BRT Design Criteria Section 2/Environmental Considerations

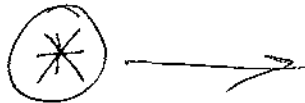
Attachment B. Excerpt of Metro Rail Design Criteria Section 2/Environmental Considerations

## Attachment A. Excerpt of Metro BRT Design Criteria Section 2/Environmental Considerations

Maintenance of the following plant materials have been problematic in the past: Jacaranda, Platanus, Tristania, Cupania, Carob, Magnolia, Pinus, Arbutus, Bougainvillea, Mexican Palo Verde, Santa Cruz, Mexican Fan Palm, Carissa, Oregon Grape, Pyracantha, Oleander, and Ivy. Avoid using these plant materials.

It may be necessary to remove some landscaped areas and some street trees as a result of implementing the METRO BRT Projects. In order to mitigate these losses, the following criteria shall apply.

Where existing vegetation must be removed, new landscaping shall be planted where possible and appropriate, the placement and types of which shall be as specified in an established landscaping plan. As much as practical, landscaping should be drought tolerant, preferably native species. The landscaping plan shall include a master plant list which shall call for new vegetation that is designed to conform with the surrounding environment and enhance its visual appeal. The landscaping plan shall extend to the system rights-of-way, stations, parking and public areas, and other areas of fixed system facilities. A program shall be developed as part of the overall operating procedures for the METRO BRT System which shall provide for the regular maintenance of landscaping owned by METRO.



The design of landscaping shall be prepared as part of the BRT facilities' detailed engineering and be included in the facilities contract documents. In station areas, landscaping may relate to the station design recommended by the designer.

In public rights-of-way, METRO's agreement with the City of Los Angeles states that street trees shall be replaced on a two-for-one basis with a 24-inch box tree. The trees are to be maintained for one year as part of the contract requirement.

### 2.11.2 Fauna

Most of the METRO BRT projects are located in urban areas and would cause minimal disturbance to animal species. Nevertheless, biological studies should be completed for natural areas in the vicinity of BRT projects which could be adversely affected by construction and operation. Adverse impacts should be assessed and mitigation measures recommended to minimize adverse impacts, as necessary.

## 2.12 CULTURAL RESOURCES

### 2.12.1 Historic Properties

METRO's service area includes many historic sites and buildings which could be adversely affected during construction and implementation of projects. If the

## Attachment B. Excerpt of Metro Rail Design Criteria Section 2/Environmental Considerations

### 2.11.3 Hazardous Materials

- A. Hazardous Materials would include asbestos, lead containing materials, polychlorinated biphenyl (PCB) containing light ballasts or electrical transformers, and other related hazardous waste and hazardous materials.

Designers should anticipate that any building demolition activity may encounter asbestos contaminated material (ACM) or lead-based paint (LBP). All demolition involving asbestos or lead-based paint removal shall be in accordance with all governmental regulations. Soil contamination, that is different from the surrounding area, may exist at a specific site that is the target of demolition.

- B. Other Hazardous Waste and Hazardous Materials

All handling and disposal of hazardous waste and hazardous materials shall be in accordance with all governmental regulations and shall depend on the hazardous or toxic nature of the material as specified in an environmental assessment report, on a case by case basis.

## 2.12 BIOLOGICAL

### 2.12.1 Flora

- A. Natural Landscape

Most rail projects are located in urban areas. No truly riparian habitats are in the project area, although urban runoff and drainage modifications have contributed to the development of a few riparian habitats, as well as a few wetland habitats. Biological studies should be completed for natural areas in the vicinity of rail projects, which could be adversely affected by the rail project. In areas where impacts are identified, biological surveys should be done to assess the impacts. Mitigation measures should be recommended to minimize adverse impacts in addition to those specified in the adopted Final Environmental Impact Statement/ Final Environmental Impact Report (FEIS/FEIR).

- B. Ornamental Landscape

As a result of implementing the Metro Rail Projects, it will be necessary to remove some landscaped areas and street trees. In order to mitigate these losses, the following criteria shall apply:

- Where existing vegetation must be removed, new landscaping shall be planted where possible and appropriate, the placement and types of which shall be as specified in an established landscaping plan.
- The selected landscape material shall be drought tolerant and California native, if possible.

