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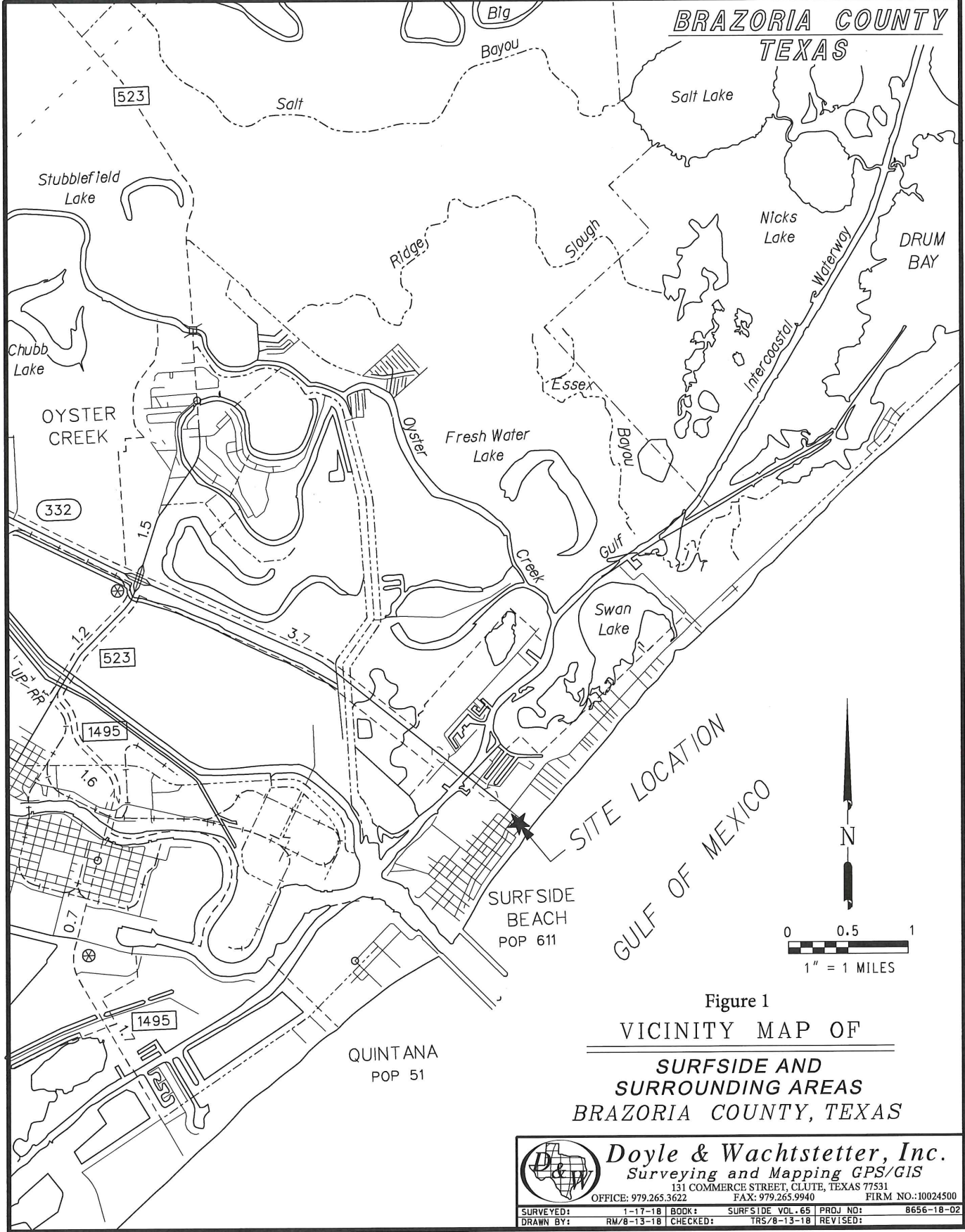


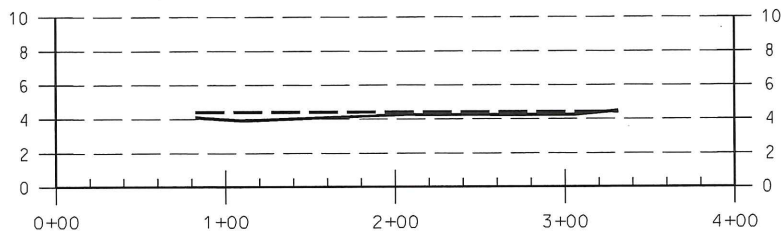
Figure 1
 VICINITY MAP OF
SURFSIDE AND SURROUNDING AREAS
 BRAZORIA COUNTY, TEXAS

Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/GIS
 131 COMMERCE STREET, CLUTE, TEXAS 77531
 OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED:	1-17-18	BOOK:	SURFSIDE VOL. 65	PROJ NO:	8656-18-02
DRAWN BY:	RM/8-13-18	CHECKED:	TRS/8-13-18	REVISED:	

**BRAZORIA COUNTY
TEXAS**

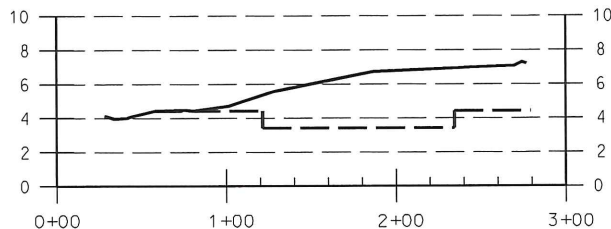
**F.J.CALVIT LEAGUE
ABSTRACT 51**



LINE	SURFACE
—	—
—	—
—	—

EXISTING GRADE
4.4' GRADE

STATION
PROFILE SECTION A-A LOOKING NORTHWEST
REFER TO SHEET 1 OF 2
VERTICAL SCALE 1" = 10'
HORIZONTAL SCALE 1" = 100'



LINE	SURFACE
—	—
—	—
—	—

EXISTING GRADE
4.4' GRADE AND
1' DEEP POND

STATION
PROFILE SECTION B-B LOOKING NORTHEAST
REFER TO SHEET 1 OF 2
VERTICAL SCALE 1" = 10'
HORIZONTAL SCALE 1" = 100'

Figure 4

SHEET 2 OF 2

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
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SURVEYED: KE/ME 8-12-14	BOOK No: MAT. CD. VOL. 112	PROJECT NO.: 5238-14-01
DRAWN BY: TTW 5-05-15	CHECKED: TTW 8-03-15	REVISED: TTW 4-04-17

USER: Unfiled Workspace\CDGN\Boundary\Surfside\The Village SD\ Village Lake (Lot K)\Exhibits\Sheet 4 - Wetland Plat Cross Sections and Pond_lev1.dgn
DATE: 9/15/2018
TIME: 8:51:15 AM

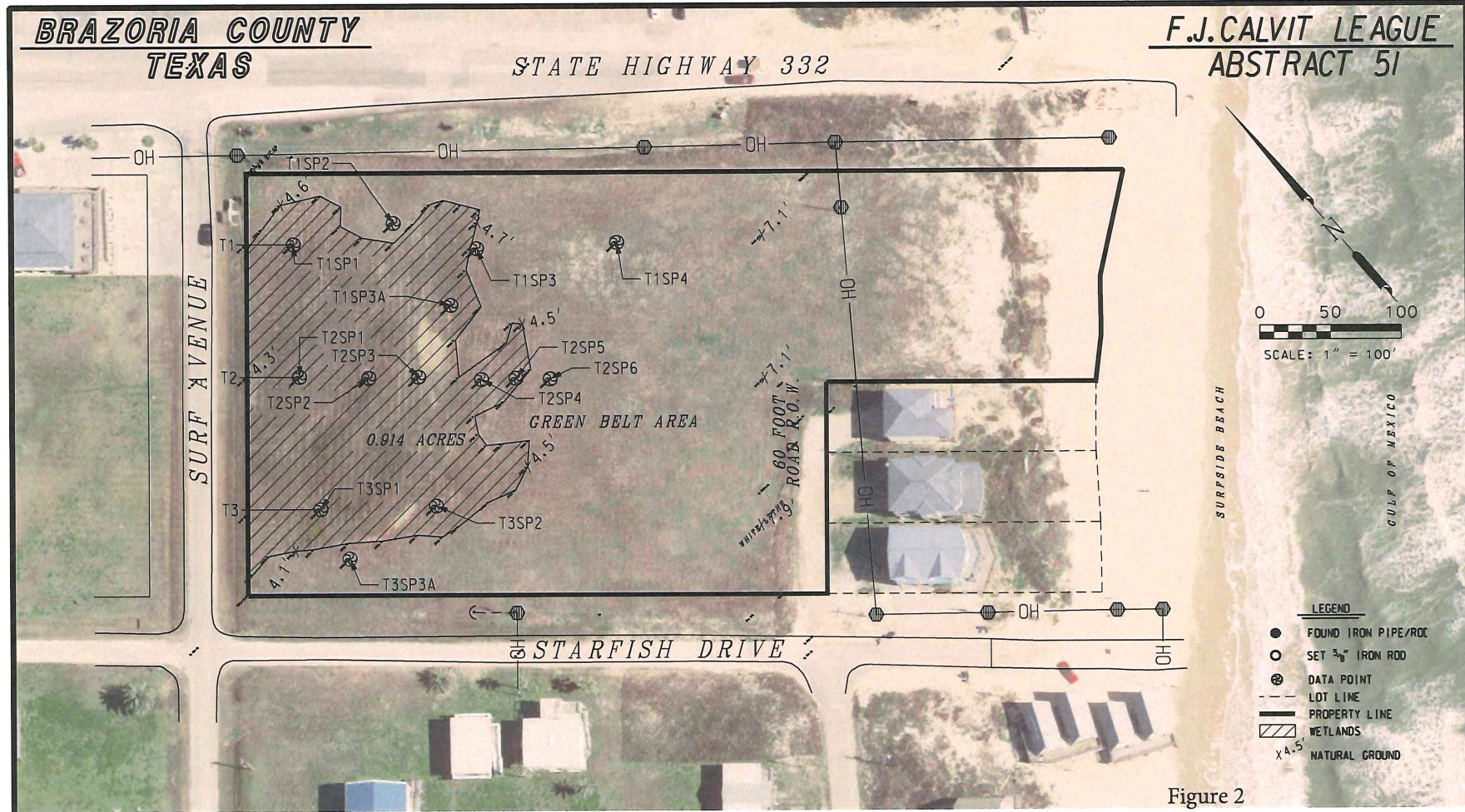


Figure 2

WETLAND EXHIBIT OF

OUT OF A
THE VILLAGE SUBDIVISION
 RECORDED IN
 CLERK'S FILE NO. 2017-017798
 OF THE
BRAZORIA COUNTY OFFICIAL RECORDS
 IN THE
F.J. CALVIT LEAGUE
ABSTRACT 51
VILLAGE OF SURFSIDE BEACH
BRAZORIA COUNTY, TEXAS

I, TERRY SINGLETARY, REGISTERED PROFESSIONAL LAND SURVEYOR DO HEREBY CERTIFY THAT THE ABOVE PLAT IS A TRUE REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND, AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY, EXCEPT AS SHOWN.
 DATE SURVEYED: JANUARY 01, 2006.

NOTES:

1. BEARINGS AND DISTANCES ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 27), SCALE FACTOR = 0.999885887.
2. THIS PROPERTY IS LOCATED WITHIN THE LIMITS OF ZONE "VE", PER FEMA FLOOD INSURANCE RATE MAP NUMBER 48039C07851, DATED MAY 4, 1992.
3. THIS SUBDIVISION IS CLASSIFIED AS ZONE C1.
4. MHHW AND MLW ARE BASED ON NOAA TIDAL BENCHMARK 24408, 1980 AT ELEVATION 16.85 FEET (NGVD 29).
5. WETLANDS ASSESSMENT ONGOING AND NOT VERIFIED WITH U.S.A.C.E., GALVESTON DISTRICT. WETLANDS TO BE AVOIDED UNTIL MITIGATION IS APPROVED.



PRELIMINARY

TERRY SINGLETARY
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4808

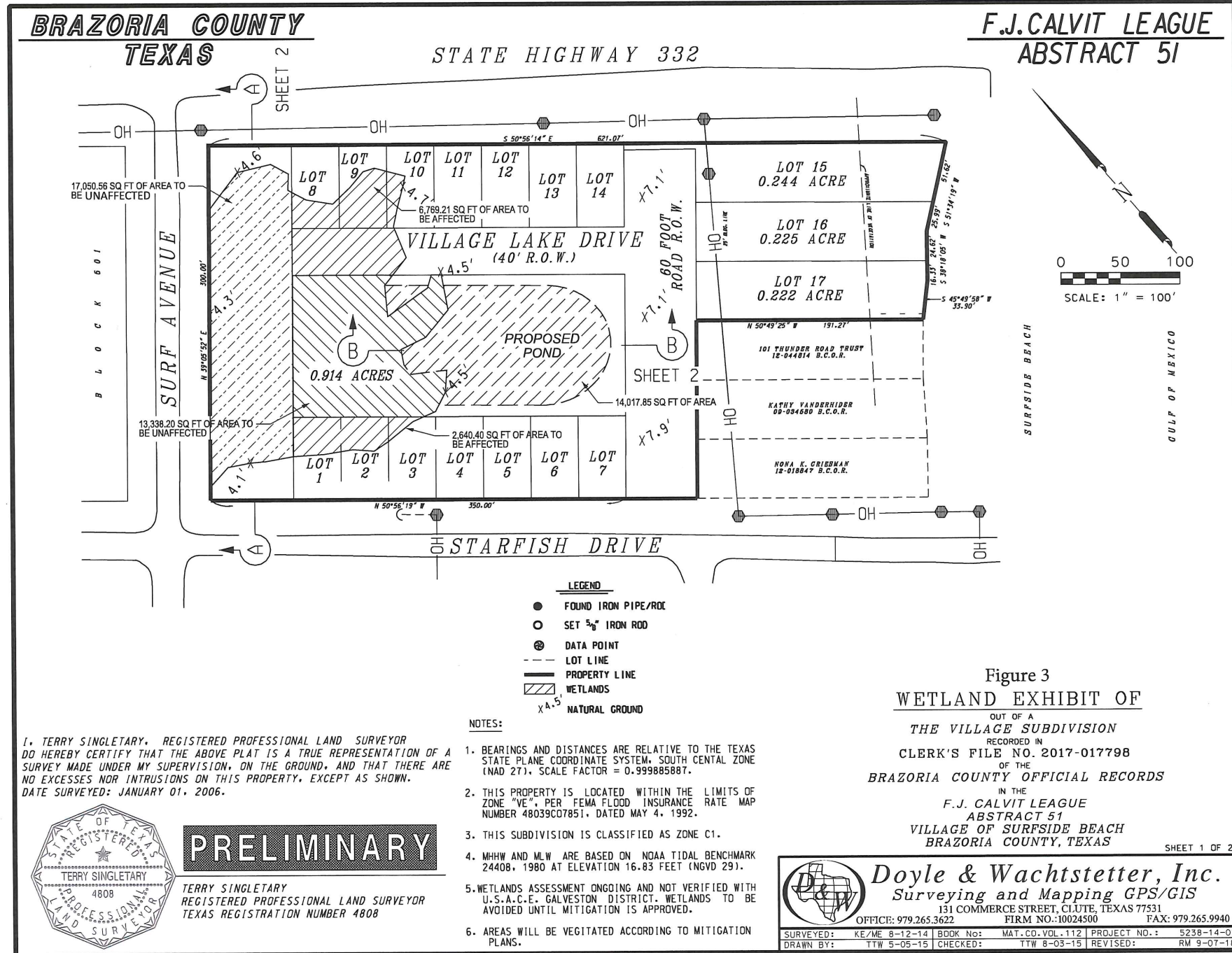


Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/GIS

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SURVEYED: KE/ME 8-12-14 | BOOK No: MAT. CO. VOL. 112 | PROJECT NO.: 5238-14-01
 DRAWN BY: TTW 5-05-15 | CHECKED: TTW 8-03-15 | REVISED: TTW 4-04-17

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 DATE: 8/22/2018 TIME: 3:26:23 PM



I, TERRY SINGLETARY, REGISTERED PROFESSIONAL LAND SURVEYOR DO HEREBY CERTIFY THAT THE ABOVE PLAT IS A TRUE REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND, AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY, EXCEPT AS SHOWN.
DATE SURVEYED: JANUARY 01, 2006.



PRELIMINARY

TERRY SINGLETARY
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4808

Doyle & Wachtstetter, Inc.
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DRAWN BY: TTW 5-05-15	CHECKED: TTW 8-03-15	REVISED: RM 9-07-18

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 DATE: 9/11/2018 TIME: 9:23:07 AM

**MITIGATION PLAN
K-TRACT
Brazoria County, Texas**

PREPARED FOR:
U. S. Army Corps of Engineers, Galveston District

PREPARED BY:



**301 Main Street, Suite 2200
Baton Rouge, Louisiana 70802
Project Number: 17039**

SEPTEMBER 2018



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- FIGURE 4 CROSS SECTION



1.0 PROJECT INFORMATION

Project Name: K-Tract Development

Project Location: Latitude 28.95012 N and Longitude -95.2864 W; intersection of Surf Dive and Starfish Drive in the town of Surfside, Texas.

County or Counties: Brazoria County, Texas

Watershed(s): United States Geological Survey (USGS) Cataloging Unit 8-DIGIT HUC; 12040205; Austin-Oyster

2.0 GOALS AND OBJECTIVES

The following report summarizes the compensatory mitigation plan for impacts that may occur on a portion of an approximate 3.5-acre site (site), Brazoria County, Texas. This mitigation plan will comply with the general conditions of the U.S. Army Corps of Engineers (USACE) the Individual Permit. The purpose of the report is to present a mitigation plan (plan) for the site.

The goal and objective of this plan is to enhance and rehabilitate the portion of the site not currently proposed for future activities and restore the function and value of the historical Waters of the United States (non-tidal wetland). This restoration project intends to serve as mitigation offering project-specific, onsite mitigation credits for unavoidable impacts to this non-tidal wetland associated with the site.

It was determined that a total of approximately 0.22 acres of jurisdictional non-tidal wetlands will be filled and mitigated on-site as a result of construction activities. These impacts are unavoidable.

3.0 SITE SELECTION

The wetland mitigation site was selected based on the on-site location, adequate size to compensate for impacts, and suitable habitat to compensate for non-tidal wetland. The selected site is located entirely within approximately 3.5-acre property and is part of the Austin-Oyster watershed. The selected on-site mitigation location will increase the size and functionality of an existing non-tidal wetland that will be avoided by the proposed plans, therefore resulting in a higher probability of success for natural recruitment of the species that are found within the areas to be impacted.

4.0 BASELINE INFORMATION

4.1 Jurisdictional Determination

A Determination of Potential Jurisdictional Waters request was completed on September 4, 2018 for the approximately 3.5-acre site. Approximately 0.914 acres of potential jurisdictional non-tidal wetland were identified.



4.2 Existing land Use

4.2.1 Vegetation

The herbaceous upland habitat generally consists of Indian blanket (*Gaillardia pulchella*), annual ragweed (*Ambrosia artemisiifolia*), partridge pea (*Chamaecrista fasciculata*), torpedo grass (*Panicum repens*), largeleaf pennywort (*Hydrocotyle bonariensis*), bushy bluestem (*Andropogon glomeratus*), saltmeadow cordgrass (*Spartina patens*), saltgrass (*Distichlis spicata*), spikerush (*Eleocharis sp.*), and sturdy bulrush (*Bolboschoenus robustus*). The herbaceous non-tidal wetland habitat generally consists of torpedo grass, largeleaf pennywort, spikerush, sturdy bulrush, saltgrass, Gulf cordgrass, bushy seaside tansy, and turtleweed.

4.2.2 Soil

According to the Natural Resource Conservation Service (NRCS) Web Soil Survey, the site is underlain with Galveston fine sand, 0 to 3 percent slopes, occasionally flooded and Madre fine sand, 0 to 1 percent slopes, occasionally flooded and frequently ponded. Each of the soil types are on the national list of hydric soils for Brazoria County, Texas.

4.2.3 Hydrology

The topography of the review area is relatively flat. Elevations on the site range from approximately zero to five feet above mean sea level. Site drainage generally is directed to the non-tidal wetland.

5.0 PROPOSED MITIGATION WORK PLAN

The development proposes to restore approximately 0.32 acres of non-tidal wetland. The existing emergent non-tidal wetland and the adjacent upland areas to be excavated will be used as reference elevations.

The portions of the non-tidal wetland should be re-established and stabilized using light duty earth moving equipment and biodegradable erosion control measures such as reseeded, wattles, or natural fiber matting. The mitigation area will be excavated to an elevation conducive to recruitment and survival of the target species. Excavated material will be placed in uplands on-site or hauled off-site for storage and disposal. A post-construction survey of the wetland mitigation site will be conducted and submitted to the USACE within 60 days of mitigation project completion.

6.0 DETERMINATION OF CREDITS

The applicant proposes that the non-tidal wetland habitat will be restored within the interior of the site. Approximately 0.22 acres of non-tidal wetlands will be filled and 0.32 acres of non-tidal wetlands will be restored adjacent to the original location. A portion of the existing non-tidal wetland will be avoided.



Based on the surrounding habitat types, and connectivity to an existing emergent non-tidal wetland, it is anticipated that the 0.32-acre mitigation site will naturally re-vegetate and form emergent wetland. Furthermore, the connectivity of the mitigation site with an existing emergent wetland will result in equal or improved ecological function in terms of habitat value and water quality treatment.

7.0 MAINTENANCE PLAN

The applicant will be responsible for maintaining the wetland mitigation site in accordance with this mitigation plan. Once the USAGE has determined that success criteria have been met, maintenance of the wetland mitigation site will be the responsibility of the permittee. The applicant will observe the area for erosion, invasion of exotic plant species, herbivory, death of plantings, or any other adverse changes to the restoration site.

8.0 PERFORMANCE STANDARDS

Monitoring of the non-tidal wetland restored on the site will be required for three years upon implementation of the mitigation project. Due to the growth nature of the native species most species should begin to naturally recruit shortly after establishment.

Year 1: A minimum of 25% of the vegetative cover must survive through the end of the first growing season and will be visually estimated.

Year 2: A minimum of 50% of the vegetative cover must survive through the end of the second growing season and will be visually estimated.

Years 3 - 5: The vegetative percent cover shall remain equal to or greater than 70 percent. If the site meets target success criteria after Year 3, USAGE may determine that no additional monitoring is required.

Target wetland vegetation may include, but is not limited to torpedo grass, largeleaf pennywort, spikerush, sturdy bulrush, saltgrass, Gulf cordgrass, bushy seaside tansy, and turtleweed.

Monitoring reports prepared by the applicant include, but not be limited to, information regarding:

1. estimated percent plant coverage,
2. estimated percent exotic/invasive species,
3. invasive species control,
4. measures to control predation/grazing of mitigation area plants,
5. replacement planting,
6. water inundation/saturation levels, and
7. other information of note.

Vegetative monitoring reports shall be completed in the summer of Years 1 through 5 generally in latter stages of the growing season. Reports will be submitted in the fall of each monitoring year. At the time of restoration, permanent monitoring plots will be established and located in such a manner that they are representative of the restored area.



In the event monitoring reveals that the success criteria have not been met, the applicant shall take measures to achieve those criteria. If the restoration goals have not been met by Year 5 (or year 3 if determined appropriate) monitoring shall continue until the success criteria are met.

9.0 LONG TERM MANAGEMENT PLAN

To ensure the long-term sustainability of the resource, the applicant will monitor and maintain the portion of the site for a period of three years. Success criteria will be established for initial success (end of Year 1) and target Year 3 or 5 success. The created habitat will be protected in perpetuity by a deed restriction, conservation easement, or equivalent legal instrument.

10.0 ADAPTIVE MANAGEMENT PLAN

In the event that unforeseen circumstances arise and the mitigation is not successful, the applicant in coordination with the USACE Galveston District, will implement adaptive management measures to address any shortcomings and identify corrective measures to be taken.