



Transportation Landscape Architecture



District 12

July 2008

Transportation Landscape Architecture



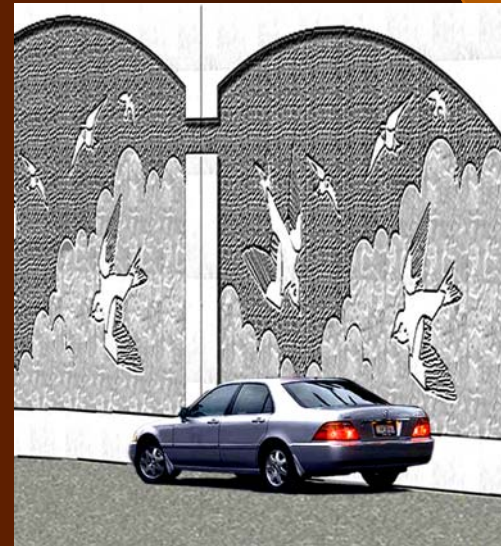
VALUES

- Aesthetic
- Environment
- Scenic
- Community



□ Aesthetic

- Protect and improve transportation facility aesthetics.



□ Environmental

- Integrate transportation facilities and the environment:
 - ✓ Preserve and restore habitat.
 - ✓ Conserve agricultural lands.
 - ✓ Conserve water with drought tolerant plants.
 - ✓ Use inert materials for groundcover.
 - ✓ Use non-potable water.
 - ✓ Prevent storm water pollution.



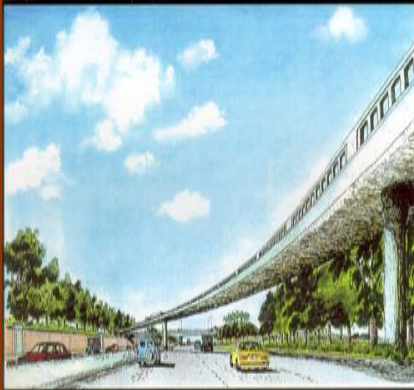
□ Scenic

- Assess potential adverse visual impacts.
- Design mitigation for scenic protection and preservation.

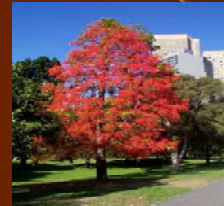
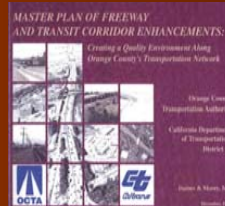
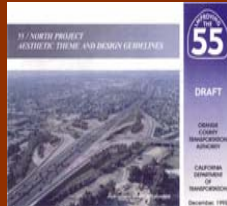


□ Community

- Integrate transportation needs:
 - ✓ Community goals.
 - ✓ Community involvement.
 - ✓ Corridor planning.
- Implement Context Sensitive Design Policy



Landscape Architecture Design Considerations



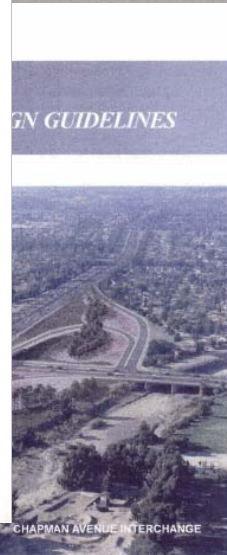
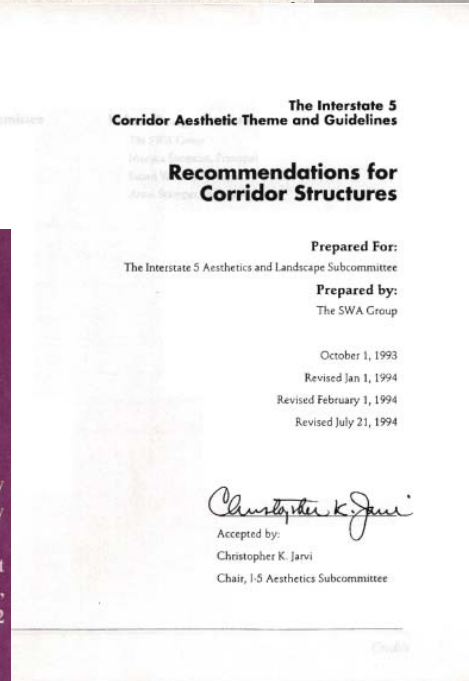
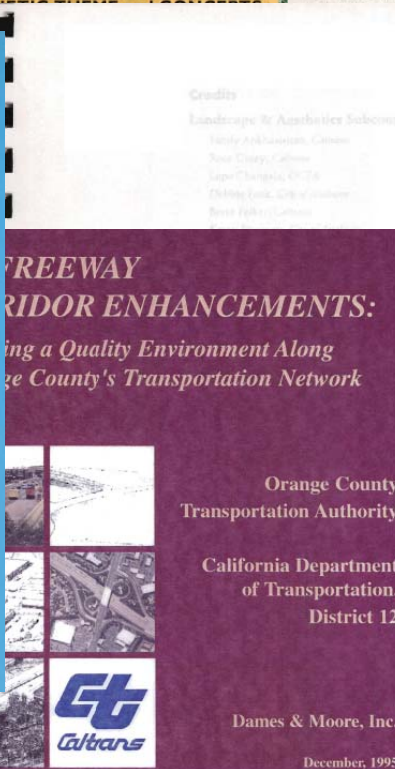
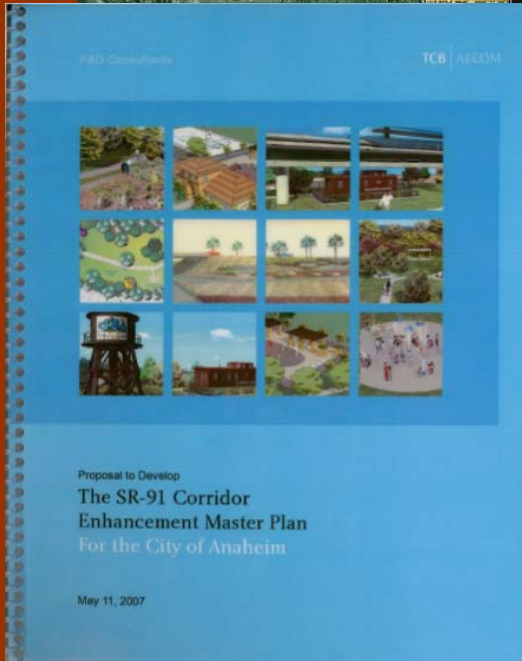
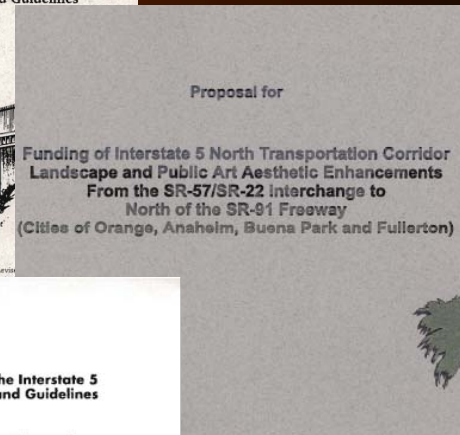
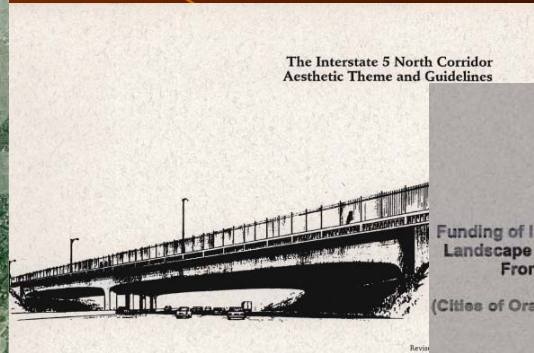
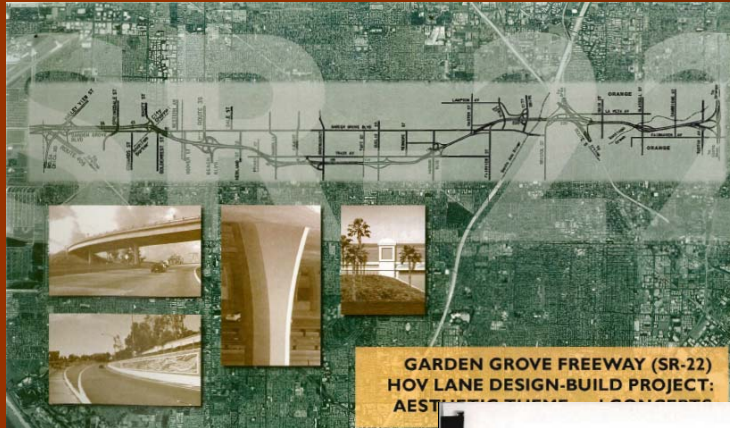
- ❖ Context Sensitive Design Policy
- ❖ Freeway Master Plans
- ❖ Corridor Aesthetic Considerations
- ❖ Plant Selection Process
- ❖ Native Plant Considerations
- ❖ Drought Considerations

❖ Context Sensitive Design Policy

- Harmonize roadway, topography and land use.
- Preserve and enhance community character.
- Meet needs of non-motorized travelers.
- Support transportation art and community identification.

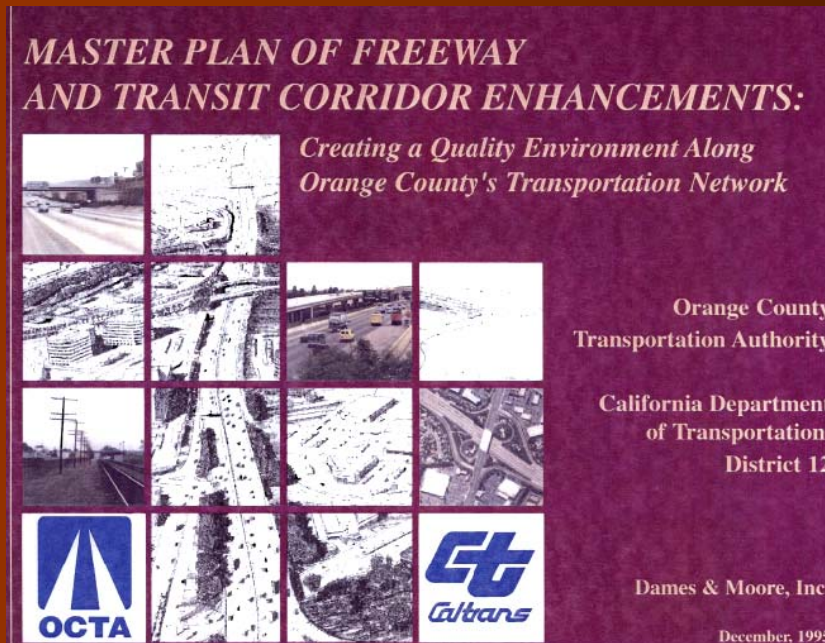


❖ Freeway Master Plans



❖ Freeway Master Plan

- ❑ **Master Plan of Freeway and Transit Corridor Enhancements:** Creating a quality environment along Orange County's Transportation Network



❖ Corridor Aesthetic Considerations

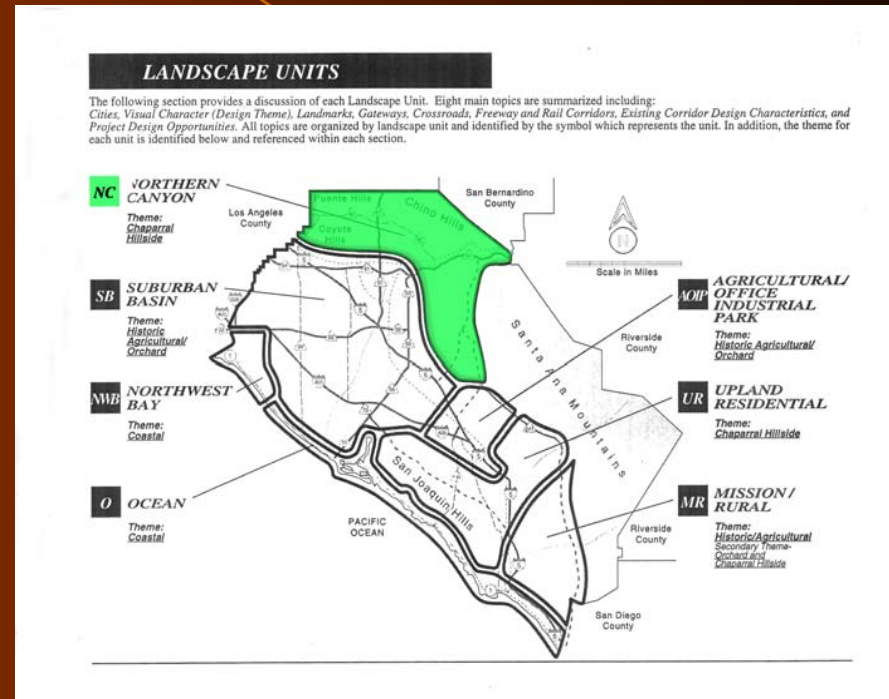


❑ Master Plan of Freeway and Transit Corridor Enhancements:

- Northern Canyon
- Suburban Basin
- Northwest Bay
- Agricultural/ Office Industrial Park
- Ocean
- Upland Residential
- Mission/Rural

• Northern Canyon

- Route 57
- Route 90
- Route 91



• Northern Canyon



Design Theme Chaparral Hillside

• Aesthetic Treatment

✓ Natural Elements

• Landscape Treatment

✓ Natural

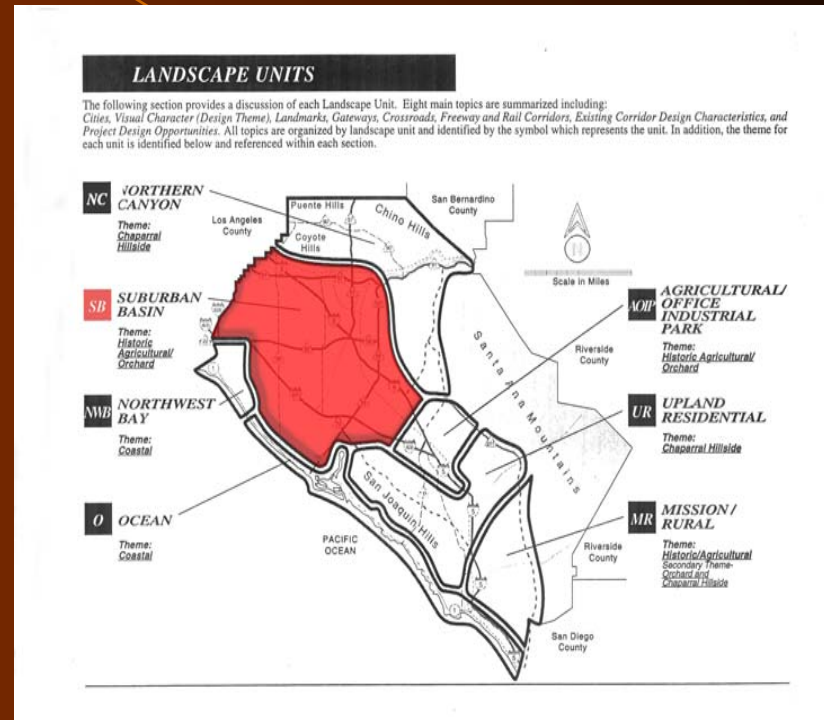
✓ Drought tolerant



• Suburban Basin



- Route 5
- Route 22
- Route 55
- Route 57
- Route 91
- Route 405
- Route 605



• Suburban Basin

Design Theme Historic Agriculture/ Orchard

- **Aesthetic Treatment**

- ✓ Geometric

- **Landscape Treatment**

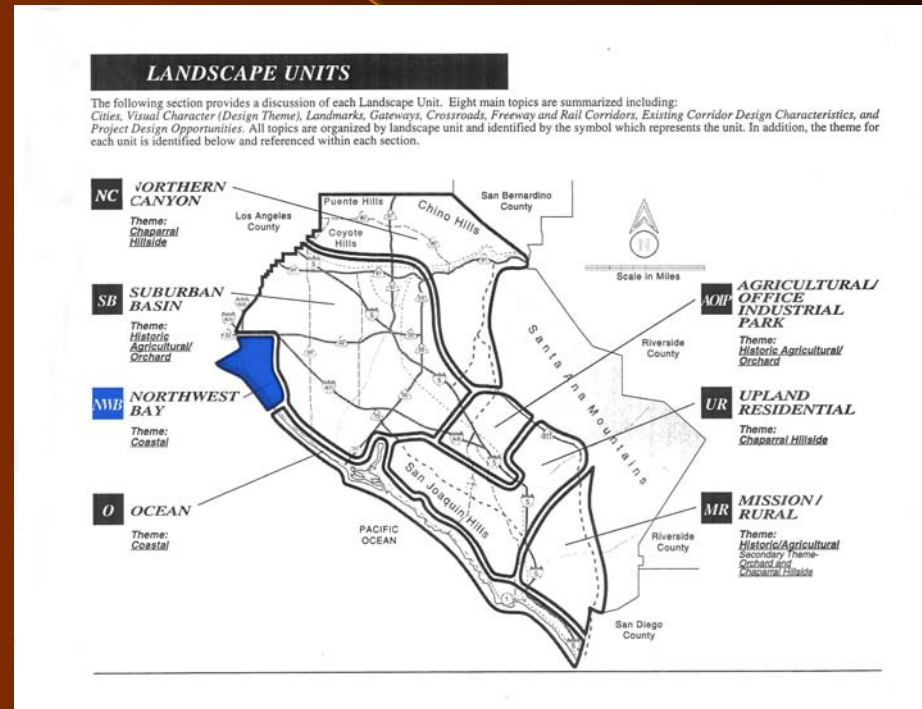
- ✓ Row Pattern

- ✓ Symmetrical



• Northwest Bay

- Route 1
- Route 22
- Route 405



• Northwest Bay



Design Theme Coastal

- **Aesthetic Treatment**

- ✓ Natural

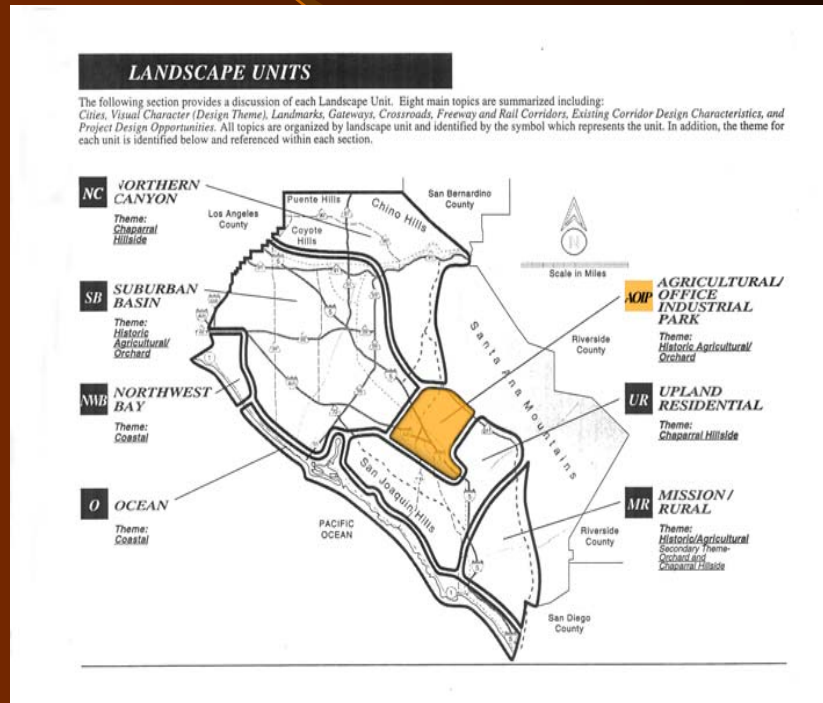
- **Landscape Treatment**

- ✓ Free Form



• Agricultural/ Office Industrial Park

- Route 5
- Route 133
- Route 231 Toll
- Route 241 Toll
- Route 405



• Agricultural/ Office Industrial Park



Design Theme Historic Agriculture/ Orchard

• Aesthetic Treatment

✓ Geometric

• Landscape Treatment

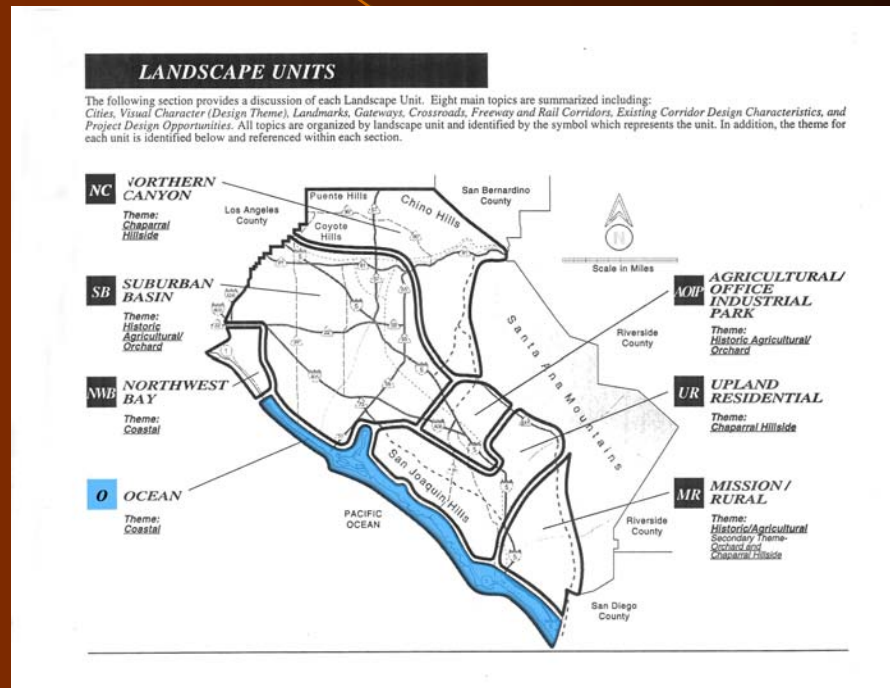
✓ Row Pattern

✓ Symmetrical



• Ocean

- Route 1
- Route 5



- Ocean



Design Theme

Coastal

- Aesthetic Treatment

✓ Natural

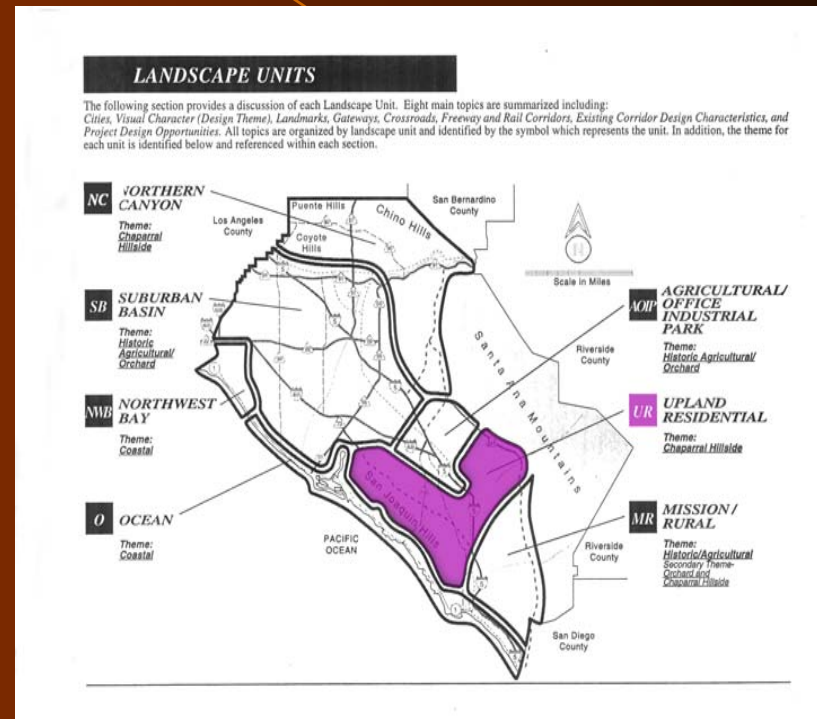
- Landscape Treatment

✓ Free Form



• Upland Residential

- Route 5
- Route 133
- Route 73 Toll
- Route 241 Toll



• Upland Residential

Design Theme Chaparral Hillside

- **Aesthetic Treatment**

- ✓ Natural Elements

- **Landscape Treatment**

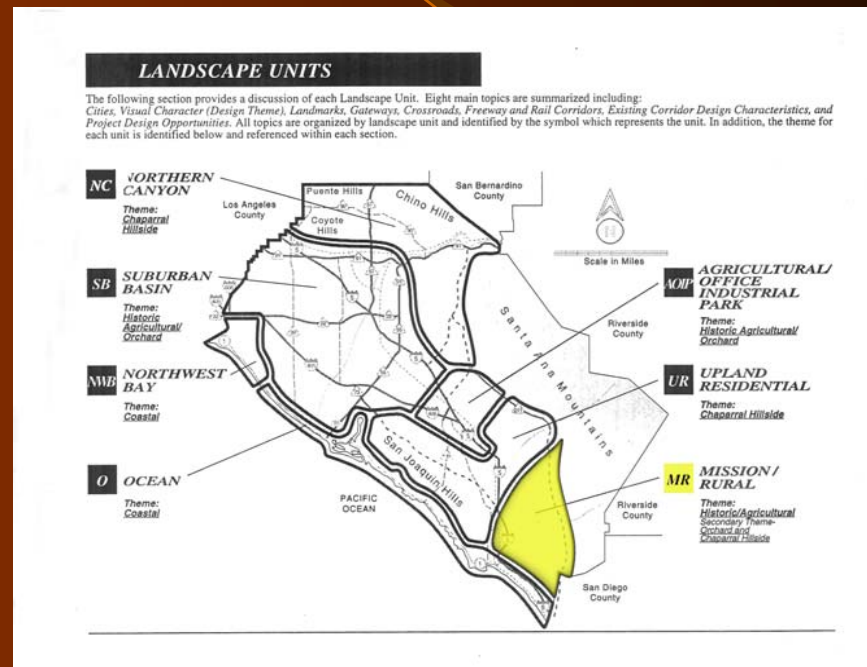
- ✓ Natural

- ✓ Drought tolerant



Mission/ Rural

- Route 5
- Route 241 Toll



- Mission/ Rural



Design Theme

Historic /Agricultural

- Aesthetic Treatment

- ✓ Historical

- Landscape Treatment

- ✓ Row Pattern

- ✓ Natural



Route Design Considerations



- **Aesthetic Treatments**



- **Landscape Treatments**



Route 5



Route 22



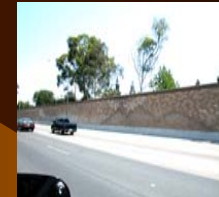
Route 57



Route 5/22/57 Interchange



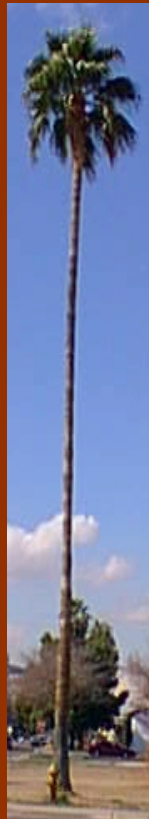
Route 55



Route 405



□ Route 55/405 Interchange



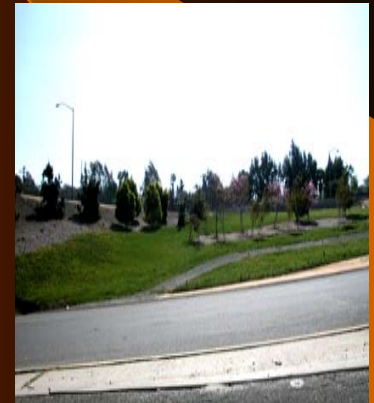
Route 605



Routes 22/405/605 Interchange



Route 91



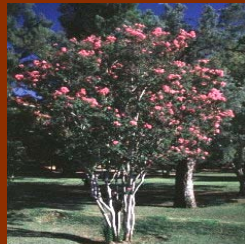
Route 5/91 Interchange



□ Toll Roads



❖ Plant Selection Criteria



- Safety
- Context Sensitivity
- Environmental Analysis
- Cost
- Maintainability

❖ Native Plant Considerations



California Sycamore

- Use when feasible.
- Use for mitigation purposes.
- Sensitive to environmental conditions.



Toyon



Native Grasses



Oaks



California Pepper

❖ Native Plant Considerations



- Dormant/brown in summer.
- Complex to create native micro-climate.
- Flammable.



❖ Drought Considerations



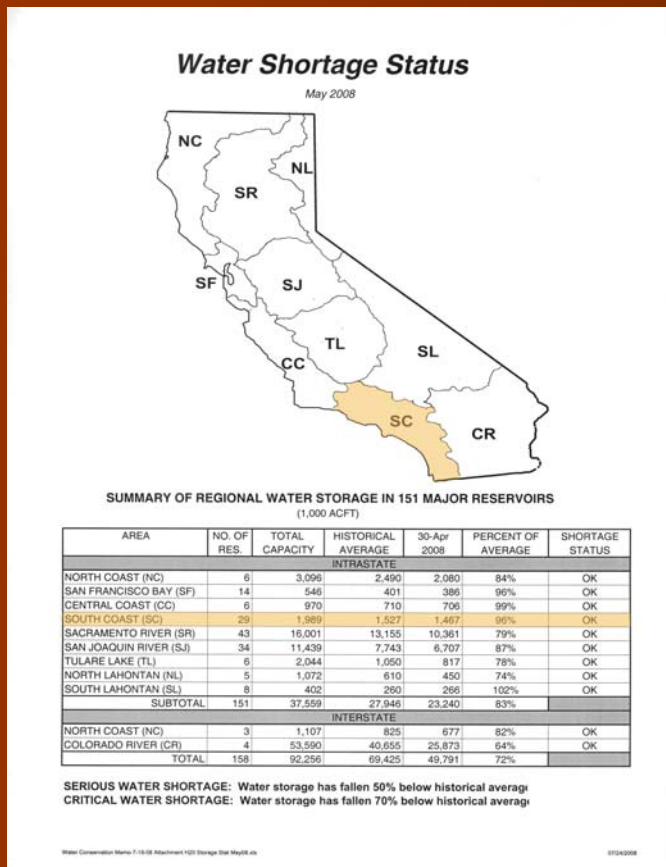
- Caltrans Water Conservation Efforts
 - ✓ Proactive design for drought resistance.
 - ✓ 1993 Deputy Directive to Conserve Water.
 - ✓ 1993 Reclaimed Water Master Plan.
 - ✓ Remote irrigation systems (RICS).
 - ✓ Low water use plants.
 - ✓ Mulch, paving, inert material.



❖ Drought Considerations

- Caltrans Monitors Water Storage

- ✓ Project Development Procedures.
- ✓ Serious water shortage procedures.
- ✓ Critical water shortage procedures.
- ✓ Current water shortage status.



□ Proactive Water Conservation Practice

1993 Director's Water Conservation Honor

Category : Water Management

Utilization of Proactive Management Strategies

Presented to :

District 12

“District’s ‘can-do’ attitude and aggressive efforts to negotiate feasible reclaimed water agreements with local agencies resulted in substantial potable water savings.”




Director, Department of Transportation

