



**PARKS & RECREATION ADVISORY BOARD**

**MINUTES**

**Rowlett Community Centre, 5300 Main Street, Room D**

**September 10, 2008 - 6:30 PM**

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- PRESENT:** Wayne Baxter, Lonnie Cornwell, Debby Bobbitt, Robert Kittrell, Karen Scholz, Norman Tsao, Norman Scown; Ken Romaine, Louis Lebel, Jeff Jenkins
- ABSENT:** Becky Tate (excused), Howard Marsellus (Excused)
- VISITORS:** Bill Barber, Bob Carter, Heather Sims, Deborah Alexander of the Parks & Recreation Bond Committee; Zach Rozinsks & Gabriel Palma
- STAFF:** Katie Corder, Assistant City Manager, Tim Hightshoe, Interim Culture & Recreation Director; Dianne Zachary, Sr. Administrative Assistant
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1. The meeting was called to order at 6:34 p.m. by Chairman Baxter.
2. The minutes of the July 9, 2008 meeting were unanimously approved following a motion by Karen Scholz that was seconded by Norman Scown.
3. A quorum was present.
4. Review and board's recommendation of reported violations by the Rowlett Chapter #4440 of the Academy of Model Aeronautics." Mr. Ken Romaine recused himself from this discussion because he is the President of the RCFC.

Tim Hightshoe shared two reported violations by flying club members received from a resident.

**Official Complaint against the  
Rowlett Chapter #4440 of the Academy of Model Aeronautics**

An official complaint on the "Rowlett Chapter #4440 of the Academy of Model Aeronautics" was received on Wednesday, August 20<sup>th</sup>. The complaint was for multiple out of bound violations captured in video on Wednesday, August 13<sup>th</sup> and Saturday August 16<sup>th</sup>.

Additional issues of violations on Tuesday August 12<sup>th</sup> were reported; however citizen did not have a camera or video equipment with her at the time. A noise violation was also reported with a decibel reading of 90.

August 12<sup>th</sup> Out of bounds violations- With no video or physical evidence out of bounds violations for this date cannot be proved.

August 13<sup>th</sup> Out of bounds violations - In review of the video provided the plane was out of bounds.

August 16<sup>th</sup> Out of bounds violations & Exceeding noise levels- In review of the video provided the plane was out of bounds. Noise violation was recorded on a Weight C level at 90 decibels; however measuring is to be performed on a Weight A scale.

Upon notifying the RCAMA of the violations and their review of the evidence, the club has identified members in violation.

The Board reviewed this investigation information. Lonnie Cornwell made a motion to recommend to the Mayor and City Council that the sanctions given to Hector Ramos for the August 13<sup>th</sup> violations, and Steven Canan for the August 16<sup>th</sup> violations stating that both members will not be allowed to fly at the Rowlett field for one week starting Sunday, September 21<sup>st</sup> and ending on Sunday morning September 28<sup>th</sup> be accepted and no further sanctions be required. The motion was seconded by Robert Kittrell, and the vote was unanimous in the affirmative to support this recommendation.

5. The new Culture & Recreation Director will not be hired until after a new City Manager is hired. Tim Hightshoe is now Interim Parks Director; Heath Olinger is over all of Recreation; and Jennifer Gomez will be handling special events and helping with parks and the downtown project in which the city is currently engaged.

- Upcoming events include: 9/20-Dog Swim and 10/18 Camp Fear.
- The Council approved the purchase of "Control Link" which will automate electricity at the athletic fields and save money on the cost of electricity.
- The Skate Zone area usage will be discussed in next month's PAB meeting.
- Staff is now preparing for bad weather when they may be called upon to use parks equipment to render aid.
- Parks employees have been distributing survey forms to residents to evaluate the parks. This information will be used to evaluate each area in the parks to make improvements and will be tied to employee reviews.

6. Skate Zone update. (Wayne Baxter) This item was tabled until the October meeting.

7. Discuss Environmental Learning Center history. (Wayne Baxter)

Tim Hightshoe distributed a history of the ELC, drawings for Phase II of the ELC for the information of the Parks Board a copy of the Parkland Dedication Ordinance # 4-1-86A. (See Attached)

8. Discuss Parks Pro Rata funding. (Wayne Baxter)

Katie Corder explained the pro rata spreadsheet. This account was audited two years ago and all was in order. Tim will verify when these funds must be used, either 5 or 10 years.

9. Discuss RCC Hours of operation. (Wayne Baxter)

Heath Olinger explained that the possibility of opening the RCC on Sunday from 1-6 p.m. has been explored, but the cost is prohibitive. Two staff members would be required from 12:45-6:45 pm as well as one custodian for a total of \$11,625 annually for Sunday only. All area community centers are also closed on Sunday.

10. Discuss Springfield Park parking. (Wayne Baxter)

Karen Scholz explained that the small parking lot at Springfield Park necessitates people parking on the street and making access by emergency vehicles difficult. Tim Hightshoe explained that much of the park is in a flood zone and finding an area for another parking lot is difficult, but he will look at the options and report back.

11. Discuss single loading streets to parks and updating the Parks & Open Space Master Plan. (Norman Scown)

Norman explained that single loading around our parks is designed to have all homes face the parks, rather than back up to them. The Board discussed the issue that had been considered a few years ago by the Parks Board that voted unanimously to recommend to Council that all streets surrounding parks should be single-loaded. Since Rowlett is almost completely "built out", but Wayne Baxter asked for clarification from staff on this matter.

12. Discuss project for Eagle Scouts of identifying trees along the walking trails in our parks by placing markers. (Lonnie Cornwell)

Lonnie informed the Board that the Girl Scout who attended a meeting earlier this year has not been in touch with him out placing markers along walking trails in the parks to identify trees. Debby Bobbitt has asked a master naturalist to begin identifying trees, and will give the city a list when it is complete. Keep Rowlett Beautiful will pay for the placards.

13. Bill Barber, chairman of the Parks & Recreation Bond Sub-committee addressed the Parks Board explaining that they are charged with the responsibility to determine what items related to Parks & Recreation to ask to be included in the November 2009 bond package. They will determine priorities, since Parks have been without funds for some time, and take a presentation to clubs, sports, people who use our parks, and students to gather this information.

Many people come to our parks from other cities and spend money in Rowlett in the process. Only 8% of all the city's budget is spend on parks. There is also a need to expand the Wet Zone and perhaps install solar heat in the pools to use them for longer periods.

The bond committee survey will be distributed at the Dog Swim and Camp Fear.

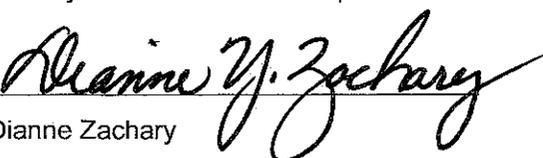
14. Public Announcement. Members of the Board and/or staff may make announcements of local civic events. No member of the board or commission may discuss nor take any action with regard to the announcements.

- Camp Fear, October 18-19 – Volunteers are needed. Contact Sandy Beffa at the RCC.
- Howard Marsellus and Louis Lebel will not reapply for the Parks Advisory Board.

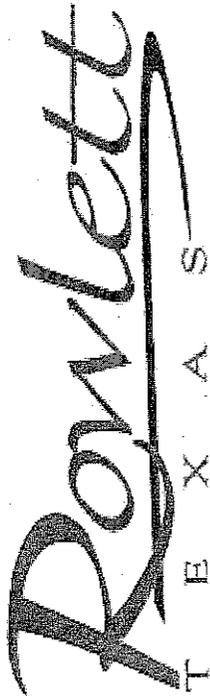
15. Members of the Board may request topics for future agenda meetings. No member of the board or commission may discuss any of the requested subjects until such matters have been properly placed on a posted agenda.

No agenda items were suggested for October's meeting.

16. Adjournment was at 8:25 p.m.

  
 \_\_\_\_\_  
 Dianne Zachary  
 Sr. Administrative Assistant

  
 \_\_\_\_\_  
 Wayne Baxter  
 Chairman



**Donated land for Parks**

Asset no	Tag	Description	Explanation	Date	FMV
315	1506	LAND (COLLEGE PARKBLK 10, LOT 16 STANFORD)	DONATED.	07/01/85	20,500.00
316	1507	LAND (COLLEGE PARKBLK 10, LOT 17 STANFORD)	DONATED	07/01/85	20,500.00
319	1510	LAND (GARNER RD 6.195 ACRES)	DONATED	02/01/86	49,556.00
2140	1515	LAND (SPRINGFIELD 116.988 ACRE)	DONATED	10/01/89	423,425.00
4632	4632	LAND 3.4 AC KENWOOD OFF LAKEVW/ADJ TO WALMART	DONATION-TO CREATE NEW CITY PK TO SERVE KENWOOD HTS/NORTH PK	12/16/03	370,000.00



ORDINANCE NO. 4-1-86A

AN ORDINANCE OF THE CITY OF ROWLETT, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE CITY OF ROWLETT TO ADD SECTION 13-4-2 REQUIRING THE DEDICATION OF PARK LAND IN CONNECTION WITH THE PLATTING OF RESIDENTIAL SUBDIVISIONS; PROVIDING FOR THE DEPOSIT OF MONEY IN LIEU OF PARK LAND IN CERTAIN CASES; PROVIDING FOR THE ESTABLISHMENT OF A PARK DEDICATION FUND; PROVIDING FOR THE EXPENDITURE OF THE PARK DEDICATION FUND; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR THE REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO HUNDRED DOLLARS (\$200.00) FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

**WHEREAS**, the City Council of the City of Rowlett, Texas, has adopted a Parks, Recreation, and Open Space Plan to provide for future park and open space needs for the City; and

**WHEREAS**, continuing residential subdivision development in the City increases the need for open space and park preservation and puts an undue burden on City resources; and

**WHEREAS**, the preservation of the public health, safety, and general welfare requires that residential developers dedicate land for park purposes or deposit money in a park dedication fund in lieu thereof to provide parks and open spaces for residents of new residential subdivisions; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROWLETT, TEXAS:

SECTION 1.

That the Code of Ordinances of the City of Rowlett be, and the same is hereby, amended by adding Section 13-4-2 to read as follows:

"Section 13-4-2 **PARK LAND DEDICATION**

- A. Any person, firm, or corporation offering a preliminary or final plat for development of any area zoned and to be used for single family, duplex, or multi-family residential purposes in the City shall include in such preliminary or final plat dedication to the City of Rowlett of land for public park purposes, calculated at a rate of not less than 4.5 acres of park land per 1,000 ultimate residents of such residential subdivision. The following formula shall be used to determine the amount of park land to be dedicated.

$$\frac{4.5 \text{ acres} \times (\text{No. of Units}) \times (\text{Persons/Unit})}{1,000} = \text{Acres to be Dedicated}$$

The location and size of public parks within the City shall be determined in all instances by the City Council of the City of Rowlett. That determination shall be based on existing circumstances at the time, upon recommendation from the Park Board and in accordance with the Parks, Recreation, and Open Space Plan adopted by the City. A neighborhood park shall have a minimum size of 5 acres, with an optimum size of 10 acres. A community park shall have a minimum size of 15 acres, with an optimum size of 50 acres. A City park shall have a minimum size of 100 acres, with an optimum size of 200 acres.

- B. The preliminary and final subdivision plat shall clearly show the area proposed to be dedicated as park land under the provisions of this section. The Planning and Zoning Commission shall determine the number of persons per unit based upon data compiled by the City of Rowlett from time to time in the update of its comprehensive plans, which shall be reviewed and adjusted by the City Council as necessary to reflect current figures. The City Council finds that the following chart represents the average number of persons per unit by correct density categories at this time:

<u>Gross Density Per Residential Land Area</u>	<u>Persons Per Unit</u>
0 - 6 dwelling units per acre	2.8
6 -12 dwelling units per acre	2.2
over 12 dwelling units per acre	1.7

The developer has the duty to submit with his subdivision plat for a multi-family residential development information concerning the number of units, and should he fail to do so, the Planning and Zoning Commission shall assume the highest density allowed in such multi-family residential district.

- C. The City Council declares that development of an area smaller than 5 acres for public park purposes is impractical. Therefore, if a development would require, by virtue of Section A above, less than 5 acres to be dedicated as park land, the developer shall be required to pay cash in lieu of land in an amount determined as set out below. In instances where an area of greater than 5 acres is required to be dedicated, the Planning and Zoning Commission shall have the right to refuse dedication of land and, instead, require payment of cash in lieu of land as provided below if the sector of the City in which the development is situated has sufficient park area as required by the City's Master Land Use Plan and the Parks, Recreation and Open Space Plan, and the public health, safety, and general welfare would be better served by requiring cash payment into the fund described below.
- D. In instances where an area of less than 5 acres is required to be dedicated using the above formula or in instances where required as provided in C above, money, in lieu of land, shall be paid into a "park dedication fund" to be established by the City of Rowlett. Such money shall equal the "fair market value" of the acreage required to be dedicated under the above formula at the time the final plat is approved by the Planning and Zoning Commission. If the "fair market value" is not agreed upon between the Planning and Zoning Commission, with assistance from the Park Board, and the developer, an appraiser will be chosen by the Commission and will, at the developer's expense, give the Commission an opinion as to the current "fair market value" of the acreage required. The payment by the developer will be made at or before approval of the final plat by the Commission.

- E. The park dedication fund will be administered by the Park Board to best benefit the development, provided that the establishment of a park shall be within the discretion of the City Council. In no event will the money paid by the developer into the fund be expended on any park site greater than 2 1/2 miles from the subdivision. The money paid by the developer will be expended on such park site or sites within 5 years from the date of final plat approval. All sums deposited to the fund shall be accounted for by the City of Rowlett and expended for such purposes as acquisition of land, construction of improvements and purchase of equipment for the site directly related to the subdivision depositing the funds. If such funds are not so expended within 5 years of final plat approval, the owner shall be entitled to a refund of such funds, less any amounts expended for such purposes.
- F. At least 50% of the dedicated land required hereby shall be well drained, level, and suitable for open play. No part of such 50% shall be within any designated flood plain or floodway of the City. All park land offered for dedication or purchased under this section shall meet the requirements for location outlined in the Parks, Recreation, and Open Space Plan adopted by the City. Areas of unusual topography or slope which render the site unusable are not acceptable. Drainage areas may be accepted if the recommended channel improvements, walkways, landscaping, and irrigation systems are constructed in accordance with City standards and conform to the Plan."

#### SECTION 2.

All ordinances in conflict with the provisions of this ordinance are hereby repealed.

#### SECTION 3.

Should any paragraph, sentence, subdivision, clause, phrase or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole or any part or provision thereof, other than the part so declared to be invalid, illegal or unconstitutional, and shall not affect the validity of the Rowlett City Code as a whole.

#### SECTION 4.

Any person, firm or corporation violating any of the provisions of this ordinance or the Rowlett City Code, as amended hereby, shall be deemed guilty of a misdemeanor and, upon conviction in the Municipal Court of the City of Rowlett, Texas, shall be punished by a fine not to exceed the sum of Two Hundred Dollars (\$200.00) for each offense, and each and every day any such violation shall continue shall be deemed to constitute a separate offense.

#### SECTION 5.

This ordinance shall take effect immediately from and after its passage and the publication of the caption as the law and charter in such cases provide, provided however, that no preliminary or final plat filed with the City of Rowlett pursuant to the provisions of Chapter 13 of the Rowlett City Code prior to the effective date

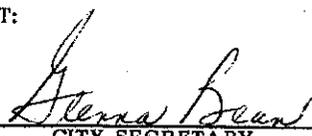
hereof shall be required to comply with the park land dedication provisions hereof. The owner of property upon which a preliminary plat has been conditionally approved as provided by Chapter 13 may file a final plat within one (1) year of the conditional approval without compliance with the provisions hereof, provided further however, that such conditional approval may not be extended beyond such one (1) year period unless such preliminary plat complies with the provisions of this ordinance.

**DULY PASSED** by the City Council of the City of Rowlett, Texas, on the 15th day of April, 1986.

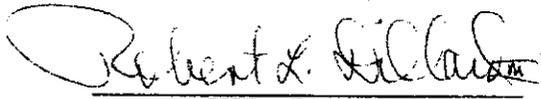
APPROVED:

  
MAYOR

ATTEST:

  
CITY SECRETARY

APPROVED AS TO FORM:

  
CITY ATTORNEY

CITY OF ROWLETT, TEXAS

ORDINANCE NO. 8-3-93A

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ROWLETT, TEXAS AMENDING § 13-4-2 OF THE CODE OF ORDINANCES BY PROVIDING CERTAIN CASH PAYMENTS IN LIEU OF PARK LAND DEDICATION; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROWLETT, TEXAS:

Section 1. That § 13-4-2 D of the Code of Ordinances of the City of Rowlett, Texas is hereby amended to read in its entirety as follows:

"In instances where an area of less than five (5) acres is required to be dedicated using the above formula or in instances where required as provided in C above, money in lieu of land shall be paid into a "park dedication fund" to be established by the City of Rowlett. The cash payment shall be in an amount set from time to time by Resolution of the City Council, sufficient to acquire land for a neighborhood park or reimburse the City for land previously acquired for a neighborhood park in the area where such development is located. Until changed by the City Council, such amount shall be computed on the basis of the greater of \$335 times the maximum possible dwelling units or \$335 per platted lot, as shown on the proposed plat. The payment by the developer will be made at or before approval of the final plat by the Commission."

Section 2. That the park dedication fee as established herein shall be in effect for all outstanding plats for which the fee has not yet been paid.

Section 3. If any section, article, paragraph, sentence, clause, phrase or word in this ordinance, or application thereto any person or circumstances is held invalid or unconstitutional by a Court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this ordinance; and the City Council hereby declares it would have passed such remaining portions of the ordinance despite such invalidity, which remaining portions shall remain in full force and effect.

Section 4. That this Ordinance shall take effect immediately from and after its adoption and it is so ordained.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ROWLETT, TEXAS this 3rd day of August, 1993.

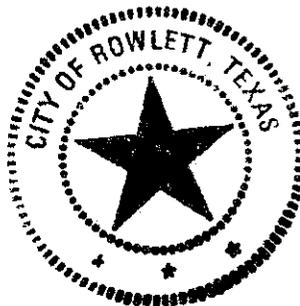
ATTEST:

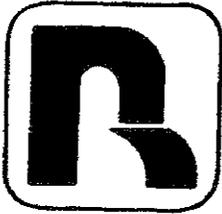
*Barbara Dean*  
City Secretary  
City of Rowlett, Texas

APPROVED AS TO FORM:

*[Signature]*  
City Attorney  
City of Rowlett, Texas

*M. M. Call*  
Mayor  
City of Rowlett, Texas





## Rowlett Parks and Recreation Department

### MEMORANDUM

TO: CITY COUNCIL, MIKE GIBSON  
FROM: JERRY W. KEY, PALS DEPARTMENT  
RE: PARK DEDICATION ORDINANCE REVISION  
DATE: JULY 13, 1993

For the past several months, the Park Board has been discussing the revision of our Park Dedication Ordinance (PDO). As you are aware, the current PDO requires the Board to establish a value for each Sub-Division presented to the Planning Department with that value being converted, by the PDO formula, to a park dedication fee. This fee must be paid prior to approval of the final plat. As the Board and I understand this PDO, the Board established value on the proposed Sub-Division has always been on the land as if all amenities (water-sewer-streets) were in place and the property could be developed immediately. Other cities interpretation of this same ordinance is as ours, however, several developers have taken exception to this interpretation and think the assessment should be on raw, undeveloped land.

The Park Board had requested that I meet with Attorney Eckert and establish a more workable and less controversial ordinance. The Board's recommendation was to discuss with Mr. Eckert the possibility of establishing a fee of \$335 per lot to each Sub-Division at submittal of the preliminary plat. (Since the inception of this ordinance in 1986 the average assessment paid per lot has been \$335)

Attorneys meet with Mr. Gibson and I to discuss this recommendation. Each agreed that this \$335 per lot seems fair and equitable, and is requesting that Council permit us to discuss this issue with you and adopt the revised ordinance if you so choose.

Our request for placing this item on the work session and regular agenda during the same session are two fold. First, the Board has tabled two assessments (a) Centex's Harborside Estates and Harborview Addition and (b) Heritage on the Lake while awaiting our meeting with the attorneys and any subsequent Council action. Secondly, the board has two Sub-Divisions which have been assessed values and the owners are not pleased with the methods of establishing these values nor have they paid the assessment which was given them by the Board. Not wanting to delay any of these developers further, I would appreciate any discussion and action Council may wish to take on this ordinance.

Below is an example of the fee as it relates the current ordinance and another of what the proposed fee would become if we use a proposed Sub-Division of 80 lots at a Board established value of \$25,000 per acre.

**Current Park Dedication Ordinance:**

2.8 citizens per home x 4.5 acres x 80 lots div. by 1000 residents x \$25,000 per acre  
= \$25,200 park dedication fee

**Proposed**

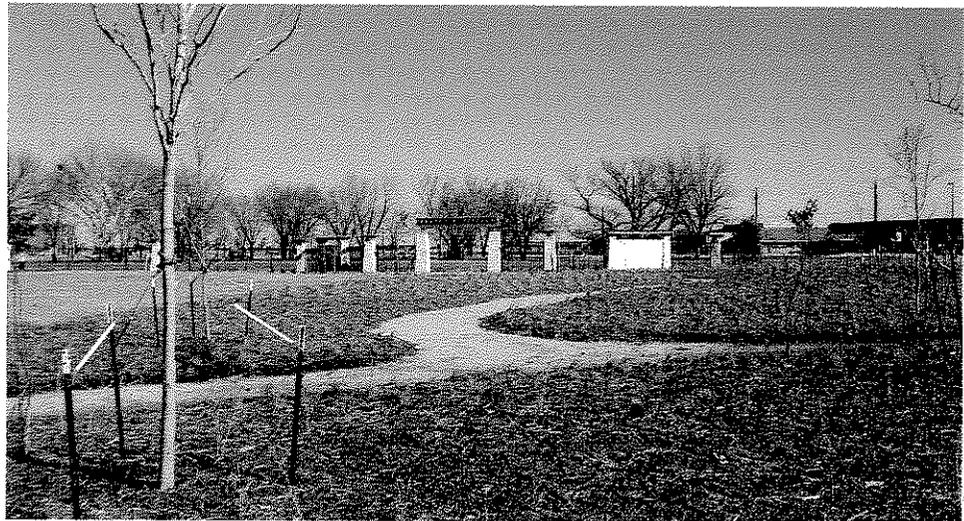
80 lots x \$335 per lot = \$26,800 park dedication fee

**Environmental Learning Center**

**Type of Park: Special Purpose Park (partly developed)**

The Rowlett Environmental Learning Center is located in sector 3 (northeast quadrant) of Rowlett.

**Address:** 6301 Chiesa Road  
**Year Built:** 2002/03  
**Size of Park:** 4.73 Acres



**Comments** – The Rowlett Environmental Learning Center (RELC) was conceived by Keep Rowlett Beautiful, Inc. in partnership with Rowlett Parks Department. The mission of the RELC is to “teach Texans to manage and conserve the natural resources of Texas for the use and enjoyment of present and future generations.” The purpose is to be a “showcase for conservation and environmental education open to the public and used by the parks maintenance division as a grow out location for trees to supply public property plantings.”

Half Associates was contracted by the City of Rowlett to design and prepare contract documents for implementing Phase II of the RELC partly funded by an educational grant from NCTCOG. This phase of the project included:

- Implementation of demonstration gardens,
- Provision of a buffer between the RELC and the adjacent residential properties,
- The implementation of concepts of recycling and solid waste minimization, and
- A stone column and ornamental metal fence entryway with stone signage walls.

Since the project is an environmental learning center, the objective was to have the gardens demonstrate the following:

- Elements of recycling and solid waste minimization;
- The use of plants with a low demand for water and maintenance (which requires the use of energy);
- The use of no chemical fertilizer, pesticides or herbicides; and
- The introduction of birds and beneficial insects by means of the appropriate choice of plants.

It was evident that the use of plants native to the North Texas region adapted to the specific environment of Rowlett would achieve the above objective. A secondary aim was to demonstrate that indigenous plants can be used in an aesthetic pleasing manner.

It was also decided to use the demonstration garden as a buffer to the activities of the learning center. This was achieved by creating a plan that would mimic the growth of a natural wood/forest.

A typical forest consists of vertical layers of habitat or plant biomass. The branches and leaves of canopy trees generally occupy the upper layers of a forest, understory trees make up the middle layer of the biomass and understory shrubs occupy the lower layer. Together with grasses, ground covers do what the term suggests: it covers the ground layer with plant material preventing erosion and evaporation of the soil moisture.

The plan for the buffer/demonstration garden included 7 different species of canopy trees, 10 different species of understory trees, 4 species of understory shrubs, 5 species of ground covers and 4 species of grasses. The selection of plants was based entirely on plants that are indigenous to North Texas.

A plant of particular interest included Tickle Tongue or the Toothache Tree (*Zanthoxylum hirtum*) which, as the name suggests, causes temporary numbness of the gums when chewed. Another interesting understory tree is Eve's Necklace (*Sophora affinis*) with its pink blooms and winter necklace: pods consisting of 4 to 6-inch strings of ½-inch beads. Extracts from the leaves and seeds of the Indigobush (*Amorpha fruticosa*) can be used to control various pests but harmless to beneficial insects and animals.

The buffer/demonstration garden will also serve as a "plant bank" whereby its seed will be available for the tree farm and distribution by wind, birds and insects causing its spreading in the surrounding area.

Solid waste minimization and recycling were achieved in the following manner:

- The use of recycle concrete as a surface material for walks;

- The use of recycled newspaper as a manner to reduce weed infestation;
- The use of compost which is recycled organic material (it is particular important for native plantings in order to mimic the natural layer of leave litter under trees and shrubs in a natural woodland setting); and
- The use of hard wood mulch derived from recycled plant material in order to protect the soil from erosion and evaporation.

***Implementing the demonstration gardens in this manner allows for the opportunity to educate the public on the appropriate and aesthetic use of native plants, solid waste minimization and recycling which is the ultimate goal of this project.***

The Rowlett Environmental Learning Center is located opposite two schools, making it ideal to partner with Garland ISD for specialized education programs.

***Existing Facilities in the Park:***

- 0.2 mile recycled concrete walking path
- Demonstration gardens
- 7 species of native canopy trees
- 10 species of native understory trees
- 4 species of native understory shrubs
- 4 species of native ground covers
- 4 species of native grasses
- 1 entry feature
- 2 sign walls



*Wild sunflower*

***Parking:***      ***Off-Street:***    0 spaces  
                          ***On-Street:***     a few unmarked spaces for informal use  
                          ***Handicap:***       0 spaces

***Recommended Park Improvements:***

The following improvements are recommended for the Rowlett Environmental Learning Center:

- Name tags for the various native plants.
- Metal letter signage pin-mounted on the cast stone slabs attached to the stone sign walls.
- The park will further be improved by future phases of the Rowlett Environmental Learning Center and may include: outdoor classrooms, an amphitheater, demonstration composting, demonstration gardens established with native plants, a tree farm with a green house, energy efficient structures, water efficient landscaping etc.

*Rowlett*  
 TEXAS  
 4004 Main Street  
 P.O. Box 99  
 Rowlett, Texas 75080-0099  
 972-412-1811

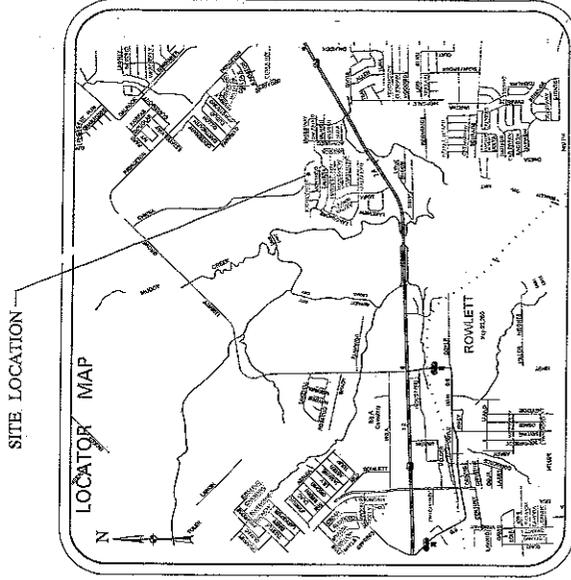
**Half Associates, Inc.**  
 ENGINEERS • ARCHITECTS • LANDSCAPE ARCHITECTS • PLANNERS  
 10000 Preston Road, Suite 1000  
 Dallas, Texas 75225-2282  
 TEL (972) 346-8200  
 FAX (972) 728-0085

# ROWLETT ENVIRONMENTAL LEARNING CENTER PHASE II

JULY 2003 AVO 21579

SHEET INDEX  
 COVER SHEET

- MPI.01 SITE MASTER PLAN
- LA1.01 LAYOUT PLAN
- LA2.01 GRADING PLAN
- LA3.01 CONSTRUCTION DETAILS
- LA4.01 CANOPY TREE PLANTING PLAN
- LA4.02 UNDERSTORY TREE PLANTING PLAN
- LA4.03 UNDERSTORY SHRUB PLANTING PLAN
- LA4.04 GRASS & GROUND COVER PLANTING PLAN
- LA4.05 PLANTING DETAILS & SCHEDULE
- IR1.01 IRRIGATION PLAN
- IR1.01 IRRIGATION DETAILS



**CITY OF ROWLETT, DALLAS COUNTY, TEXAS**

CITY STAFF

CITY MANAGER  
 SUSAN THORPE  
 ASSISTANT CITY MANAGER  
 CRAIG OWENS  
 DIRECTOR OF PARKS  
 JIM BOWLIN





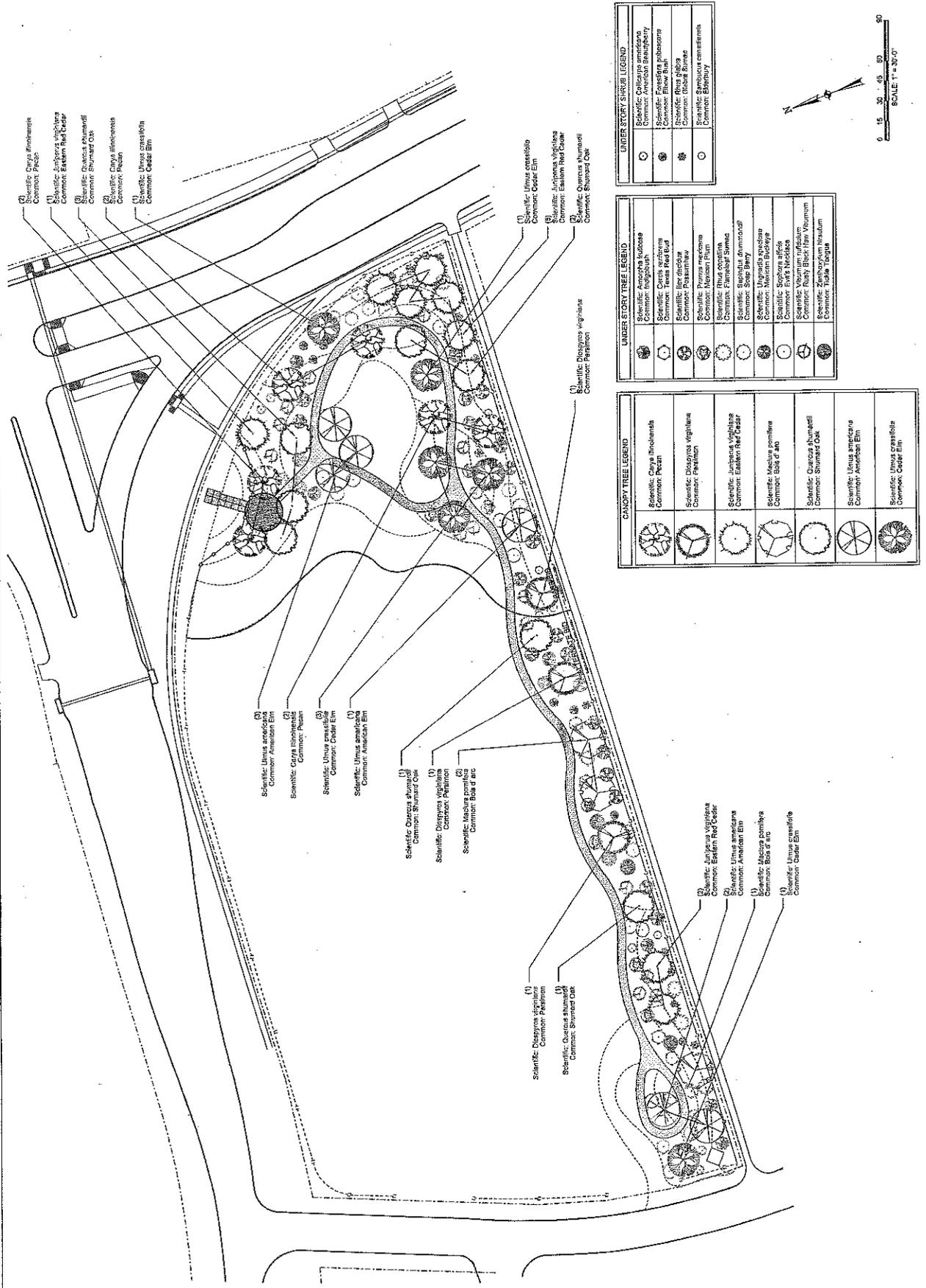








DATE: 04/15/10	PROJECT: ENVIRONMENTAL LEARNING CENTER
DRAWN BY: J. HALL	CHECKED BY: J. HALL
SCALE: 1" = 30'-0"	



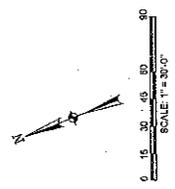
CANOPY TREE LEGEND	
	Scientific: <i>Chaya binchamensis</i> Common: Pear Scientific: <i>Juniperus virginiana</i> Common: Eastern Red Cedar Scientific: <i>Quercus shumardii</i> Common: Shumard Oak Scientific: <i>Chaya binchamensis</i> Common: Pear Scientific: <i>Ulmus americana</i> Common: Cedar Elm
	Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Carya bicolor</i> Common: Pecan Scientific: <i>Ulmus americana</i> Common: Cedar Elm Scientific: <i>Ulmus americana</i> Common: American Elm
	Scientific: <i>Quercus shumardii</i> Common: Shumard Oak Scientific: <i>Disopynia virginiana</i> Common: Pearlin Scientific: <i>Disopynia virginiana</i> Common: Eastern Red Cedar Scientific: <i>Malvaceae pomifera</i> Common: Bob of arc Scientific: <i>Quercus shumardii</i> Common: Shumard Oak Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Ulmus americana</i> Common: Cedar Elm
	Scientific: <i>Juniperus virginiana</i> Common: Eastern Red Cedar Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Malvaceae pomifera</i> Common: Bob of arc Scientific: <i>Ulmus americana</i> Common: Cedar Elm
	Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Ulmus americana</i> Common: Cedar Elm

UNDER STORY TREE LEGEND	
	Scientific: <i>Amorpha biocolor</i> Common: Indigo Bush Scientific: <i>Cercis florida</i> Common: Red Bud Scientific: <i>Ilex decidua</i> Common: Paw Paw Scientific: <i>Prunus mexicana</i> Common: Mexican Plum Scientific: <i>Rhus copallina</i> Common: Smaller Sassafras Scientific: <i>Rhus glabra</i> Common: Sassafras Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Ulmus americana</i> Common: Cedar Elm Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Ulmus americana</i> Common: Cedar Elm
	Scientific: <i>Disopynia virginiana</i> Common: Pearlin Scientific: <i>Disopynia virginiana</i> Common: Eastern Red Cedar Scientific: <i>Malvaceae pomifera</i> Common: Bob of arc Scientific: <i>Quercus shumardii</i> Common: Shumard Oak Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Ulmus americana</i> Common: Cedar Elm
	Scientific: <i>Juniperus virginiana</i> Common: Eastern Red Cedar Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Malvaceae pomifera</i> Common: Bob of arc Scientific: <i>Ulmus americana</i> Common: Cedar Elm
	Scientific: <i>Ulmus americana</i> Common: American Elm Scientific: <i>Ulmus americana</i> Common: Cedar Elm

UNDER STORY SHRUB LEGEND	
	Scientific: <i>Callerya americana</i> Common: American Beauty Scientific: <i>Rosa blanda</i> Common: Rose Scientific: <i>Rosa blanda</i> Common: Rose Scientific: <i>Sambucus canadensis</i> Common: Blackberry

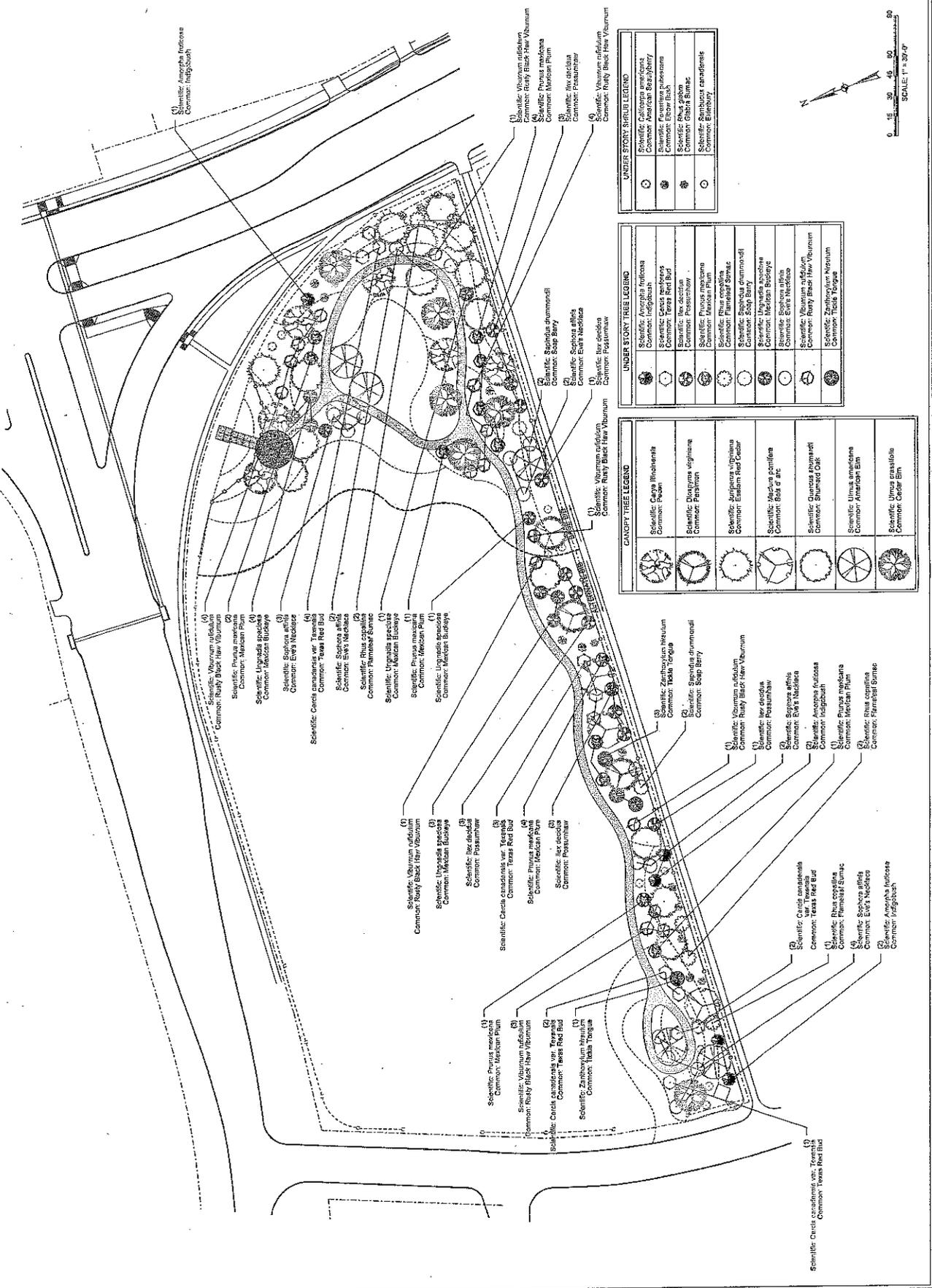


LA4.01



DATE: 03/17/2017	BY: [Signature]
NO. 124	PROJECT: ENVIRONMENTAL LEARNING CENTER
NO. 124	PROJECT: ENVIRONMENTAL LEARNING CENTER
NO. 124	PROJECT: ENVIRONMENTAL LEARNING CENTER
NO. 124	PROJECT: ENVIRONMENTAL LEARNING CENTER
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NO. 124	PROJECT: ENVIRONMENTAL LEARNING CENTER
NO. 124	PROJECT: ENVIRONMENTAL LEARNING CENTER

UNIVERSITY TREE PLANTING PLAN  
LA.02



UNDER STORY TREE LEGEND

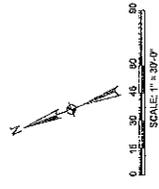
①	Scientific: Callitriche americana Common: American Spanglerry
②	Scientific: Prunus mexicana Common: Mexican Plum
③	Scientific: Rhus glabra Common: Glossy Starburst
④	Scientific: Sambucus canadensis Common: Elderberry

UNDER STORY TREE LEGEND

①	Scientific: Amorpha fruticosa Common: Indigo Bush
②	Scientific: Cercis canadensis Common: Red Bud
③	Scientific: Ilex decidua Common: Pawnee Holly
④	Scientific: Prunus mexicana Common: Mexican Plum
⑤	Scientific: Rhus copallina Common: Smokey Bark Holly
⑥	Scientific: Spatholobus suberectus Common: Spiky Berry
⑦	Scientific: Ligustrum lucidum Common: Mexican Ligustrum
⑧	Scientific: Eriobotrya japonica Common: Chinese Loquat
⑨	Scientific: Viburnum nudum Common: Rummy Black Hawthorn
⑩	Scientific: Taxus virginiana Common: Texas Red Cedar

CANOPY TREE LEGEND

①	Scientific: Carya illinoensis Common: Pecan
②	Scientific: Diospyros virginiana Common: Persimmon
③	Scientific: Juglans nigra Common: Black Walnut
④	Scientific: Quercus prinus Common: White Oak
⑤	Scientific: Quercus macrocarpa Common: Chestnut Oak
⑥	Scientific: Ulmus americana Common: American Elm
⑦	Scientific: Ulmus crassifolia Common: Cedar Elm



① Scientific: Amorpha fruticosa  
Common: Indigo Bush

① Scientific: Viburnum nudum  
Common: Rummy Black Hawthorn  
② Scientific: Prunus mexicana  
Common: Mexican Plum  
③ Scientific: Ilex decidua  
Common: Pawnee Holly  
④ Scientific: Viburnum coccineum  
Common: Rusty Black Hawthorn

① Scientific: Spatholobus suberectus  
Common: Spiky Berry  
② Scientific: Spatholobus suberectus  
Common: Spiky Berry  
③ Scientific: Spatholobus suberectus  
Common: Spiky Berry  
④ Scientific: Ilex decidua  
Common: Pawnee Holly  
⑤ Scientific: Ilex decidua  
Common: Pawnee Holly

① Scientific: Viburnum nudum  
Common: Rummy Black Hawthorn

① Scientific: Viburnum nudum  
Common: Rummy Black Hawthorn  
② Scientific: Prunus mexicana  
Common: Mexican Plum  
③ Scientific: Prunus mexicana  
Common: Mexican Plum  
④ Scientific: Prunus mexicana  
Common: Mexican Plum  
⑤ Scientific: Prunus mexicana  
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⑫ Scientific: Prunus mexicana  
Common: Mexican Plum  
⑬ Scientific: Prunus mexicana  
Common: Mexican Plum

① Scientific: Viburnum nudum  
Common: Rummy Black Hawthorn  
② Scientific: Prunus mexicana  
Common: Mexican Plum  
③ Scientific: Prunus mexicana  
Common: Mexican Plum  
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⑬ Scientific: Prunus mexicana  
Common: Mexican Plum

① Scientific: Prunus mexicana  
Common: Mexican Plum  
② Scientific: Viburnum nudum  
Common: Rummy Black Hawthorn  
③ Scientific: Prunus mexicana  
Common: Mexican Plum  
④ Scientific: Prunus mexicana  
Common: Mexican Plum  
⑤ Scientific: Prunus mexicana  
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Common: Mexican Plum  
⑫ Scientific: Prunus mexicana  
Common: Mexican Plum  
⑬ Scientific: Prunus mexicana  
Common: Mexican Plum

① Scientific: Zanthoxylum armatum  
Common: Texas Red Cedar  
② Scientific: Zanthoxylum armatum  
Common: Texas Red Cedar  
③ Scientific: Zanthoxylum armatum  
Common: Texas Red Cedar  
④ Scientific: Zanthoxylum armatum  
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⑫ Scientific: Zanthoxylum armatum  
Common: Texas Red Cedar  
⑬ Scientific: Zanthoxylum armatum  
Common: Texas Red Cedar

① Scientific: Viburnum nudum  
Common: Rummy Black Hawthorn  
② Scientific: Prunus mexicana  
Common: Mexican Plum  
③ Scientific: Prunus mexicana  
Common: Mexican Plum  
④ Scientific: Prunus mexicana  
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⑤ Scientific: Prunus mexicana  
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Common: Mexican Plum  
⑫ Scientific: Prunus mexicana  
Common: Mexican Plum  
⑬ Scientific: Prunus mexicana  
Common: Mexican Plum

① Scientific: Carya macrocarpa  
Common: Texas Red Cedar  
② Scientific: Prunus mexicana  
Common: Mexican Plum  
③ Scientific: Prunus mexicana  
Common: Mexican Plum  
④ Scientific: Prunus mexicana  
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Common: Mexican Plum  
⑫ Scientific: Prunus mexicana  
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⑬ Scientific: Prunus mexicana  
Common: Mexican Plum

① Scientific: Cercis canadensis var. texensis  
Common: Texas Red Bud

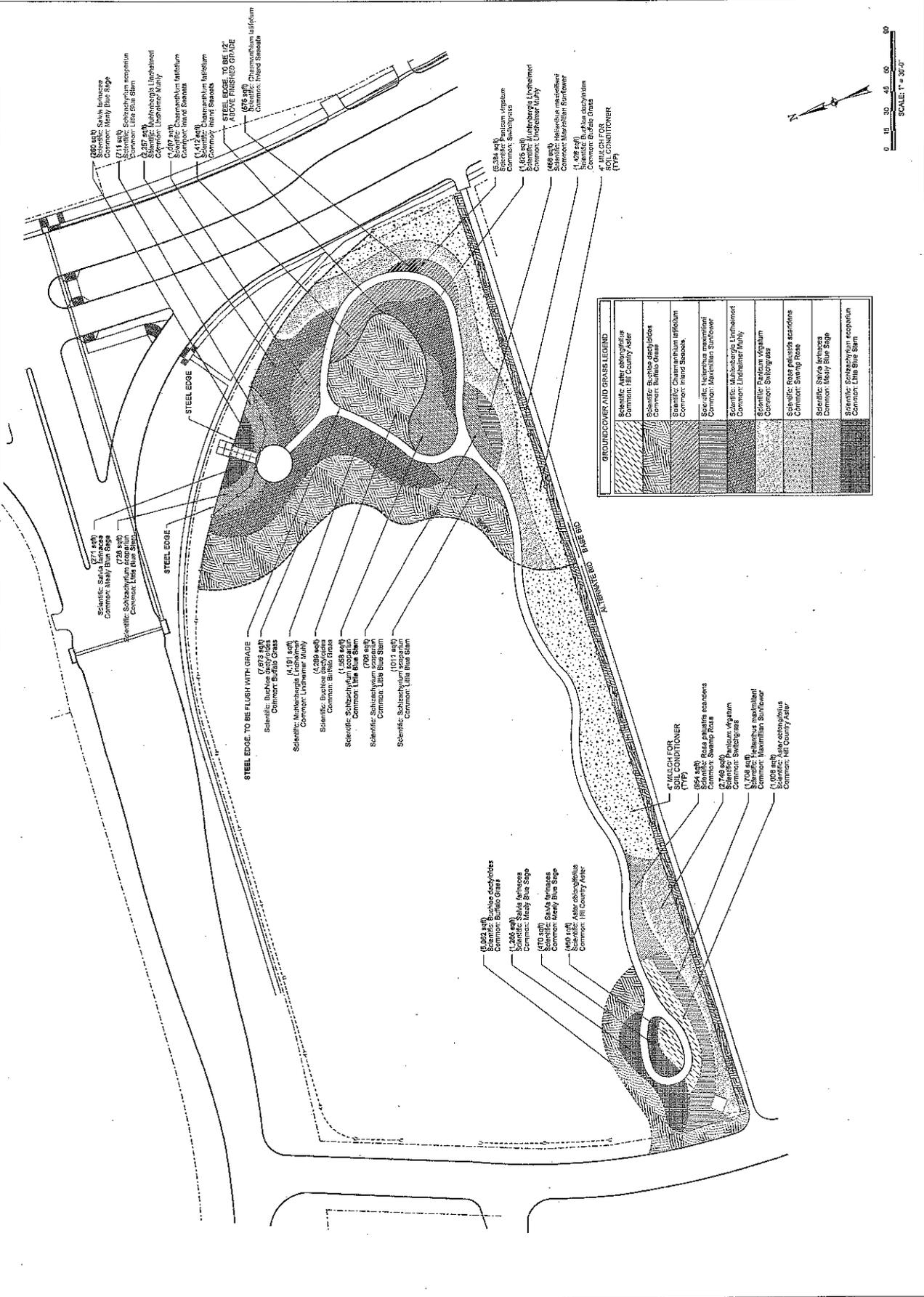






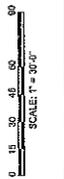
DATE: 12/15/2011  
PROJECT: ENVIRONMENTAL LEARNING CENTER  
DRAWING NO.: LA4.04  
SCALE: 1" = 30'-0"

LA4.04  
GRASS/SLIPCOVER  
PLANTING PLAN



GROUND COVER AND GRASS LEGEND

	Scientific: <i>Aster oblongifolius</i> Common: Hill Country Aster
	Scientific: <i>Burchardia umbellata</i> Common: Buffalo Grass
	Scientific: <i>Chamaecrista nictitans</i> Common: Bird's Nest
	Scientific: <i>Muhlenbergia lindheimeri</i> Common: Muhlenberg Sunflower
	Scientific: <i>Panicum virgatum</i> Common: Switchgrass
	Scientific: <i>Rosa pratincola exoniensis</i> Common: Swamp Rose
	Scientific: <i>Sida ferruginea</i> Common: Mealy Blue Sage
	Scientific: <i>Schizanthus lindenianus</i> Common: Little Blue Stem



(650 sq ft) Scientific: *Sida ferruginea*  
Common: Mealy Blue Sage

(711 sq ft) Scientific: *Muhlenbergia lindheimeri*  
Common: Muhlenberg Sunflower

(2,237 sq ft) Scientific: *Chamaecrista nictitans*  
Common: Bird's Nest

(1,409 sq ft) Scientific: *Chamaecrista nictitans*  
Common: Bird's Nest

(1,427 sq ft) Scientific: *Chamaecrista nictitans*  
Common: Bird's Nest

(675 sq ft) Scientific: *Chamaecrista nictitans*  
Common: Bird's Nest

(654 sq ft) Scientific: *Burchardia umbellata*  
Common: Buffalo Grass

(2,746 sq ft) Scientific: *Rosa pratincola exoniensis*  
Common: Swamp Rose

(1,708 sq ft) Scientific: *Muhlenbergia lindheimeri*  
Common: Muhlenberg Sunflower

(1,078 sq ft) Scientific: *Aster oblongifolius*  
Common: Hill Country Aster

(1,285 sq ft) Scientific: *Burchardia umbellata*  
Common: Buffalo Grass

(470 sq ft) Scientific: *Sida ferruginea*  
Common: Mealy Blue Sage

(899 sq ft) Scientific: *Aster oblongifolius*  
Common: Hill Country Aster

(1,285 sq ft) Scientific: *Burchardia umbellata*  
Common: Buffalo Grass

(4,239 sq ft) Scientific: *Muhlenbergia lindheimeri*  
Common: Muhlenberg Sunflower

(1,258 sq ft) Scientific: *Chamaecrista nictitans*  
Common: Bird's Nest

(708 sq ft) Scientific: *Schizanthus lindenianus*  
Common: Little Blue Stem

(1,071 sq ft) Scientific: *Schizanthus lindenianus*  
Common: Little Blue Stem

(5,853 sq ft) Scientific: *Burchardia umbellata*  
Common: Buffalo Grass

(1,285 sq ft) Scientific: *Burchardia umbellata*  
Common: Buffalo Grass

(470 sq ft) Scientific: *Sida ferruginea*  
Common: Mealy Blue Sage

(899 sq ft) Scientific: *Aster oblongifolius*  
Common: Hill Country Aster

(1,285 sq ft) Scientific: *Burchardia umbellata*  
Common: Buffalo Grass

(470 sq ft) Scientific: *Sida ferruginea*  
Common: Mealy Blue Sage

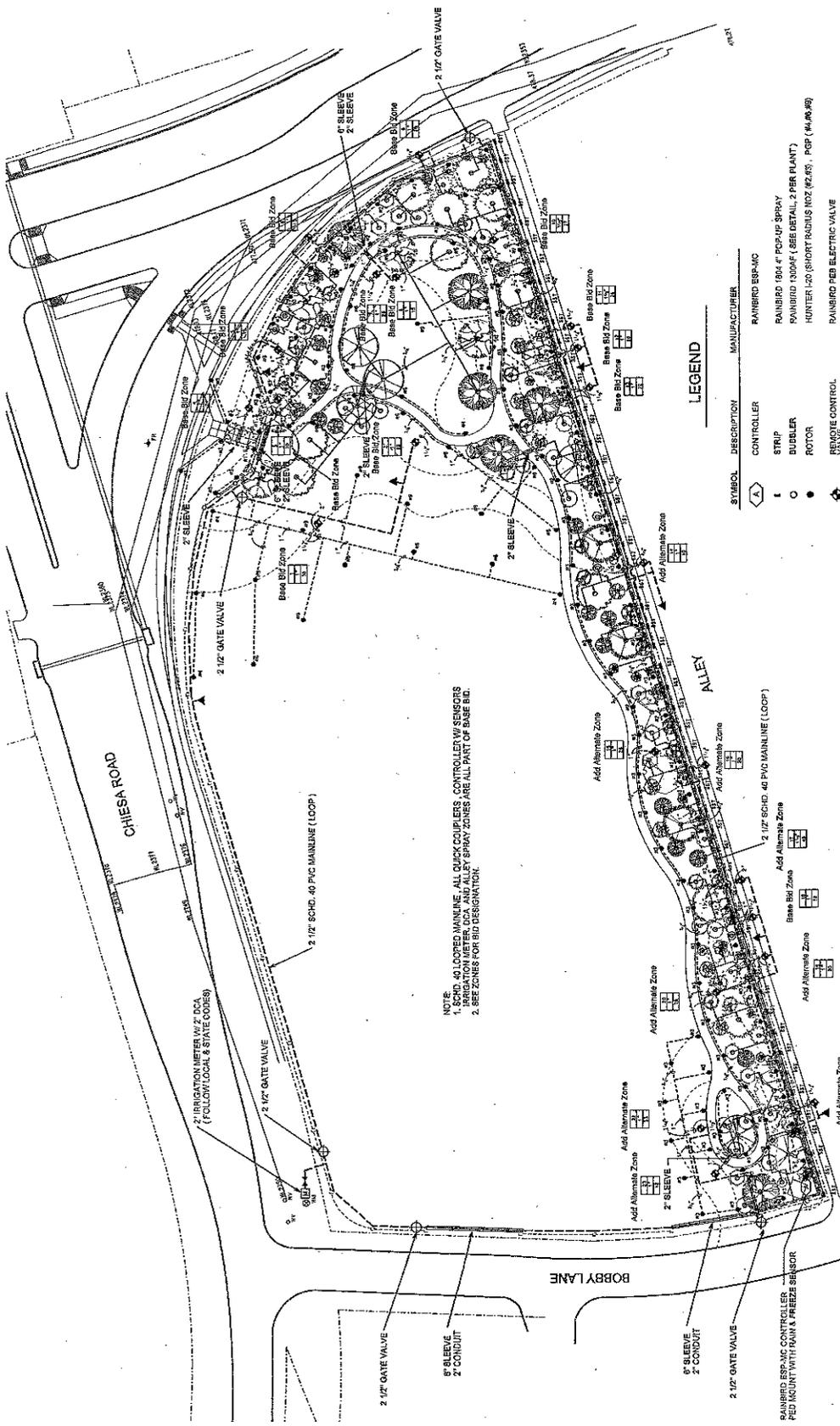
(899 sq ft) Scientific: *Aster oblongifolius*  
Common: Hill Country Aster





PROJECT NO.	1007
DATE	10/1/10
SCALE	AS SHOWN
DESIGNED BY	...
DRAWN BY	...
CHECKED BY	...
APPROVED BY	...
DATE	...
PROJECT NAME	ENVIRONMENTAL LEARNING CENTER
LOCATION	...
CLIENT	CITY OF ROWLETT
PROJECT NO.	1007
DATE	10/1/10
SCALE	AS SHOWN
DESIGNED BY	...
DRAWN BY	...
CHECKED BY	...
APPROVED BY	...
DATE	...
PROJECT NAME	ENVIRONMENTAL LEARNING CENTER
LOCATION	...
CLIENT	CITY OF ROWLETT

IR1.01  
IRRIGATION PLAN



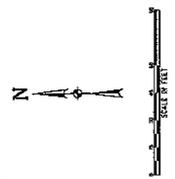
NOTES:  
1. SCHED. 40 LOOPED MAINLINE. ALL QUICK COUPLERS, CONTROLLER W/ SENSORS, IRRIGATION METER, DCA, AND ALLEY SPRAY ZONES ARE ALL PART OF BASE BID.  
2. SEE ZONES FOR BID DESIGNATION.

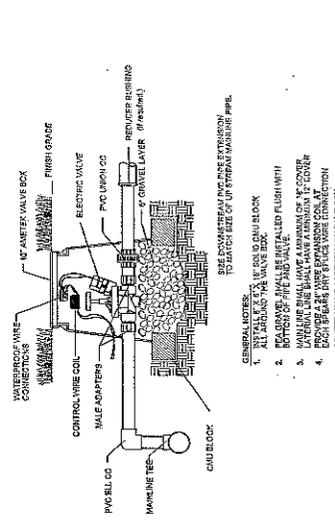
LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER
(Symbol)	CONTROLLER	RAINBIRD ESP-MC
(Symbol)	STRIP	RAINBIRD 1804 4\"/>
(Symbol)	BUBBLER	RAINBIRD 1004/F (SEE DETAIL 2 PER PLANT)
(Symbol)	ROTOR	HUNTER-I20 (SHORT RADIUS NOZ. #2.85) - PGP (M.A.M.R)
(Symbol)	REMOTE CONTROL VALVE	RAINBIRD FIB ELECTRIC VALVE
(Symbol)	VALVE	FECCO BRASS GATE VALVE
(Symbol)	ASSEMBLY CHECK	FECCO 650 DOUBLE CHECK
(Symbol)	WATER METER	2\"/>
(Symbol)	QUICK COUPLER	RAINBIRD 300R/C QUICK COUPLER
(Symbol)	MAINLINE PIPING	SCHEDULE 40 - SEE PLANS FOR SIZE
(Symbol)	SLEEVE PIPING	SCHEDULE 40 SEE DETAIL SCHEDULE
(Symbol)	LATERAL PIPING (SUBWAY)	PVC SDR21 (CLASS 200)
(Symbol)	LATERAL PIPING (GROUND)	PVC SDR21 (CLASS 200)
(Symbol)	STATION NUMBER	...
(Symbol)	CPV (APPROX)	...

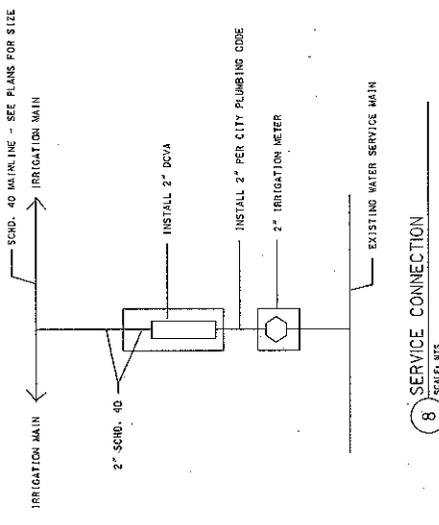
PIPE SIZE	PIPE WALL THICKNESS	PIPE WEIGHT	PIPE LENGTH	PIPE WEIGHT	PIPE WEIGHT
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10\"/>					
8\"/>					
6\"/>					
4\"/>					
3\"/>					
2\"/>					

1 SLEEVE SCHEDULE  
SCALE: NTS





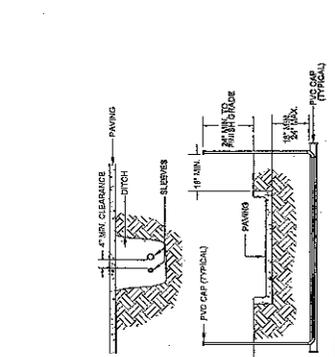
7 ELECTRIC VALVE AND VALVE BOX  
SCALE: NTS



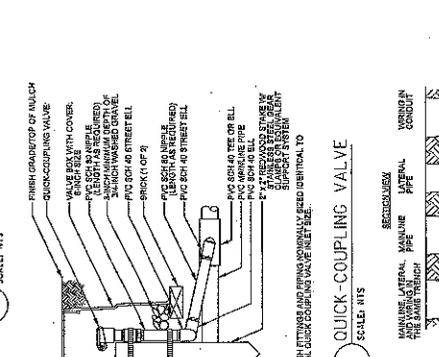
8 SERVICE CONNECTION  
SCALE: NTS

**IRRIGATION NOTES:**

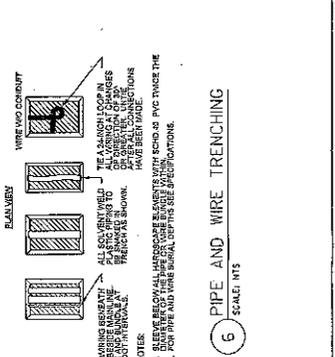
1. ALL SPRINKLER EQUIPMENT NUMBERS REFERENCE THE BRAND AND MODEL EQUIPMENT CATALOG.
2. ALL 2\"/>



4 SLEEVING  
SCALE: NTS



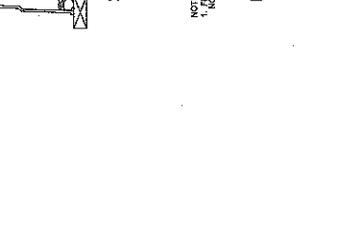
5 QUICK-COUPLING VALVE  
SCALE: NTS



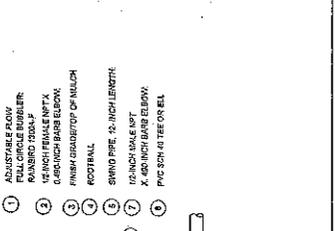
6 PIPE AND WIRE TRENCHING  
SCALE: NTS



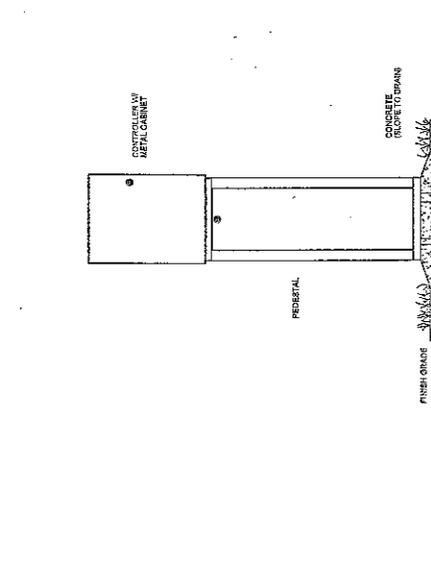
1 RAINBIRD ESP-MC PED MOUNT CONTROLLER  
SCALE: NTS



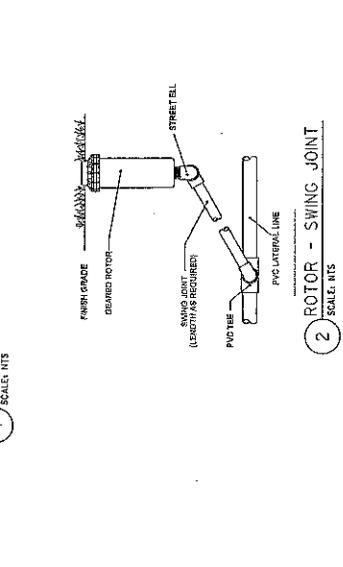
2 ROTOR - SWING JOINT  
SCALE: NTS



3 BUBBLER ON SWING PIPE  
SCALE: NTS



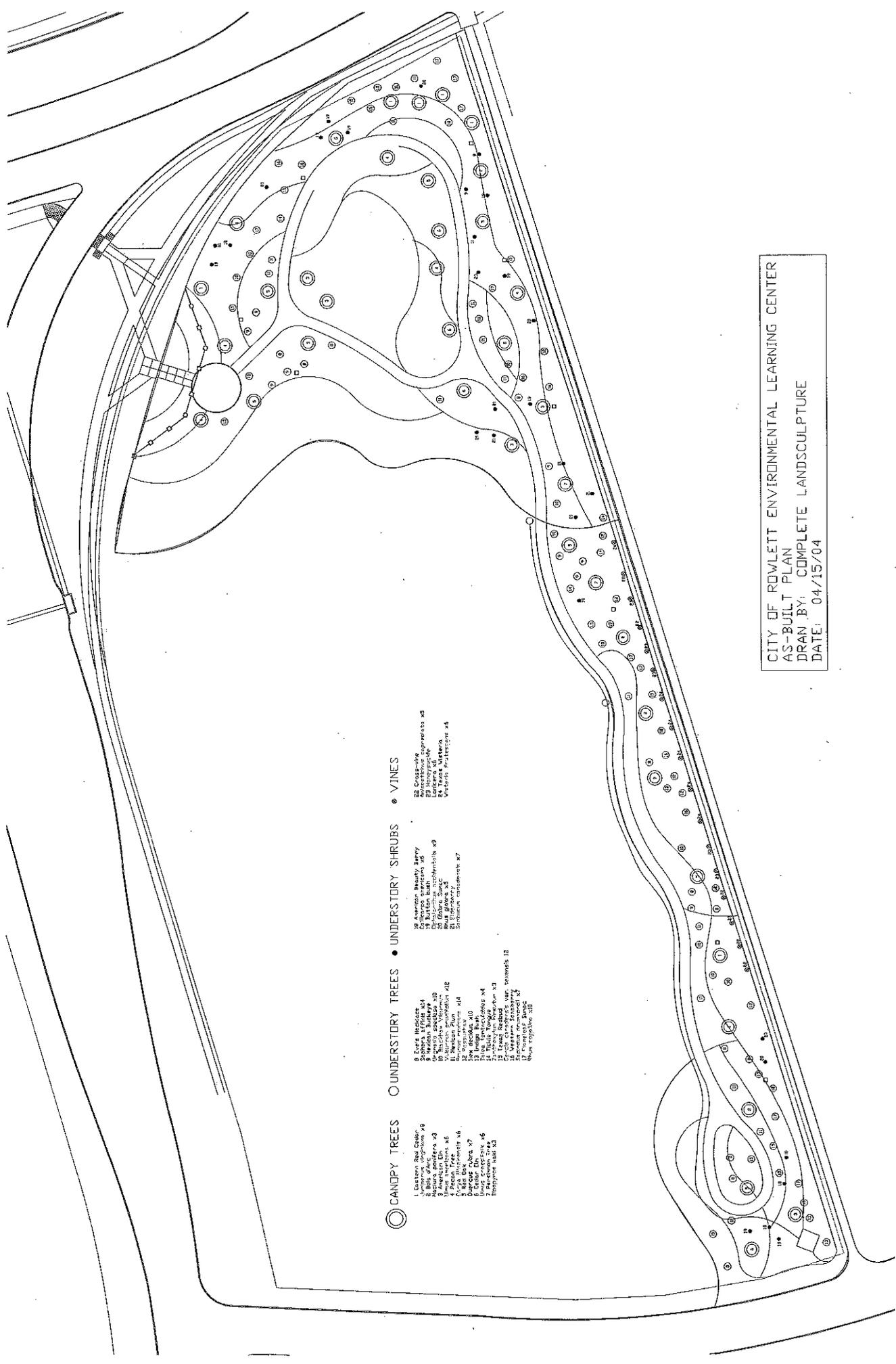
7 ELECTRIC VALVE AND VALVE BOX  
SCALE: NTS



8 SERVICE CONNECTION  
SCALE: NTS

**IRRIGATION NOTES:**

1. ALL SPRINKLER EQUIPMENT NUMBERS REFERENCE THE BRAND AND MODEL EQUIPMENT CATALOG.
2. ALL 2\"/>



- CANDY TREES    ○ UNDERSTORY TREES    ● UNDERSTORY SHRUBS    ● VINES
- 1. Eastern Red Cedar
  - 2. Live Oak
  - 3. White Oak
  - 4. Live Oak
  - 5. Live Oak
  - 6. Live Oak
  - 7. Live Oak
  - 8. Live Oak
  - 9. Live Oak
  - 10. Live Oak
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  - 94. Live Oak
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  - 97. Live Oak
  - 98. Live Oak
  - 99. Live Oak
  - 100. Live Oak

CITY OF ROWLETT ENVIRONMENTAL LEARNING CENTER  
 AS-BUILT PLAN  
 DRAWN BY: COMPLETE LANDSCULPTURE  
 DATE: 04/15/04