

REAL ESTATE PLAN
BUFFALO BAYOU & TRIBUTARIES
GREENS BAYOU
FLOOD CONTROL PROJECT
HARRIS COUNTY, TEXAS
FEBRUARY 2005

Project Manager: Mike Bragg
 Prepared by: Justin Cross
 Submitted by: Orlando Rosas

REAL ESTATE PLAN – TABLE OF CONTENTS

| <u>SECTION</u> | <u>PAGE</u> |
|--|-------------|
| a. General | 1 |
| b. Project Type & Applicability | 1 |
| c. Scope & Content | 2 |
| 1. Purpose | 2 |
| Description of LER | 2 |
| 3. Non-Federal LER | 2 |
| 4. Non-Standard Estates | 3 |
| 5. Internal Federal Projects | 3 |
| 6. Federally Owned Land Within LER | 3 |
| 7. LER below Mean High Water Mark | 3 |
| 8. Project Maps | 3 |
| 9. Project Induced Flooding | 3 |
| 10. Baseline Cost Estimate | 4 |
| 11. Relocation Assistance Benefits | 5 |
| 12. Mineral Activity | 5 |
| 13. Non-Federal Sponsor's Capability to Provide LER | 5 |
| 14. Anticipated Zoning Changes | 5 |
| 15. Acquisition Schedule | 6 |
| 16. Facility/Utility Relocations | 6 |
| 17. HTRW Impacts | 7 |
| 18. Landowner Attitude | 7 |
| 19. Notification to Non-Federal Sponsor | 7 |
| 20. Other Real Estate Issues | |
| Placement Areas | 7 |
| Impacts on Aids to Navigation | 7 |
| Mitigation | 7 |
| Federal & State Rule Concepts for Cost Shared Projects | 7 |

EXHIBITS

| | |
|-----|--|
| 'A' | Vicinity Map |
| 'B' | Project Location Map |
| 'C' | Tract Map Depicting Required Real Estate |
| 'D' | Potential Placement Areas |
| 'E' | Tract Register |

REAL ESTATE PLAN

General: This Real Estate Plan (REP) is the real estate work product of the U.S. Army Corps of Engineers, Galveston District, Real Estate Division (“District”) that supports project plan formulation for the Greens Bayou Flood Control Project, Harris County, Texas (“Project”). It identifies and describes the lands, easements, and rights-of-way (LER) required for the construction, operation, and maintenance of the proposed Project, including those required for borrow material and dredged or excavated material disposal. The REP also identifies and describes the Public Law 91-646 relocations and facility/utility relocations that are necessary to implement the Project.

The Recommended Plan for Greens Bayou includes channel improvement for a portion of the length of the bayou as well as a detention basin. Channel reconstructing and recontouring will be between Cutten Road and Veteran’s Memorial Drive. The 108 acre detention basin, in the vicinity of West Greens Road, is owned by the Harris County Flood Control District.

Project Type & Applicability: This is a general reevaluation study conducted under authority of Public Law 101-640, dated November 28, 1990, of the Water Resources Development Act of 1990 (WRDA ’90). This law authorizes construction of six different elements identified to reduce flood damages within the Buffalo Bayou watershed. One of these elements is Greens Bayou, Houston, Texas. The public law reads:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,...Except as provided in this subsection, the following projects for water resources development and conservation and other purposes are authorized to be carried out by the Secretary of the Army (Secretary) substantially in accordance with the plans, and subject to the conditions, recommended in the respective reports designated in the subsection:

(21) BUFFALO BAYOU AND TRIBUTARIES, TEXAS. – The project for flood control, Buffalo Bayou and tributaries, Texas: Report of the Chief of Engineers, dated February 12, 1990.

According to ER 1105-2-100, Policy and Planning Guidance for Conducting Civil Works Planning Studies, “Construction authorities imply the authority to undertake necessary reevaluation studies.”

Scope & Content: Changes in the watershed since project authorization that were considered for the reevaluation include improvements to the channel by the local sponsor for flood damage reduction, identification of damage areas from recent floods, and increased development in the study area. Structural measures were formulated for the portion of the stream flowing east from its headwaters upstream of FM 1960 to its confluence at Garners Bayou. No structural alternatives were formulated for the portion of the stream running south from the confluence with Garners Bayou to the outfall at the Houston Ship Channel, due to the environmental sensitivity of the area.

1. Purpose: The purpose of this reevaluation is to reformulate a smaller project to reduce flood damages for Greens Bayou in light of current conditions in the watershed, environmental sensitivity, and public acceptance.

2. Description of LER: The optimized channel enlargement consists of an earthen trapezoidal channel requiring a total of 93.8902 acres and extending from Cutten Road to Veteran's Memorial Drive, accompanied by a 108-acre capacity detention basin that sits on a footprint of approximately 133 acres. A portion of the channel will be acquired in fee (65.8811 acres) and a portion of the channel will utilize a channel improvement easement (28.0091 acres). The basin is bound by Antoine Road, the Sam Houston Tollway, the Briarcreek Subdivision, and Greens Bayou. The detention basin acreage is owned in fee by the non-Federal sponsor. The non-Federal sponsor will furnish the necessary lands, easements or rights-of-way to complete the project.

3. Non-Federal LER: Along with the detention basin, the project will utilize 93.8902 acres along the length of the channel of Green's Bayou. The footprint of the project necessitates land, easements, or rights-of-way from all or part of 125 tracts. The ownership of the land on which lies the footprint of the project is listed in a tract register in Exhibit E. A tract map showing the lands identified to be acquired is shown in Exhibit C. The estimated value for the total acreage is \$5,885,000.

Although the minimum estate needed to be acquired is a channel improvement easement, some of the property will be acquired in fee. This is because the uneconomic remnant left to the landowner would be small enough to necessitate buying the estate in fee. No permanent or temporary pipeline easements, road easements, or work area easements will be required.

Definitions of the estates are below.

Detention Basin:

Fee Excluding Minerals (With Restriction on Use of the Surface): The fee simple title to the surface estate, subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines; excepting and including from the taking all oil and gas and other minerals in and under said land and all appurtenant rights for the exploration, development, production and removal of said oil and gas and minerals, but without the right to enter upon or over the surface of said land for the purpose of drilling and extracting therefrom said oil and gas. This is based on standard estate number 3.

Channel Improvements:

Channel Improvement Easement: A perpetual and assignable easement and right to construct, operate, and maintain channel improvement works on, over and across the land for the purposes as authorized by the Act of Congress, including the right to clear, cut, fell, remove and dispose of any and all timber, trees, underbrush, buildings, improvements and/or other obstructions therefrom; to excavate: dredge, cut away, and remove any or all of said land and to place thereon dredge or spoil material; and for such other purposes as may be required in connection with said work of improvement; reserving, however, to the owners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines. This is based on standard estate number 8.

4. Non-standard estates: There are no non-standard estates.

5. Internal Federal Projects: The proposed new federal project does not overlay any existing Federal project lands.

6. Federally Owned Land Within LER: There is no federally owned land within the LER.

7. LER Below Mean High Water Mark: There is no LER below mean high water that would be classified as navigable waters.

8. Project Maps: All maps of the project area and tracts to be acquired are included in the Appendix.

9. Project Induced Flooding: Plans were formulated on the assumption that the 108-acre detention basin would prevent any induced flows downstream; therefore eliminating any project induced flooding, therefore no taking analysis is required.

10. Baseline Cost Estimate:

**BASELINE COST ESTIMATE
GREENS BAYOU FLOOD CONTROL PROJECT
FEASIBILITY STUDY PHASE
REAL ESTATE PLAN**

| ACCOUNT | DESCRIPTION | ESTIMATE | | CONTINGENCIES | |
|-------------|---------------------------------------|--------------|--------------|---------------|------------|
| | | Total | Mitigation | Total | Mitigation |
| 01 | Lands & Damages | | | | |
| 01-23 | Construction Contract Documents | | | | |
| 01-23-03 | Real Estate Analysis Documents | | | | |
| 01-23-03-01 | Real Estate Planning Documents | | | | |
| | Planning by non Federal Sponsor | \$ 0 | \$0 | \$0 | \$0 |
| | Review of Sponsor Plan | 0 | 0 | 0 | 0 |
| 01-23-03-02 | Real Estate Acquisition Documents | | | | |
| | Acquisitions by Sponsor | 75,900 | 0 | 15,180 | 0 |
| | Review of Sponsor | 25,300 | 0 | 5,060 | 0 |
| 01-23-03-03 | Real Estate Condemnation Documents | | | | |
| | Condemnations by Sponsor | 55,000 | 0 | 13,750 | 0 |
| | Review of Sponsor | 2,200 | 0 | 550 | 0 |
| 01-23-03-05 | Real Estate Appraisal Documents | | | | |
| | Appraisals by Sponsor | 25,300 | 0 | 2,530 | 0 |
| | Review of Sponsor | 6,325 | 0 | 630 | 0 |
| 01-23-03-06 | Real Estate PL 91-646 Asst. Documents | | | | |
| | PL 91-646 Asst. By Sponsor | 0 | 0 | 0 | 0 |
| | Review of Sponsor | 0 | 0 | 0 | 0 |
| 01-23-03-15 | Real Estate Payment Documents | | | | |
| | Payments by Sponsor (Land) | 5,885,000 | 0 | 1,471,250 | 0 |
| | Payments by Sponsor (Damages) | 0 | 0 | 0 | 0 |
| | Payments by Sponsor (PL 91-646) | 0 | 0 | 0 | 0 |
| | Review of Sponsor | 0 | 0 | 0 | 0 |
| 01-23-03-17 | Real Estate LERRD Credit Documents | 800,000 | 0 | 0 | 0 |
| | Total Admin & Payments | \$ 6,875,025 | 0 | 0 | 0 |
| | Total Contingencies | 0 | 0 | 1,508,950 | 0 |
| | GRAND TOTAL | | \$ 8,383,975 | | |

11. Relocation Assistance Benefits: No PL 91-646 relocations are necessary for this project. Relocation benefits are not applicable because the land is vacant or unimproved.

12. Mineral Activity: A review of Railroad Commission of Texas records indicate there has been limited historic oil and gas exploration in the project area. The project area is predominantly residential with supporting commercial establishments and is within the urban metropolitan area of Houston, Texas.

No mineral, oil, or gas rights will be acquired because their development will not interfere with project purposes. Acquisition or subordination of these rights is not considered necessary because of the low risk that any mineral development would occur in this area (the geography of the project is an urban stream in Houston, Texas) and because adequate safeguards are in place to protect the project. These safeguards include State oil and gas regulations, State and Federal environmental laws, and the rule of law in Texas that subsurface owners must “accommodate” surface usage before mineral activity can take place.

The procedure of the Corps of Engineers in acquiring the necessary land or interests therein to accommodate projects authorized by the Congress is to permit the reservation of the minerals in the land, unless the reservation is detrimental to the operation of the project. In all cases wherein a reservation is permitted, the mineral interests are subordinated to the primary project purposes. However, subordination of 3rd Party minerals will not be pursued for this project. The risk of 3rd Party mineral extraction is negligible because the Texas Railroad Commission keeps oil and gas wells out of populated areas, including our smaller tracts of land (such as this project). The Texas RR Commission, a political subdivision of the State of Texas, derives its authority from the Texas Administrative Code, Title 16, Part 1, Chapter 3, and Rule Para. 3.5, in regulating oil and gas drilling. This project is different from one with a large reservoir where huge areas are impacted and, therefore, would require more expenses involved in directional drilling. This approach has to do with the permanent severance of Texas minerals and the fact that under State law, the mineral estate is dominant. Subordination of 3rd Party minerals increases the cost of the project unnecessarily. Such action requires an attorney's examination to identify 3rd Party mineral owners and a very specialized expertise on establishing a value on the subordination. Galveston District has been successful in this approach which avoids subordination of 3rd Party minerals.

13. Non-Federal Sponsor's Capability to Provide LER: The Non-Federal Sponsor is highly capable of performing the real estate acquisition required by this project. The Non-Federal Sponsor has performed real estate acquisition satisfactorily for similar flood control projects and is well acquainted with Federal real estate acquisition regulations including the provisions of PL 91-646.

14. Anticipated Zoning Changes: No zoning changes are anticipated.

15. Acquisition Schedule: Acquisition for the following contracts has already occurred and is owned in fee by the Non-Federal Sponsor.

Contract No. 1 – 108-acre capacity detention basin located south of Buffalo Bayou between Antoine and West Greens Road bounded on the south by the Sam Houston Tollway.

Contract No. 2 – Excavation of an earthen channel from upstream of Veteran Memorial Drive to downstream of Bammel North Houston.

Contract No. 3 – Environmental quality features and landscaping within the 108-acre detention basin and right-of-way, respectively.

Contract No. 4 – Excavation of the existing earthen channel from downstream of Bammel North Houston to downstream of Cutten Road.

The remaining land the non-Federal sponsor will furnish must precede the Construction Schedule. The start dates for the above-mentioned contracts (1-4) are November 2007, February 2009, January 2009 and May 2010, respectively. Portions of the channel not acquired in fee by the sponsor are covered by flood control easements that are sufficient to allow for the channel improvements in this project.

16. Facility/Utility Relocations: In cost shared civil works projects, it is the responsibility of the non-Federal sponsor to perform or assure the performance of relocations. The non-Federal sponsor's attorneys performed the attorney opinions of compensability on the following impacted facilities. Williams Gas Pipeline Company, Entex and the City of Houston have a compensable interest in the facilities below, pursuant to Texas Water Code 49.223 and Texas Utilities Code 181.005. The local sponsor will be responsible for coordinating with pipeline and utility owners in making final determinations for all pipeline and utility relocation requirements, as well as relocation costs.

| <u>Facility</u> | <u>Owner</u> |
|------------------------------|-----------------|
| 16" sanitary sewer | City of Houston |
| 30" above ground pipeline | City of Houston |
| 10" above ground pipeline | City of Houston |
| 24" above ground pipeline | City of Houston |
| 10" above ground pipeline | Entex |
| 16" above ground pipeline | Entex |
| 30" underground gas pipeline | Williams Gas |
| 30" underground gas pipeline | Williams Gas |

17. HTRW Impacts: Surveys were performed to identify potential sites of concern in the Greens Bayou project area. Investigation indicate no HTRW areas are within or adjacent to the proposed channelization area and the detention basin which could impact the project. The potential placement areas for the excavated materials have not been impacted by hazardous materials or solid waste disposal. Based on findings of the surveys, the potential of encountering HTRW is considered low. No other HTRW investigations are warranted at this time.

18. Landowner Attitude: Landowners support the project.

19. Notification to Non-Federal Sponsor: The non-Federal sponsor is represented at all meetings and stays well informed of the project.

20. Other Real Estate Issues:

Placement Area: A total of 3,030,331 CY of excavation is required for the project, which requires 196.5 acres of upland placement area. Potential placement areas are shown in exhibit D. An upland placement height of 10 feet was assumed. The first site (156 acres) is an open land tract located south of the bayou and near the North Sam Houston Parkway Beltway 8. The second site (225 acres) is situated south of the bayou and adjacent to the North Sam Houston Parkway Beltway 8.

Impacts on Aids to Navigation: This part of Greens Bayou is not considered navigable. There will be no impacts to navigation.

Mitigation: The recommended plan will not result in significant habitat loss and mitigation is not required.

Federal & State Rule Concepts for Cost Shared Projects: The non-Federal sponsor is responsible for all LER. Federal and State rules of acquisition apply.

EXHIBIT A
VICINITY MAP

EXHIBIT B
PROJECT LOCATION MAP

EXHIBIT C

TRACT MAP DEPICTING REQUIRED REAL ESTATE

EXHIBIT D
POTENTIAL PLACEMENT AREA

EXHIBIT E
TRACT REGISTER

Fee

521-20-0482, Southwest Land Investments Partnership, Ltd., 30.848
522-89-1717, American Real Estate Co. of Texas, Inc., 0.2552
543-29-2564, American Real Estate Co. of Texas, Inc., 91.659
139-84-1438, Lincoln Associates, Inc. et al, 58.4421
538-03-0707, Mission Investment Fund of the Evangelical Lutheran Church in America, 2.9486
549-82-2569, Lincoln Green Apartment Venture, 7.0000
170-88-1586, William Marsh Rice University, 0.732
177-94-0085, Pan American Land, 0.540
7156/307DR, Robert H. Lintz et al, 12.734
2247/481DR, Fred W. Waechter et ux, 1.499
181-00-1136, M. Michael Thomas et ux, 1.293
087-00-1406, Cutten Associates, 0.435
087-00-1406, Cutten Associates, 0.645
517-48-3211, Thomas Willard Moore, Jr. et al, 69.896
024-45-3248, Barons Company, 165.867
139-84-1438, Lincoln Associate, Inc. et al, 58.4421
063-93-0456, Lincoln Property Co. No. 47, Ltd., 8.852
007-78-0525, Lydia Smith Conklin et al, 1.164
091-84-2425, Danny L. Daver et ux, 0.201
025-88-0478, Friendswood Development Co., 7.249
085-87-0823, Peter S. Terpstra, 0.338
082-95-1494, O.Z. Bullard et ux, 0.133
090-89-2410, Lucy M. Dale et al, 0.438
092-95-2150, Louis N. Frank et ux, 0.272
099-96-2340, Gene Calhoun et ux, 0.275
087-00-1398, Beverly Kay Shaffer, 0.430
087-00-1358, Clifford Barry Keller et ux, 0.452
087-00-1364, Clifford Barry Keller et ux, 0.449
096-81-0007, Jane V. Welch et al, 0.292
084-83-0584, Glynda G. Snark Brosette et al, 0.670
099-96-2356, Vincent Kin Shing Tam, 0.305
076-92-1848, Marilyn A. Thompson, 0.284
087-00-1381, Joy Zelene Blunt Savoy et al, 0.288
084-83-0620, Joseph T. James et ux, 0.242
087-00-1422, Irene Ellen Tant, et al, 0.196
087-00-1415, Mackie J. Loper et al, 0.252
088-92-1624, Clyde Spikes et ux, 0.252
084-83-0604, Charles T. Dean et al, 0.791

Drainage Easement

161-73-0786, Lydia Smith Conklin et al, 2.842
2179/595DR, Carrie B. House, 10.74
009-50-1788, Gloria Broski Pryor et al, 0.152
2153/625DR, B.J. Broski, 4.88
199-40-0559, Grant E. Whitaker, 0.5975
125-63-2194, Grant E. Whitaker, 0.5975
2108/343DR, Jacques Lehmann, 2.76
2179/509DR, H.L. &P. Co., 0.52
2207/605DR, F.W. Waechter, 0.782
172-04-0251, Cutten Green Corporation, 10.7091

Joint Use Easement

006-65-2090, State of Texas, 1.804

