

APPENDIX D

ECONOMIC

DEVELOPMENT

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EXECUTIVE SUMMARY

This section presents a summary of the results of a regional economic development study. The complete study results are presented in two volumes: ***Baseline Conditions: An Interim Report*** and ***Final Economic Development Study, Cypress Bayou Watershed***. The economic development study was conducted by the Technology and Economic Development Division of the Texas A&M Engineering Extension Service under a Memorandum of Agreement with the Fort Worth District. The purpose of the study was to provide detailed recommendations for the most feasible economic development opportunities available to the counties of the Cypress Bayou Watershed. Throughout the study, economic development has been widely defined to include all forms of commerce that would provide a substantial net import revenue to the area.

The initial step in the economic development study was to determine existing economic conditions through an objective, statistical view of the region's demographic characteristics, agricultural output, history, quality of life (measured by crime, health, and education) and attractiveness to existing and new business. These Baseline Conditions report, prepared for each individual county, formed the foundation for a comprehensive industrial targeting investigation as well as insight into future tourism and agriculture opportunities, which are also considered important to this region's long-term economic prosperity.

The study's principal goal was to identify *specific* industry candidates on which the region's economic development planners can focus their attention, rather than wasting valuable and limited resources on a broad spectrum of industries for which the region has no distinct, planned advantage. The study goal was attained by identifying new manufacturing opportunities (companies that do not already have a presence in the region but should thrive there), "spin-off" industries (companies that can be a supplier or customer of companies already present in the region), and agricultural opportunities (value-added or niche production and processing possibilities for the area). In addition, tourism development opportunities were examined. The final step in the study process was the development of policy and implementation recommendations to assist economic development planners in attaining development goals. The principal process used by the study team, the *CrossMatch* methodology, emphasizes manufacturing opportunities as the inherent foundation of the area's economic base.

BASELINE CONDITIONS REPORT

In order to understand the strengths of the region, a comprehensive Baseline Conditions Report was prepared for each county. The Baseline Conditions Report is the foundation for the CrossMatch selection process, and it provides an objective viewpoint of what the area can offer in terms of both financial and non-financial incentives as well as overall quality of life. The information gathered for the Baseline Conditions Report is the basis of the rating system used during the analysis or *Amatching@* phase where the best targets are selected. The purpose is to assess the readiness of the area to become a viable industrial target for new business.

The Baseline Conditions Report is divided into the following three sections:

- § County History and Population Demographics gives a brief overview of the background of the county and outlines its unique properties, personality and goals. The demographics breakdown includes total population by ethnicity, age, sex and level of education.
- § County Industrial Profile provides a narrative snapshot of the county as part of a larger regional portrait. Using sources such as the Directory of Texas Manufacturers, Ward's Business Directory, Dun and Bradstreet and the local chambers of commerce, major employers are located by product type (four-digit SIC code), number of employees and gross sales.
- § County Audit assesses the county's current economic health, including its financial vitality; infrastructure; employment; agriculture outlook; educational opportunities; crime rate; health facilities and other factors. The review includes broader quality-of-life issues as well.

NEW MANUFACTURING OPPORTUNITIES

Placing heavy emphasis on the inherent strengths of the Cypress Bayou Watershed, the strategy employed was to identify industries that have high future growth potential -- those that are capable of creating many jobs in the long term -- and then to determine which ones are most suitable for local development. Because of steep national competition for such employers, however, it is only prudent to concentrate on the industries that will be attracted by the area's strengths and be minimally concerned about the area's weaknesses. This approach is the heart of the *CrossMatch* industrial targeting process. *CrossMatch* focuses exclusively on targeting new manufacturing opportunities.

The goal of this strategy is to provide the region with specific target industries that have been screened for a good local fit and are naturally drawn to the area's resources. These industries are not heavily represented in the current industrial mix. These fresh, growth-oriented industries add diversity to the economy for future employment stability. This is especially important in this region, where the legacy of the oil and gas downturn remains. The hope is that the *CrossMatch* results will bring consensus among area leadership to concentrate on these industries, and by understanding the site selection criteria for the industry, accelerate the development of such industries with an aggressive, area-wide target-marketing approach.

CROSSMATCH ASSUMPTIONS. The major assumptions used in the *CrossMatch* analysis are as follows:

1. Because of the emphasis on manufacturing only the manufacturing sectors (SICs 20-39) were considered as potential industrial targets for this analysis.
2. For an industry to make the first selection cut, it must meet a formidable challenge: to have a forecasted annual growth rate of at least 5 percent for the next five years (based on information from 1993 data, the latest figures available). This is the principal criteria for placing an SIC code in the initial industry evaluation matrix, a comparative table ranking regional attributes with industry needs. This matrix is used for the initial screening of prospective targets for locational fit.
3. Previous strategic planning goals of the region, as identified by prior economic development planning reports, are incorporated as high priority targets for the list of industries ultimately selected.

ANALYSIS PROCESS. Based on the Baseline Condition Reports, the study team determines the region's relative strengths in areas such as labor, transportation, utilities and other factors of importance to industry. In this study, other factors include a positive environmental sensitivity and an inclination to move to rural areas. For each of these factors, a rating from one to ten was given based on comparative analysis of other parts of Texas and the nation.

Predicasts Forecasts is used simultaneously to determine which industries are growing the fastest annually in order to locate target companies most likely to expand and to create jobs the most quickly. In this study, these targets originally numbered in excess of 60. No consideration is given at this stage as to whether or not they are appropriate for the region, but it provides the first-cut priority list that will be *matched* to the regional attributes.

To narrow the number of targets, the products are sorted according to category, and further secondary literature research is done to isolate those that are clearly inappropriate. Reasons for eliminating potential targets include seasonal volatility, trendiness, capital intensity, acute overseas competition, the need to be in an urban environment, inappropriate agricultural climate and other unsavory intuitive rationales.

For this study, a short list of 22 targeted industries was decided upon, and intensive research was done to verify the industry's needs and compare them to the ratings of the study area. All 22 targets are appropriate to the region, but only those that presented the most opportunity were further examined. Even though only a few became targets on which to concentrate, the region is attractive to these *short list* companies. The following table shows identified industries with growth opportunities in manufacturing (which is emphasized most in this methodology due to its greater economic impact on an economy in general), and agriculture-related production.

Table 1 presents the *short list* of manufacturing targets identified by the *CrossMatch* analysis process. From this list, the industries with the best regional and local fit were determined. Further research into any specific sector, not just the final targets, by area economic developers should yield worthwhile contacts for recruitment as all of the short list industries are in a growth mode. With sufficient local infrastructure improvements and multi-county dedication, they could be easily attracted to the Watershed. In the *CrossMatch* system, the difference between being a target and being on the following short list is simply the number of obstacles--usually not insurmountable, or they would not have made it this far--that must be overcome to make the region appealing to a specific industry.

Table 2 presents the new manufacturing opportunities which were further analyzed and are highly recommended for targeting. Also included are the counties which would be most conducive to development of these industries. It should be noted that all of the region's counties would be a good site for the industries identified, however, the counties shown in the table have a competitive advantage in targeting.

Table 1.
Prospective Manufacturing Target Industries for
the Cypress Bayou Watershed
the short list@

| SIC | Annual Growth Rate | Industry |
|------------|---------------------------|------------------------------------|
| 3073 | 9% | Reinforced plastics |
| 3074 | 115% | Plastic liners |
| 3074 | 82% | Compression wrap |
| 3075 | 38% | Plastic industrial parts |
| 2451 | 17% | Mobile homes |
| 3076 | 38% | Construction plastics |
| 3079 | 41% | Medical plastics |
| 3541 | 17% | Metal working machinery |
| 3544 | 33% | Tools, molds & precision equipment |
| 3564 | 22% | Air pollution equipment |
| 2000 | 220% | Food & Kindred products |
| 2033 | 20% | Hot sauces, fiery foods |
| 2432 | 246% | Hardwood, plywood & veneers |
| 2611 | 42% | Recycled pulp |
| 2611 | 24% | Woodpulp and related goods |
| 2611 | 34% | Market woodpulp |
| 2821 | 50% | Polyamide resins |
| 2821 | 17% | Degradable plastics |
| 2821 | 8% | Acrylic resins |
| 2821 | 24% | Polyethylene |

Table 2
New Manufacturing Opportunities
Target Industries and Counties

| Industry | Counties |
|---|--|
| Stretch film and blow-molded plastic containers | Caddo, Gregg and Marion |
| Medical plastics and devices | Caddo, Gregg, Harrison and Marion |
| Air pollution equipment | Caddo, Gregg, Harrison and Marion |
| Manufactured homes | Titus, Camp, Franklin, Wood and Upshur |
| Construction materials | Cass, Morris, Franklin and Wood |

"SPIN OFF" OPPORTUNITIES

"Spin off" opportunities were identified by examining the current industrial base and determining critical suppliers or customers of manufacturers who are already doing business in the Cypress Bayou Watershed. The purpose of locating such suppliers and customers is to give the area=s economic development leadership substantiated evidence of sufficient demand to locate new but closely related operations. Such companies could supply services or products to existing industries that are currently being imported into the region. Such an opportunity is considered a "spin off" because a concentration of industry has created enough critical mass in the region to provide related or "spin off" industry. Creating related employment in the area that otherwise would be unrealized because of imports is essential to stopping economic leakage, the flow of revenue away from an economy.

Using the Baseline Conditions Reports for each county, the employers were sorted by Standard Industrial Classification. Where a substantial concentration of industry could be identified by a measure of economic impact such as payroll, number of employees, or number of establishments, they were deemed "clusters." The study team investigated the customers and suppliers of each cluster through a literature search and confirmed the correctness of these assumptions by speaking with purchasing agents of a representative number of companies. This information was compared to the region=s volume and overall industry growth patterns to see if the recommendations would support a new business in the region.

This analysis looked at the inputs, by-products, and outputs of major employers as well as those of clusters of small manufacturers that as a group may have the same economic impact as a large company but would probably go unnoticed individually. If a key supplier to several manufacturers can be located in the area, the new business will create jobs, and the business position of the existing company will also be improved as inventory carrying costs and transportation costs are reduced. If a heavy user of a product made in the region can be located there, again both companies win. It is an especially big win if numerous inputs are available to produce a product that is in regionally high demand and difficult to ship long distances. For example, the study team found a very promising candidate in this regard: manufactured homes. Locally produced sheet metal, plumbing fixtures, tubular steel, and wheel components are available, and the demand for such homes is twice the Texas average in the Cypress Bayou Watershed.

In addition to looking only for suppliers or customers of the region=s industrial base, the study team also looked at the waste products of the region in an effort to uncover potentially valuable products for another company. This process of intentionally seeking opportunities for the re-use of the waste and by-products of neighboring companies is termed "sustainable development." These opportunities typically involve recycling materials and creating new products. In this analysis, it was discovered that the Lone Star Steel plant has a large quantity of waste heat which would be appealing to many companies. Recycling opportunities, especially for corrugated boxes, may cut expenses to the companies in the area if sufficient demand for a box recycler exists. This is because the recycler would pay for the waste product instead of the companies having to pay for it to be discarded. It provides a means for decreasing the overall waste stream leaving the region and is a long term, environmentally-sensitive approach to economic development.

Table 3 outlines the "spin off" manufacturing opportunities identified.

| Table 3 "Spin Off" Manufacturing Opportunities Target Industries and Counties | |
|--|--|
| Industry | Counties |
| Corrugated box manufacturing | Caddo, Gregg, Harrison, Marion and Upshur |
| Particle board manufacturing | Caddo, Gregg, Harrison, Titus, Cass, Marion and Upshur |
| Corrugated recycling operation | Caddo, Gregg and Harrison |
| Plastic bags and shrink wrap | Caddo, Gregg, Harrison, Titus, Cass, Camp, Morris, Marion, Franklin, Wood and Upshur |

VALUE-ADDED AGRICULTURE OPPORTUNITIES

For this portion of the study, the agricultural output of the various agricultural products in the region was prepared in the Baseline Conditions Report, and this information was examined for growth trends and niche opportunities. Also important was data gathered from agricultural extension agents, companies in the area, and national trade journals regarding unique, specialty products that could be grown and marketed by a local entrepreneur. This study specifically looked at non-traditional income sources that by design, require some additional processing, special marketing, or are opportunities because of unmet, growing consumer demand. An example is aquaculture, in which captive bred fish are grown in tanks. This process ensures a reliable, safe product. Shortages of catfish are already present in the region at the current time. The result of this analysis is a report that urges agribusinesses-businesses to look at non-traditional opportunities.

Table 4 presents the identified target industries for value-added agriculture.

| Table 4 Value-Added Agricultural Opportunities Target Industries and Counties | |
|--|--|
| Industry | Counties |
| Nursery plants | Titus, Morris, Camp, Franklin, Wood and Upshur |
| Aquaculture | Titus, Cass, Camp and Morris |
| Organic chicken litter fertilizer | Titus, Cass, Camp, Morris, Franklin, Wood and Upshur |
| Blueberry growing | Franklin, Titus, Morris and Cass |

TOURISM OPPORTUNITIES

To identify the impact of tourism on the region, the Micro IMPLAN model was used. This model provides a detailed and reliable answer to the real contribution of tourism for each county in

terms of output, income, value added and employment. The IMPLAN system is operated in the Texas Tourism and Recreation Information Program (TTRIP) facility at Texas A&M University where the data was analyzed.

Source data for the IMPLAN data base used for measuring tourism impact was obtained from the U.S. Bureau of the Census, as well as a review of published and unpublished literature related to the subject of study. Micro IMPLAN is a microcomputer program that constructs regional input-output (I-O) accounts and models. A model can be constructed for any region in the United States using inter-industry databases showing spending linkages, which are available by state and county. (The county is the smallest unit of measure available.) The resulting information includes how often tourism money cycles within the local economy, known as the multiplier effect. By using multiplier analysis, tourism's impact on total income and employment was also generated.

The analysis and recommendations in this section have been provided to TEEX by Dr. Turgut Var of the Tourism, Parks and Recreation Department of the Texas Agricultural Experiment Station under contract due to his expertise in tourism research. The major recommendation posed for tourism is that the region should endeavor to develop a regional identity through a regional recreation master plan. This recommendation includes establishment of a regional coordinating body that would carry out grass-root long range planning and marketing strategies.

The regional tourism organization could enhance tourism in the area through the following measures:

1. Develop specific guided tours for travelling public.
2. Determine the economic impact of tourism in each county by gathering data about visitors and their expenditures.
3. Establish a cooperation between Louisiana and Texas tourism authorities, Chambers of Commerce, and Convention and Visitors Bureaus.
4. Enhance tourism education through Texas Hospitality Programs offered by the Texas Agricultural Extension Service.
5. Develop new themes by emphasizing the regional attraction.
6. Develop new festivals and special events that would attract new segments of visitors.
7. Emphasize market research through surveys and other instruments.
8. Make sure that individual counties work as a group in achieving residents' participation.
9. Educate the residents about the contribution of tourism toward employment and taxes.
10. Emphasize the reconstruction of additional plantation homes.
11. Emphasize the security, cleanliness, and solitude themes for lakes and parks.
12. Emphasize the historical importance of the area.

ECONOMIC DEVELOPMENT POLICY RECOMMENDATIONS

In order to be effective in successfully developing the opportunities presented above, economic development must proceed with more regional consensus and cooperation, more regional marketing and more financial dedication to the goals. The region has pockets of exceptional economic development organization in both large and small cities: Longview, Pittsburg and Mount Pleasant are examples. However, many areas are not assertive about correcting their hindrances to business.

Economic development policy recommendations, reported in section eight of the report, will hopefully be integrated into industrial development policy and help to build local consensus on specific economic development strategies. Much of this information came from industry requirements and the Baseline Conditions Reports, which revealed ways that the area can better utilize state and federal economic development programs, coordinate local resources and leverage public and private development agendas.

Policy recommendations for the region includes training for economic developers and economic development boards. These groups should be made aware of the importance of strategies that include multi-community cooperation, entrepreneurial development and sensible incentive planning. Training will probably be effective only if it is delivered locally and involves all community stakeholders, such as banks, existing business and the education sector. Companies are now looking for areas that understand their unique training and resource needs and have this type of infrastructure already developed to minimize their set-up costs.

The policy recommendations also include development of a manufacturing entrepreneurial assistance center. This center, known as a manufacturing incubator service, would provide the following services:

- § Access to manufacturing prototyping facilities and engineering planning.
- § Business planning, including capital sourcing, state agency advocacy and loan/grant preparation.
- § Access to a network of service providers (including technology sources, accounting and legal advisors) as well as to other entrepreneurs.
- § Contacts for joint ventures and contract manufacturing as appropriate.
- § Office and manufacturing space at low cost.

In addition, the study makes recommendations for the watershed's direct incentives programs. The economic development leadership in the Cypress Bayou will be more effective in the recruitment and development of companies if it considers these tactics in helping companies obtain debt and equity financing:

- § Establish a "one-stop" financial planning center that emphasizes manufacturing and has the ability to finance and package federal and state loans, loan guarantees and grants.
- § Encourage legislation that will make existing loan programs large enough to cover highly capital-intensive manufacturing entities, which consistently provide a higher economic impact turnover than service businesses.
- § Provide long-term, reliable loans with commitments to future loans at similar interest rates to those businesses that continue to operate in the state and employ a specified number of employees.
- § Support the Texas Capital Network, a non-profit economic development corporation located in Austin, which operates the largest venture capital network in the country. The company provides a "matching" service for entrepreneurs and investors that has helped entrepreneurial ventures raise more than \$20 million.

Indirect incentives are those that aid business by providing additional efficiencies to their operations. An example is development of infrastructure needed in an industrial park. Most companies are unwilling to look at any sites without basic infrastructure in place, unless locational advantage or some other business-related factor makes an unimproved site highly desirable. A first step for community economic development is the construction of an industrial park or at least improvement of an industrial site. For small communities, the Texas Capital Fund (TCF) is available. This program provides infrastructure grants, Main Street programs (downtown redevelopment), and real estate grants to communities of less than 50,000 people. Another program available is the TCF Infrastructure Grant Program. The program provides grants for eligible communities for construction and/or improvements of water and waste water facilities, public road construction, natural gas line services, electrical power services and railroad spur construction and improvements.

Tax incentives include any type of tax exemption, deduction or credit. With regard to tax incentives, research findings indicated that the following guidelines are the most effective in promoting economic development and provide flexibility to decision-makers:

- § Allow officials to vary the size or degree of tax abatement among applicants.
- § Give local officials discretion in granting abatements rather than following statewide policies.
- § Allow officials to give larger abatements to projects that would impose smaller infrastructure costs on the jurisdiction.
- § Allow abatements to vary with the length of projects.

Non-financial incentives generally refer to human capital investments that translate into reduction in costs of doing business, increased labor productivity or both. The recommended policy includes development of a recruitment and training program for personnel of new businesses, provide lists of qualified personnel seeking employment, and business management training for incoming businesses and current business owners.

Special incentives include programs such as export promotion assistance, enterprise zones and other promotional programs for new businesses. Export promotion assistance should be developed due to the increasing NAFTA trade. Enterprise zone programs are geographically targeted tax, expenditure, and regulatory inducements. In addition, regulatory compliance assistance can further economic development by providing a much-needed service to small business owners.

SUMMARY

This section presented a brief summary of an extensive study of economic development opportunities for the watershed counties. Detailed information about the methodology, sources, assumptions and other considerations used in the study are available in the report ***Final Economic Development Study, Cypress Bayou Watershed***, dated August 1995.

Table 5 below presents a summary of target industries for the watershed economic development planners to pursue in their economic development efforts.

Table 5
Summary of Recommended Target Industries for the
Cypress Bayou Watershed
(by county)

| County | New Manufacturing | Spin-Off Manufacturing | Agriculture |
|---------------|---|--|---|
| Camp | Manufactured homes | Plastic bags & shrink wrap | Aquaculture Organic chicken litter fertilizer Nursery plants Blueberries |
| Cass | Construction materials | Plastic bags & shrink wrap Particle board plant | Aquaculture Organic chicken litter fertilizer Blueberries |
| Franklin | Construction materials Manufactured homes | Plastic bags & shrink wrap | Blueberries Organic chicken litter fertilizer Nursery plants |
| Gregg | Stretch film, blow mold containers Medical plastics & devices Air pollution equipment | Corrugated boxes Corrugated recycling Plastic bags & shrink wrap Particle board plant | |
| Harrison | Medical plastics & devices Air Pollution equipment | Corrugated boxes Corrugated recycling Plastic bags & shrink wrap Particle board plant | |
| Marion | Stretch film, blow mold containers Medical plastics & devices Air pollution equipment | Corrugated boxes Plastic bags & shrink wrap Particle board plant | |

Table 5 (continued)
Summary of Recommended Target Industries for the
Cypress Bayou Watershed
(by county)

| County | New Manufacturing | Spin-Off Manufacturing | Agriculture |
|---------------|---|--|---|
| Morris | Construction Materials | Plastic bags & shrink wrap | Aquaculture Organic chicken litter fertilizer Nursery plants Blueberries |
| Titus | Manufactured homes | Plastic bags & shrink wrap | Aquaculture Organic chicken litter fertilizer Nursery plants Blueberries |
| Upshur | Manufactured homes | Corrugated boxes Plastic bags & shrink wrap Particle board plant | Organic chicken litter fertilizer Nursery plants |
| Wood | Construction materials Manufactured homes | Plastic bags & shrink wrap | Organic chicken litter fertilizer Nursery plants |
| Caddo Parish | Stretch film, blow mold containers Medical plastics & devices Air pollution equipment | Corrugated boxes Corrugated recycling Plastic bags & shrink wrap Particle board plant | |

APPENDIX E

REAL ESTATE

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REAL ESTATE

GENERAL

The common focus among the alternatives in this study is the land immediately adjacent to Big Cypress Bayou and the existing lakes. Therefore, much of the real property in our analysis is within a floodplain or floodway. Beyond this similarity, the real estate characteristics of the various alternatives are somewhat diverse, because the study area is large. Property types include lake shore at Lake o' the Pines, Texas; rural property along Big Cypress Bayou (some being within existing flowage easements); property immediately adjacent to downtown Jefferson, Texas; property with development potential in the immediate vicinity of the town; and land at and around the Caddo Lake dam in Louisiana. We will discuss the real estate setting for each general project location in the following paragraphs.

SCOPE OF ANALYSIS

The real estate analysis presented here is intended to provide a basis for future detailed investigations and appraisals of specific projects. A Reconnaissance Cost Estimate for Big Cypress Bayou, Jefferson, Texas has been prepared by a Fort Worth District Staff Appraiser. This document is dated August 21, 1995 and is on file in the District office. It is a compilation of sales data on comparable real property in the study area. Comparable properties for which sales data is available have portions falling within the floodplain, floodway as well as outside of any flooding areas. The highest and best uses of the comparables are variable. There are properties which are, or have the potential for, commercial, residential and agricultural uses (crop production or timber). The real estate costs, included in the overall project cost estimates, as presented elsewhere in this report, are based on the data in this document.

ANALYSIS OF PROPOSED PROJECTS

Lake o' the Pines

Lake o' the Pines is a multi-purpose reservoir operated by the Fort Worth District Corps of Engineers. The project was transferred to Fort Worth from the New Orleans District in October 1979. Construction of the dam, which is known individually as Ferrells Bridge Dam, was initiated in January 1955 and the reservoir was placed in operation on December 11, 1959. The dam impounds the waters of Big Cypress Bayou.

The United States of America owns over 29,040 acres of land in fee simple at Lake o' the Pines. Fee was acquired up to elevation 236 feet National Geodetic Vertical Datum (NGVD) for the permanently inundated areas and the designed 5-year flood frequency. In order to accommodate the occasional storage of floodwater above elevation 236', flowage easements were acquired up to elevation 254.5' NGVD. This amounts to approximately 16,054 acres of flowage easement. Fee was also purchased at specific locations above 236' for park development. Also, the USA holds flowage easements on approximately 2,223 acres downstream of Ferrells Bridge Dam along Big Cypress Bayou. These easements date back to the early 1960's after the completion of the dam.

At the lake itself, the Corps has granted commercial concession leases to a number of private entities. These businesses provide services to the public which support water-based recreational activities. The services include boat slip rental and sale of gas, groceries and fishing supplies. These marinas generally have both floating dock facilities and land based improvements.

Because of the erosive nature of the soils along what is now the lake shore of Lake o' the Pines there are many areas which have experienced significant soil loss. As the reservoir operates

to store floodwater and release them downstream in a controlled manner, the lake level rises upstream of the dam. During this time, soil which is normally dry becomes saturated and subjected to vigorous wave action. As the lake level recedes these soils are exposed, but continue to absorb the force of waves. These forces often cause large-scale sloughing of the shoreline and this phenomenon can be observed in many places around Lake o' the Pines. Funds appropriated for operation and maintenance of the lake are insufficient to address this problem, except in isolated areas where park facilities are immediately threatened.

There may be opportunity to deal systematically and holistically with this problem under the Cypress Valley Initiative. While some critical sites in the public recreation areas may be best dealt with through structural protection of the shoreline, the acquisition of additional real estate by the Government may be the most pragmatic answer overall. This study effort has not quantified the problem by estimating the amount of land that would be necessary to properly resolve it. Nor have we made a detailed investigation of the number and type of private improvements around the lake which might be impacted. In general, however, since the Government holds flowage easement up to the 254.5' contour, much of the acquisition would involve conversion of these flowage easements to fee. Under Federal law, no such acquisition of private property rights can be done by the Government without payment of fair market value. The Reconnaissance Cost Estimate concludes that the local real estate market is stagnant due to a lack of recent sales activity around the lake. Values of properties around Lake o= the Pines tend to be approximately 40% lower than Caddo Lake.

Big Cypress Bayou

The land along Big Cypress Bayou between Lake o' the Pines and the Town of Jefferson is rural and is being utilized for timber production and other agricultural uses such as cattle grazing and hay production. There are also producing oil and gas wells along the Bayou. Maps of the area show named oil fields. There does not seem to be a significant level of exploration going on at the present time. Much of the land is also leased by local hunting clubs. Low lying, often wet areas in the region are routinely purchased for the purpose of hunting and fishing.

The Government flowage easements (mentioned in the previous section) were designed to accommodate a release of 3,000 cubic feet per second (cfs) from Lake o' the Pines. They extend downstream of Ferrells Bridge Dam to just past the confluence of Big Cypress Bayou and French Creek to the eastern edge of the John French Survey (A-140). This is slightly more than half the length of the bayou between the dam and the Town of Jefferson. These easements are shown on the project maps for Cypress Creek, Texas Channel Below Ferrells Bridge Dam which are included herein as Figures 1 & 2.

Below Jefferson to the upper end of Caddo Lake the land is very similar in nature and use to that upstream of the town. Paper companies are major land owners. Longhorn Army Ammunition Plant is also in the immediate vicinity and has a water intake on the Bayou. The upper end of Caddo Lake is made up of the swamps and wetlands that are part of the area's fascinating mystique. The Texas Parks and Wildlife Department operates Caddo Lake State Park and a large wildlife management area here.

Along the bayou the focus has been on the potential for environmental restoration. It is felt that much habitat benefit can be achieved in the upper portion, simply through well timed releases from Lake o' the Pines. These releases would flood key backwater areas, thereby creating favorable habitat for various species of wildlife. No additional real estate would be required to allow such practices since the Government flowage easements are already in place. If viable projects are identified which require land acquisition, the lower range of values for land sales around Lake o' the Pines would apply.

Port of Jefferson

Real estate market activity in the Town of Jefferson is slow, as is typical of the majority small east Texas communities. The sites proposed for the Port of Jefferson restoration project are located

on the southern fringe of the downtown area, mostly southeast of Dallas Street. Most of the area is within the floodplain, between the old levees and the Bayou, hence there is very little development present. There is no federal property interest or known maintenance or inspection responsibility for the levees.

The various port restoration sites can be compartmentalized as follows:

a. The Old Wharf, Water Related Recreation area is located east of the Louisiana and Arkansas Railroad bridge on the north bank of the bayou south of the businesses and the City parking facility on Austin Street. The City's water intake structure is located on this site. The area contains approximately 3.5 acres and is entirely inside the levee. The access road to the water intake passes through a breach in the levee. A portion of the site is platted as part of Blocks 10 and 11 to the Urquhart Addition of the City of Jefferson.

b. The Core Area, Heritage Park contains approximately 3 acres located on the north bank of the bayou east of Polk Street and west of the railroad. Appraisal District records indicate this area to be owned by the City of Jefferson and the State of Texas. It includes the site of the existing public boat ramp which was constructed by the state Highway Department in 1969. The ramp is now under the jurisdiction of the Texas Parks and Wildlife Department (TPWD). By contract with TPWD, the City of Jefferson performs mowing, trash collection and minor maintenance, with TPWD providing funds for major repairs. TPWD staff feel that the Department would not object to relocation of the ramp and could possibly cost share in such a project. If such were to occur, TPWD's policy would be to transfer all maintenance responsibility to the local interests with the requirement that the facility remain public for 25 years.

c. A possible location for a Port Museum is on the north east corner of the intersection of Polk Street and Dallas Street. This site is part of Lots 4 and 5 Block 8 of the Urquhart Addition and is in private ownership according to Appraisal District records.

d. The Northbank Outdoor Learning Center is approximately 18 acres on the east side of Polk Street and south of Dallas Street. This area is a wooded bottomland site, inside the levee, and is undeveloped although the area is divided into lots and blocks on the City plats as part of the Urquhart Addition. Streets are also shown on the plats, but these do not exist on the ground. An unimproved private road does provide access to the area from Dallas Street. According to available records, a small part of the area is owned by the City of Jefferson and a number of the platted lots are in private ownership.

e. The Southbank Parking and Boat Concession would be located across the Polk Street bridge from the main section of Downtown Jefferson. Approximately 16 acres out of a 400 acre parent tract would be required to accommodate a parking lot and access to the bayou. The parent tract is in private ownership, and it surrounds the historic powder magazine. Like the Northbank Outdoor Learning Center site, part of this area is platted with lots and streets which do not exist on the ground. There is at least one residence on the tract and a unimproved road which leads to the powder magazine.

Jefferson Powder Magazine

It is proposed to develop a pedestrian trail along the southbank of the bayou to the historic powder magazine. A trail corridor consisting of approximately 4.5 acres directly adjacent to the bank of the bayou channel is envisioned. Some of this corridor overlaps the proposed Southbank Parking and Boat Concession area. The trail would connect the old rail road bridge and Polk Street to the powder magazine. This right of way would come out of the same parent tract as described above for the parking area and boat concession. The Jefferson Historical Society owns the 1/3 acre parcel on which the powder magazine sits.

The powder magazine structure is currently being threatened by erosion of the bank of Big Cypress Bayou. Stream bank protection measures are proposed to protect it. The erosion protection structure will require approximately 0.64 acres of land, most of which is within the existing channel of the bayou.

Caddo Lake Dam

The Caddo Lake dam is operated and maintained by the Vicksburg District Corps of Engineers in accordance with the Water Resources Development Act of 1976 which changed the operation and maintenance from a local to a Federal responsibility. The land on which it resides is owned by the Caddo Lake Levee District. Proposed modifications to the spillway would flood approximately 30 acres downstream. This area appears to be entirely within the existing Levee District ownership.

The real estate market at Caddo Lake is considerably more active than at Lake o' the Pines and property values are consistently higher. The majority of the lake's shoreline is in private ownership and has significant development. There are many residences on the lake as well as commercial fishing camps and tour guide operations. Longhorn Army Ammunition Plant borders on the Goose Prairie arm of the lake. This military installation contains approximately 8,500 acres of land owned in fee by the United States.

FINAL

PROJECT MAP

DEPT. OF THE ARMY
USING SERVICE CIVIL WORKS

LOCATION OF PROJECT

STATE TEXAS
COUNTY MARION
DIVISION LOWER MISSISSIPPI VALLEY
DISTRICT NEW ORLEANS

ARMY AREA
6 MILES W OF JEFFERSON
MILES OF

TRANSPORTATION FACILITIES

RAILROADS
STATE ROADS
FEDERAL ROADS
AIR LINES

ACQUISITION

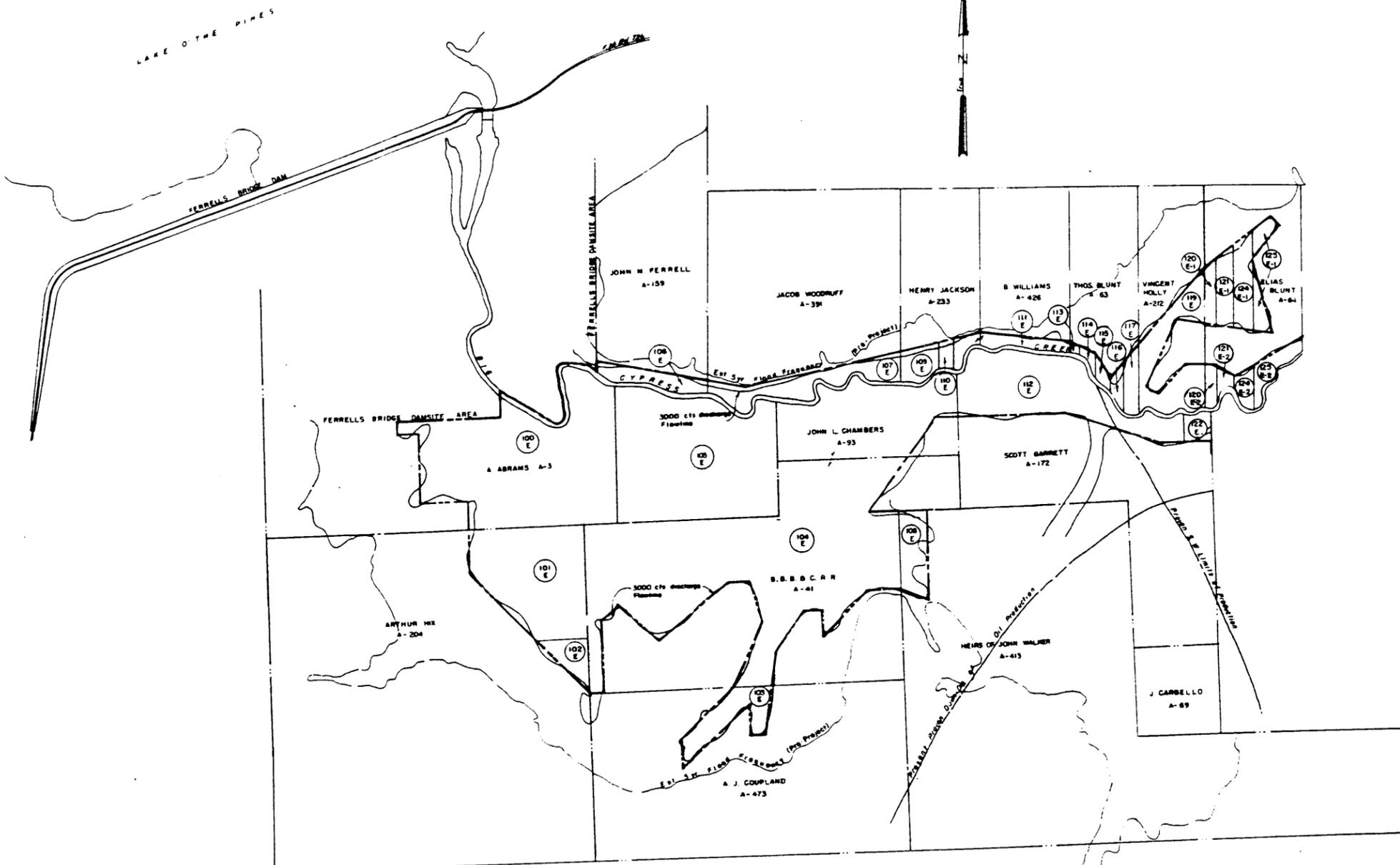
TOTAL ACRES ACQUIRED 2,223.19
FEE
PUBLIC DOMAIN (PERM. WITHDRAWAL / TEMP. WITHDRAWAL)
USE PERMIT
TRANSFER
LEASE
LESSER INTERESTS (LEASE (52) 2,223.19)

DISPOSAL

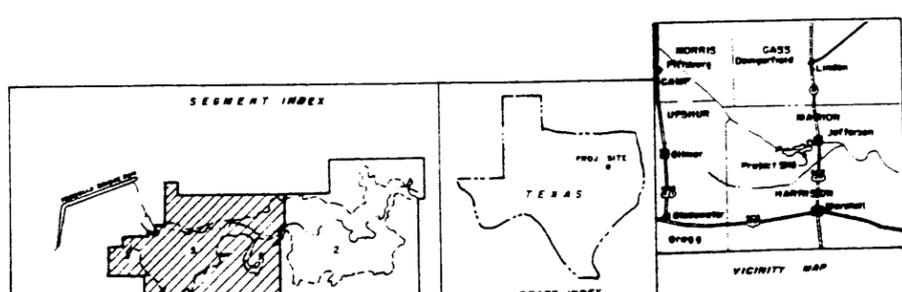
TOTAL ACRES DISPOSED OF
SOLD
PUBLIC DOMAIN (PERM. WITHDRAWAL / TEMP. WITHDRAWAL)
USE PERMIT
TRANSFERRED
LEASES TERMINATED
LESSER INTERESTS TERM.
REASSIGNED
OTHER

LEGEND

| ACQUISITION AUTHORIZATION | EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW ALL SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 23. |
|--|--|
| Public Law No. 526, 79th Congress, 24 July 1946. 2nd Ind. from OCE to L.M.V.D. dated 24 Nov 1959. | RESERVATION LINE |
| | RESERVATION LINE (Actual Survey) |
| | TRACT BOUNDARY LINE |
| | TRACT NUMBER |
| | CONTOUR LINE |
| | DISPOSAL |



NOTE: The boundary of this installation was computed from original benchmark survey field notes, good descriptions & aerial photos.



SEGMENT 1

DEPARTMENT OF THE ARMY
OFFICE OF THE NEW ORLEANS DISTRICT ENGINEER
LOWER MISSISSIPPI VALLEY DIVISION

**REAL ESTATE
CYPRESS CREEK, TEXAS
CHANNEL BELOW
FERRELLS BRIDGE DAM**

| | | |
|---------------------------|--|-----------------------|
| DESIGNED BY: NCA | APPROVED BY: [Signature] | DATE: 12-31-59 |
| TRACED BY: [Signature] | OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C. | SCALE: 1" = 100' |
| CHECKED BY: [Signature] | AUDITED | PROJECT NO. A2-2-0007 |
| SUBMITTED BY: [Signature] | | |

FINAL
PROJECT MAP

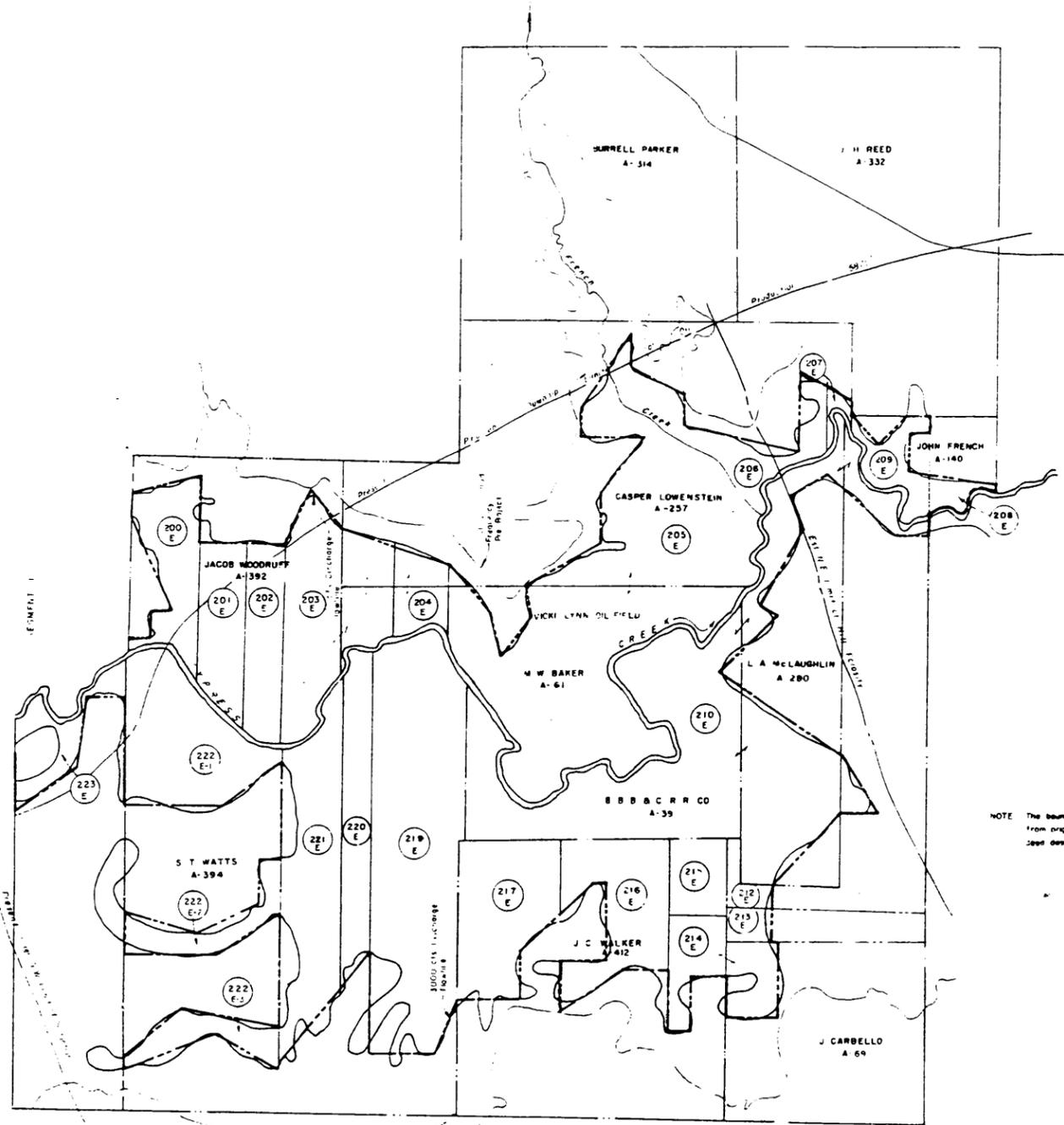
ARMY
ENGINEER SERVICE CIVIL WORKS
LOCATION OF PROJECT
STATE TEXAS
COUNTY MARION
DIVISION LOWER MISSISSIPPI VALLEY
DISTRICT NEW ORLEANS
ARMY AREA
6 MILE W OF JEFFERSON
MILE

TRANSPORTATION FACILITIES
RAILROADS
STATE ROADS
GENERAL ROADS
AIR LINES

ACQUISITION
TOTAL ACRES ACQUIRED
FREE
PUBLIC DOMAIN PERM WITHDRAWAL
LEASE PERMIT
TRANSFERRED
LEASE
LESSER INTEREST

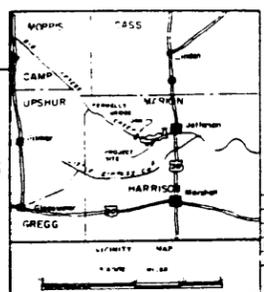
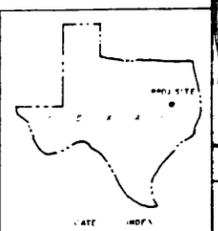
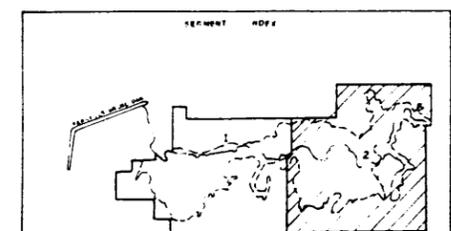
DISPOSAL
TOTAL ACRES DISPOSED OF
SOLD
PUBLIC DOMAIN PERM WITHDRAWAL
LEASE PERMIT
TRANSFERRED
LEASES TERMINATED
LEASED INTERESTS TERM
REASSIGNED
OTHER

LEGEND
EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO 23
RESERVATION LINE
RESERVATION LINE (A-100) (A-100) (A-100)
TRACT BOUNDARY LINE
TRACT NUMBER
CONTOUR LINE
DISPOSAL



NOTE: The boundary of this installation was computed from original headright survey field notes. See descriptions in serial notes.

simulate 5 ft. -1000 Frequency (Per Project Conditions)



| | |
|---|-----------|
| 11-1-67 Final Audit | R.P. |
| 10-4-60 Tract 209E revised, tract 208E added | INC A |
| 5-3-60 Map redrafted and position of contour and property lines corrected | INC A |
| DATE | REVISIONS |

SEGMENT 2

DEPARTMENT OF THE ARMY
OFFICE OF THE NEW ORLEANS DISTRICT ENGINEER
LOWER MISSISSIPPI VALLEY DIVISION

REAL ESTATE
CYPRESS CREEK, TEXAS
CHANNEL BELOW
FERRELLS BRIDGE DAM

DRAWN BY: R.E.A.
CHECKED BY:
SUBMITTED BY:
RECOMMENDED BY:
APPROVED BY: [Signature] DATE: 4-27-60
OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.
SCALE IN FEET
AUDITED
AZ-2-0007
SHEET 2 OF 2