ITEM 2

ENVIRONMENTAL BOARD MEETING MINUTES Wednesday, September 17, 2008,

ENVIRONMENTAL BOARD REGULAR MEETING MINUTES WEDNESDAY, September 17, 2008.

The Environmental Board convened in a regular meeting on Wednesday, September 17, 2008, City Council Chambers at 301 W. Second Street, Austin, Texas 78704

Board Members in Attendance:
Dave Anderson, Jon Beall, Phil Moncada and Mary Ann Neely

Staff in Attendance:
Marilla Shepherd, Ingrid McDonald, Patricia Foran, Craig Carson, Scott Hiers and Brad Jackson

DRAFT

CALL TO ORDER
Chair Dave Anderson called the Board Meeting to order at 6:25 p.m.

1. CITIZEN COMMUNICATIONS: GENERAL
a. **Carol Torgrimson spoke on item 4a Service Extension Request for Vaught Ranch Road. Water 2768 and Wastewater #2769**

2. APPROVAL OF MINUTES
Approve the minutes of the September 10, 2008 regular meeting.

The Minutes for the regular meeting on September 10, 2008 were approved on Board member Phil Moncadas' motion and Board member Neely's second [Vote 4-0] one vacancy and Board member Maxwell and Board member Ahart absent.

3. PUBLIC HEARINGS DISCUSSION AND ACTION ON DEVELOPMENT CASES

a. **Name: Wildflower Commons PUD C814-06-0233**
Applicant: Drenner & Golden Stuart Wolff, LLP
Location: 4700 – 5200 Blocks of State Highway 45
Staff Person: Patricia Foran – Watershed Protection and Development Review Department
Request: Applicant is requesting PUD zoning for the property with the following exceptions: 1) LDC 25-8-65 (Roadways) to not account for the

roadway deduction; 2) LDC 25-8-262(B)(3)(b) (Critical Water Quality Zone Street Crossings) to allow one crossing; 3) LDC 25-8-341 (Cut Requirements) per cut/fill exhibit; 4) LDC 25-8-342 (Fill Requirements) per cut/fill exhibit; 5) LDC 25-8-482 (Critical Water Quality Zone) to allow one driveway or roadway; 6) LDC 25-8-483(A)(1) (Water Quality Transition Zone) to allow one driveway or roadway; 7) LDC 25-1-21(98) (Definitions) to revise the definition of "site"; and 8) LDC 25-4-157(B) (Subdivision Access Streets) to provide only one access to an external street. The land in the PUD is within the area known as the Barton Springs Zone in which the City's Save Our Springs (SOS) ordinance applies. Application of City ordinances to development of the land is affected by the "Settlement Agreement by and Between the City of Austin and the Bradley Parties" (commonly known as the Bradley Agreement) that ended litigation over development of the land in 2000. PUD zoning may also modify City ordinances applicable to development of the land.
Staff Recommendation: Recommended

Wildflower Commons PUD, this item was withdrawn by Pat Murphy, Environmental Officer, due to no quorum and will be posted on the September 17, 2008 Environmental Board agenda.

b. **Name: Bulldog Storage SP-2007-0673D**
Applicant: Possner and Associates, Inc. (Kurt Possner)
Location: 4221 N. FM 620 Road
Staff Person: Craig Carson- Watershed Protection and Development Review Department
Request: Variance request to Land Development Code Section 25-8-342 1) To allow fill up to 12 feet.
Staff Recommendation: Recommended

The Environmental Board recommended conditional approval to a variance request to LDC 25-8-341 1) To allow fill up to 12 feet. STAFF CONDITIONS: 1. Only clean fill of soil, dirt, rock, sand or other natural man-made materials are to be used as fill on the site; and 2. Submittal and City approval of a Pollution Attenuation Plan for the site must be obtained prior to site plan approval; and 3. All trees over 8 caliper inches will be mitigated for and replaced with Class 1 native tress; and 4. All fill over four feet will be structurally contained. RATIONALE; Findings of fact have been met. This project is constrained by the construction of FM 620 and fill is necessary for safe access of FM 620. No portion of site drains to Lake Austin, which is on half mile away. Motion approved on Board member Phil Moncada and seconded by Board member Jon Beall [Vote 4-0] one vacancy and Board members Ahart and Maxwell absent.

c. **Name: Munson Park Commercial Project SP-2008-0088D**
Applicant: Urban Design Group (Laura Toups, P. E.)
Location: 320 South Capital of Texas Highway (Loop 360)

Staff Person: Brad Jackson- Watershed Protection and Development Review Department
Request: Variance request to Land Development Code Section 25-8-341/342; LAO 9-10 409 1) To allow cut/fill over four feet.
Staff Recommendation: Item submitted for consent.

The Environmental Board recommended the following case be approved by consent, with no staff conditions and no board conditions listed for Munson Park Commercial Project SP-2008-0088D.Motion approved on Board member Dave Anderson and Seconded by Board member Phil Moncada [Vote 4-0] on vacancy, and Board member Ahart and Maxwell absent.

4. ACTION ITEMS

a. Service Extension Request for Vaught Ranch Road. Water 2768 and Wastewater #2769- Robbie Botto- Watershed Protection and Development Review Department.

The Environmental Board disapproved a service extension request for Vaught Ranch Road #2768 Water and #2769 Wastewater. RATIONALE; This site is adjacent to Bull Creek and proposed developments runoff would discharge directly to Bull Creek. This is not an environmentally sound project with a proposed service station. This subject tract is not served by the Certificate of Convience and Necessity (C. C. N). Motion approved on Board member Phil Monada and Seconded by Board member Jon Beall [Vote 4-0] on vacancy and Board member Ahart and Maxwell absent.

DRAFT

5. OLD BUSINESS

a. Joint Environmental/Parks Board Subcommittee Update – Dave Anderson, P.E.

Board Member Anderson and Beall reported on this item.

b. Erosion and Sedimentation Controls Update – Dave Anderson, P.E.

Board member Anderson reported on this item.

c. Balcones Canyonlands Conservation Plan Citizens Advisory Group Update – Mary Ann Neely

Board Member Neely reported on this item.

d. Waterfront Overlay Taskforce – Dr. Mary Gay Maxwell

No report on this item.

e. 2008 Work Plan Review –Dave Anderson, P. E.

No report on this item.

6. NEW BUSINESS

Request for future agenda items:

1. Board Member Neely requested a report on the landscape improvement on Barton Springs Road for the October 1, 2008 Environmental Board meeting.

7. ADJOURNMENT

Meeting adjourned at 7:30 P.M.

ENVIRONMENTAL BOARD MOTION 091708 3b-001

Date: September 17 2008

Subject: Bull Dog Storage SP-2007-0673D

Motioned By: Phil Moncada Seconded By: Jon Beall

The Environmental Board recommended conditional approval to a variance request to LDC 25-8-341 1) To allow fill up to 12 feet.

STAFF CONDITIONS:

1. Only clean fill of soil, dirt, rock, sand or other natural man-made materials are to be used as fill on the site.
2. Submittal and City approval of a Pollution Attenuation Plan for the site must be obtained prior to site plan approval;
3. All trees over 8 caliper inches will be mitigated for and replaced with Class 1 native tress.
4. All fill over four feet will be structurally contained.

RATIONALE;

Findings of fact have been met. This project is constrained by the construction of FM 620 and fill is necessary for safe access of FM 620. No portion of site drains to Lake Austin, which is on half mile away.

Vote 4-0-0-2

For: Ahart, Anderson, Beall, and Neely

Against:

Abstain: None

Absent: Ahart and Maxwell

Recused:

Vacant: One.

Approved By:

Dave Anderson P.E., CFM, Chair

DRAFT

ENVIRONMENTAL BOARD MOTION 091708 4a-001

Date: September 17 2008

Subject: Vaugh Ranch Road Service Extension Requests #2768 Water and #2769 Wastewater

Motioned By: Phil Moncada Seconded By: Jon Beall

The Environmental Board recommended **disapproval** of **a** service extension request for Vaught Ranch Road #2768 Water and #2769 Wastewater.

RATIONALE; This site is adjacent to Bull Creek and proposed developments runoff would discharge directly to Bull Creek. This is not an environmentally sound project with a proposed service station.
This subject tract is not served by the Certificate of Convenience and Necessity

Vote 4-0-0-2

For: Ahart, Anderson, Beall, and Neely

Against:

Abstain: None

Absent: Ahart and Maxwell

Recused:

Vacant: One.

Approved By:

Dave Anderson P.E., CFM, Chair

Agenda Item 4a
Part a.

Water Treatment Plant 4

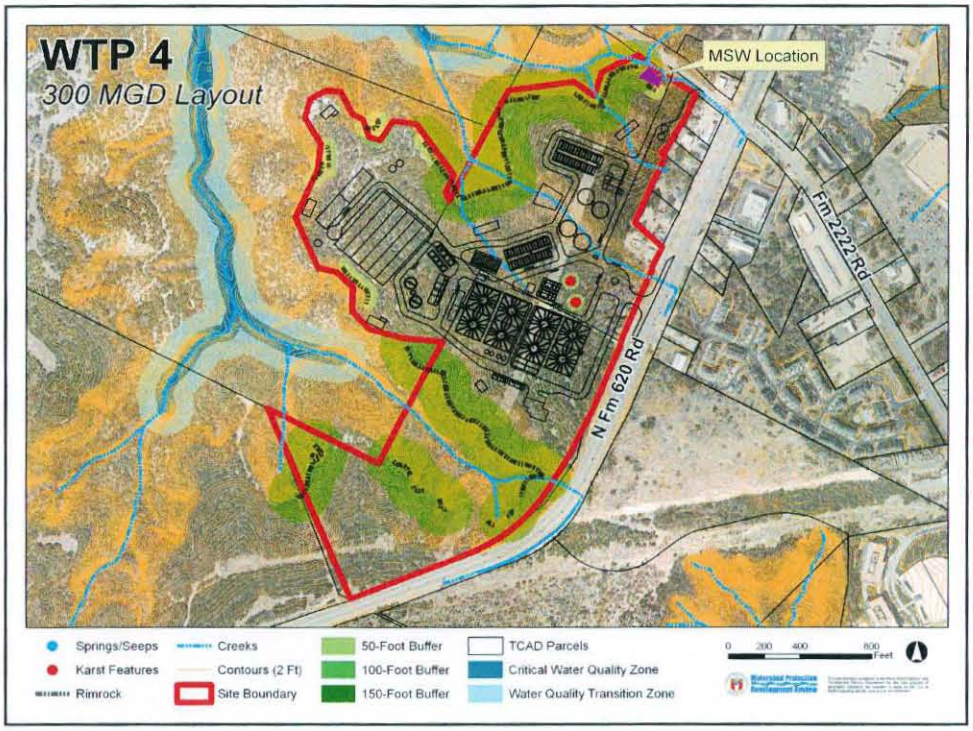
Quarterly Briefing
Environmental Board
October 1, 2008

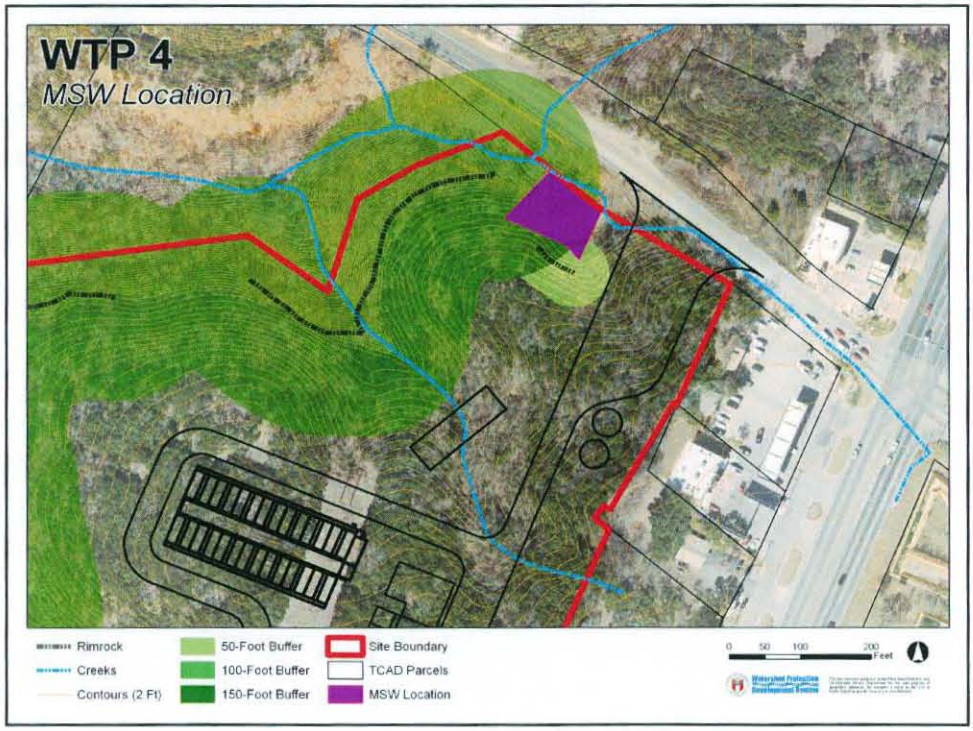
Water Treatment Plant 4 WTP 4

Austin WATER

Environmental Commissioning

- Site Development Ordinance
  - No variances granted
- EC Plan update
- EC Contract - sub consultant added
- EC Project Coordinator integrated into final design process
- Bullick Hollow Site Restoration Project


WTP 4
300 MGD Layout
MSW Location
Fm 2222 Rd
N Fm 620 Rd
Springs/Seeps
Karst Features
Rimrock
Creeks
Contours (2 Ft)
Site Boundary
50-Foot Buffer
100-Foot Buffer
150-Foot Buffer
TCAD Parcels
Critical Water Quality Zone
Water Quality Transition Zone
0 200 400 800 Feet


WTP 4
MSW Location
Rimrock
Creeks
Contours (2 Ft)
50-Foot Buffer
100-Foot Buffer
150-Foot Buffer
Site Boundary
TCAD Parcels
MSW Location
0 50 100 200 Feet

Project Overview

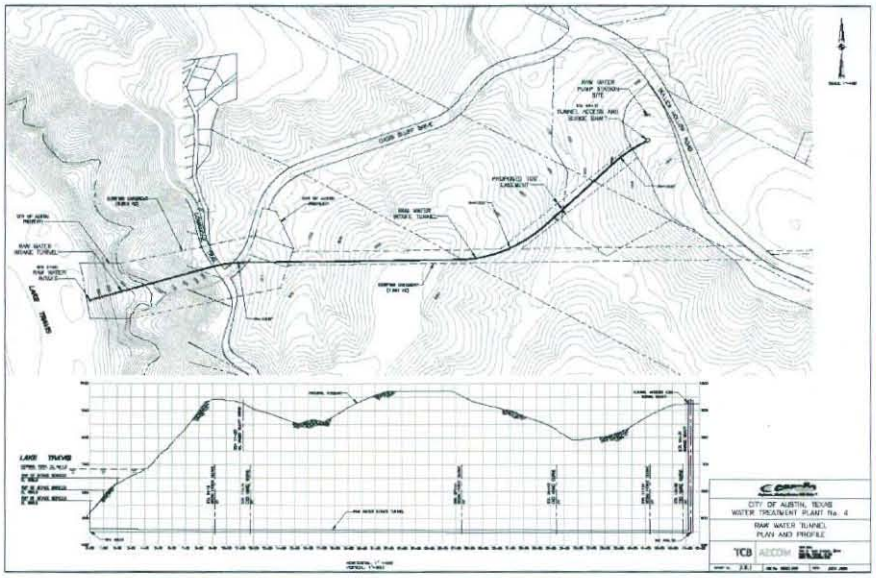
- Design and Construct a 50 MGD WTP with future expansion planned to 300 MGD.
  - Facilities Include: RW Intake and Pump Station, all Plant Treatment facilities, Finished Water Pump Station, Electrical sub-stations, and all site related improvements (roads, storm water facilities, security, etc.)
- Have on-line by the Summer of 2014

Facilities Overview

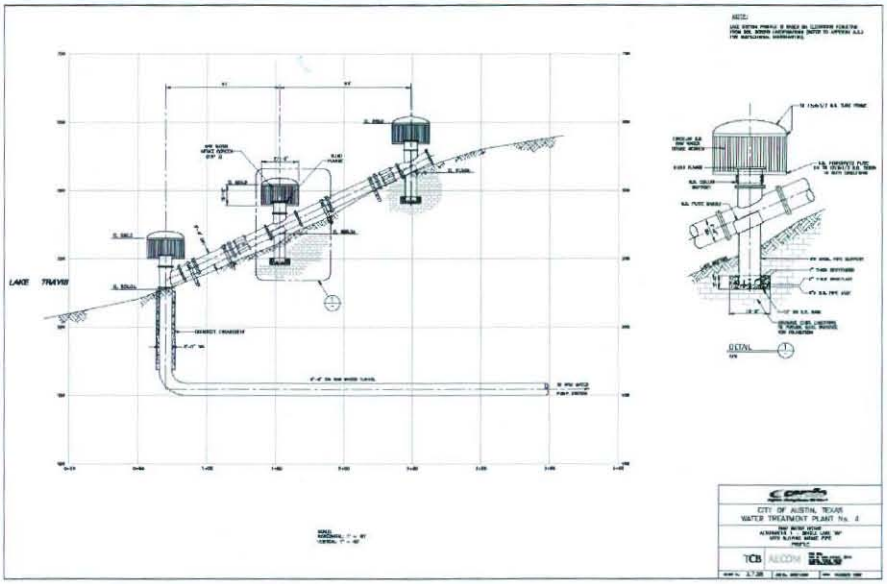
- Raw Water Intake, Tunnels & Pump Station
  - Hydraulic capacities and layout
- Water Treatment Plant Facilities
  - Site Layout (Phase 1 and Ultimate 300 MGD)
- Finished Water TMs (two separate consultant contracts)

WTP 4 Overview

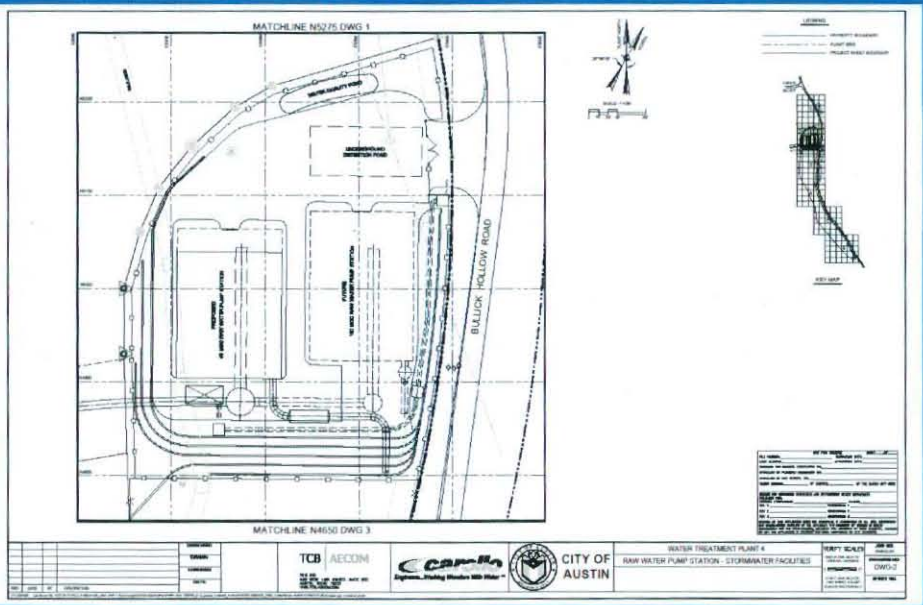
Intake to RWPS



Raw Water Intake

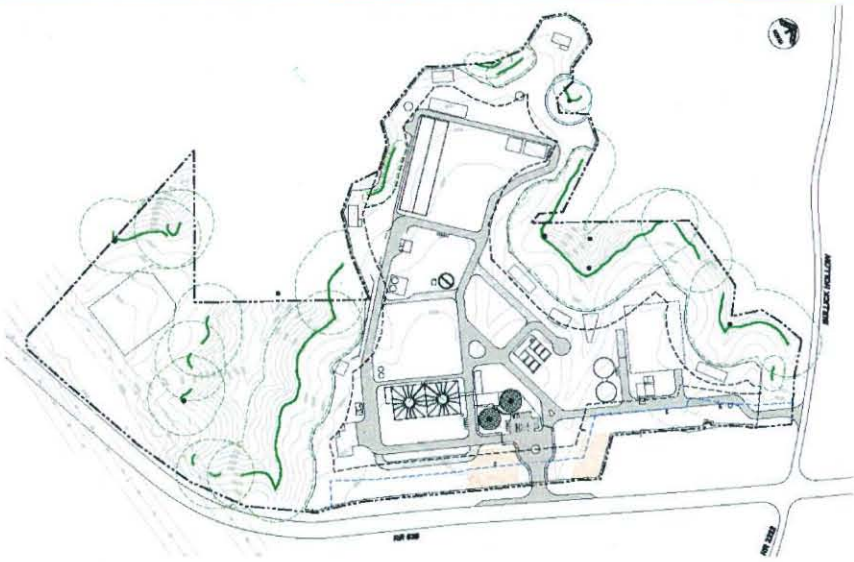


RWPS Site Plan



Agenda Item 4a
Part b.

WTP Site Layout (50 MGD)



WTP Site Layout (300 MGD)

Engineering – Recent Activities

- Final Design started in August
- Tree and Topographical Surveys are ongoing
- Geotechnical Boring – All planned shallow bores are complete at the Plant Site, RWPS Site, and at the RW Intake
- Fence bid package is complete

Engineering – Recent Activities

- Various Project coordination meetings held with TCEQ, Travis County, AE, and PEC
- Site visit to Southern Nevada Water Authority Water Treatment facilities (Lake Mead)
- LEED Workshop held. Administration and Maintenance Buildings will be LEED Silver certified

Engineering – Upcoming Activities

- Finalize all survey (October) and proceed with deep bore geotechnical investigations on the Plant & RWPS sites and ROW.
- Site Temporary Fencing
  - Bid October 2008; Construct Early 2009
- Ongoing Design efforts & coordination

Engineering – Upcoming Activities

- Authorize the Negotiation and Contract Execution for the WTP 4 Finished Water Transmission Mains
  - Jollyville TM – Council date September 25
  - Forest Ridge TM – Council date October 23
- Continued Water Quality Sampling at Lake Travis

Public Communications

- Members of the Project Team plan to meet with local businesses on October 2nd to discuss project scope and timelines
- Fall Newsletter will be issued by the end of this month
- Ongoing updates being published to the WTP 4 website

Questions?

info@wtpfour.com
http://www.ci.austin.tx.us/water/wtpfour.htm

Water Treatment Plant 4

Austin WATER

Item # 4d Part A

Barton Springs Bike Lanes Project, regulatory approvals and signoffs

Approximately 48 approvals are needed from various reviewers, agencies, boards and commissions. Any changes in the plans can trigger a new review by someone who has already given their approval.

City of Austin

- Parks and Recreation, Director
- Parks and Recreation, Planning Coordinator
- Parks and Recreation, Land and Facilities Board (recommendation)
- Parks and Recreation Board
- City of Austin, Historic Officer
- Austin Energy
- Austin Water Utility
- Urban Transportation Commission (recommendation)
- Planning Commission (Conditional Use Permit)
- City Council (advance funding agreement, multiple use agreement, construction contract)
- Watershed Protection and Development Review
  - Site Planner
  - Transportation Planner
  - Environmental
  - Water Quality Engineer
  - Drainage Engineer
- Public Works Department
  - Traffic Engineer
  - Project Manager
  - Street & Bridge Engineer
- TxDOT sign-off

Texas Department of Transportation, Austin District

- District Engineer
- District Design Engineer (Pat Crews-Weight)
- Plan Reviewer (Kevin Kirchoff)
- Landscape Reviewer (Kerry Blackmon)
- Environmental Coordinator (Mike Walker)
- Julie Perales (environmental)

Texas Department of Transportation, Downtown Divisions

- Design
- Bridge
- Traffic
- Construction
- DBE

Texas Department of Transportation, Maintenance Division

- Multiple Use Agreement (Wayne Rehnborg).

Texas Transportation Commission

Texas Department of Licensing and Regulation
Laura Montes, plan reviewer

CAMPO
Approvals and listed in TIP and STIP

Texas Department of Transportation, Environmental Affairs
Biological Resources (Karen Clary)
Project Management (Julia Ragsdale)
Archeological Studies
Historic Studies (Renee Benn, Daniel Harris)
Pollution Prevention and Abatement

Texas Historic Commission (via TxDOT)
Archeology Division Review (Mark Denton)
History Division Review (Adrienne Campbell)
Director Concurrence letter

US Fish & Wildlife (via TxDOT)
Director concurrence letter

Texas Commission on Environmental Quality
Director concurrence letter

Texas Parks & Wildlife (via TxDOT)
Endangered Species Section
Woody Plants

Landscaping for the Barton Springs Bicycle Lanes Project

The plans provided show the extent of the landscaping that is planned for this project. The improvements are located inside of Zilker Park since most of the improvements are within the parks limits.

The plans call for installation of 15 **Comanche Crape Myrtles** to be installed along the pedestrian walkway to complement and augment existing Crape Myrtles already in bloom on the west side of the park parallel to the disk golf course.

In addition to the Crape Myrtles being installed, there are a number of **Dark Cloud Desert Willow** and **Mexican Buckeye** planting being installed (16 and 15 respectively).

All three of these the Crape Myrtles, Dark Cloud Desert Willow and the Mexican Buckeye were chosen for installation for aesthetics and to complement the existing vegetation already existing in the park. They are also serving another purpose to create a buffer between the disk golfer and the walking pedestrians in the park that will use the new walkway.

On the east side of the park seven **Barbados Cherry** shrubs will be added to create a buffer between the vehicular traffic on Barton Springs Road and the pedestrians using the new walkway.

In addition to those features mentioned, **St Augustine Solid Sod grass** is being added to the area between the two new walkways adjacent to the picnic tables in the Pecan Grove area. The remaining disturbed areas disturb by construction will be hydromulched using native **Bermuda grass hydromulch** to allow for vegetation to grow back in the park.

The design team look at other ground cover options for the area around the Pecan Grove trees. This area is well shaded. With this in mind our Landscape Architect proposed a Horseherb ground cover it is drought tolerant and pest free. The plant grows to about 8-inch in height and spreads approximately 1-foot out from the center. It is a native Texas plant that requires low water usage.

The second option was Frog Fruit (Phyla nodiflora). Although it produced a tiny lilac flower it required more watering than the Horseherb ground cover. Ultimatly both were not chosen because of cost. These and other type of ground cover were at least twice the budget of the sod and hydromulching.

UNIVERSITY OF FLORIDA
Cooperative Extension Service
Institute of Food and Agricultural Sciences

Fact Sheet FPS-324
October, 1999

Lagerstroemia x 'Comanche'[1]

Edward F. Gilman[2]

Introduction

A long period of striking summer flower color, attractive fall foliage, and good drought-tolerance all combine to make Crape-Myrtle a favorite small tree for either formal or informal landscapes (Fig. 1). It is highly recommended for planting in urban and suburban areas.

General Information

Scientific name: *Lagerstroemia x* 'Comanche'
Pronunciation: lay-gur-STREE-mee-uh
Common name(s): 'Comanche' Crapemyrtle
Family: *Lythraceae*
Plant type: tree
USDA hardiness zones: 7 through 9 (Fig. 2)
Planting month for zone 7: year round
Planting month for zone 8: year round
Planting month for zone 9: year round
Origin: not native to North America
Uses: specimen; near a deck or patio; border; container or above-ground planter; trained as a standard; small parking lot islands (< 100 square feet in size); medium-sized parking lot islands (100-200 square feet in size); large parking lot islands (> 200 square feet in size); narrow tree lawns (3-4 feet wide); medium-sized tree lawns (4-6 feet wide); wide tree lawns (>6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway
Availablity: generally available in many areas within its hardiness range

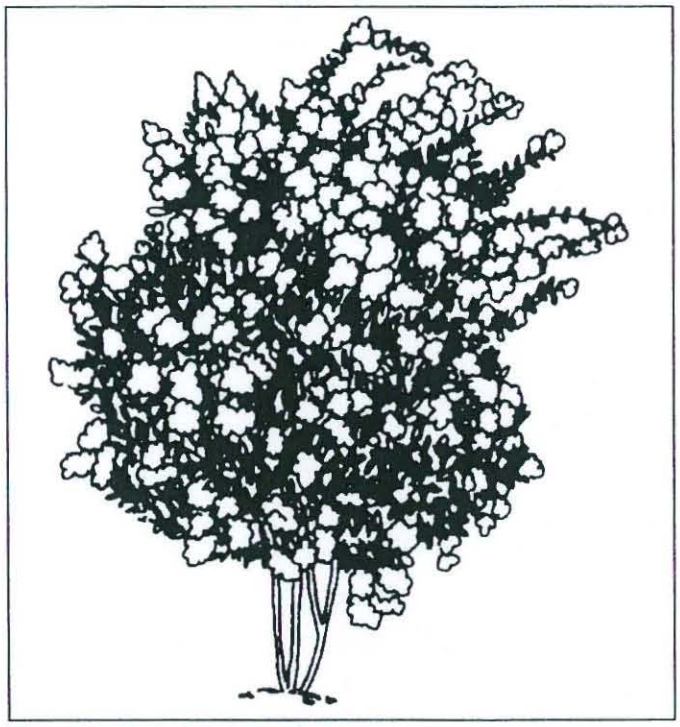


Figure 1. 'Comanche' Crapemyrtle.

Description

Height: 10 to 15 feet
Spread: 10 to 15 feet
Plant habit: spreading; round
Plant density: moderate
Growth rate: slow
Texture: medium

1. This document is Fact Sheet FPS-324, one of a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October, 1999 Please visit the EDIS Web site at http://edis.ifas.ufl.edu.

2. Edward F. Gilman, professor, Environmental Horticulture Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

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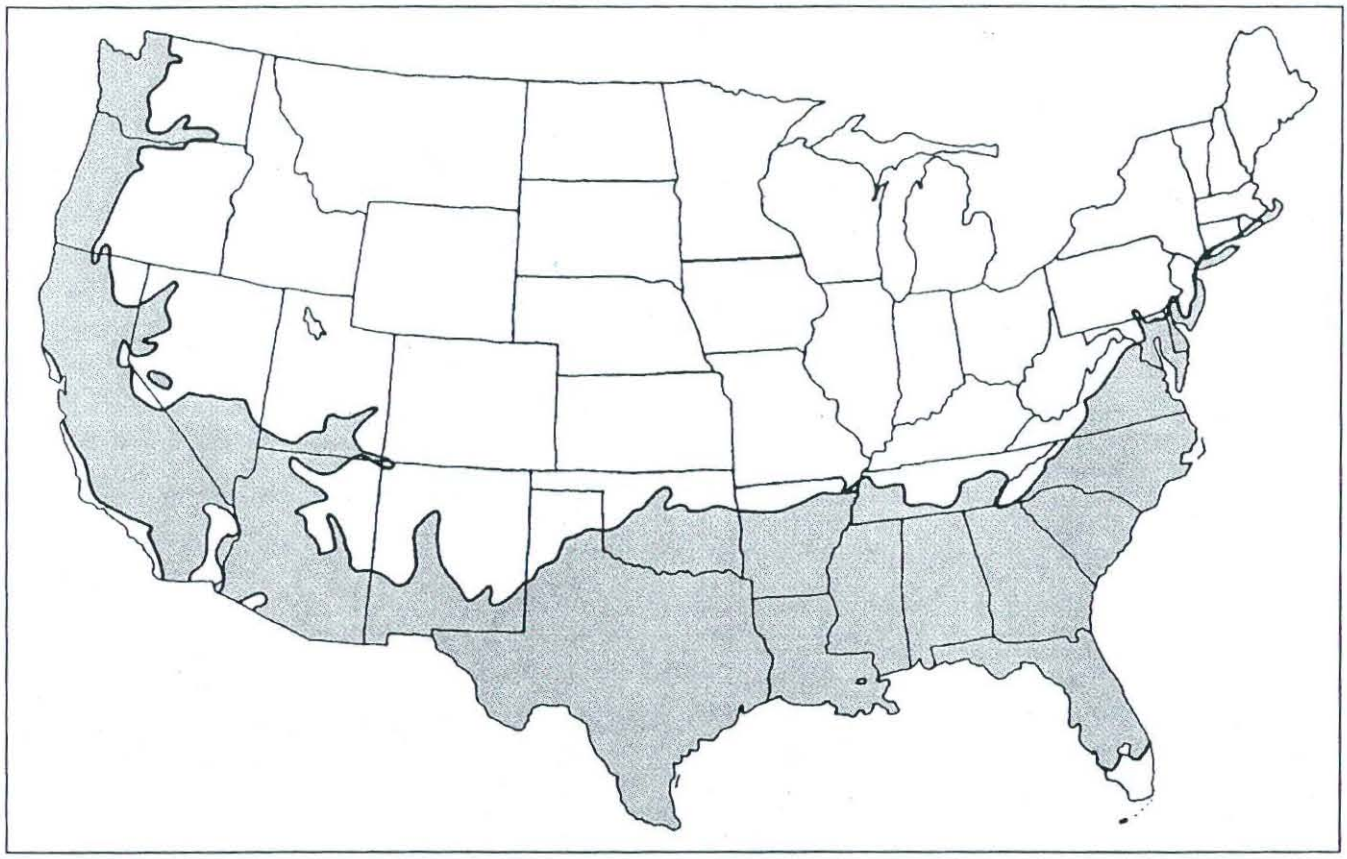


Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate
Leaf type: simple
Leaf margin: entire
Leaf shape: oblong; obovate
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: red; purple
Fall characteristic: showy

Flower

Flower color: pink
Flower characteristic: summer flowering

Fruit

Fruit shape: oval
Fruit length: .5 to 1 inch
Fruit cover: dry or hard
Fruit color: brown
Fruit characteristic: persists on the plant

Trunk and Branches

Trunk/bark/branches: showy; no thorns; can be trained to grow with a short, single trunk
Current year stem/twig color: brown
Current year stem/twig thickness: thin

Culture

Light requirement: plant grows in full sun
Soil tolerances: slightly alkaline; clay; sand; acidic; loam
Drought tolerance: high
Soil salt tolerances: unknown
Plant spacing: 36 to 60 inches

Other

Roots: usually not a problem
Winter interest: plant has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers
Outstanding plant: not particularly outstanding
Invasive potential: not known to be invasive
Pest resistance: long-term health usually not affected by pests

Use and Management

Available in all shades of white, pink, red, or lavender, the 6- to 12-inch-long clustered blooms appear on the tips of branches during late spring and summer in USDA hardiness zones 9 and 10, and summer in other areas. The individual flowers are ruffled and crinkly as to appear made of crepe paper. The smooth, peeling bark and multi-branched, open habit of Crape-Myrtle make it ideal for specimen planting where its bright red to orange-colored fall leaves add further interest. Most forms of the tree are upright, upright-spreading, or vase-shaped, spreading out as they ascend. Most tree types grow to 20 to 25 feet tall although there are more dwarf types available. The upright, vase-shaped crown makes the tall-growing selections well-suited for street tree planting.

Pruning should be done in late winter or early in the spring before growth begins because it is easier to see which branches to prune. New growth can be pinched during the growing season to increase branchiness and flower number. Pruning methods vary from topping to cutting Crape-Myrtle nearly to the ground each spring to the removal of dead wood and old flower stalks only. Topping creates several long, thin branches from each cut which droop down under the weight of the flowers. This practice disfigures the nice trunk and branch structure. Lower branches are often thinned to show off the trunk form and color. You can remove the spent flower heads to encourage a second flush of flowers and to prevent formation of the brown fruits. Since cultivars are now available in a wide range of growth heights, severe pruning should not be necessary to control size. Severe pruning or topping can stimulate basal sprouting which can become a constant nuisance, requiring regular removal. Some trees sprout from the base of the trunk and roots even without severe heading. This can be a maintenance nuisance.

Crape-Myrtle grows best in full sun with rich, moist soil but will tolerate less hospitable positions in the landscape just as well, once it becomes established. It grows well in limited soil spaces in urban areas such as along boulevards, in parking lots, and in small pavement cutouts if provided with some irrigation until well established. They tolerate clay and alkaline soil well. However, the flowers of some selections may stain car paint. Insect pests are few but Crape-Myrtle is susceptible to powdery mildew damage, especially when planted in some shade or when the leaves are kept moist. There are new cultivars (many developed by the USDA) available which are resistant to powdery mildew and aphids.

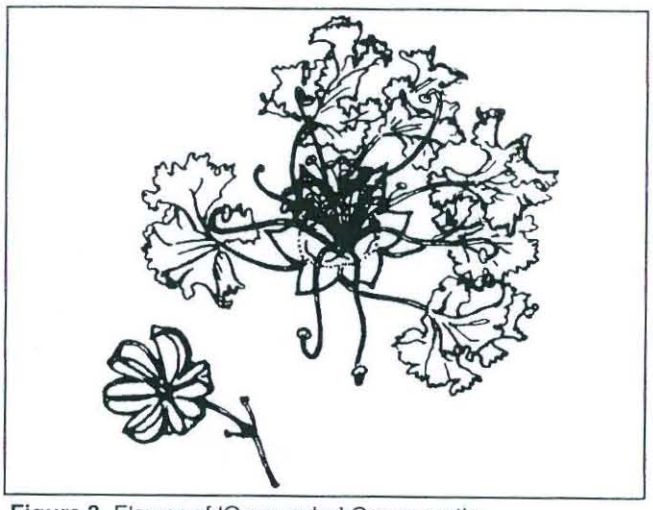


Figure 3. Flower of 'Comanche' Crapemyrtle

Many cultivars of Crape-Myrtle are available: hybrid 'Acoma', 14 to 16 feet tall, white flowers, purple-red fall foliage, mildew resistant; hybrid 'Biloxi', 25 feet tall, pale pink blooms, orange-red fall foliage, hardy and mildew resistant; 'Cherokee', 10 to 12 feet, bright red flowers; `Powhatan', 14 to 20 feet, clear yellow fall foliage, medium purple flowers. The hybrid cultivars 'Natchez', 30 feet tall, pure white flowers, resistant to aphids, one of the best Crape-Myrtles; 'Muskogee', 24 feet tall, light lavender flowers, and 'Tuscarora', 16 feet tall, dark coral pink blooms, are hybrids between *Lagerstroemia indica* and *Lagerstroemia fauriei* and have greater resistance to mildew. The cultivar 'Crape-Myrtlettes' have the same color range as the species but only grow to three to four feet high. The National Arboretum releases are generally superior because they have been selected for their disease resistance. These releases may prove more resistant to powdery mildew in the Deep South, although further testing needs to be done to confirm this.

Propagation is by cuttings or seed.

Pests and Diseases

Aphids often infest the new growth causing an unsightly but harmless sooty mold to grow on the foliage. Heavy aphid infestations cause a heavy black sooty mold which detracts from the tree's appearance.

Powdery mildew can severely affect Crape-Myrtle. Select resistant cultivars and hybrids to avoid this disease. Leaf spots are only a minor concern and do not require treatment.

Fact Sheet ST-657
October 1994

Ungnadia speciosa
Mexican-Buckeye[1]

Edward F. Gilman and Dennis G. Watson[2]

INTRODUCTION

Mexican Buckeye is a native North American deciduous tree or large shrub which reaches 20 to 30 feet in height with a spread of 20 feet (Fig. 1). The spreading, irregular crown is composed of many small, upright branches which along with the persistent seedpods and smooth, mottled gray/brown bark helps make Mexican Buckeye an attractive feature in the winter landscape. The pinnately compound, dark green leaves turn a beautiful bright yellow color in fall before dropping. In spring the tree is also quite colorful when the showy, fragrant, purple blooms appear, either just before or with the new, fresh leaves. The showy, three-pod seeds contain sweet seeds which are poisonous. It is reported that children in west Texas have used the round seeds as a substitute for marbles. The seedpods persist on the bare branches throughout the winter.

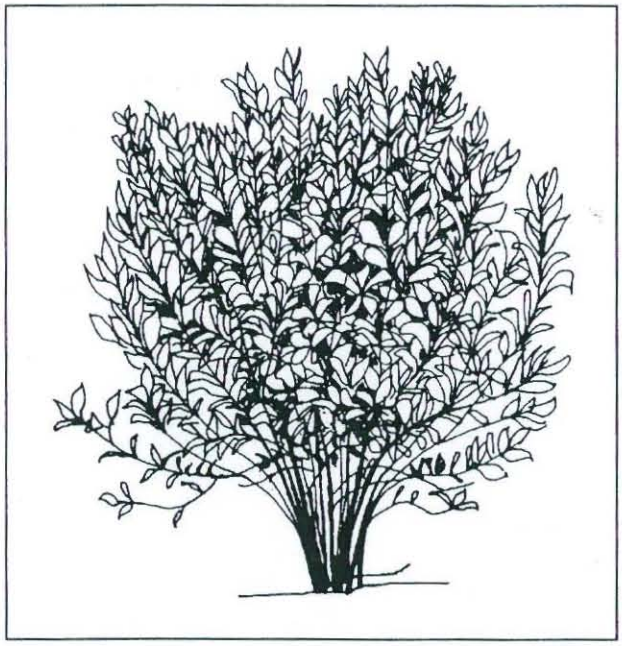


Figure 1. Young Mexican-Buckeye.

GENERAL INFORMATION

Scientific name: *Ungnadia speciosa*
Pronunciation: ung-NAW-dee-uh spee-see-OH-suh
Common name(s): Mexican-Buckeye
Family: *Sapindaceae*
USDA hardiness zones: 7 through 9A (Fig. 2)
Origin: native to North America
Uses: container or above-ground planter; recommended for buffer strips around parking lots or for median strip plantings in the highway; near a deck or patio; specimen; no proven urban tolerance
Availability: grown in small quantities by a small number of nurseries

DESCRIPTION

Height: 20 to 30 feet
Spread: 15 to 20 feet
Crown uniformity: irregular outline or silhouette
Crown shape: oval
Crown density: open
Growth rate: medium
Texture: fine

1. This document is adapted from Fact Sheet ST-657, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.

2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

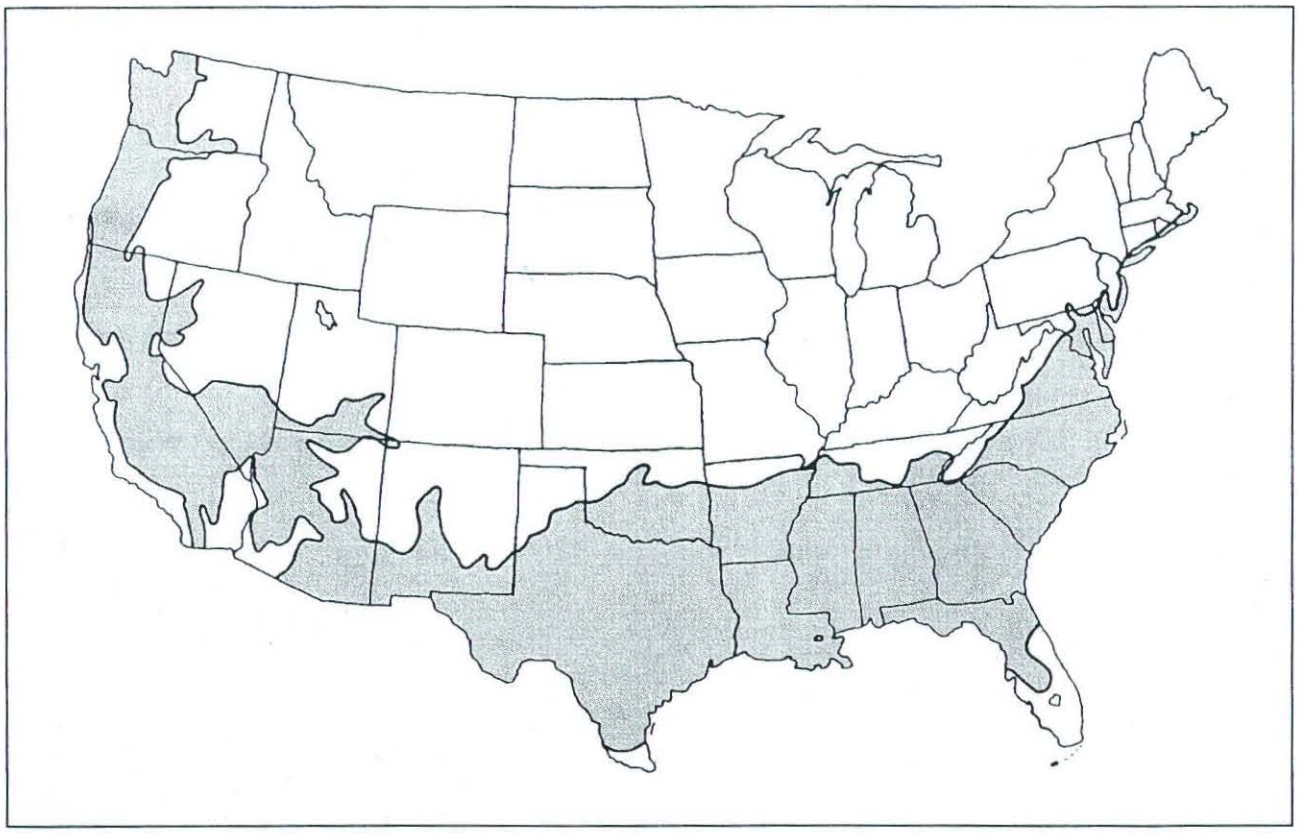


Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: odd pinnately compound
Leaflet margin: crenate; serrulate
Leaflet shape: lanceolate; ovate
Leaflet venation: pinnate
Leaf type and persistence: deciduous
Leaflet blade length: 2 to 4 inches
Leaf color: green
Fall color: yellow
Fall characteristic: showy

Flower

Flower color: pink
Flower characteristics: fall flowering; pleasant fragrance; showy; spring flowering

Fruit

Fruit shape: oval; round
Fruit length: 1 to 3 inches
Fruit covering: fleshy
Fruit color: brown
Fruit characteristics: does not attract wildlife; no significant litter problem; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: routinely grown with, or trainable to be grown with, multiple trunks; grow mostly upright and will not droop; not particularly showy; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns
Pruning requirement: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: brown
Current year twig thickness: thin

Culture

Light requirement: tree grows in part shade/part sun; tree grows in the shade; tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; alkaline; well-drained
Drought tolerance: high

Figure 3. Foliage of Mexican-Buckeye.

Other

Roots: surface roots are usually not a problem
Winter interest: tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers
Outstanding tree: tree has outstanding ornamental features and could be planted more
Invasive potential: little, if any, potential at this time
Pest resistance: no pests are normally seen on the tree

USE AND MANAGEMENT

This small tree is probably best used as a specimen planted for the coarse leaf texture and striking fall color display. It would make a nice tall component in a shrub border or other grouping of shrubs. The corner of a large building could be buffered or softened by this tall shrub or small tree.

Mexican Buckeye should be grown in full sun or partial shade on well-drained soil and prefers moist, alkaline soil. Established trees are quite drought-tolerant.

Propagation is easily done by seed.

Pests and Diseases

No pests or diseases are of major concern.

Item # 4d
Part B

Fact Sheet ST-159
November 1993

Chilopsis linearis
Desert-Willow[1]

Edward F. Gilman and Dennis G. Watson[2]

INTRODUCTION

This native North American tree is well-known in hot, dry areas where the soft, willow-like leaves and beautiful blooms are a welcome relief (Fig. 1). Desert-Willow reaches 30 feet in height and a width of 25 feet, with fairly loose, open branching. The narrow leaves are five to 12 inches long and, although deciduous, provide no appreciable fall color change.

GENERAL INFORMATION

Scientific name: *Chilopsis linearis*
Pronunciation: kye-LOP-sis lin-ee-AIR-iss
Common name(s): Desert-Willow
Family: *Bignoniaceae*
USDA hardiness zones: 7B through 11 (Fig. 2)
Origin: native to North America
Uses: container or above-ground planter; recommended for buffer strips around parking lots or for median strip plantings in the highway; near a deck or patio; reclamation plant; specimen
Availability: somewhat available, may have to go out of the region to find the tree

DESCRIPTION

Height: 20 to 30 feet
Spread: 15 to 25 feet
Crown uniformity: irregular outline or silhouette
Crown shape: round; spreading
Crown density: open
Growth rate: medium
Texture: fine

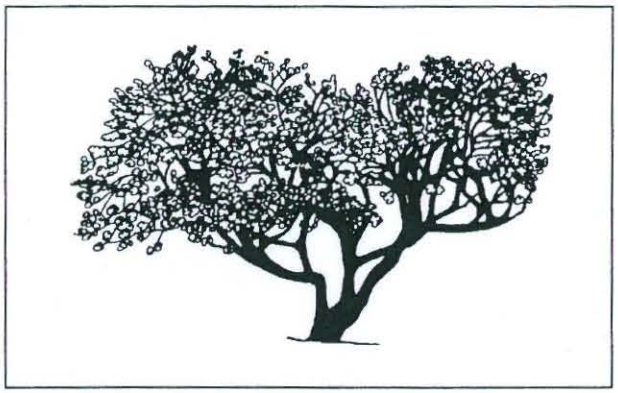


Figure 1. Mature Desert-Willow.

Foliage

Leaf arrangement: alternate; opposite/subopposite (Fig. 3)
Leaf type: simple
Leaf margin: entire
Leaf shape: lanceolate; linear
Leaf venation: parallel; pinnate
Leaf type and persistence: deciduous
Leaf blade length: 8 to 12 inches; 4 to 8 inches
Leaf color: green
Fall color: no fall color change
Fall characteristic: not showy

Flower

Flower color: lavender; pink; white
Flower characteristics: pleasant fragrance; showy; summer flowering

1. This document is adapted from Fact Sheet ST-159, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: November 1993.

2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

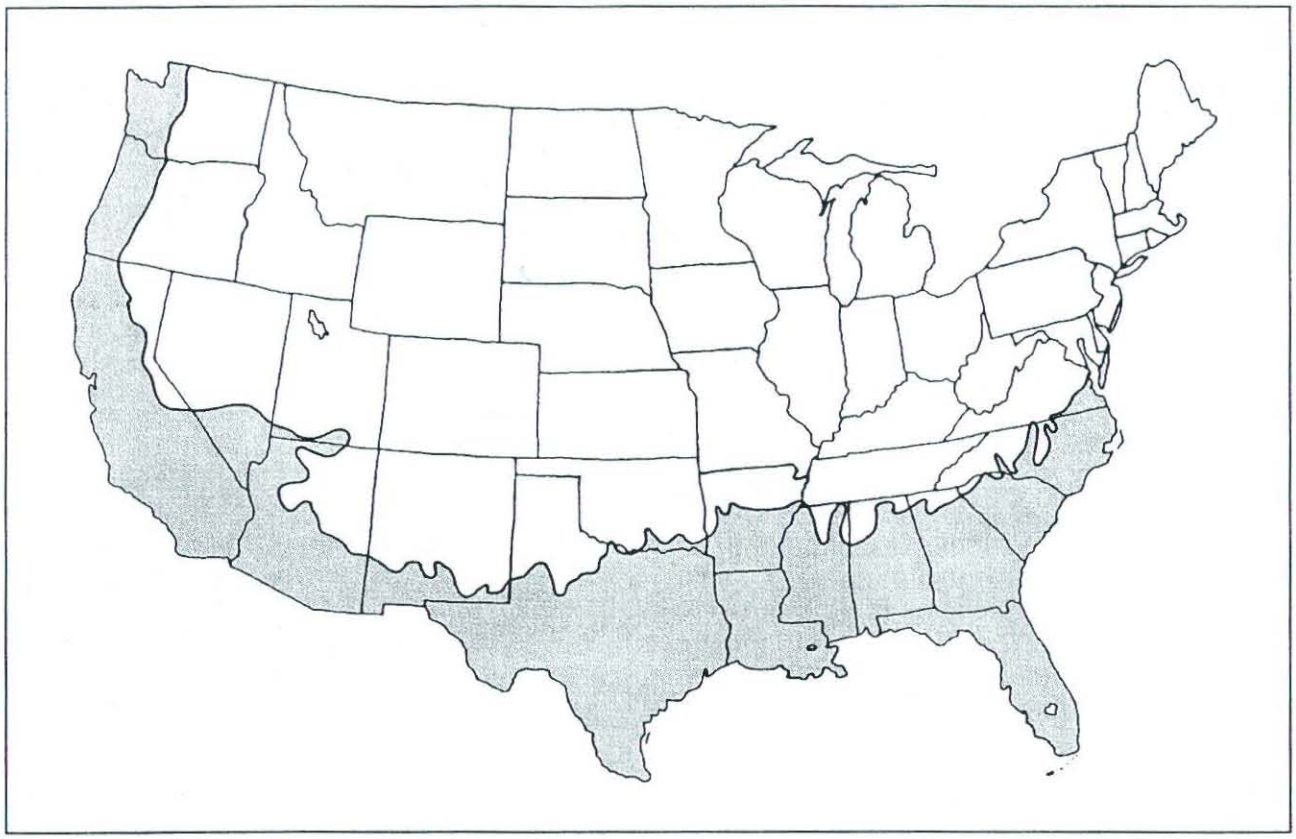


Figure 2. Shaded area represents potential planting range.

Fruit

Fruit shape: elongated
Fruit length: 6 to 12 inches; 3 to 6 inches
Fruit covering: dry or hard
Fruit color: brown; tan
Fruit characteristics: attracts birds; no significant litter problem; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; routinely grown with, or trainable to be grown with, multiple trunks; not particularly showy; tree wants to grow with several trunks but can be trained to grow with a single trunk; no thorns
Pruning requirement: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: green
Current year twig thickness: thin

Culture

Light requirement: tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; alkaline; well-drained
Drought tolerance: high

Other

Roots: surface roots are usually not a problem
Winter interest: no special winter interest
Outstanding tree: tree has outstanding ornamental features and could be planted more
Invasive potential: seeds itself into the landscape
Pest resistance: no pests are normally seen on the tree

USE AND MANAGEMENT

Unlike the weak wood of true willows, the wood of Desert-Willow was used by Indians to craft their hunting bows. The wood has also been used for fence posts, and baskets are often woven from the twigs. It is the blossoms of Desert-Willow which help make it so special, though, the showy, two to four-inch-long clusters of 1 to 1.5-inch-long, trumpet-shaped blooms

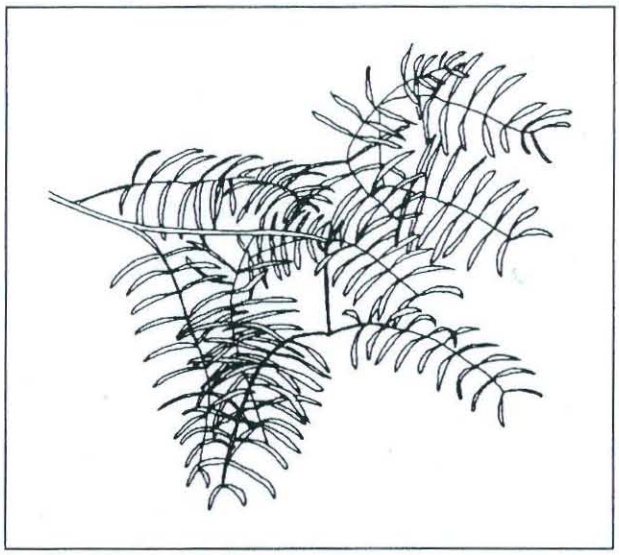


Figure 3. Foliage of Desert-Willow.

appearing from late spring to early fall, or only during the summer if rainfall is sparse. The blooms occur at the tips of the branches and on new growth. The extremely fragrant, orchid-like blooms are most often seen in shades of lavender and pink but a white variety is occasionally found. The bees find the blossoms irresistible and a delightful honey is produced from the flowers. The narrow, four to 12-inch-long seed capsules which follow persist on the tree, and the seeds are quite popular with birds.

The multi-trunked, well branched habit of growth and thick growth make Desert-Willow well suited for a wide screen or tall hedge. Groups can be planted in a large-scale landscape for a splash of color. The tree has also been popular in residential plantings as specimens.

Desert-Willow should be grown in full sun and is extremely drought-tolerant. While the trees will grow better with adequate moisture, they will not tolerate overwatering.

Cultivars include 'Dark Storm' with burgundy flowers and 'Pink Star' with bright pink flowers.

Propagation is done easily by cuttings.

Pests

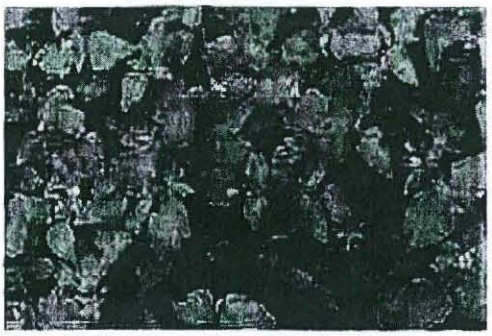
No pests are of major concern.

Diseases

No diseases are of major concern.

Topic

Horseherb
Deciduous to semi-evergreen for shade to part shade
Calyptocarpus vialis
Ht. 8-10" Spread 18-36"
ka-lip-toe-CAR-pus
Spacing: 12-15"



HABIT: Ever blooming tiny yellow flowers. Very easy to grow in any soil. Evergreen in the southern half of the state. Freezes to the ground in the northern areas but returns each spring.

CULTURE: Drought tolerant and pest free.

USES: Natural ground cover. Should be used more. Looks terrific when planted with wild violets.

PROBLEMS: Some people still consider it a weed – that's too bad.

Common Name:	Horseherb
Botanical Name:	*Calyptocarpus vialis*
Plant Type:	Groundcover
USDA Hardiness Zone:	7
AHS Heat Zone:	
Light Requirements:	Partial Shade; Full Shade
Water Usage:	Low
Soil Type:	Well-Drained
Height:	8 to 10 in.
Spread:	1 ft.
Season of Bloom:	April to October
Bloom Color:	Yellow
Deciduous/Evergreen:	Deciduous
Native TX Plant:	Native
Wildlife Value:	

An excellent substitute for grass in heavily shaded areas where grass will not grow. Horseherb can be mowed or let it grow to its normal 8 - 10 inch height. Once established, it grows with little or no water. Produces small yellow flowers throughout the growing season. A tough, drought tolerant performer.

Phyla nodiflora

From Wikipedia, the free encyclopedia

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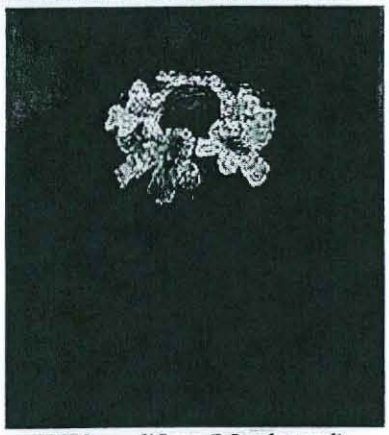
Phyla nodiflora



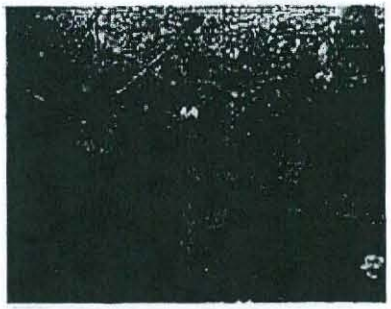
Phyla nodiflora (Matchweed)

Scientific classification

Kingdom:	Plantae
Division:	Magnoliophyta
Class:	Magnoliopsida
Order:	Lamiales
Family:	Verbenaceae
Genus:	*Phyla*
Species:	***P. nodiflora***

Binomial name

Phyla nodiflora
(L.) Greene



Matchweed habit

Phyla nodiflora **(frog fruit, sawtooth fogfruit, turkey tangle, turkey tangle fogfruit**; syn. *Lippia canescens* Kunth, *Lippia incasiomalo* (Small) Tildsoan, *Lippia lickiflora* (L.) Michx., *Lippia nodiflora* var. *canescens* (Kunth) Kuntze, *Lippia nodiflora var. reptans* (Kunth) Kuntze, *Lippia nodiflora* var. *rosea* (D. Don) Munz, *Lippia reptans* Kunth, *Polyumn incisa* Small, *Phyla nodiflora* var. *antillana* Moldenke, *Phyla nodiflora* var. *canescens* (Kunth) Moldenke, *Phyla nodiflora* var. *incisa* (Small) Moldenke, *Phyla nodiflora* var. *longifolia* Moldenke, *Phyla nodiflora* var. *repens* (Spreng.) Moldenke, *Phyla nodiflora* var. *reptans* (Kunth) Moldenke, *Phyla nodiflora* var. *rosea* (D. Don) Moldenke, *Phyla nodiflora* var. *texensis* Moldenke) is an ornamental plant in the Verbenaceae family, which is native from Brazil and United States. This plant is cited in Flora Brasiliensis by Carl Friedrich Philipp von Martius.

It is a flowering, broadleaf plant. It is grows in a groundcover or turflike manner, and is often present in yards.

The inflorescence consists of a purple-coloured centre encircled by small white-to-pink flowers. The flower takes on a match-like look, which is why the plant is called matchweed.

[edit] References

- Pink, A. (2004). *Gardening for the Million*. Project Gutenberg Literary Archive Foundation.

[edit] External links

- TSN 32197. Integrated Taxonomic Information System.
- USDA Plants Profile: *Phyla nodiflora* photos
- **(Portuguese)** Flora Brasiliensis: *Lippia reptans*

[edit] Gallery

with Mottled Emigrant *Catopsilia pyranthe*-Male in Hyderabad, India.

in Hyderabad, India.

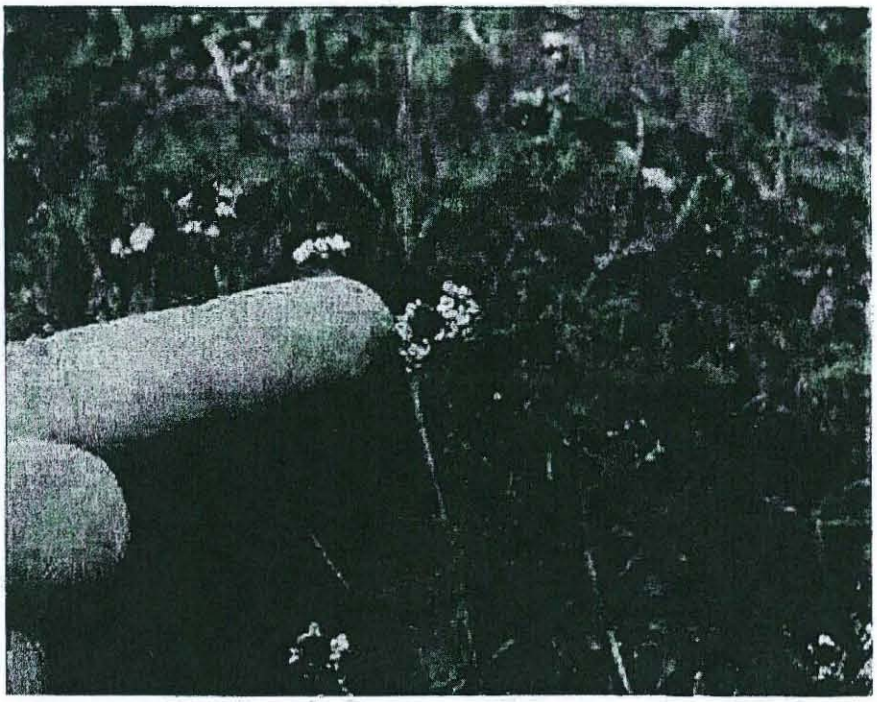
in Hyderabad, India.

Lippia nodiflora
Frogfruit
Verbenaceae Family

Compiled by the Master Gardeners
of the University of Arizona Pima County Cooperative Extension.

HOME

Form: low ground cover
Seasonality: evergreen; best in summer
Size: 3 to 6 inches
Leaves: green to blue-green; oval, to 3/4inch long; jagged margin
Flowers: tiny lilac puffs; attracts bees
Fruit: n/a
Stems/Trunks: stems lay along ground and root
Range/Origin: Sandy or beachy areas from Mexico to Florida
Hardiness: hardy; no damage seen in low teens


Frogfruit blooms

LANDSCAPE VALUE:

- larval foodplant of Phaon Crescent butterfly
- attracts bees and butterflies
- aggressive ground cover once established
- lawns; with stands foot traffic
- on banks to hold soil

CULTURAL REQUIREMENTS:

- **Exposure:** best in full sun
- **Water:** regular supplemental; at least every other day in summer heat

- **Soil:** appreciates amended garden doil
- **Propagation:** cuttings; runners
- **Maintenance:** none when given room to run; needs clipping if it is to be kept to a confined area

Research by Master Gardener Devona Painter

NOTES:

nematodes can be a problem

AKA mat grass

low-growing mat of *Lippia nodiflora*

Item 4d part C

REMEDIAL TREE CARE NOTES: AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS

NOTE: EXISTING TREES ON THIS SITE ARE REQUIRED TO BE FERTILIZED AS A CONDITION OF THE APPROVAL OF THESE PLANS. THIS IS A REQUIREMENT OF THE GENERAL CONTRACTOR.
TREES WILL BE FERTILIZED PRIOR TO ANY CONSTRUCTION ACTIVITY.
NOTE: MATERIALS AND METHODS PROPOSED WHICH ARE DIFFERENT FROM THE SPECIFICATIONS LISTED BELOW REQUIRE THE APPROVAL OF THE CITY ARBORIST (974-2820) PRIOR TO APPLICATION.
THE GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND INSURE COORDINATION WITH CITY ARBORIST. IN ORDER FOR A CERTIFICATE OF OCCUPANCY TO BE GRANTED, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF WORK PERFORMED TO "CITY ARBORIST, E.C.S.D., P.O. BOX 1088, AUSTIN, 78767", WITHIN 7 DAYS FROM THE DAY WORK IS PERFORMED.
ALL TREES SHOWN TO REMAIN ON THE PLANS WILL BE FERTILIZED PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES AND AGAIN AFTER THE COMPLETION OF ALL CONSTRUCTION. AREAS TO BE FERTILIZED INCLUDE THE ENTIRE CRITICAL ROOT ZONE (CRZ) OF A TREE AS DEPICTED ON CITY-APPROVED PLANS. TREES ARE TO BE FERTILIZED VIA SOIL INJECTION METHOD (MIN. 100 PSI) USING DOGGETT X-L INJECTO 32-7-7 OR EQUIVALENT AT RECOMMENDED RATES. (CONSTRUCTION WHICH WILL BE COMPLETED IN LESS THAN 90 DAYS SHOULD USE MATERIALS AT 1/2 RECOMMENDED RATES). ALTERNATIVE ORGANIC FERTILIZER MATERIALS ARE ACCEPTABLE WHEN APPROVED BY THE ENVIRONMENTAL DEPARTMENT.
TO ACCOMMODATE THIS REQUIREMENT AND TO FACILITATE AIR SUPPLY TO THE CRZ OF TREES TO REMAIN, AIR VENTS SHALL BE INSTALLED WHEREVER THERE IS PAVEMENT AND/OR 12" OR MORE OF FILL WITHIN THE CRZ. THESE VENTS SHALL BE DESIGNED BY THE CONTRACTOR BUT SHALL BE SPACED AT MINIMUM FIVE FEET ON CENTER AND PROVIDE A MINIMUM OPENING OF THREE INCHES EXCEPT AS OTHERWISE SHOWN ON THE APPROVED PLANS.

REFER TO TREE PROTECTION PLAN FOR ADDITIONAL APPLICABLE TREE PROTECTION NOTES.

LANDSCAPE PLANTING NOTES

1. COMPLETE ALL LANDSCAPE PLANTING AND RELATED EARTHWORK INCLUDING ALL PRODUCTS, EQUIPMENT AND LABOR, FOR THE LANDSCAPE AREAS SHOWN ON THE DRAWING AND DESCRIBED IN THE SPECIFICATIONS.
2. ALL QUESTIONS SHOULD BE REFERRED TO THE PROJECT LANDSCAPE ARCHITECT.
3. INFORMATION PROVIDED ON THIS PLAN IS GENERAL IN NATURE. DIMENSIONS, LOCATIONS, AND AREAS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO BIDDING & INSTALLATION.
4. QUANTITIES SHOWN FOR PLANT MATERIALS ARE APPROXIMATE. ACTUAL INSTALLED QUANTITIES OF PLANT MATERIALS MAY VARY FROM THE PLAN AND SHOULD BE FIELD DETERMINED ACCORDING TO THE GIVEN SPACING AND FIELD CONDITIONS. DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE PLAN WHICH LIMIT THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. MINOR ADJUSTMENTS OF SHRUBS AND GROUNDCOVERS OF UP TO AN ADDITIONAL 5X OF THE GIVEN QUANTITIES SHOULD BE CONSIDERED A PART OF THE BASE BID.
5. BY BIDDING, THE CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS SATISFIED HIMSELF/HERSELF AS TO THE NATURE AND LOCATION OF THE WORK AND TO THE QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES INSOFAR AS THIS DATA IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE.
6. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF/ HERSELF WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM/HER FROM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK AS DESCRIBED. INSTALLATION OF ALL LANDSCAPING MUST BE COORDINATED WITH THE INSTALLATION OF RELATED IRRIGATION, SITE WORK, AND GRADING.
7. UNLESS SPECIFICALLY NOTED, INSTALL ALL MASSED PLANTING UTILIZING EQUILATERAL TRIANGULAR SPACING.
8. EVENLY APPLY 4" OF MULCH TO ALL PLANTS. TREES OCCURRING IN TURF AREAS SHOULD BE MULCHED WITHIN THE SOIL SAUCERS.
9. FORM 4" DEEP EARTHEN SAUCERS AROUND ALL TREES. DO NOT INSTALL OTHER VEGETATION WITHIN THE SAUCER OF ANOTHER PLANT. SUBSTITUTIONS OF PLANT SPECIES, SIZES, OR OTHER SPECIFIED MATERIALS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
11. ALL IDENTIFICATION TAGS PROVIDED BY GROWERS AND PLACED ON TREES AND SHRUBS ARE TO REMAIN ON THE PLANTS THROUGH THE PUNCH-LIST INSPECTION. TAGS ARE TO BE REMOVED PRIOR TO FINAL ACCEPTANCE, OR UPON REQUEST OF THE LANDSCAPE ARCHITECT.
12. ALL SODDING AND SEEDING OF LAWN AREAS IS TO BE COMPLETED AS A PART OF THE LANDSCAPE CONTRACT.
13. A MINIMUM OF 2" OF QUALITY BROWN OR BLACK TOPSOIL IS TO BE PROVIDED FOR ALL SOD AND SEED AREAS. TOPSOIL AND SEEDING ARE TO BE APPLIED TO ALL CONSTRUCTION-DAMAGED GROUND SURFACES NOT OTHERWISE PLANTED OR SODDED.
14. CONTRACTOR SHALL REVIEW RELATED CONSTRUCTION DRAWINGS FOR LIMITS OF CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR COORDINATING WITH OTHER SITE CONTRACTORS TO DETERMINE ACTUAL AREAS OF SEEDING REQUIRED, INCLUDING AREAS DISTURBED BY UTILITY EXTENSIONS.
15. REFER TO THE SPECIFICATIONS FOR SOIL BACKFILL MIXTURES.

LANDSCAPE NOTES - CITY OF AUSTIN REQUIREMENTS

1. Information provided on this plan is general in nature: dimensions, areas, and distances are approximate and should be field verified prior to bidding. Discrepancies shall be reported to the Landscape Architect for resolution.
2. The Contractor is to thoroughly familiarize him/herself with the plans, specifications and the site prior to bidding. Failure to do so will not reduce the Contractor's obligation to perform the work as described for the price bid.
3. No substitutions of plant material locations, species or size will be allowed without prior approval of the Landscape Architect and Owner. Plant materials which may be noted as "replacement" are done so as a requirement of the City of Austin, and may not be modified from the specifications.
4. The landscape installer shall coordinate with the irrigation installer for tree locations and final adjustments of spray locations and coverage.
5. Areas to be seeded or sodded are to receive 4" of topsoil. Site stockpiled topsoil may be used if it has been deemed acceptable in quality. Topsoil shall be dark brown or black in color, without debris, clods, clumps, or stones larger than 1". Topsoil sources must be free from Johnson Grass, nutsedge, or other "weedy" materials.
6. Soil Preparation:
A. Refer to the Landscape Specifications for more information.
B. All tree and shrub pits shall be dug two times the diameter of the rootball or container. Pits shall be generally cube-shaped, with sides scarified and roughened. Bottoms of pits shall be firm, but not overly compacted.
C. Backfill for trees and shrubs shall be as specified. Soil from pit excavations may be used if indicated, and if it is free from debris, clay, stones, or other deleterious materials.
D. Groundcover beds shall be excavated a total of 8" and backfilled with the specified soil mixture which shall be tilled in and mixed with existing soil.
7. Mulch all plantings as follows:

LANDSCAPE DEMOLITION AND TRANSPLANTING NOTES

THIS PLAN INDICATES THE EXISTING LANDSCAPE PLANTS WHICH ARE TO BE REMOVED FROM THEIR CURRENT LOCATIONS FOR RE-USE ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL METHODS AND MEANS OF ACCOMPLISHING THE TASKS DESCRIBED.

ITEMS INCLUDED IN THIS WORK ARE THE DIGGING, STORAGE AND REPLANTING OF TREES. .

EXISTING TREES - DIGGING AND HANDLING

ALL EXISTING TREES TO BE DUG, STORED AND REPLACED ON SITE SHALL SHALL BE TREATED IN ACCORDANCE WITH THE TEXAS ASSOCIATION OF NURSERYMEN GRADES AND STANDARDS, AND THE AMERICAN STANDARD FOR NURSERY STOCK PUBLICATIONS.

ONLY THOSE TREES INDICATED ON THIS PLAN ARE TO BE INCLUDED FOR BID WITH THIS ITEM.

PLANTS MAY BE STORED ON SITE IN AN APPROVED ON-SITE STORAGE AREA, OR MAY BE REMOVED AND STORED AT A LOCATION OF THE CONTRACTOR'S CHOOSING. THE OWNER AND OWNERS AGENTS SHALL HAVE REASONABLE ACCESS TO THE STORAGE AREA TO VERIFY METHODS OF STORAGE AND CONDITIONS OF PLANTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SECURED LOCATION. ANY PLANTS WHICH DIE OR ARE UNACCEPTABLE FOR RE-USE AFTER DIGGING MAY BE DISCARDED AFTER A VISUAL INSPECTION AND WRITTEN RECORD IS MADE BY THE OWER OR OWNER'S AGENT.

DURING THE STORAGE PERIOD, ALL PLANTS SHALL BE KEPT ADEQUATELY WATERED, PROTECTED FROM DRYING OUT BY COVERING THE BALLS OR CONTAINERS WITH MULCH, AND SHALL BE SCREENED FROM HOT SUN AND WINDS WHICH COULD BURN FOLIAGE OR BARK.

PRUNING OF TRANSPLANTED TREES SHALL BE DONE ONLY AS NECESSARY TO DIG AND MOVE TREES WITHOUT DAMAGE TO THE TRUNKS OR CANOPIES. CANOPY PRUNING TO COMPENSATE FOR ROOT LOSS SHALL BE ONLY AS NECESSARY, AND SHALL NOT LEAVE TREES UNATTRACTIVE IN FORM.

TREES SHALL BE DUG AND THEN BALLED AND BURPAPPED OR CONTAINERIZED AT THE CONTRACTOR'S OPTION.
MINIMUM CONTAINER SIZES SHALL BE AS NOTED BELOW.

CONTAINERIZED TREES:

IF PLANTS ARE PLACED IN CONTAINERS FOR STORAGE, ADDITIONAL SOIL FROM THE SITE SHALL BE USED TO FILL IN ANY VOIDS IN THE CONTAINER NOT FILLED BY THE ACTUAL BALL OR ROOT MASS OF THE PLANT TO PREVENT DRYING OF ROOTS.

EACH CONTAINER SHALL BE ADEQUATELY SIZED TO CONTAIN THE ENTIRE BALL OR ROOT MASS OF THE PLANTN WITHOUT FORCING THE SOIL MASS INTO THE CONTAINER. SOIL MASS SHOULD NOT BE HIGHER THAN THE TOP OF THE CONTAINER.

TOP-DRESS EACH CONTAINER WITH 4" TO 6" MULCH TO PREVENT SURFACE DRYING OF ROOTS.

BALLED AND BURLAPPED TREES:

BALL SIZES OF TREES SHOULD BE OF A DEPTH AND DIAMETER TO ENCOMPASS ENOUGH FIBROUS AND FEEDING ROOT SYSTEM NECESSARY FOR THE FULL RECOVERY OF THE TREE.

TREES ARE TO BE DUG WITH A FIRM, NATURALLY COMPACTED BALL OF EARTH ABOUT THE ROOTS. HAND DIGGING OR MACHINE/MECHANICAL DEVICES ARE ACCEPTABLE. USE A SHARP SHOVEL OR DIGGING MACHING TO CLEANLY CUT ALL ROOTS EXTENDING BEYOND THE BALL OF EARTH PRIOR TO LIFTING THE TREE FROM THE GROUND.

SOIL:

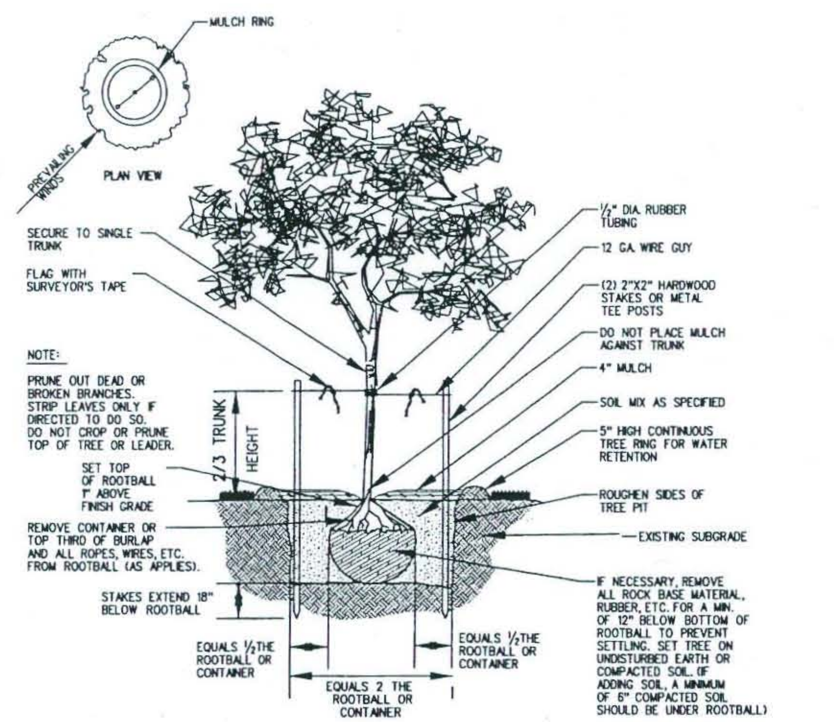
DEPENDING ON THE ACTUAL GROWING CONDITIONS, IT MAY BE ACCEPTABLE TO DIG BALLS WIDER AND SHALLOWER THAN THE STANDARD GIVE IF IT CAN BE DETERMINED THAT THE ROOT AREA IS SHALLOW. SUCH AS MAY OCCUR OVER ROCK OR HARDPAN.

BURLAP OR OTHER SUITABLE MATERIAL USED TO WRAP THE SOIL BALL SHALL COMPLETELY COVER THE ROOT BALL. ANY LACING OR OTHER BALL SUPPORTING DEVICES, SUCH AS WIRE BASKETS, SHOULD BE OUTSIDE OF THE BURLAP LAYER.

MINIMUM BALL SIZES FOR THE SPECIES TO BE CONTAINERIZED AS FOLLOWS:

CRAPE MYRTLES

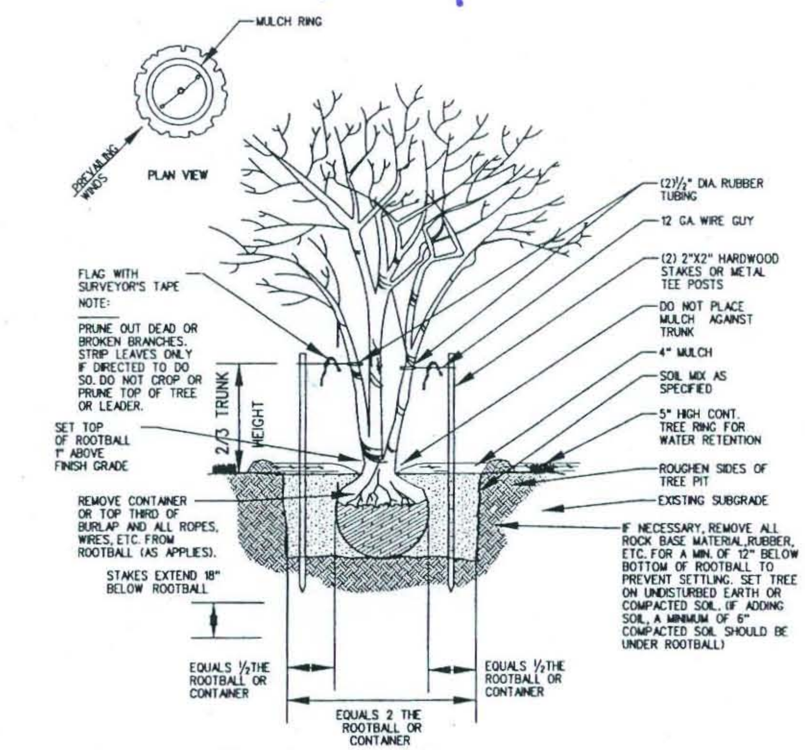
CALIPER	MIN. ROOT BALL DIAMETER
1 IN.	16 IN.
1-1/2 IN.	20 IN.
2 IN.	24 IN.
2-1/2 IN.	28 IN.
3 IN.	32 IN.
3-1/2 IN.	38 IN.
4 IN.	42 IN.
4-1/2 IN.	48 IN.
5 IN.	54 IN.



NOTE:
PRUNE OUT DEAD OR BROKEN BRANCHES. STRIP LEAVES ONLY IF DIRECTED TO DO SO. DO NOT CROP OR PRUNE TOP OF TREE OR LEADER.

L-2 | 2-STAKE TREE PLANTING DETAIL FOR TREES WITH TRUNKS LESS THAN 3" IN CALIPER

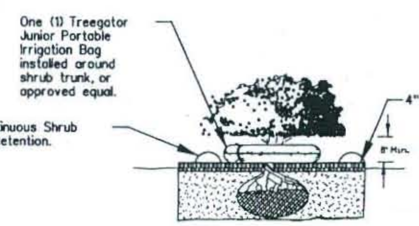
NOT TO SCALE



NOTE:
PRUNE OUT DEAD OR BROKEN BRANCHES. STRIP LEAVES ONLY IF DIRECTED TO DO SO. DO NOT CROP OR PRUNE TOP OF TREE OR LEADER.

L-1 | TREE PLANTING DETAIL FOR TREES WITH MULTI-TRUNKS

NOT TO SCALE



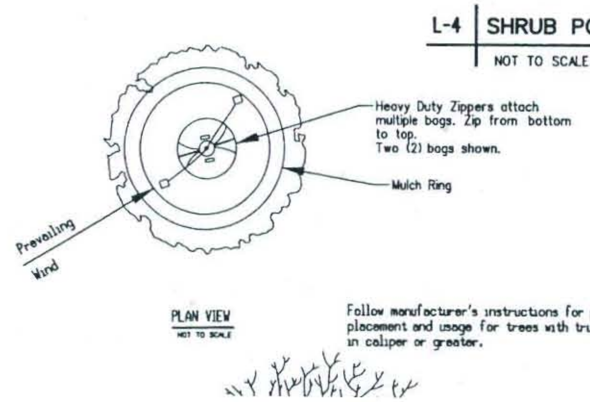
INSTALLATION AND USE
1. Place Treegator Junior on flat ground, or on top of a properly built mulch pile.
2. Wrap both sides around trunk so that trunk is centered in hole in the biuddle of bag.
3. Open the top of the red fill valve cap and insert hose.
4. Turn on water supply and begin filling. (Use clean water only) Fill bagh to desired level. To fill to maximum capacity, gently lift on red valve lip while filling.
5. Replace red fill valve tightly and securely.
6. Let bag drip until empty.

Manufactured in the USA by: Spectrum Products, Inc. Raleigh, NC 1-866-TREEGATOR (1-866-873-3428) Website: www.treegator.com

L-4 | SHRUB PORTABLE IRRIGATION PLACEMENT DETAIL

NOT TO SCALE

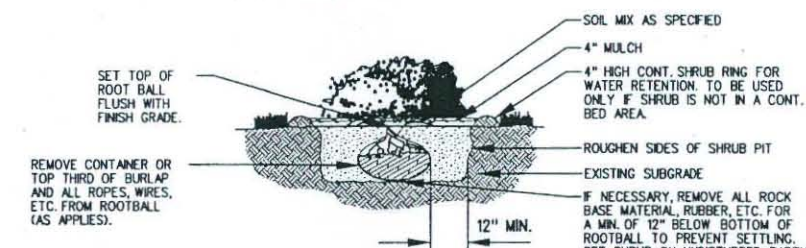
Follow manufacturer's instructions for proper placement and usage.



PLAN VIEW
NOT TO SCALE

Follow manufacturer's instructions for proper placement and usage for trees with trunks 3" in caliper or greater.

INSTALLATION AND USE
1. Place on tree trunk, with the zippers on the uphill side of the tree.
2. Wrap both sides around trunk (1" to 4" dia. trunk*) until zippers meet.
3. *40 gallon set-up - Two 20 gal. bags zippered together back-to-back - Fits 5" to 8" dia. trunk.
4. Zip sides of bag together from bottom to top.
5. Lift tag to expose fill opening at top of bag.
6. Insert hose into fill opening and begin filling with water.
7. Fill bag to 1/4" capacity, then gently lift up on straps at top of bag to expand bottom.
8. Fill bag 1 to 2 times per week, or as needed.



L-3 | SHRUB POCKET PLANTING DETAIL

NOT TO SCALE

PLANT LIST

QUANTITY	COMMON / LATIN NAME	SIZE
15	COMANCHE CRAPE MYRTLE / LAGERSTROEMIA INDICA 'COMANCHE'	2" CAL. (6' HT. MIN. MULTI-TRUNK)
15	MEXICAN BUCKEYE / UNGNADIA SPECIOSA	2" CAL. (6' HT. MIN.)
16	DARK CLOUD DESERT WILLOW / CHILOPSIS LINEARIS 'DARK CLOUD'	2" CAL. (5' HT. MIN. MULTI-TRUNK)
7	BARBADOS CHERRY / MALPIGHIA GLABRA	3 GAL. (24" HT. BY 12" WIDE MIN.)
	COMMON BERMUDA HYDROMULCH ALL AREAS DISTURBED BY CONSTRUCTION FOR THIS PROJECT AND NOT OTHERWISE INDICATED	
	COMMON BERMUDA SOLID SOD ON ALL SLOPES 3:1 NOT OTHERWISE INDICATED	

REV. NO.	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT DIANE STEINBRUECK 1197 STATE OF TEXAS

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Landscape Architecture
Planning
Site Design
2111 Dickson Drive, Suite 30 Austin, Texas 78704 TEL 512-442-0100 FAX 512-442-0788

LANDSCAPE NOTES AND DETAILS
2200-2800 BLOCK OF BARTON SPRINGS ROAD

Trees Saved********
TAG*TYPE*SIZE **CALIPER

15*Pecan*27******27
98*Pecan*37******37
102*Pecan*30******30
103*Pecan*26******26
104*Pecan*23******23
105*Pecan*16******16
107*Juniper*19******19
108*Pecan*32******32
109*Pecan*24******24
110*Pecan*37******37
111*Pecan*14******14
112*Pecan*14******14
113*Pecan*11******11
181*Live Oak*13******13
182*Live Oak*16******16
189*Cedar*10******10
190*Live Oak*20******20
191*Live Oak*17*17*****25.5
192*Cedar*9******9
193*Live Oak*16******16
195*Live Oak*16******16
196*Cedar*10******10
974*Live Oak*21******21
975*Live Oak*17******17
976*Live Oak*17******17
977*Live Oak*18******18
978*Cedar Elm*15******15
979*Live Oak*18******18
980*Live Oak*9*9*****13.5
981*Live Oak*15******15
982*Live Oak*13******13
983*Live Oak*17******17
984*Live Oak*16******16
985*Live Oak*11******11
986*Live Oak*11******11
1302*Hackberry*8******8
1331*Hackberry*14******14
1332*Chinese Elm*10******10
1647*Live Oak*24******24
1648*Live Oak*18******18
1649*Live Oak*25******25
1650*Cedar Elm*18******18
1651*Live Oak*14******14
1652*Live Oak*23******23
1653*Cedar Elm*16******16
1654*Live Oak*20******20
1656*Live Oak*15******15
1657*Live Oak*17*15*****24.5
1658*Live Oak*12******12
1659*Live Oak*15******15
1660*Cedar Elm*12******12
1661*Cedar Elm*11******11
1662*Live Oak*15******15
1663*Live Oak*19*16*****27
1664*Live Oak*12******12
1665*Live Oak*27******27
1666*Live Oak*20******20
1668*Live Oak*19******19
1669*Cedar Elm*12******12
1670*Cedar Elm*13******13
1671*Cedar Elm*16******16
1672*Live Oak*45******45
1673*Live Oak*26******26
1708*Live Oak*12******12
1720*Cedar Elm*4******4
1721*Cedar Elm*6******6
1722*Crape Myrte*6******6
1726*Cedar*9******9
1728*Cedar*4******4
1729*Cedar*8******8
1730*Cedar*5******5
1732*Cedar*10******10
1733*Cedar*6******6
1734*Crape Myrte*5******5
1735*Cedar Elm*5******5
1736*Crape Myrte*9******9
1737*Live Oak*4******4
1738*Cedar Elm*4******4

Trees Saved********
TAG*TYPE*SIZE **CALIPER

1740*Live Oak*5******5
1741*Live Oak*7******7
1747*Live Oak*25*16*****33
1752*Cedar*6******6
1753*Cedar*7******7
1755*Cedar*6******6
1756*Cedar*4******4
1759*Cedar Elm*4******4
1760*Live Oak*5******5
1762*Cedar*7******7
1764*Cedar*6******6
1765*Cedar*6******6
1766*Cedar*6******6
1767*Cedar*7******7
1768*Cedar Elm*5******5
1769*Cedar*7*5*****9.5
1773*Live Oak*16******16
1774*Hackberry*5******5
1780*Live Oak*4******4
1781*Live Oak*5******5
1808*Live Oak*16******16
1810*Palm*6******6
1836*Cedar Elm*7******7
1839*Cedar Elm*12******12
1846*Cedar Elm*4******4
2020*Chinese Tallow*9******9
2021*Chinese Tallow*8******8
2030*Live Oak*20******20
2031*Live Oak*15******15
2044*Cedar Elm*4******4
2045*Live Oak*10******10
2046*Live Oak*11******11
2048*Cedar Elm*4******4
2049*Cedar Elm*7******7
2051*Live Oak*9******9
2052*Live Oak*10******10
2054*Live Oak*14******14
2056*Cedar*9******9
2057*Live Oak*8******8
2060*Live Oak*7******7
2061*Live Oak*5******5
2063*Cedar Elm*4******4
2064*Cedar*5******5
2065*Cedar*9******9
2067*Cedar*18******18
2070*Cedar Elm*5******5
2071*Cedar Elm*5******5
2075*Chinese Tallow*4******4
2078*Live Oak*18******18
2091*Live Oak*25*20*20****45
2215*Chinese Tallow*6******6
2216*Chinese Tallow*8******8
2226*Cedar Elm*26******26
2227*Crape Myrte*5*4*****7
2228*Crape Myrte*7*6*****10
2229*Pecan*12******12
2372*Live Oak*5******5
2373*Live Oak*5******5
2374*Chinese Tallow*8******8
2375*Chinese Tallow*5******5
2376*Chinese Tallow*10******10
2380*Live Oak*5******5
2381*Live Oak*5******5
2382*Live Oak*8******8
2384*Live Oak*8******8
2385*Live Oak*10******10
2392*Live Oak*65******65
2393*Live Oak*22******22
2394*Live Oak*22******22
2395*Live Oak*32******32
2398*Cedar Elm*16******16
2399*Live Oak*22******22
2400*Live Oak*27******27
2401*Live Oak*9******9
2404*Live Oak*9******9
2405*Live Oak*12******12
2526*Live Oak*5******5
2527*Live Oak*17******17

Trees Saved********
TAG*TYPE*SIZE **CALIPER

2528*Live Oak*14******14
2529*Live Oak*9******9
2531*Live Oak*10******10
2532*Cedar Elm*7******7
2534*Cedar*4******4
2535*Crape Myrte*4******4
2536*Cedar*5******5
2537*Cedar*4******4
2538*Cedar*8******8
2540*Live Oak*12******12
2541*Live Oak*16******16
2545*Cedar*11******11
2546*Cedar*9******9
2547*Live Oak*12*9*****16.5
2548*Cedar*7******7
2552*Cedar*12******12
2553*Live Oak*5******5
2554*Cedar*7******7
2555*Cedar*11******11
2557*Cedar*7******7
2558*Cedar*4******4
2559*Cedar*11******11
2560*Cedar*7******7
2563*Cedar*16******16
2570*Live Oak*4******4
2573*Cedar*5******5
2577*Cedar*4******4
2579*Live Oak*20*20*****30
2580*Cedar*6******6
2583*Cedar*4******4
2584*Live Oak*20******20
2585*Cedar*10*8*8*4***20
2603*Cedar Elm*4******4
2604*Cedar Elm*6******6
2605*Hackberry*4******4
2606*Live Oak*22*16*****30
2613*Cedar*5******5
2614*Live Oak*21******21
2623*Cedar Elm*4******4
2624*Cedar Elm*5******5
2625*Live Oak*15******15
2725*Cedar Elm*17******17
2726*Live Oak*36******36
2727*Live Oak*18******18
2728*Live Oak*17******17
2729*Live Oak*30******30
2730*Crape Myrte*5*5*5****10
2731*Crape Myrte*4*4*****6
2732*Crape Myrte*6*4*****8
2733*Crape Myrte*4*4*****6
2745*Live Oak*30******30
2746*Hackberry*5******5
2747*Live Oak*17******17
2837*Cedar Elm*24******24
2838*Pecan*15******15
2870*Cedar Elm*18******18
2887*Pecan*7******7
2931*Cedar Elm*12*11*10*10***27.5
2946*Cedar Elm*15******15
2948*Live Oak*10******10
2949*Live Oak*10******10
3020*Live Oak*28******28
3021*Live Oak*28******28
3022*Cedar*13******13
3023*Cedar*12******12
3024*Cedar Elm*9******9
3025*Pine*8******8
3026*Pine*23******23
3028*Cedar Elm*13*12*9****23.5
3035*Crape Myrte*7******7
4991*Chinese Elm*14*13*12****26.5
4993*Chinese Elm*11******11
4994*Cedar Elm*14******14
5168*Pecan*23******23
5170*Pecan*26******26
5171*Pecan*29******29
5335*Magnolia*15*7*7****22

Trees Saved********
TAG*TYPE*SIZE ***CALIPER

5790*Pecan*29******29
5791*Pecan*5******5
5792*Pecan*5******5
5793*Pecan*25******25
5794*Pecan*5******5
5795*Walnut*37******37
5796*Pecan*19******19
5797*Pecan*26******26
5798*Cedar Elm*5******5
5799*Cedar Elm*6******6
5800*Chinese Tallow*13*11*7****22
5801*Redbud*5******5
5802*Walnut*7******7
5803*Walnut*6******6
5927*Pecan*44******44
5928*Pecan*5******5
5929*Walnut*30******30
5930*Pecan*5*4*4****9
5931*Pecan*4*4*****6
5932*Pecan*26******26
5933*Pecan*29******29
6157*Chinese Tallow*22******22
6158*Chinese Tallow*15*14*6****25
6159*Chinese Tallow*11*10*****16
6160*Chinese Tallow*15*15*13****29
6161*Pecan*23******23
6162*Pecan*23******23
6163*Pecan*17******17
6164*Pecan*28******28
6166*Elm*5*4*2****8
6167*Elm*4*3*2*2***7.5
6168*Elm*4*2*1****5.5
6169*Elm*4*3*3*2***8
6170*Elm*4*2*2****6
6171*Redbud*5*5*4****9.5
6172*Redbud*5*4*3****8.5
6173*Redbud*4*4*3****7.5
6174*Cedar Elm*6******6
6175*Cedar Elm*6******6
6176*Cedar Elm*4******4
6177*Bur Oak*5******5
6178*Pecan*30******30
6179*Pecan*28******28
6429*Cedar*13******13
6430*Cedar*15******15
6431*Cedar*10******10
6432*Cedar Elm*21******21
6433*Live Oak*14******14
6434*Cedar Elm*33******33
6435*Cedar Elm*10******10
6436*Live Oak*25******25
6437*Cedar*11******11
6438*Cedar*9******9
6439*Cedar*10******10
6440*Soapberry*11*6*6*6***20
6441*Golden Rain Tree*15*8*****19
6448*Soapberry*9*9*7*7***20.5
6449*Pecan*29******29

Trees Saved********
TAG*TYPE*SIZE ***CALIPER

6451*Soapberry*10******10
6452*Soapberry*11******11
6453*Soapberry*9******9
6454*Bur Oak*8******8
6455*Soapberry*9******9
6456*Pecan*37******37
No tag*1*Live Oak*10******10
No tag*2*Live Oak*16******16
No tag*3*Chinaberry*10*6*****13
No tag*4*Elm*8******8
No tag*5*Hackberry*5******5
No tag*6*Live Oak*14*14*****21
No tag*7*Live Oak*14*12*****20
No tag*8*Live Oak*16*12*****22
No tag*9*Live Oak*16*10*****21
No tag*10*Elm*6******6
No tag*11*Pecan*18******18
No tag*12*Cedar*12******12
No tag*13*Pecan*16******16
No tag*14*Pecan*12******12
****
****
*Caliper Inches Saved*******4372

CERTIFICATION

I, Diane Steinbrueck, a professional Landscape Architect, do hereby certify that all information shown to be true and accurate and that this plan satisfies the written requirements of the Landscape Regulations, Chapter 25-2, Subchapter C, Article 9 of of the Land Development Code.

SITE PLAN RELEASE Sheet ___ of ___

FILE NUMBER: SPC-06-0010D EXPIRATION DATE: ____
CASE MANAGER: ____ APPLICATION DATE: 03/13/2006
APPROVED ADMINISTRATIVELY ON: ____
APPROVED BY PLANNING COMMISSION ON: ____
APPROVED BY CITY COUNCIL ON: ____
under Section ____ of Chapter ____ of the Austin City Code.

____
Director, Watershed Protection and Development Review Department

DATE OF RELEASE: ____ ZONING: ____
Rev. 1: ____ Correction 1: ____
Rev. 2: ____ Correction 2: ____
Rev. 3: ____ Correction 3: ____

SPC-06-0010D

REV NO	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT DIANE STEINBRUECK 1197 STATE OF TEXAS

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Landscape Architecture
Planning
Site Design
211E Dickson Drive, Suite 30
Austin, Texas 78704
TEL 512-443-0090
FAX 512-442-0788

TREES SAVED CALCULATIONS
2200-2800 BLOCK OF BARTON SPRINGS ROAD

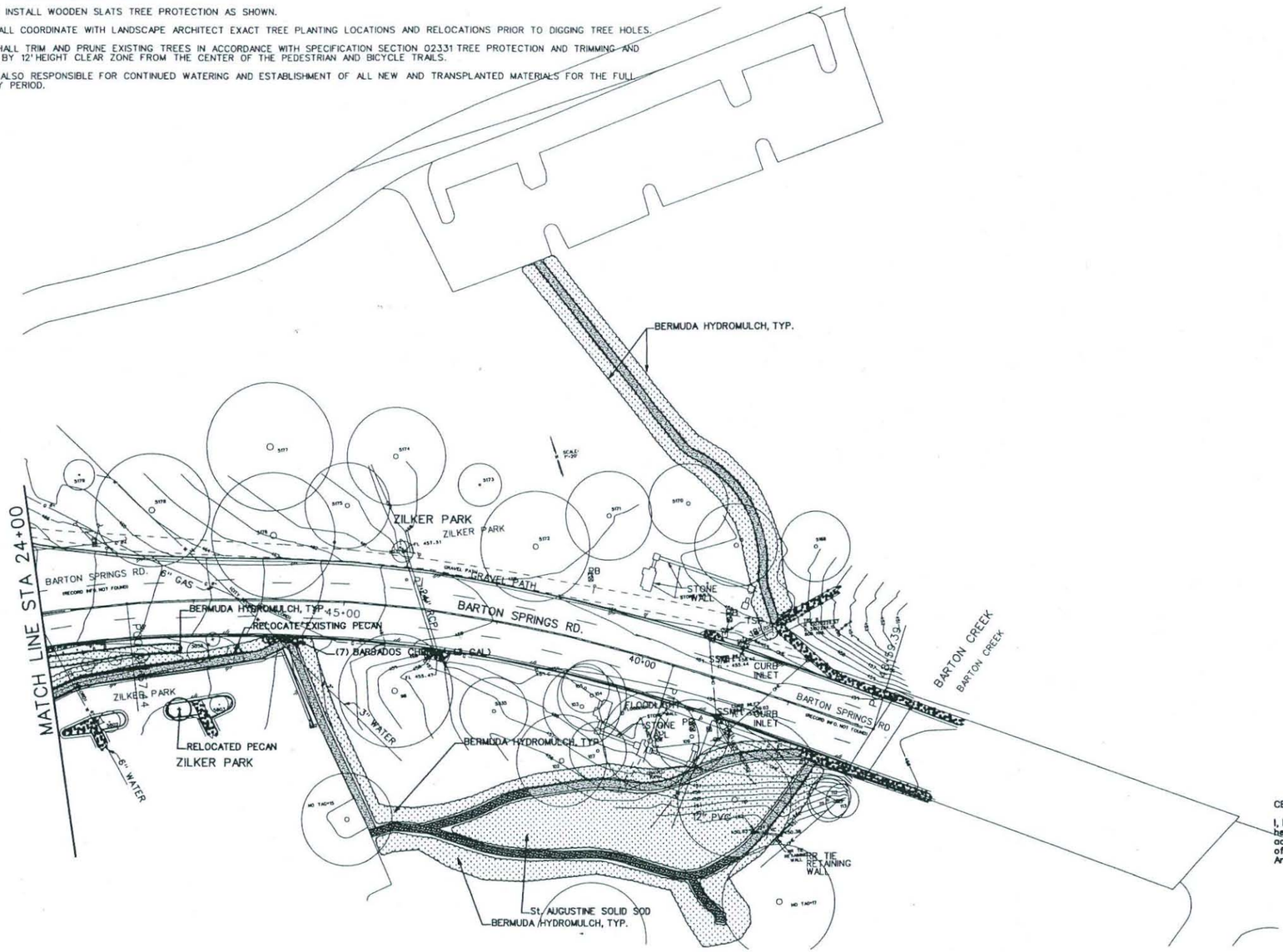
CITY OF AUSTIN FOUNDED 1839

NOTES	NAME	DATE
SURVEY BY	MWM	02/09/05
DRAWN BY	CJ	08/19/05
CHECKED BY	DS	08/19/05
DESIGNED BY	DS	08/19/05
REVIEWED BY	DS	08/19/05
SCALE: 1" = 40'		
CADD REF. NO.:		
CADD DIR.:		

SHEET NUMBER L8 OF L8

CONSTRUCTION NOTES

1. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES CONTRACTOR SHALL FERTILIZE EXISTING TREES WITHIN LIMITS OF CONSTRUCTION IN ACCORDANCE WITH REMEDIAL TREE CARE NOTES ON SHEET L7.
2. CONTRACTOR TO INSTALL AND MAINTAIN SILT FENCE AS SHOWN.
3. CONTRACTOR TO ESTABLISH VEGETATION IN DISTURBED AREAS BY HYDROMULCHING AND IRRIGATING AS REQUIRED.
4. ALL 3:1 SLOPES TO BE SOLID SOD.
5. NO EXISTING IRRIGATION ON SITE. CONTRACTOR IS RESPONSIBLE FOR ALL WATERING OF PLANTS AND REVEGETATION UNTIL FINAL ACCEPTANCE. NO WATER IS AVAILABLE ON SITE FOR ESTABLISHMENT. CONTRACTOR SHALL INSTALL TREEGATOR BAGS AT ALL RELOCATED AND NEWLY PLANTED TREES AS PER DETAILS L-4/L7 AND L-5/L7.
6. CONTRACTOR TO INSTALL FENCE TREE PROTECTION AS SHOWN.
7. CONTRACTOR TO INSTALL WOODEN SLATS TREE PROTECTION AS SHOWN.
8. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT EXACT TREE PLANTING LOCATIONS AND RELOCATIONS PRIOR TO DIGGING TREE HOLES.
9. CONTRACTOR SHALL TRIM AND PRUNE EXISTING TREES IN ACCORDANCE WITH SPECIFICATION SECTION 02331 TREE PROTECTION AND TRIMMING AND MAINTAIN A 20' WIDE BY 12' HEIGHT CLEAR ZONE FROM THE CENTER OF THE PEDESTRIAN AND BICYCLE TRAILS.
10. CONTRACTOR IS ALSO RESPONSIBLE FOR CONTINUED WATERING AND ESTABLISHMENT OF ALL NEW AND TRANSPLANTED MATERIALS FOR THE FULL ONE-YEAR WARRANTY PERIOD.



LEGEND

- HMAC/ BIKE LANE
- CONCRETE/ WALKWAY
- LANDSCAPING
- CONTRACTOR STAGING AREA
- SILT FENCE
- ROCK BERM
- FENCE TREE PROTECTION
- WOODEN SLATS TREE PROTECTION
- EXISTING TREE TO BE RELOCATED
- EXISTING TREE TO REMAIN
- NEW OR RELOCATED TREE
- NEW SHRUB
- APPROXIMATE LIMITS OF BERMUDA HYDROMULCH

CERTIFICATION

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SITE PLAN RELEASE Sheet ___ of ___

FILE NUMBER: SPC-06-0010D EXPIRATION DATE: ___
CASE MANAGER: ___ APPLICATION DATE: 03/13/2006
APPROVED ADMINISTRATIVELY ON: ___
APPROVED BY PLANNING COMMISSION ON: ___
APPROVED BY CITY COUNCIL ON: ___
under Section ___ of Chapter ___ of the Austin City Code.

___
Director, Watershed Protection and Development Review Department

DATE OF RELEASE: ___ ZONING: ___
Rev. 1: ___ Correction 1: ___
Rev. 2: ___ Correction 2: ___
Rev. 3: ___ Correction 3: ___

SPC-06-0010D

REV NO.	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT DIANE STEINBRUECK STATE OF TEXAS 1197

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

austin ... inc.
Landscape Architecture
Planning
Site Design
2111 Dickson Drive, Suite 30
Austin, Texas 78704
TEL 512-443-0900
FAX 512-443-0788

LANDSCAPE PLAN (STA 43+00 + STA 49+00)
2200-2800 BLOCK OF BARTON SPRINGS ROAD

CITY OF AUSTIN FOUNDED 1839

NOTES	NAME	DATE
SURVEY BY	MWM	02/09/05
DRAWN BY	CJ	09/14/06
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DESIGNED BY	DS	08/19/05
REVIEWED BY	DS	09/14/06
SCALE:	1" = 40'	
CADD REF. NO.:		
CADD DIR.:		

SHEET NUMBER L6 OF L8

...\07172006 LAND\40LSP06.dgn 1/22/2007 9:23:11 AM WINTEROWD

CONSTRUCTION NOTES

1. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES CONTRACTOR SHALL FERTILIZE EXISTING TREES WITHIN LIMITS OF CONSTRUCTION IN ACCORDANCE WITH REMEDIAL TREE CARE NOTES ON SHEET L7.
2. CONTRACTOR TO INSTALL AND MAINTAIN SILT FENCE AS SHOWN.
3. CONTRACTOR TO ESTABLISH VEGETATION IN DISTURBED AREAS BY HYDROMULCHING AND IRRIGATING AS REQUIRED.
4. ALL 3:1 SLOPES TO BE SOLID SOD.
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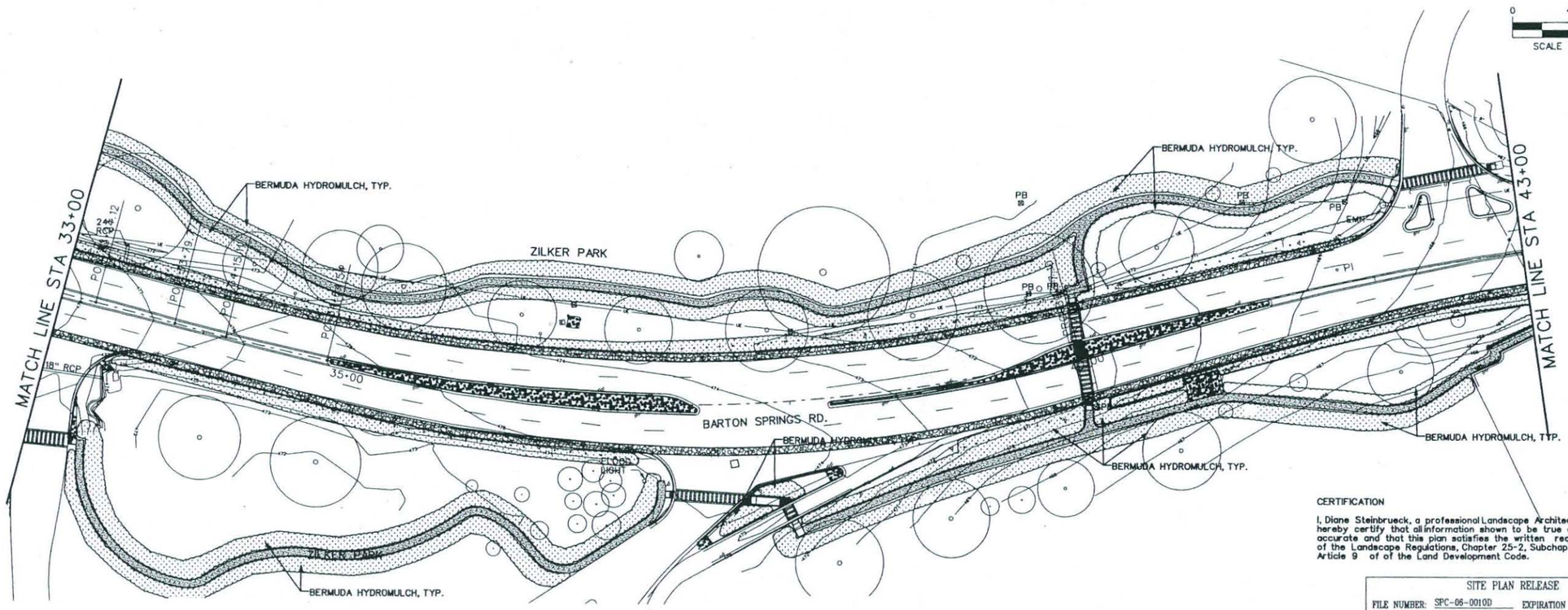
6. CONTRACTOR TO INSTALL FENCE TREE PROTECTION AS SHOWN.
7. CONTRACTOR TO INSTALL WOODEN SLATS TREE PROTECTION AS SHOWN.
8. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT EXACT TREE PLANTING LOCATIONS AND RELOCATIONS PRIOR TO DIGGING TREE HOLES.
9. CONTRACTOR SHALL TRIM AND PRUNE EXISTING TREES IN ACCORDANCE WITH SPECIFICATION SECTION 02331 TREE PROTECTION AND TRIMMING AND MAINTAIN A 20' WIDE BY 12' HEIGHT CLEAR ZONE FROM THE CENTER OF THE PEDESTRIAN AND BICYCLE TRAILS.
10. CONTRACTOR IS ALSO RESPONSIBLE FOR CONTINUED WATERING AND ESTABLISHMENT OF ALL NEW AND TRANSPLANTED MATERIALS FOR THE FULL ONE-YEAR WARRANTY PERIOD.

LEGEND

- HMAC/ BIKE LANE
- CONCRETE/ WALKWAY
- LANDSCAPING
- CONTRACTOR STAGING AREA
- SILT FENCE
- ROCK BERM
- FENCE TREE PROTECTION
- WOODEN SLATS TREE PROTECTION
- EXISTING TREE TO BE RELOCATED
- EXISTING TREE TO REMAIN
- NEW OR RELOCATED TREE
- APPROXIMATE LIMITS OF BERMUDA HYDROMULCH

0 40 80
SCALE IN FEET



CERTIFICATION

I, Diane Steinbrueck, a professional Landscape Architect, do hereby certify that all information shown to be true and accurate and that this plan satisfies the written requirements of the Landscape Regulations, Chapter 25-2, Subchapter C, Article 9 of of the Land Development Code.

SITE PLAN RELEASE Sheet ___ of ___

FILE NUMBER: SPC-06-0010D EXPIRATION DATE: ___
CASE MANAGER: ___ APPLICATION DATE: 03/13/2006
APPROVED ADMINISTRATIVELY ON: ___
APPROVED BY PLANNING COMMISSION ON: ___
APPROVED BY CITY COUNCIL ON: ___
under Section ___ of Chapter ___ of the Austin City Code.

___
Director, Watershed Protection and Development Review Department

DATE OF RELEASE: ___ ZONING: ___
Rev. 1: ___ Correction 1: ___
Rev. 2: ___ Correction 2: ___
Rev. 3: ___ Correction 3: ___

SPC-06-0010D

REV NO.	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT DIANE STEINBRUECK 1197 STATE OF TEXAS

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Landscape Architecture
Planning
Site Design

211 Dickson Drive, Suite 30
Austin, Texas 78704
512-442-0700
FAX 512-442-0798

LANDSCAPE PLAN (STA. 33+00 TO STA. 43+00)
2200-2800 BLOCK OF BARTON SPRINGS ROAD

CITY OF AUSTIN FOUNDED 1839

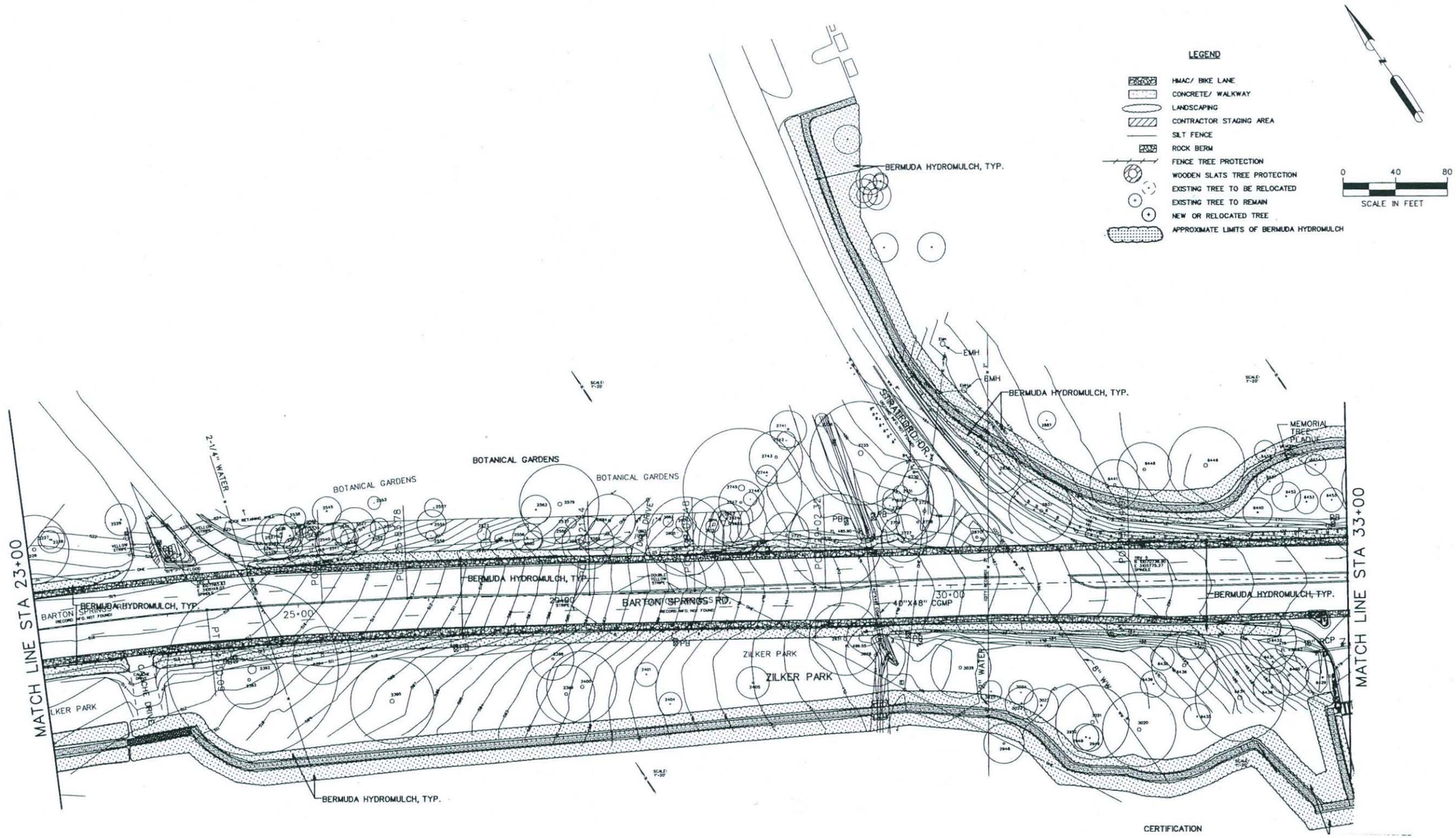
NOTES	NAME	DATE
SURVEY BY	MWM	02/09/05
DRAWN BY	CJ	09/14/06
CHECKED BY	DS	09/14/06
DESIGNED BY	DS	08/19/05
REVIEWED BY	DS	09/14/06

SCALE: 1" = 40'
CADD REF. NO.:
CADD DIR.:

SHEET NUMBER L5 OF L8

...\07172006 LAND\40LSP05.dgn 1/22/2007 9:21:40 AM WINTEROWD

Item 4d pat D



CERTIFICATION

REV NO	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT
D. ANE STEINBRECK
1197
STATE OF TEXAS

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Landscape Architecture
Planning
Site Design

austin-zurich inc.

211 Dickson Drive, Suite 30
Austin, Texas 78704
512 442-0005
FAX 512-442-0788

LANDSCAPE PLAN (STA. 23+00 TO STA. 33+00)
2200-2800 BLOCK OF BARTON SPRINGS ROAD

CITY OF AUSTIN

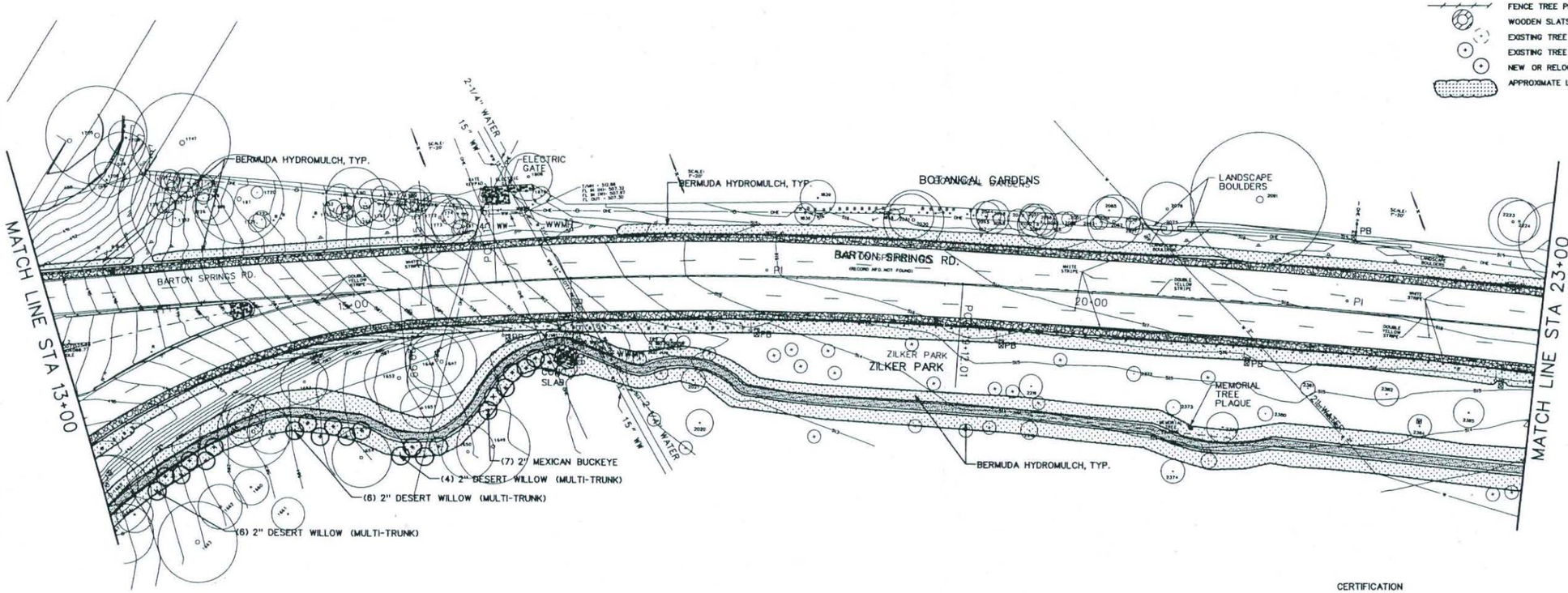
CONSTRUCTION NOTES

1. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES CONTRACTOR SHALL FERTILIZE EXISTING TREES WITHIN LIMITS OF CONSTRUCTION IN ACCORDANCE WITH REMEDIAL TREE CARE NOTES ON SHEET L7.
2. CONTRACTOR TO INSTALL AND MAINTAIN SILT FENCE AS SHOWN.
3. CONTRACTOR TO ESTABLISH VEGETATION IN DISTURBED AREAS BY HYDROMULCHING AND IRRIGATING AS REQUIRED.
4. ALL 3:1 SLOPES TO BE SOLID SOD.
5. NO EXISTING IRRIGATION ON SITE. CONTRACTOR IS RESPONSIBLE FOR ALL WATERING OF PLANTS AND REVEGETATION UNTIL FINAL ACCEPTANCE. NO WATER IS AVAILABLE ON SITE FOR ESTABLISHMENT. CONTRACTOR SHALL INSTALL TREEGATOR BAGS AT ALL RELOCATED AND NEWLY PLANTED TREES AS PER DETAILS L-4/L7 AND L-5/L7.
6. CONTRACTOR TO INSTALL FENCE TREE PROTECTION AS SHOWN.
7. CONTRACTOR TO INSTALL WOODEN SLATS TREE PROTECTION AS SHOWN.
8. CONTRACTOR SHALL COORDINATE WITH LANDSCAPE ARCHITECT EXACT TREE PLANTING LOCATIONS AND RELOCATIONS PRIOR TO DIGGING TREE HOLES.
9. CONTRACTOR SHALL TRIM AND PRUNE EXISTING TREES IN ACCORDANCE WITH SPECIFICATION SECTION 02331 TREE PROTECTION AND TRIMMING AND MAINTAIN A 20' WIDE BY 12' HEIGHT CLEAR ZONE FROM THE CENTER OF THE PEDESTRIAN AND BICYCLE TRAILS.
10. CONTRACTOR IS ALSO RESPONSIBLE FOR CONTINUED WATERING AND ESTABLISHMENT OF ALL NEW AND TRANSPLANTED MATERIALS FOR THE FULL ONE-YEAR WARRANTY PERIOD.

0 40 80
SCALE IN FEET

LEGEND

- HMAC/ BIKE LANE
- CONCRETE/ WALKWAY
- LANDSCAPING
- CONTRACTOR STAGING AREA
- SILT FENCE
- ROCK BERM
- FENCE TREE PROTECTION
- WOODEN SLATS TREE PROTECTION
- EXISTING TREE TO BE RELOCATED
- EXISTING TREE TO REMAIN
- NEW OR RELOCATED TREE
- APPROXIMATE LIMITS OF BERMUDA HYDROMULCH



CERTIFICATION

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SITE PLAN RELEASE Sheet ___ of ___

FILE NUMBER: SPC-06-0010D EXPIRATION DATE: ___
CASE MANAGER: ___ APPLICATION DATE: 03/13/2006
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Director, Watershed Protection and Development Review Department

DATE OF RELEASE: ___ ZONING: ___
Rev. 1: ___ Correction 1: ___
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Rev. 3: ___ Correction 3: ___

SPC-06-0010D

REV NO.	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT DIANE STEINBRUECK 1197 STATE OF TEXAS

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Austin studio inc
Landscape Architecture
Planning
Site Design
211 Dickson Drive, Suite 30
Austin, Texas 78704
TEL 512-442-0300
FAX 512-442-0788

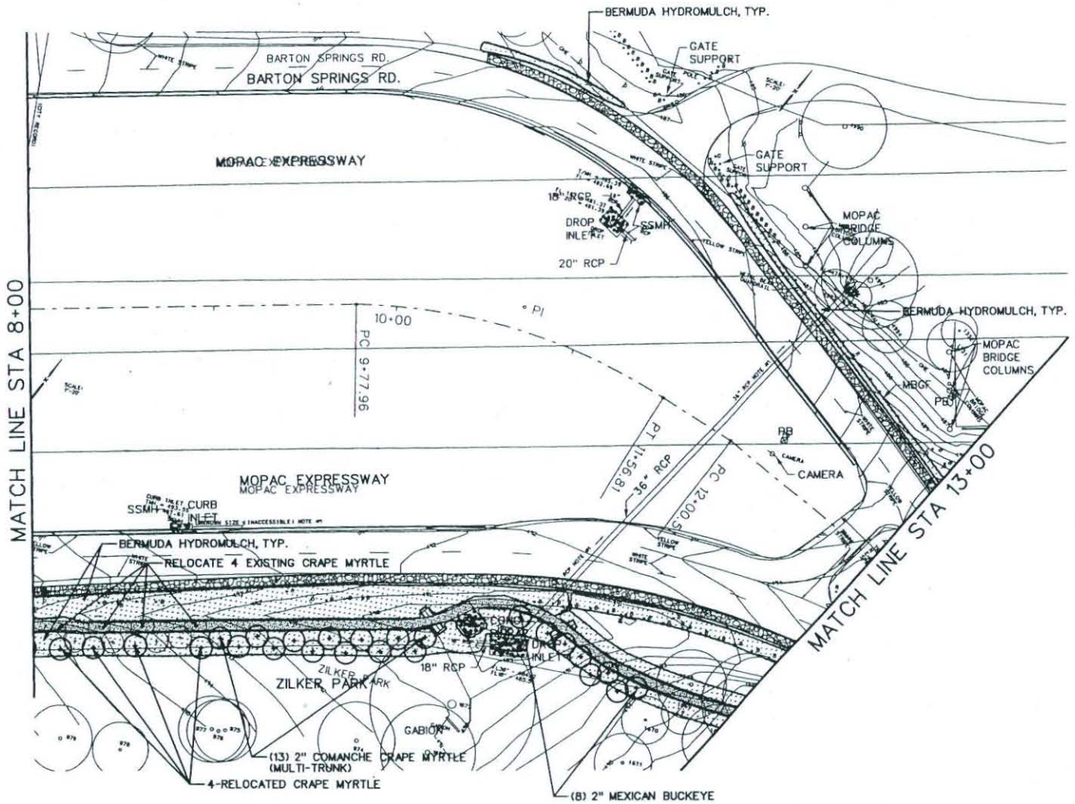
LANDSCAPE PLAN (STA 13+00 TO STA. 23+00)
2200-2800 BLOCK OF BARTON SPRINGS ROAD

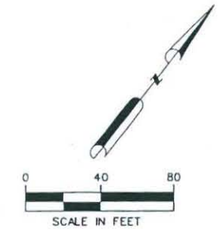
CITY OF AUSTIN FOUNDED 1839

NOTES	NAME	DATE
SURVEY BY	MWM	02/09/05
DRAWN BY	CJ	09/14/06
CHECKED BY	DS	09/14/06
DESIGNED BY	DS	08/19/05
REVIEWED BY	DS	09/14/06
SCALE: 1" = 40'		
CADD REF. NO.:		
CADD DIR.:		

SHEET NUMBER L3 OF L8

...\07172006 LAND\40LSP03.dgn 1/22/2007 9:01:57 AM WINTEROWD





LEGEND

- HMAC/ BIKE LANE
- CONCRETE/ WALKWAY
- LANDSCAPING
- CONTRACTOR STAGING AREA
- SILT FENCE
- ROCK BERM
- FENCE TREE PROTECTION
- WOODEN SLATS TREE PROTECTION
- EXISTING TREE TO BE RELOCATED
- EXISTING TREE TO REMAIN
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CONSTRUCTION NOTES

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SITE PLAN RELEASE — Sheet ___ of ___

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Director, Watershed Protection and Development Review Department

DATE OF RELEASE: ___ — ZONING: ___
Rev. 1: ___ — Correction 1: ___
Rev. 2: ___ — Correction 2: ___
Rev. 3: ___ — Correction 3: ___

SPC-06-0010D

REV NO.	BY	DATE	REVISION

REGISTERED LANDSCAPE ARCHITECT — DIANE STEINBRUECK — 1197 — STATE OF TEXAS

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Landscape Architecture
Planning
Site Design

2111 Dickson Drive, Suite 30
Austin, Texas 78704
TEL 512-442-0700
FAX 512-442-0788

LANDSCAPE PLAN (STA 8+00 TO STA. 13+00)
2200-2800 BLOCK OF BARTON SPRINGS ROAD

CITY OF AUSTIN — FOUNDED 1839

NOTES	NAME	DATE
SURVEY BY	MWM	02/09/05
DRAWN BY	CJ	09/14/06
CHECKED BY	DS	09/14/06
DESIGNED BY	DS	08/19/05
REVIEWED BY	DS	09/14/06
SCALE: 1" = 40'		
CADD REF. NO.:		
CADD DIR.:		

SHEET NUMBER L2 OF L8

...\07172006 LAND\40LSP02.dgn 1/22/2007 8:57:21 AM WINTEROWD

Hrenda Item 4a. A.

CONSTRUCTION NOTES

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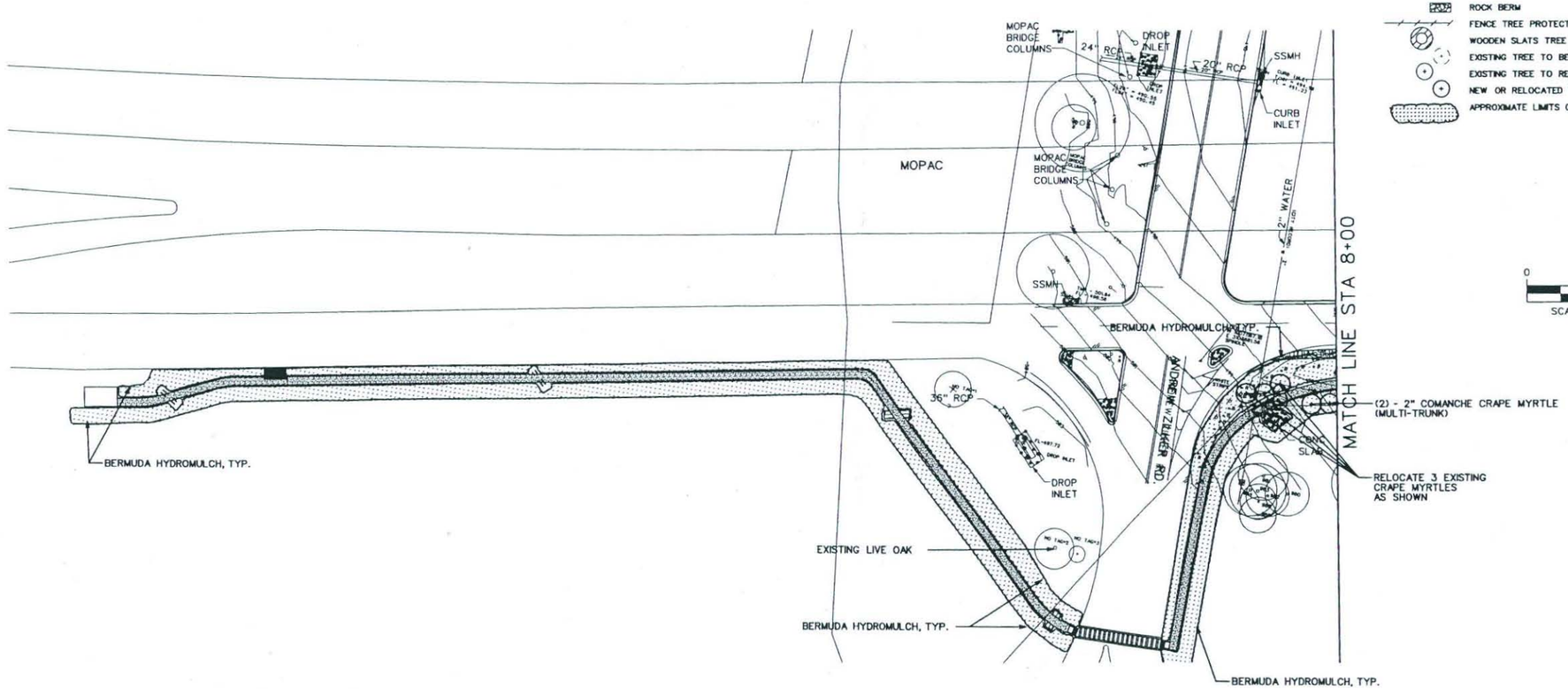

LEGEND

- HMAC/ BIKE LANE
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0 40 80
SCALE IN FEET

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SITE PLAN RELEASE Sheet ___ of ___

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SPC-06-0010D

REV NO.	BY	DATE	REVISION

PRELIMINARY

CITY OF AUSTIN, TEXAS
PUBLIC WORKS DEPARTMENT

Landscape Architecture
Planning
Site Design
211 Dickson Drive, Suite 30
Austin, Texas 78704
512 442-0055
FAX 512 442-0788

LANDSCAPE PLAN (STA 0+00 TO STA. 8+00)
2200-2800 BLOCK OF BARTON SPRINGS ROAD

NOTES	NAME	DATE
SURVEY BY	MWM	02/09/05
DRAWN BY	CJ	09/14/06
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REVIEWED BY	DS	09/14/06
SCALE: 1" = 40'		
CADD REF. NO.:		
CADD DIR.:		

SHEET NUMBER L1 OF L8

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