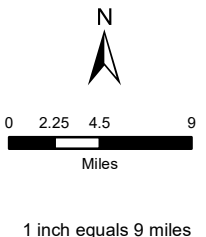


SWG-2004-00015

Project Plans: 1 of 12

USACE Received 7 May 2021



- Project Location
- Coastal Zone Boundary

**PERCHERON** Percheron, LLC  
 1904 West Grand Parkway North, Suite 200, Katy, TX, 77449

**Figure 1  
 Vicinity Map  
 Cedar Bayou Pipeline Project  
 Equistar Chemicals, LP  
 Individual Permit  
 Chambers and Harris counties, Texas**

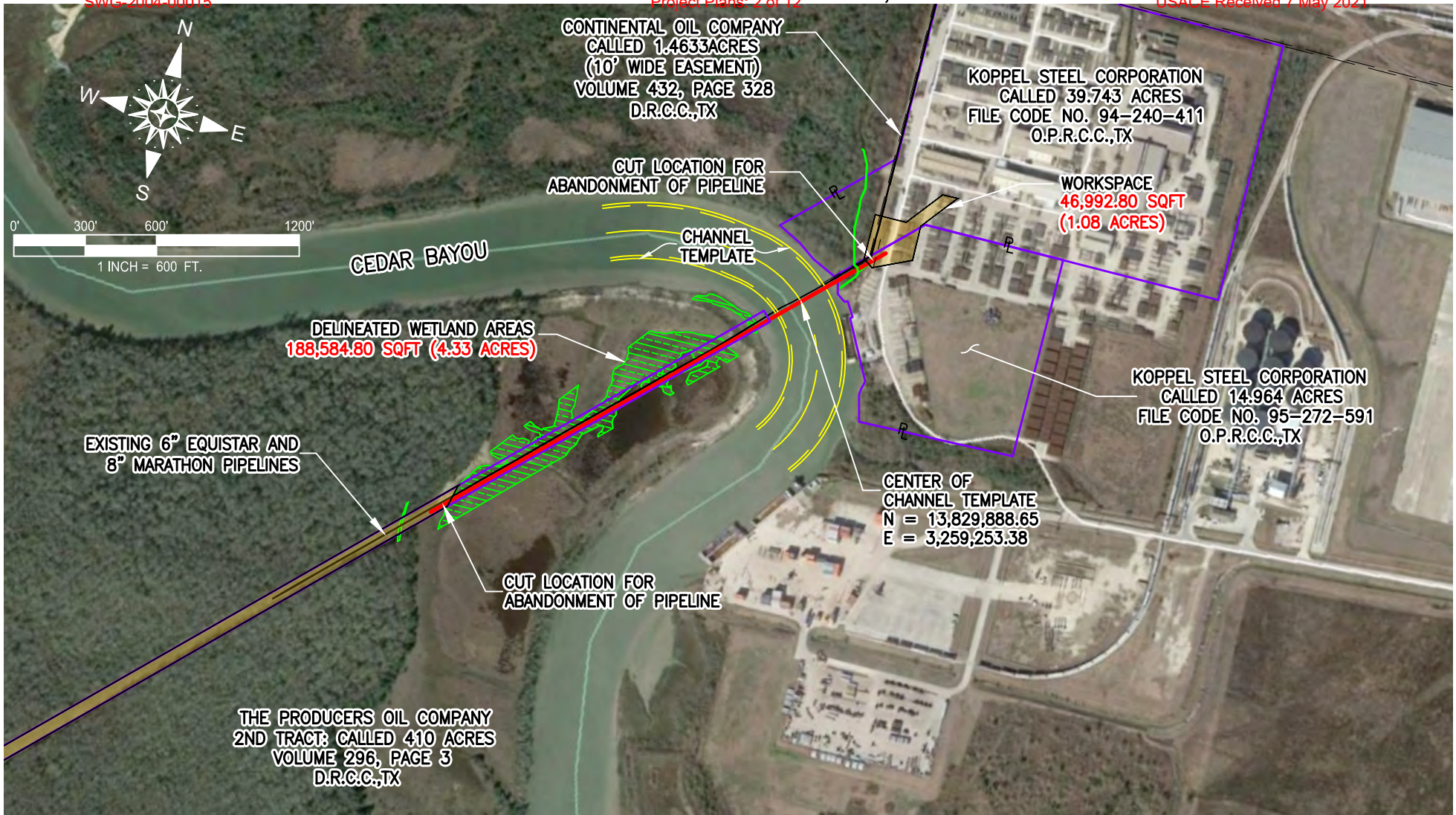
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 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

# HARRIS AND CHAMBERS COUNTIES, TEXAS

SWG-2004-00015

Project Plans - 2 of 12

USACE Received 7 May 2021


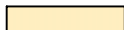
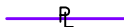



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2. BASIS OF BEARINGS: TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE, AS DETERMINED BY GPS OBSERVATION. ALL DISTANCES AND COORDINATES ARE GRID VALUES.
3. THIS SURVEY WAS PREPARED WITHOUT THE USE OF A TITLE COMMITMENT. THERE MAY BE EASEMENTS THAT AFFECT THE SUBJECT PROPERTY UNKNOWN TO SURVEYOR.

**LEGEND**

-  DELINEATED WETLAND
-  TEMPORARY WORKSPACE
-  PROPERTY LINE
-  CHANNEL TEMPLATE

**PREPARED FOR**



**CEDAR BAYOU CROSSING  
PREFERRED ALTERNATIVE -  
DECOMMISSION IN PLACE  
6" EQUICSTAR / LYONDELLBASELL  
PIPELINE CROSSING  
HARRIS AND CHAMBERS  
COUNTIES, TEXAS**

DATE: 05/04/21	REVISIONS
DRAWN BY: WT	
CHK BY: SB	
DWG#: 000014-EXH-0001	

000014-EXH-0001



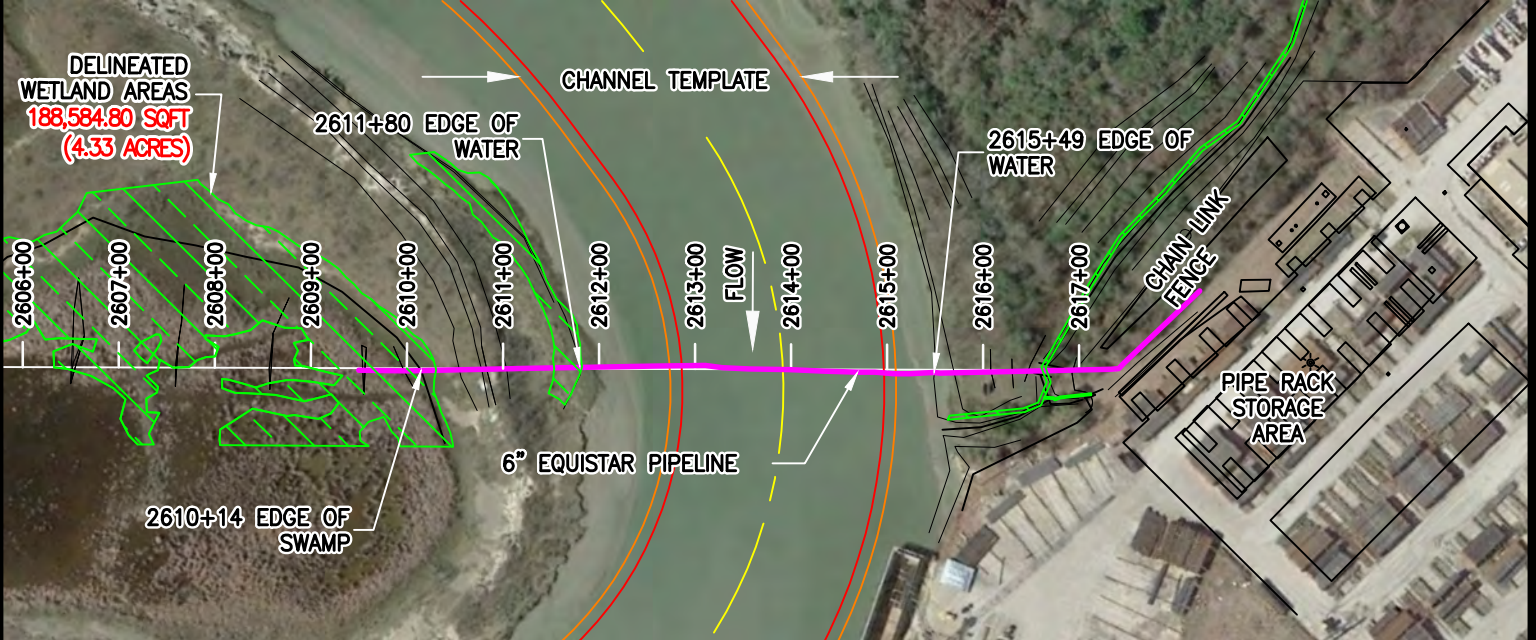
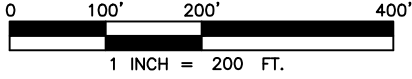
**PERCHERON**  
PROFESSIONAL SERVICES, L L C  
1904 WEST GRAND PARKWAY N.  
SUITE 200  
KATY, TEXAS 77449  
(832) 300-6400  
TEXAS SURVEYING FIRM LICENSE:  
NO. 10020700

# HARRIS AND CHAMBERS COUNTIES, TEXAS

SWG-2004-00015

Project Plans: 3 of 12

USACE Received 7 May 2021

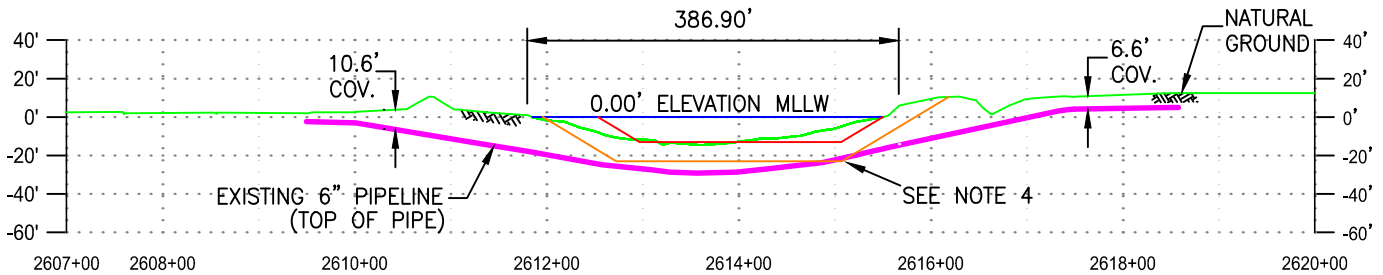


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3. THIS SURVEY WAS PREPARED WITHOUT THE USE OF A TITLE COMMITMENT. THERE MAY BE EASEMENTS THAT AFFECT THE SUBJECT PROPERTY UNKNOWN TO SURVEYOR.
4. EXISTING CROSSING INFRINGES UPON THE BUFFER ZONE TEMPLATE FOR A LINEAR DISTANCE OF 23.5' WITH A REMAINING DEPTH OF COVER 9' OR GREATER.

**PLAN**  
SCALE: 1" = 200'

ISSUED FOR ENVIRONMENTAL PERMITTING



**PROFILE**

SCALE: 1"=200' HORIZ.  
1"=100' VERT.

\* STATIONING IS DERIVED FROM EXISTING PIPELINE \*



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(832) 300-6400  
TEXAS SURVEYING FIRM LICENSE:  
NO. 10020700

**LEGEND**

- EXISTING 6" EQUISTAR PIPELINE (TOP OF PIPE)
- CHANNEL TEMPLATE
- BUFFER ZONE
- DELINEATED WETLAND

DATE: 05/04/21	REVISIONS
DRAWN BY: WT	
CHK BY: SB	
PROJECT NO: 000014-EXH-0002	
000014-EXH-0002	

**PREPARED FOR**



**CEDAR BAYOU CROSSING  
PREFERRED ALTERNATIVE -  
DECOMMISSION IN PLACE -  
IMPACT TO BUFFER ZONE  
6" EQUISTAR / LYONDELLBASELL  
PIPELINE CROSSING  
HARRIS AND CHAMBERS  
COUNTIES, TEXAS**

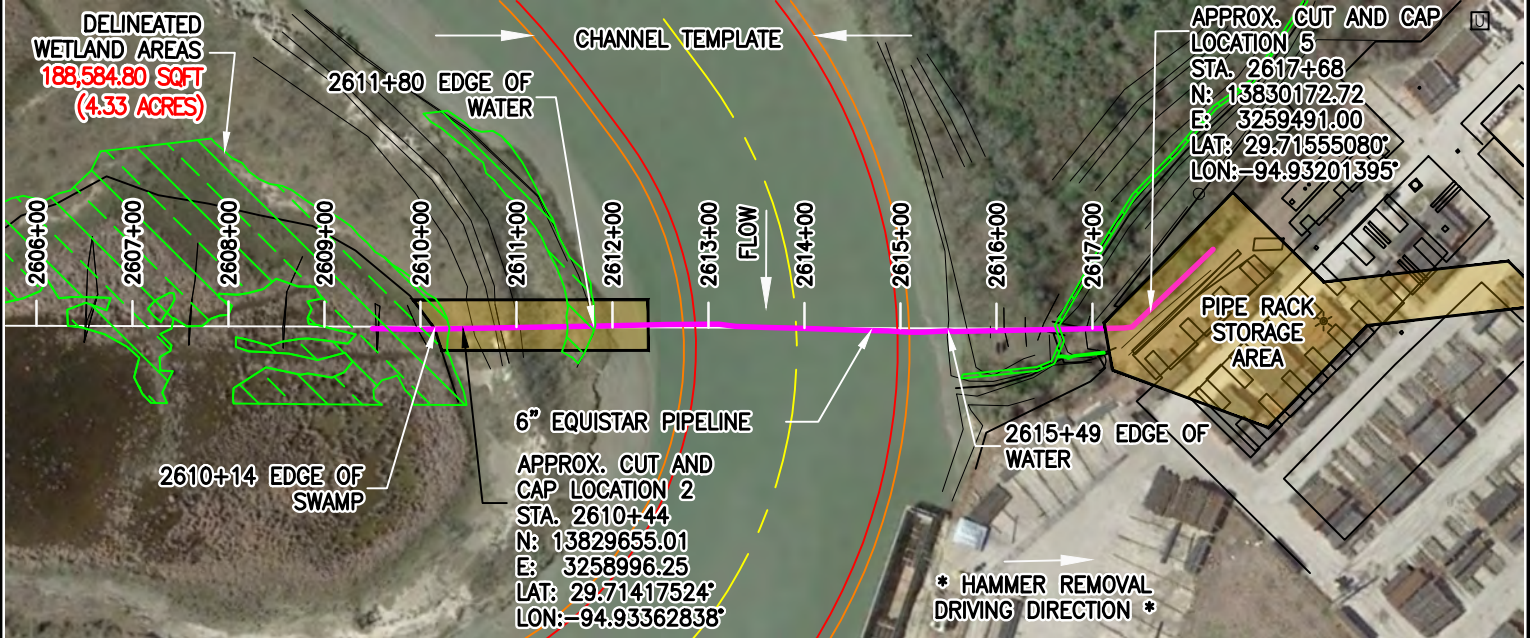
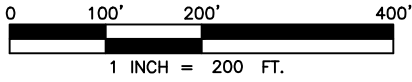
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# HARRIS AND CHAMBERS COUNTIES, TEXAS

SWG-2004-00015

Project Plans: 4 of 12

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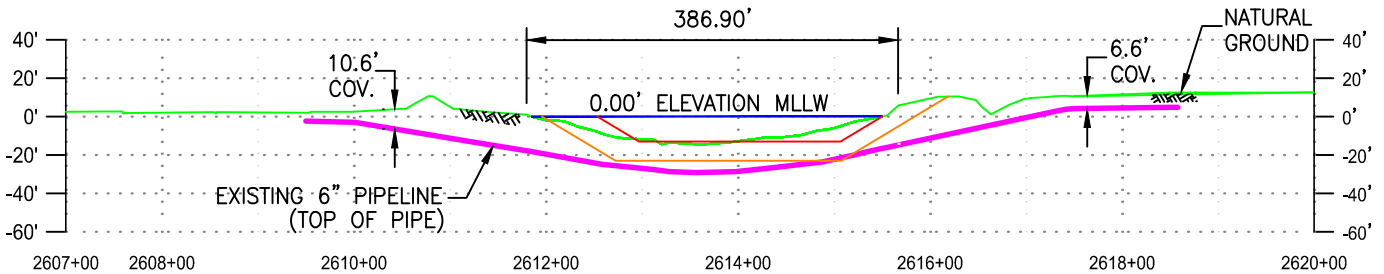
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3. THIS SURVEY WAS PREPARED WITHOUT THE USE OF A TITLE COMMITMENT. THERE MAY BE EASEMENTS THAT AFFECT THE SUBJECT PROPERTY UNKNOWN TO SURVEYOR.

**PLAN**

SCALE: 1" = 200'

ISSUED FOR ENVIRONMENTAL PERMITTING



**PROFILE**

SCALE: 1"=200' HORIZ.  
1"=100' VERT.

\* STATIONING IS DERIVED FROM EXISTING PIPELINE \*



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(832) 300-6400  
TEXAS SURVEYING FIRM LICENSE:  
NO. 10020700

**LEGEND**

- EXISTING 6" EQUITAR PIPELINE (TOP OF PIPE)
- CHANNEL TEMPLATE
- BUFFER ZONE
- TEMPORARY WORKSPACE
- DELINEATED WETLAND

DATE: 05/05/21	REVISIONS
DRAWN BY: WT	
CHK BY: SB	
PROJECT NO: 000014-EXH-0003	
000014-EXH-0003	

**PREPARED FOR**



**ALTERNATE  
HAMMER REMOVAL METHOD  
CEDAR BAYOU CROSSING  
6" EQUITAR / LYONDELLBASELL  
PIPELINE CROSSING  
HARRIS AND CHAMBERS  
COUNTIES, TEXAS**

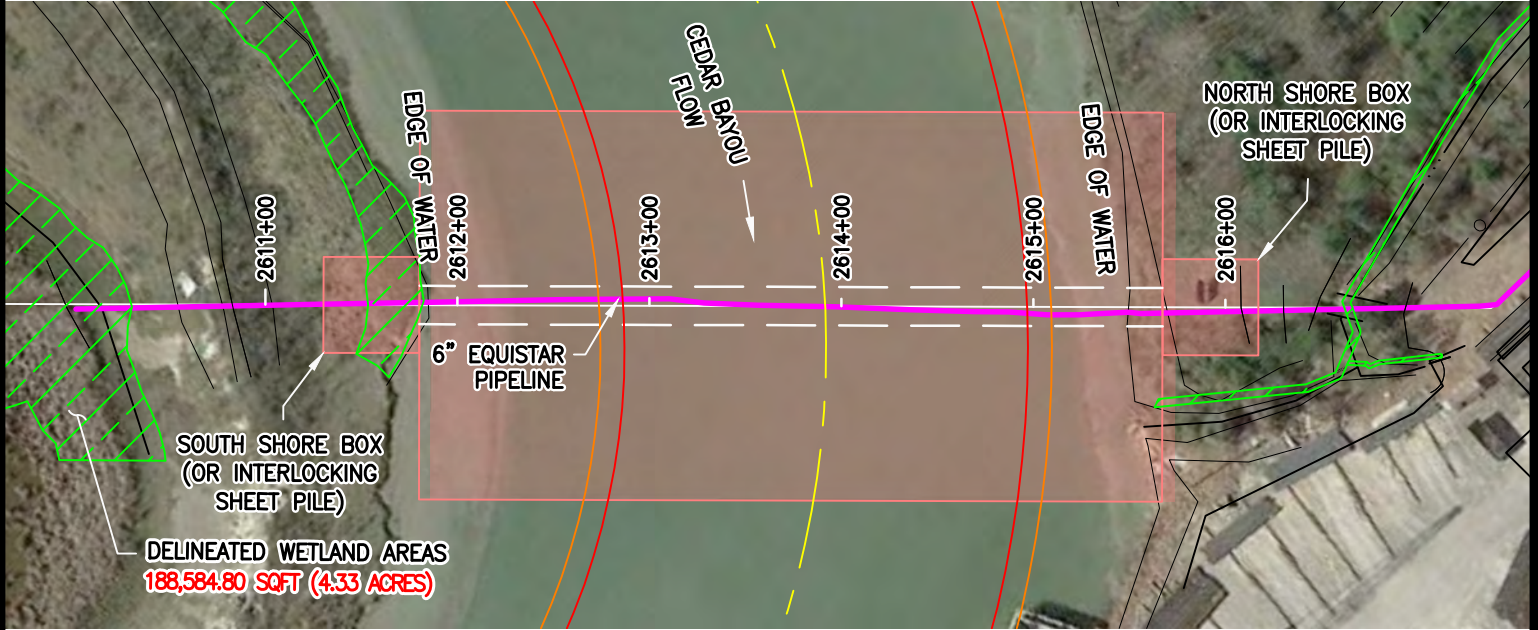
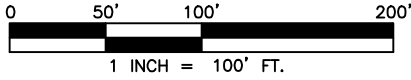
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# HARRIS AND CHAMBERS COUNTIES, TEXAS

SWG-2004-00015

Project Plans: 3 of 12

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**NOTES:**

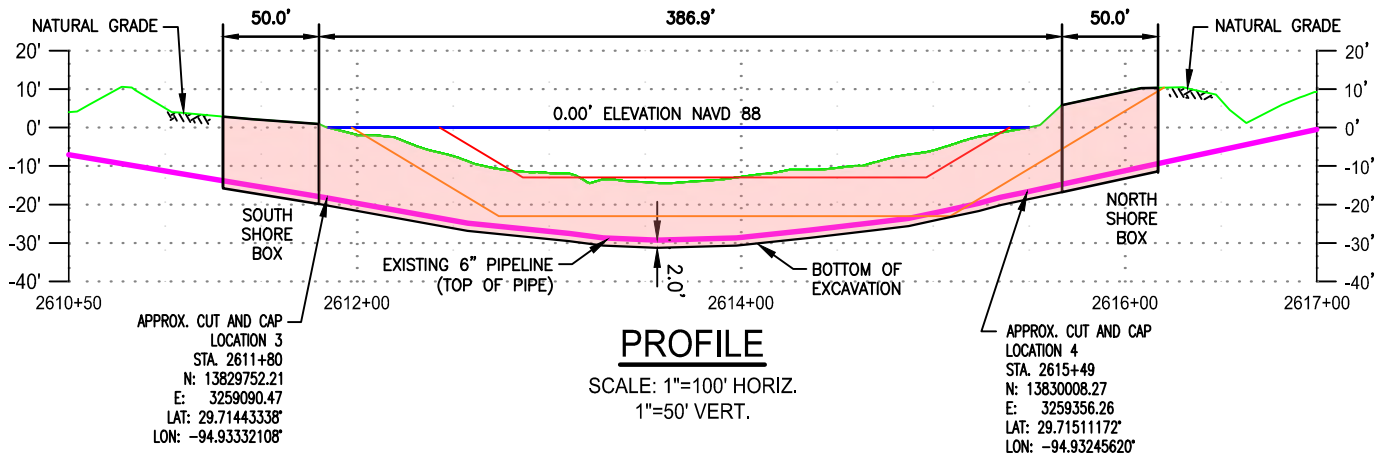
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- BASIS OF BEARINGS: TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE, AS DETERMINED BY GPS OBSERVATION. ALL DISTANCES AND COORDINATES ARE GRID VALUES.
- THIS SURVEY WAS PREPARED WITHOUT THE USE OF A TITLE COMMITMENT. THERE MAY BE EASEMENTS THAT AFFECT THE SUBJECT PROPERTY UNKNOWN TO SURVEYOR.
- STATIONING IDENTIFIED ON THIS DRAWING IS THE EXISTING PIPELINE STATIONING.

**PLAN**  
SCALE: 1" = 100'

\* STATIONING IS DERIVED FROM EXISTING PIPELINE \*

TOTAL EXCAVATION VOLUME:  
890,991.9 CUBIC FEET = 32,999.7 CUBIC YARDS

ISSUED FOR ENVIRONMENTAL PERMITTING



**PROFILE**  
SCALE: 1"=100' HORIZ.  
1"=50' VERT.

APPROX. CUT AND CAP  
LOCATION 3  
STA. 2611+80  
N: 13829752.21  
E: 3259090.47  
LAT: 29.71443338°  
LON: -94.93332108°

APPROX. CUT AND CAP  
LOCATION 4  
STA. 2615+49  
N: 13830008.27  
E: 3259356.26  
LAT: 29.71511172°  
LON: -94.93245620°

**LEGEND**

- EXISTING 6" EQUSTAR PIPELINE (TOP OF PIPE)
- CHANNEL TEMPLATE
- BUFFER ZONE
- EXCAVATION VOLUME
- DELINEATED WETLAND

DATE: 05/05/21	REVISIONS
DRAWN BY: NJF	
CHK BY: SB	
PROJECT NO: 000014-EXH-0004	
000014-EXH-0004	

PREPARED FOR

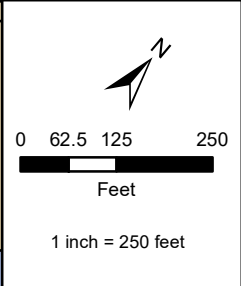
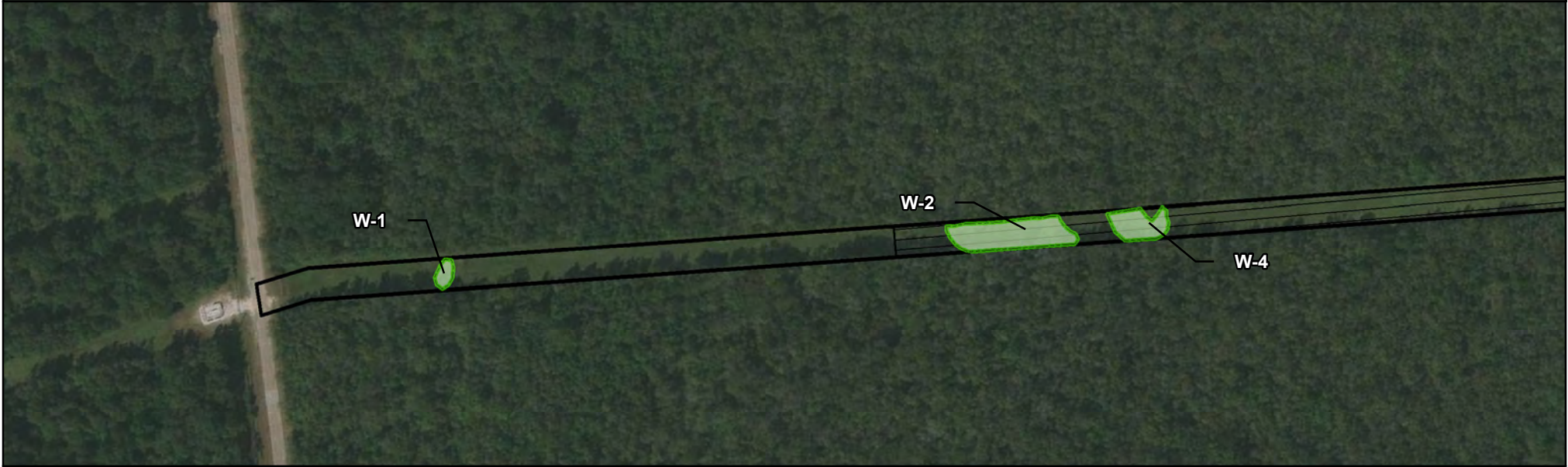
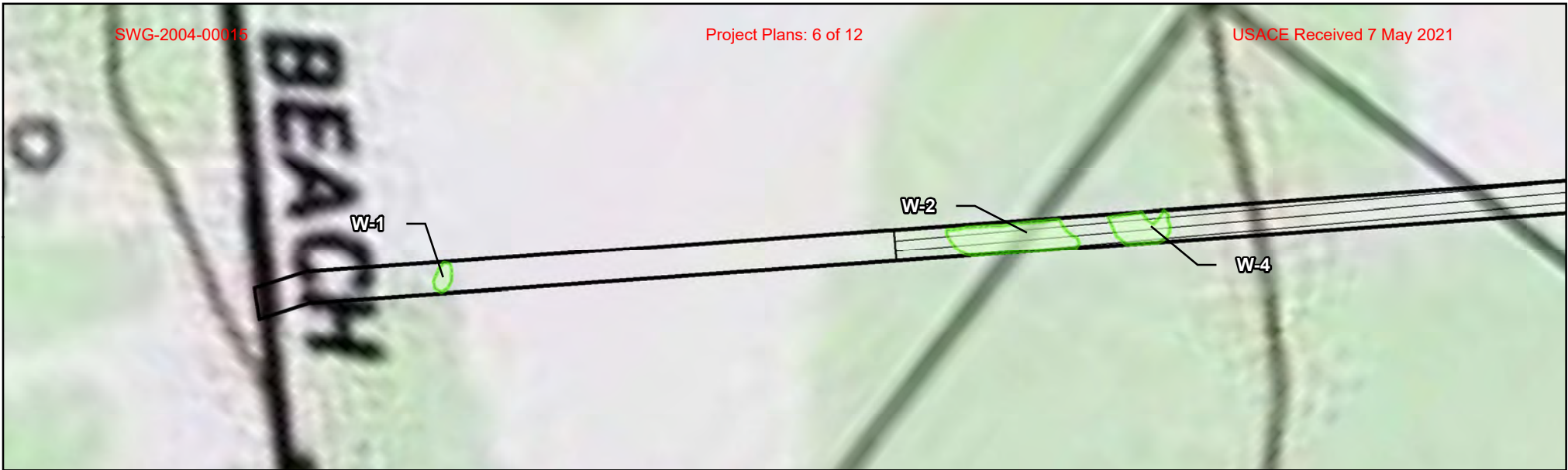


**ALTERNATE  
DREDGE REMOVAL METHOD  
6" EQUSTAR / LYONDELLBASELL  
PIPELINE CROSSING  
HARRIS AND CHAMBERS  
COUNTIES, TEXAS**

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TEXAS SURVEYING FIRM LICENSE:  
NO. 10020700

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- Project Data**
- Cut and Cap Points
  - Proposed Centerline
  - ▨ Existing Access Road
  - ▭ Existing Right of Way
  - ▩ Property Boundary
  - ▨ Temporary Workspace

**Potential Waters of the U.S.**

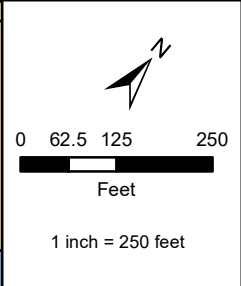
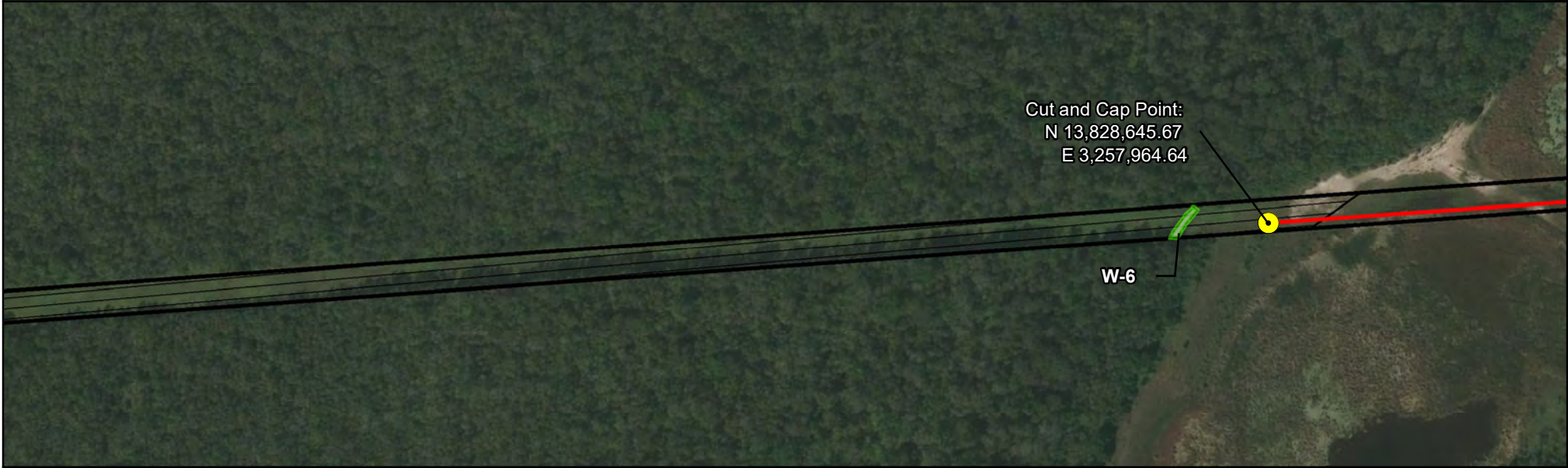
- ▭ PEM Wetland (W-#)

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 NAD 1983 StatePlane Texas South Central FIPS 4204 Feet  
 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

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**Figure 2**  
**Project Impacts Map**  
**Cedar Bayou Pipeline Project**  
**Equistar Chemicals, LP**  
**Individual Permit**  
**Chambers and Harris counties, Texas**  
**Page 1 of 4**

Date Saved: 5/3/2021 | Project Num: 05.000228.0000 | Revised by: frances.buchanek



- Project Data**
- Cut and Cap Points
  - Proposed Centerline
  - Existing Access Road
  - Existing Right of Way
  - Property Boundary
  - Temporary Workspace

**Potential Waters of the U.S.**

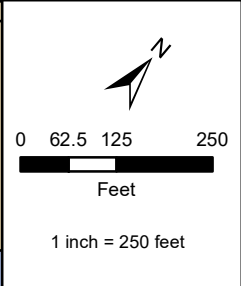
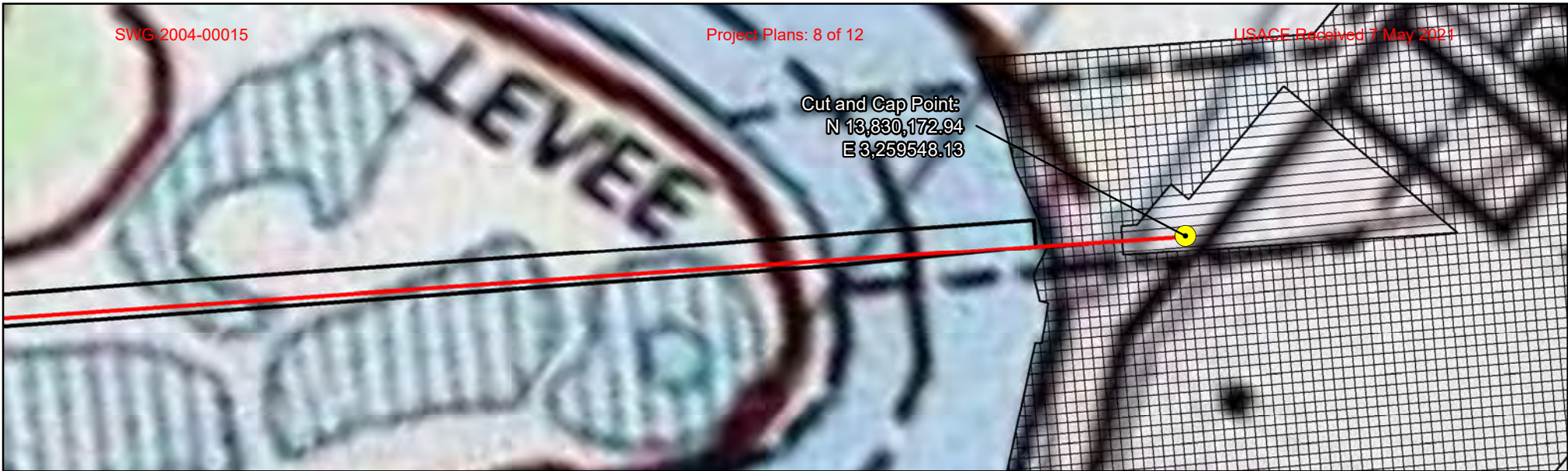
- PEM Wetland (W-#)

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 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

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**Figure 2**  
**Project Impacts Map**  
**Cedar Bayou Pipeline Project**  
**Equistar Chemicals, LP**  
**Individual Permit**  
**Chambers and Harris counties, Texas**  
**Page 2 of 4**

Date Saved: 5/3/2021      Project Num: 05.000228.0000      Revised by: frances.buchanek



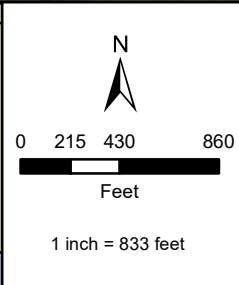
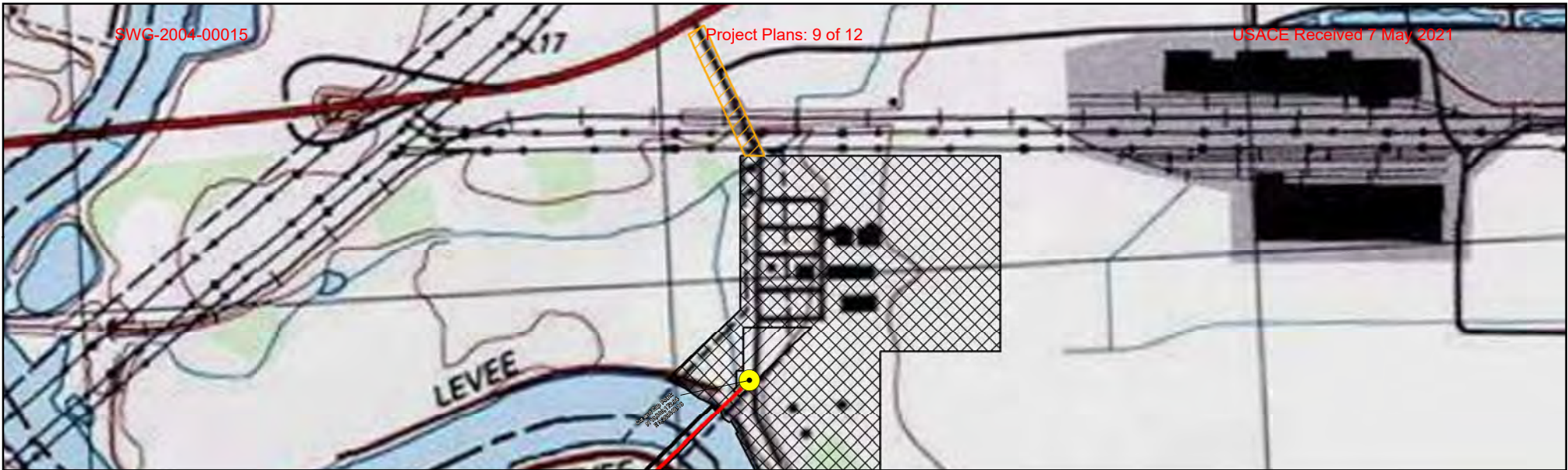
- Project Data**
- Cut and Cap Points
  - Proposed Centerline
  - Existing Access Road
  - Existing Right of Way
  - Property Boundary
  - Temporary Workspace

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 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

**PERCHERON** Percheron, LLC  
1904 West Grand Parkway North, Suite 200, Katy, TX, 77449

**Figure 2**  
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**Equistar Chemicals, LP**  
**Individual Permit**  
**Chambers and Harris counties, Texas**  
**Page 3 of 4**





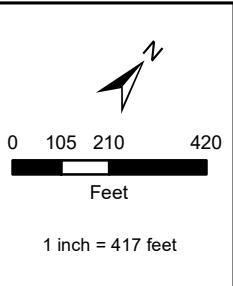
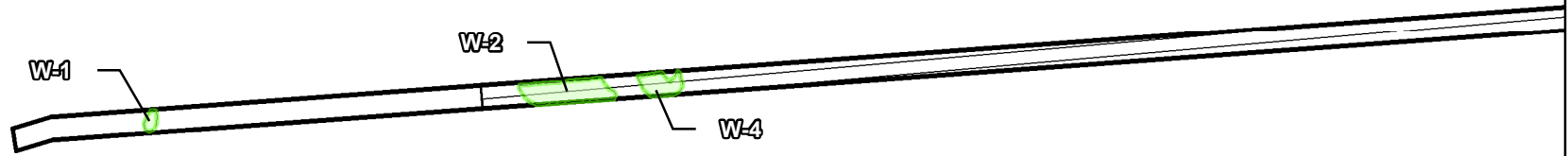
- Project Data**
- Cut and Cap Points
  - Proposed Centerline
  - Existing Access Road
  - Existing Right of Way
  - Property Boundary
  - Temporary Workspace

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 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

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 1904 West Grand Parkway North, Suite 200, Katy, TX, 77449

**Figure 2**  
**Project Impacts Map**  
**Cedar Bayou Pipeline Project**  
**Equistar Chemicals, LP**  
**Individual Permit**  
**Chambers and Harris counties, Texas**  
**Page 4 of 4**

Cup and Cap  
N 13,8  
E 3,2




- Project Data**
- Cup and Cap Points
  - Proposed Centerline
  - Existing Access Road
  - Existing Right of Way
  - Property Boundary
  - Temporary Workspace

**Potential Waters of the U.S.**

- PEM Wetland (W-#)

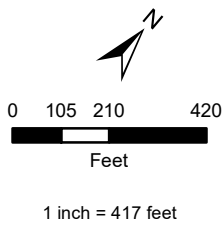
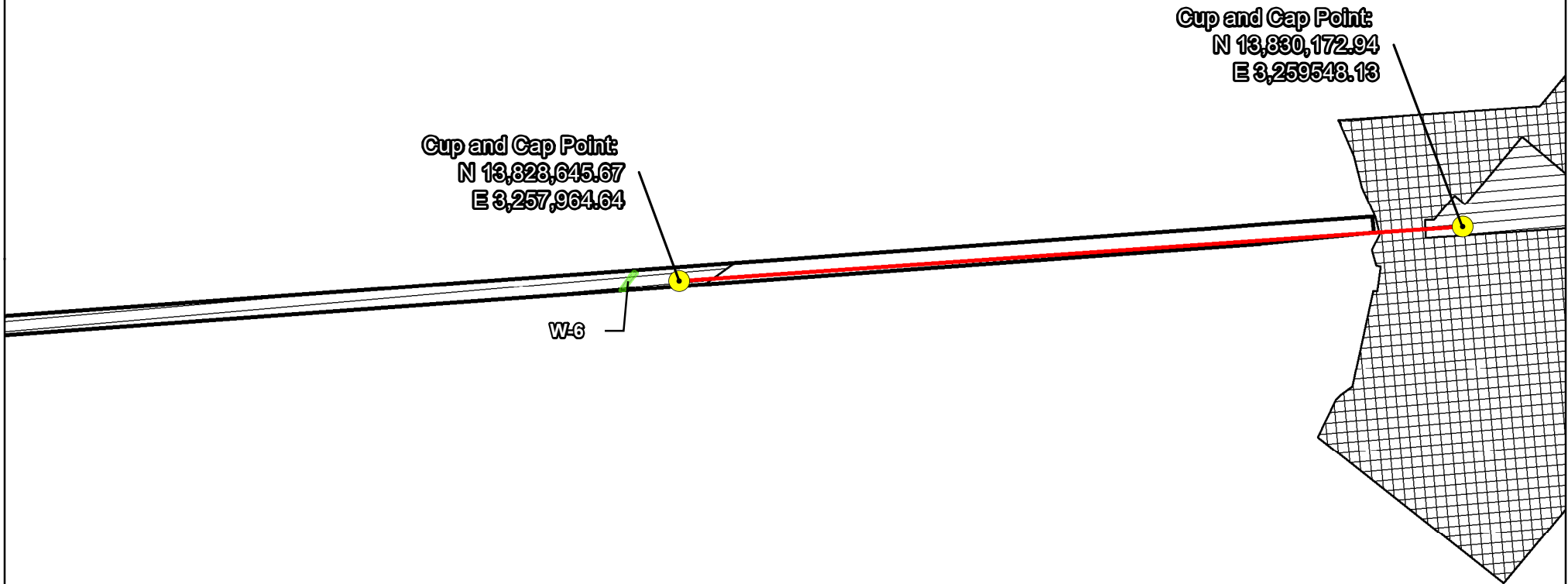
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Datum: North American 1983  
Units: Foot US



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1904 West Grand Parkway North, Suite 200, Katy, TX, 77449

**Figure 3**  
**Project Design Map**  
**Cedar Bayou Pipeline Project**  
**Equistar Chemicals, LP**  
**Individual Permit**  
**Chambers and Harris counties, Texas**  
**Page 1 of 3**

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**Project Data**

- Cup and Cap Points
- Proposed Centerline
- Existing Access Road
- Existing Right of Way
- Property Boundary
- Temporary Workspace

**Potential Waters of the U.S.**

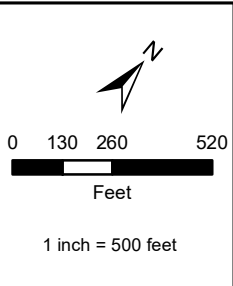
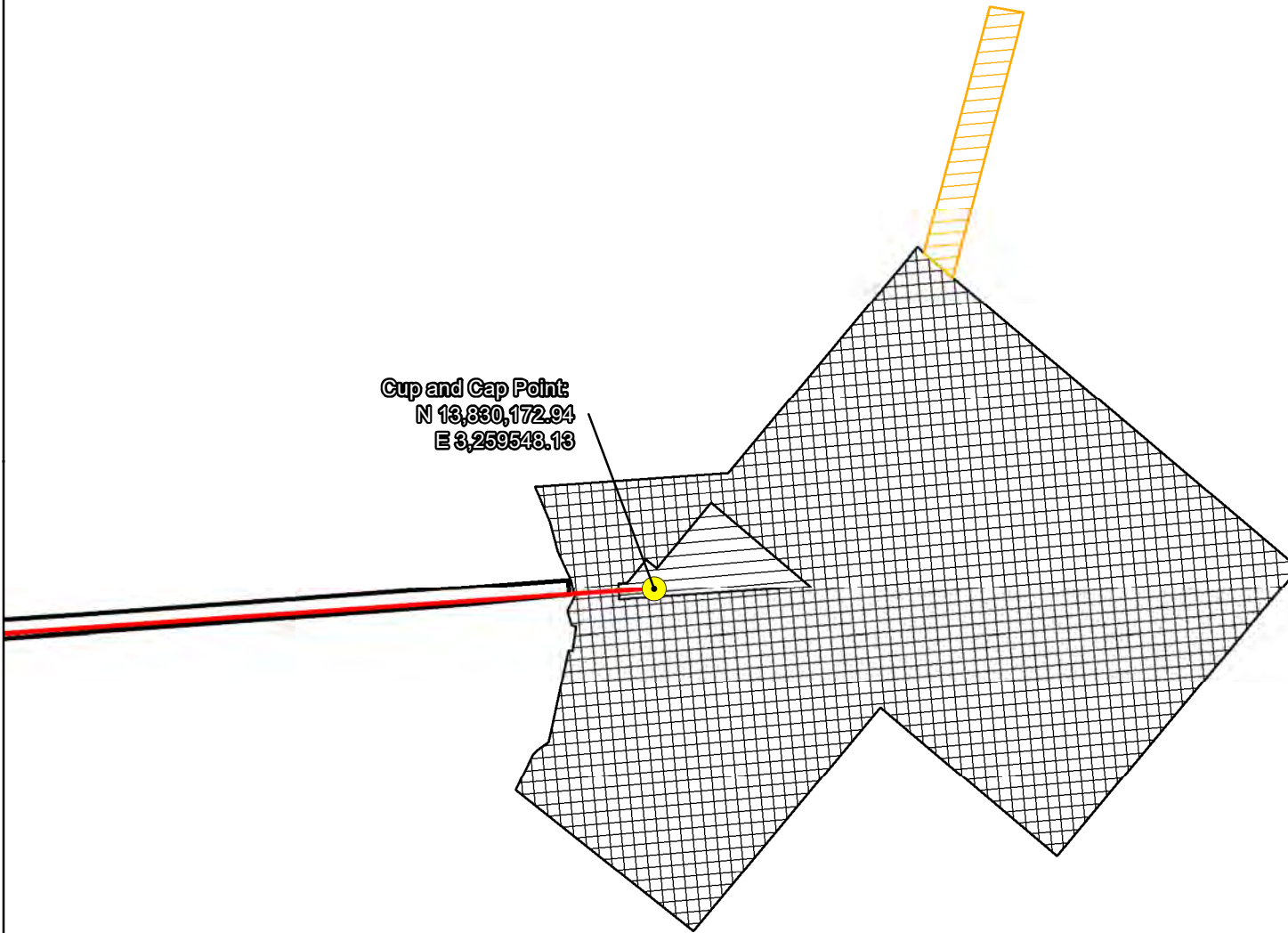
- PEM Wetland (W-#)

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 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US



Percheron, LLC  
 1904 West Grand Parkway North, Suite 200, Katy, TX, 77449

**Figure 3**  
**Project Design Map**  
**Cedar Bayou Pipeline Project**  
**Equistar Chemicals, LP**  
**Individual Permit**  
**Chambers and Harris counties, Texas**  
**Page 2 of 3**



**Project Data**

- Cup and Cap Points
- Proposed Centerline
- Existing Access Road
- Existing Right of Way
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NAD 1983 StatePlane Texas South Central FIPS 4204 Feet  
 Projection: Lambert Conformal Conic  
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**Page 3 of 3**

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