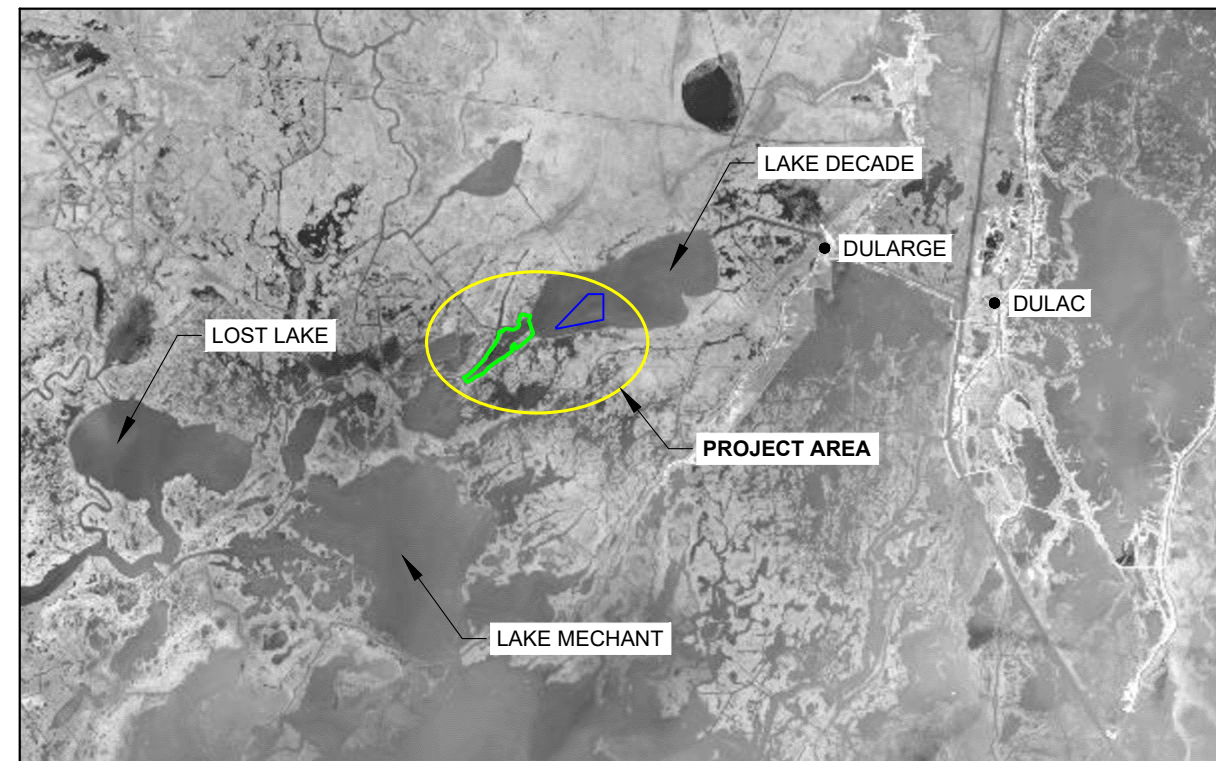


INDEX TO SHEETS

BAYOU DECADE MARSH CREATION
AND RIDGE RESTORATION PROJECT
TE-0138
TERREBONNE PARISH



STATE OF LOUISIANA

INSET MAP

ONE PARISH

PRELIMINARY
DOCUMENTS ARE NOT TO BE
USED FOR CONSTRUCTION,
BIDDING, RECORDATION,
CONVEYANCE, SALES, OR
AS THE BASIS FOR THE
ISSUANCE OF A PERMIT.

| | | | | | | |
|---|--|-------------|--|------|-------------|----|
| BAYOU DECADE MARSH CREATION AND RIDGE RESTORATION PROJECT | | TITLE SHEET | COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE A VENUE BATON ROUGE, LOUISIANA 70802 | | | |
| STATE PROJECT NUMBER: TE-0138 | | | | | | |
| DRAWN BY: SHANE FAUST | | | | | | |
| DESIGNED BY: TRAVIS BYLAND, P.E. | | | | | | |
| APPROVED BY: | | | | | | |
| DATE: JULY 2018 | | | REV. | DATE | DESCRIPTION | BY |
| SHEET 1 OF 9 | | | | | | |

GENERAL NOTES:

1. THE EQUIPMENT ACCESS TO THE PROJECT SITE SHALL BE THROUGH NAVIGABLE WATERWAYS AND SHALL NOT IMPACT EXISTING WATER BOTTOMS OR WETLANDS UNLESS OTHERWISE NOTED.
2. PLANS AND SPECIFICATIONS ARE COMPLEMENTARY; WHAT IS REQUIRED BY ONE IS BINDING AS IF REQUIRED BY ALL. CLARIFICATIONS AND INTERPRETATIONS OF, OR NOTIFICATIONS OF MINOR VARIATIONS AND DEVIATIONS IN THE CONTRACT DOCUMENTS, WILL BE ISSUED BY THE ENGINEER.
3. THE CONTRACTOR SHALL MAINTAIN AIDS TO NAVIGATION DURING CONSTRUCTION AND HAVE ADEQUATE NAVIGATIONAL EQUIPMENT ON THE DREDGE TO AVOID DREDGING IN RESTRICTED AREAS. ANY DAMAGE TO EXISTING AIDS TO NAVIGATION SHALL BE REPAIRED BY THE CONTRACTOR TO U.S. COAST GUARD STANDARDS AT THE EXPENSE OF THE CONTRACTOR.
4. THE MARSH CREATION AREAS, BORROW AREAS AND CONTAINMENT DIKES MAY BE REVISED BY THE ENGINEER THROUGHOUT THE WORK TO REFLECT CHANGES IN FIELD CONDITIONS.
5. THE CONTRACTOR SHALL PERFORM A MAGNETOMETER SURVEY OF THE DREDGE PIPELINE CORRIDOR, BORROW AREAS, AND MARSH CREATION AREAS PRIOR TO EXCAVATION OR DREDGING. DRAWINGS SHOWING THE TRACK LINES, COORDINATES, AMPLITUDE, SIGNATURE TYPE, AND DURATION OF ALL INFRASTRUCTURE AND ANOMALIES SHALL BE SUBMITTED TO THE ENGINEER IN THE PRECONSTRUCTION SURVEY.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONTAINING THE HYDRAULICALLY DREDGED MATERIAL WITHIN THE BOUNDARIES OF THE MARSH CREATION AREAS.
7. THE BACKGROUND IMAGERY WAS TAKEN IN 2016.
8. THE PIPELINE AND UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE AND MARK ALL PIPELINES AND UTILITIES LOCATED WITHIN 250 FT. OF THE WORK PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THESE MARKERS DURING CONSTRUCTION. VERIFIED PIPELINES REFERENCE THE PIPELINE LOCATION (X, Y, Z) DATA BASED IN THE DESIGN SURVEY(S).

NOTIFICATIONS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE FOLLOWING PIPELINE AND UTILITY OPERATORS AT LEAST FIVE (5) WORKING DAYS IN ADVANCE OF THE WORK. CALL LOUISIANA ONE CALL AT 1-800-272-3020 5 DAYS PRIOR TO ANY EXCAVATION AND/OR DREDGING TO LOCATE ALL PIPELINES OR UTILITIES.
2. THE CONTRACTOR SHALL NOTIFY THE LANDOWNERS LISTED BELOW AT LEAST FIVE (5) WORKING DAYS PRIOR TO PERFORMING THE WORK.

APACHE CORPORATION
CONTACT: TIM ALLEN
PHONE: (985) 879-3528

3. MODIFICATIONS TO THE DREDGE PIPELINE CORRIDOR SHALL REQUIRE APPROVAL BY THE ENGINEER.

DESIGN NOTES:

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. SURVEY FEET, GEOID 12A. ALL HORIZONTAL COORDINATES ARE GIVEN IN THE NORTH AMERICAN DATUM OF 1983 (NAD 83, LOUISIANA STATE PLANE SOUTH ZONE U.S. FEET). ALL ELEVATIONS ARE BASED ON THE FOLLOWING:
- | <u>SECONDARY SURVEY MONUMENT</u> | <u>ELEVATION</u> | <u>NORTHING</u> | <u>EASTING</u> |
|----------------------------------|------------------|-----------------|----------------|
| TE34-SM-01 | 0.82' | 315,518.71 | 3,408,657.28 |
| TE28-SM-A | 1.99' | 324,457.88 | 3,408,054.71 |
2. THE EXISTING ELEVATIONS SHOWN ON THE PLANS ARE BASED ON THE DESIGN SURVEYS PERFORMED FROM OCTOBER 2017 THROUGH FEBRUARY 2018 BY OCEANEERING INTERNATIONAL, INC. THE DESIGN SURVEY REPORT IS PROVIDED IN THE SPECIFICATIONS.
3. DATA FROM CRMS STATION 0398 WAS USED TO CALCULATE THE MHW AND MLW. ELEVATIONS ARE REFERENCED TO NAVD 88, US FEET, GEOID 12A. MHW = +0.76' AND MLW = +0.37' WITHIN PROJECT AREA.
4. A GEOTECHNICAL INVESTIGATION WAS PERFORMED BY FUGRO USA LAND, INC. ON MARCH 2018 TO APRIL 2018. THE BORING LOCATIONS ARE SHOWN ON THE PLANS. THE GEOTECHNICAL INVESTIGATION REPORT IS PROVIDED IN THE SPECIFICATIONS.

LEGEND - SECTION VIEWS

- EXISTING WATER BOTTOM

CONSTRUCTED MARSH FILL

EARTHEN CONTAINMENT DIKE

EARTHEN CONTAINMENT, EQUIPMENT ACCESS
- EARTHEN RIDGE
- SHORELINE CONTAINMENT DIKE
- BORROW AREA
- BORROW AREA (ALTERNATE)

SUMMARY OF ESTIMATED QUANTITIES

| ITEM No. | DESCRIPTION | UNIT | ESTIMATED QUANTITY¹ |
|----------|--------------------------------|------|---------------------|
| 1 | MOBILIZATION/DEMOBILIZATION | LS | 1 |
| 2 | HYDRAULIC DREDGING/MARSH FILL² | CY | 2,693,573 |
| 3 | EARTHEN CONTAINMENT DIKES | LF | 17,542 |
| 4 | EARTHEN RIDGE | LF | 11,133 |
| 5 | SETTLEMENT PLATES | EACH | 10 |
| 6 | GRADE STAKES | EACH | 10 |
| 7 | CONSTRUCTION SURVEYS | LS | 1 |

1. THE QUANTITIES SHOWN WERE CALCULATED FROM THE DESIGN SURVEY. THE OWNER RESERVES THE RIGHT TO ADJUST QUANTITIES 25% HIGHER OR LOWER WITHOUT ADJUSTMENT OF THE UNIT PRICE.
2. QUANTITY IS BASED ON THE BORROW AREA CUT VOLUMES. PAYMENT QUANTITY WILL BE BASED ON PROCESS SURVEYS OF THE MARSH CREATION BORROW AREA.

LEGEND - PLAN VIEWS

- C-1

CONE PENETRATION TEST
- DREDGE PIPELINE CORRIDOR
- EARTHEN CONTAINMENT DIKE
- EARTHEN CONTAINMENT DIKE BORROW AREA
- EQUIPMENT ACCESS CORRIDOR
- GRADE STAKE
- INSTRUMENTED SETTLEMENT PLATE
- MAGNETOMETER ANOMALY
- MARSH CREATION AREA
- MARSH CREATION BORROW AREA
- MARSH CREATION BORROW AREA ACCESS CORRIDOR
- SP-1

SETTLEMENT PLATE
- B-1

SOIL BORING
- SURVEY MONUMENT
- SURVEY TRANSECT
- SHORELINE CONTAINMENT DIKE
- TEMPORARY SPOIL
- PL

VERIFIED PIPELINE
- R

UNVERIFIED PIPELINE

ABBREVIATIONS:

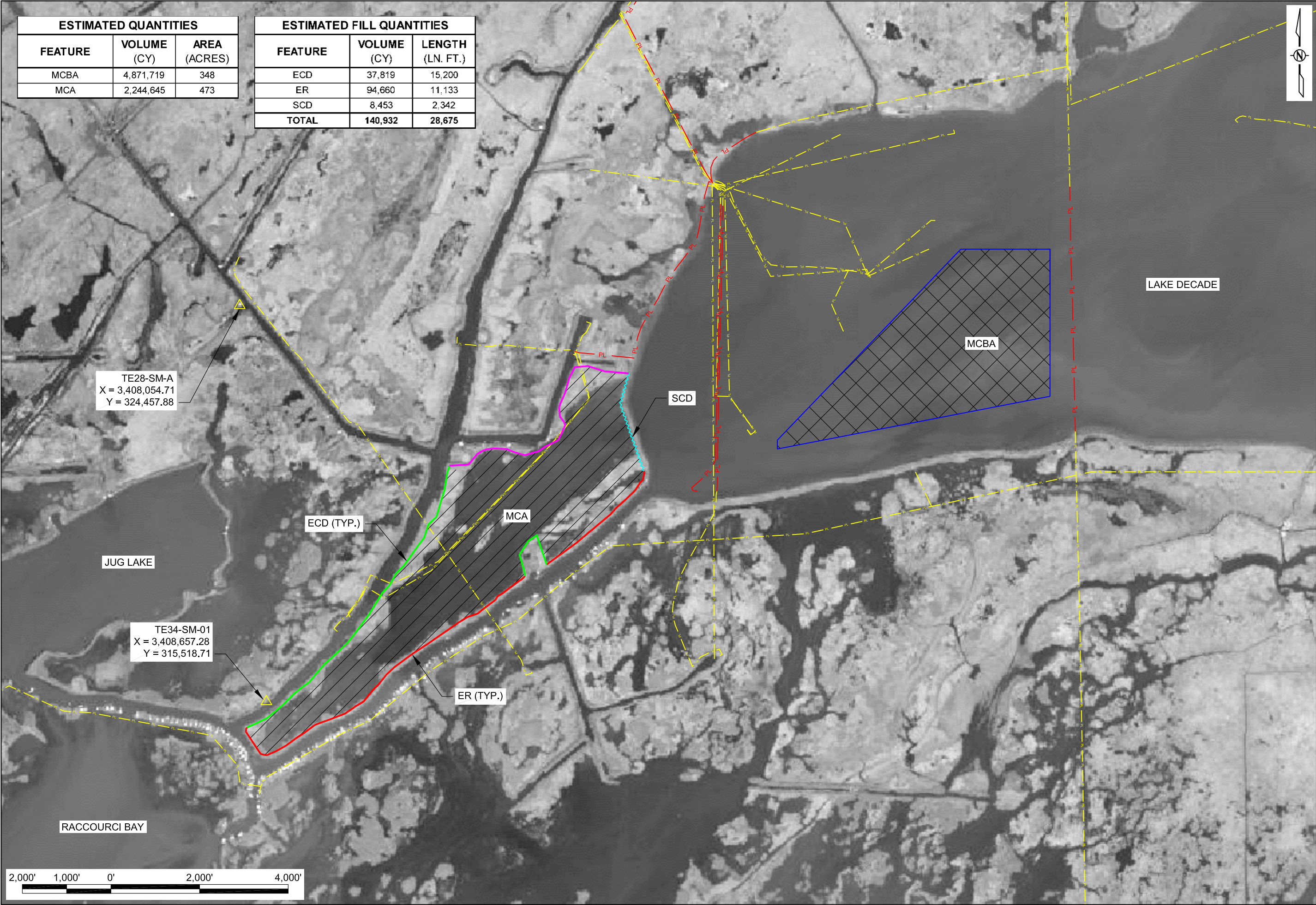
- CMF CONSTRUCTED MARSH FILL
- CPT CONE PENETRATION TEST
- CY CUBIC YARD
- DP DREDGE PIPELINE
- DPC DREDGE PIPE CORRIDOR
- EAC EQUIPMENT ACCESS CORRIDOR
- EB EXISTING BOTTOM
- ECD EARTHEN CONTAINMENT DIKE
- ECDBA EARTHEN CONTAINMENT DIKE BORROW AREA
- EL ELEVATION
- ER EARTHEN RIDGE
- FT FOOT
- ISP INSTRUMENTED SETTLEMENT PLATE
- LF LINEAR FOOT
- LS LUMP SUM
- MCA MARSH CREATION AREA
- MCBA MARSH CREATION BORROW AREA
- MHW MEAN HIGH WATER
- MLW MEAN LOW WATER
- NTS NOT TO SCALE
- PL PIPELINE
- SB SOIL BORING
- SCDBA SHORELINE CONTAINMENT DIKE BORROW AREA
- SCD SHORELINE CONTAINMENT DIKE
- SF SQUARE FOOT
- SM SURVEY MONUMENT
- SP SETTLEMENT PLATE
- ST SURVEY TRANSECT
- SY SQUARE YARD
- TS TEMPORARY SPOIL

COASTAL PROTECTION AND
RESTORATION AUTHORITY
150 TERRACE A VENUE
BATON ROUGE, LOUISIANA 70802

| | | |
|---|----------------------------------|-----------------------|
| GENERAL NOTES | DESIGNED BY: TRAVIS BYLAND, P.E. | APPROVED BY: |
| | | |
| BAYOU DECADE MARSH CREATION AND RIDGE RESTORATION PROJECT | STATE PROJECT NUMBER: TE-0138 | DRAWN BY: SHANE FAUST |

DATE: JULY 2018

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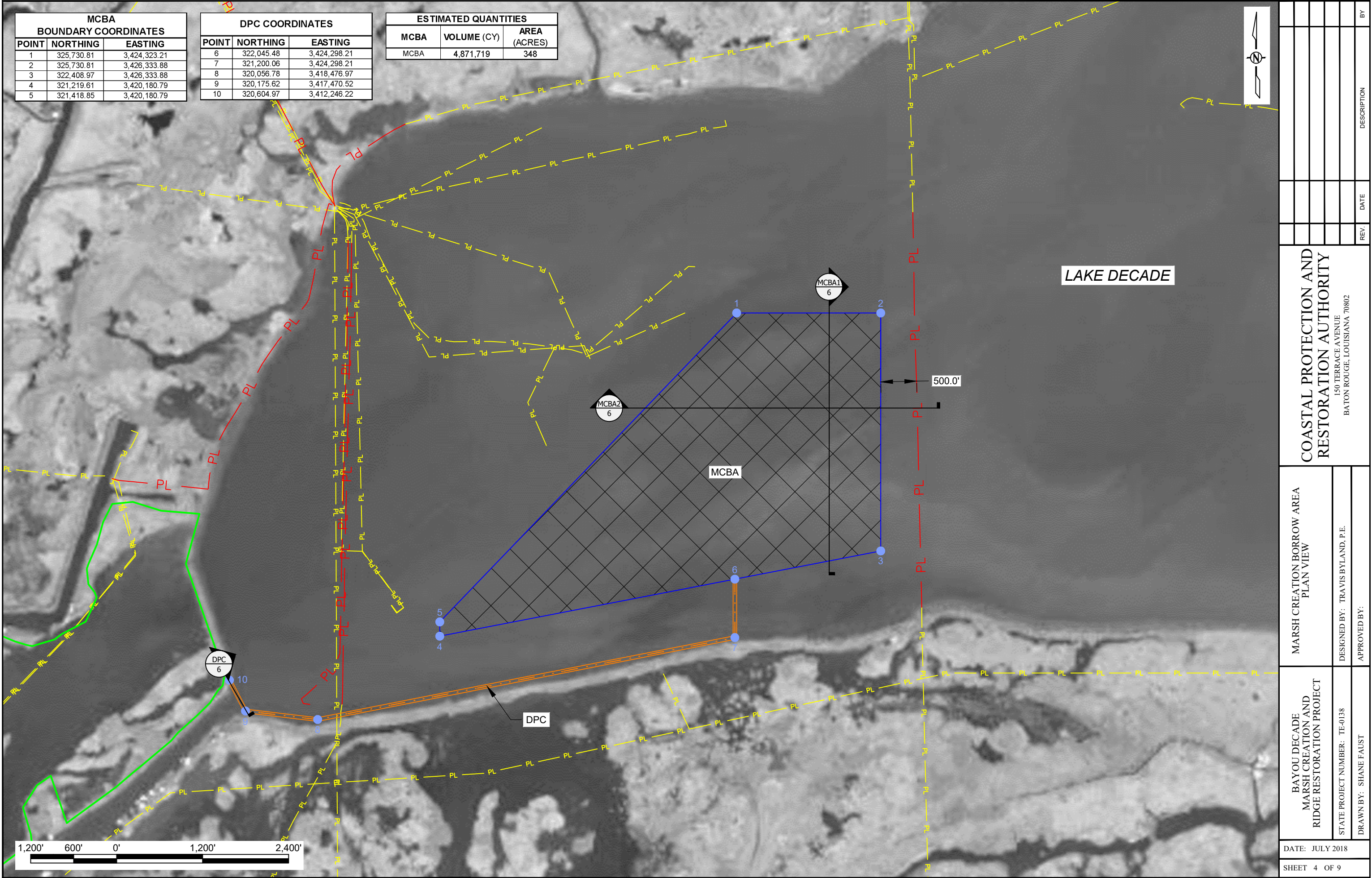


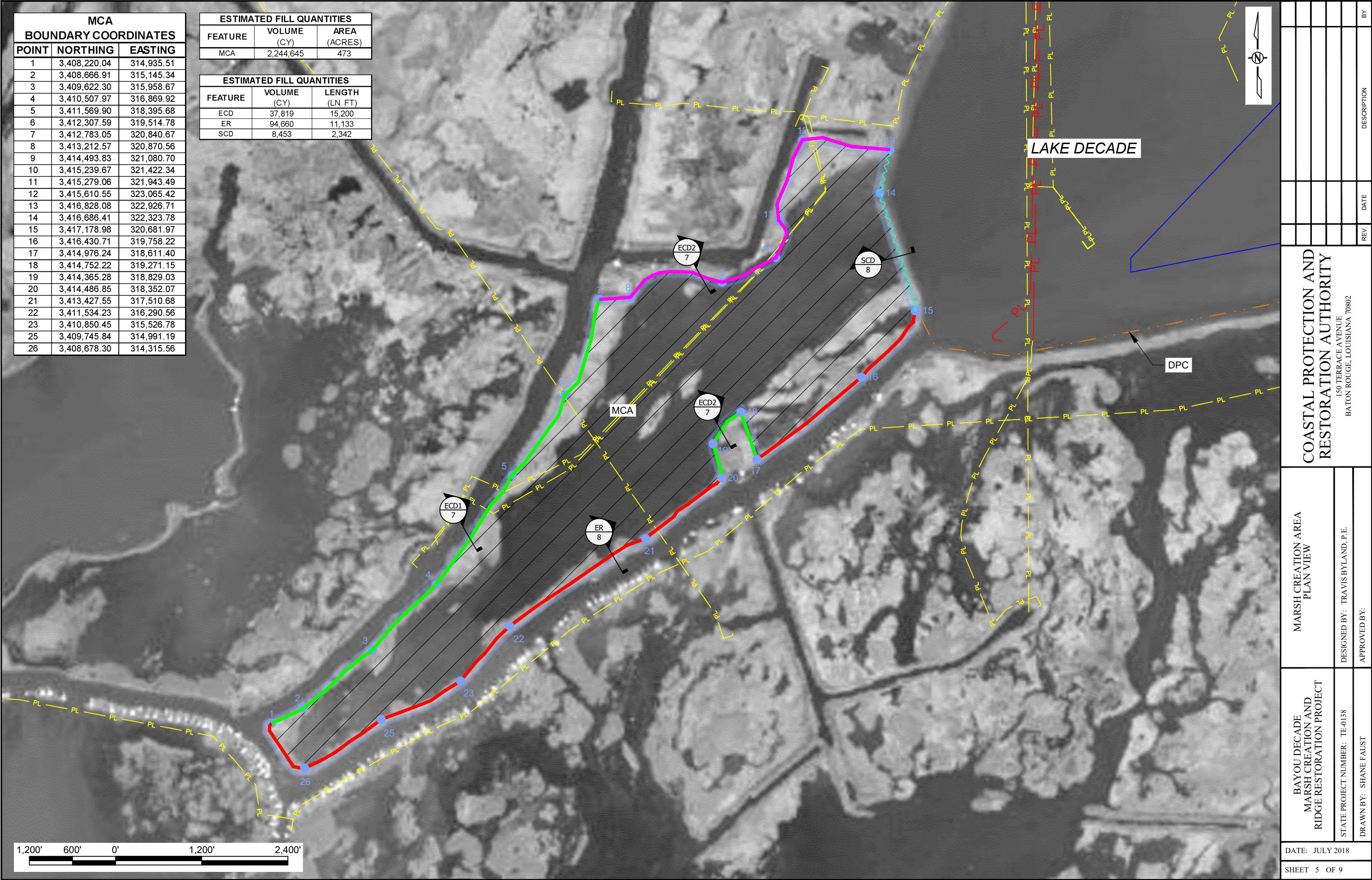
| ESTIMATED QUANTITIES | | |
|----------------------|-------------|--------------|
| FEATURE | VOLUME (CY) | AREA (ACRES) |
| MCBA | 4,871,719 | 348 |
| MCA | 2,244,645 | 473 |

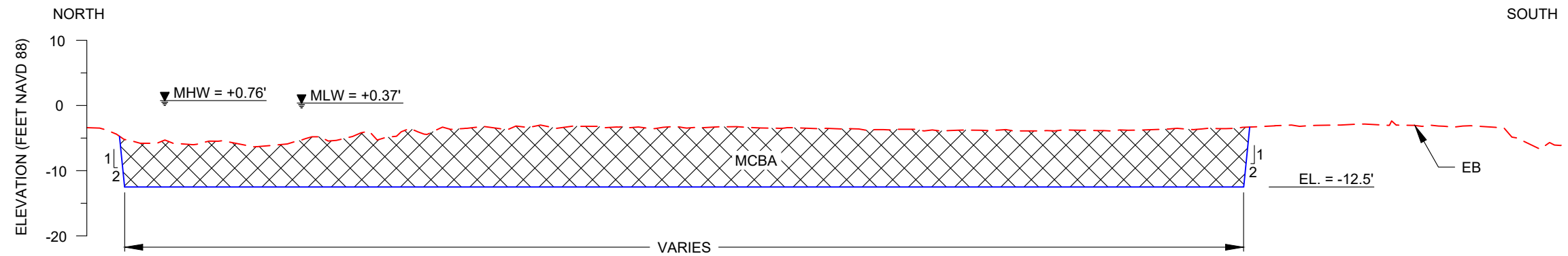
| ESTIMATED FILL QUANTITIES | | |
|---------------------------|-------------|------------------|
| FEATURE | VOLUME (CY) | LENGTH (LN. FT.) |
| ECD | 37,819 | 15,200 |
| ER | 94,660 | 11,133 |
| SCD | 8,453 | 2,342 |
| TOTAL | 140,932 | 28,675 |



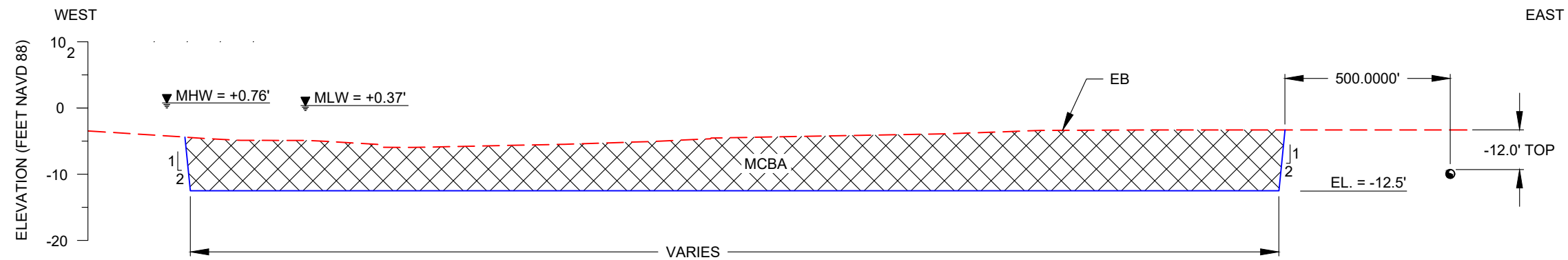
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| BAYOU DECADE MARSH CREATION AND RIDGE RESTORATION PROJECT | | PROJECT LAYOUT | | COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802 | |
| STATE PROJECT NUMBER: TE-0138 | | DESIGNED BY: TRAVIS BYLAND, P.E. | | | |
| DRAWN BY: SHANE FAUST | | APPROVED BY: | | | |
| DATE: JULY 2018 | | REV. | | DATE | BY |
| SHEET 3 OF 9 | | | | | |
| | | | | DESCRIPTION | |



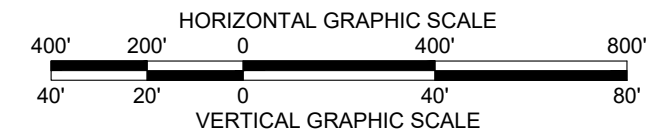




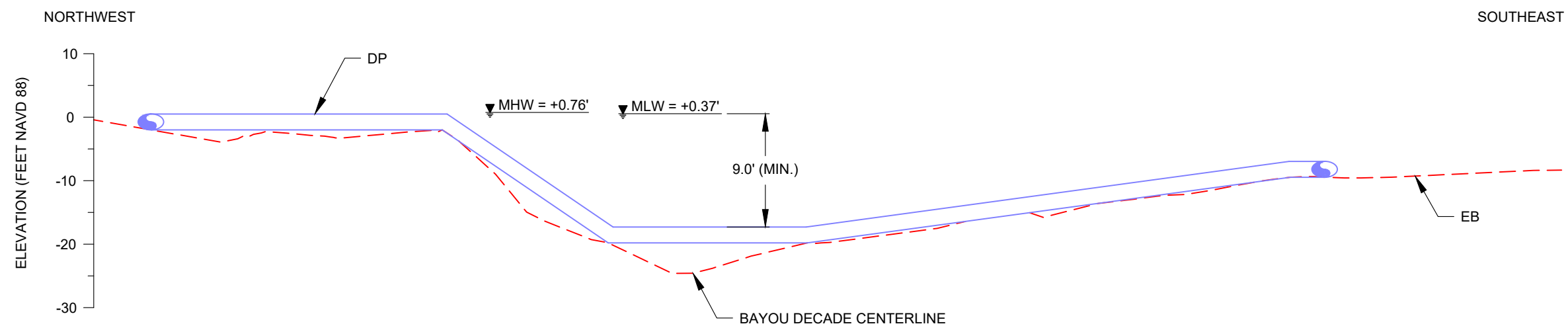
MCBA1 MARSH CREATION BORROW AREA
4 TYPICAL SECTION



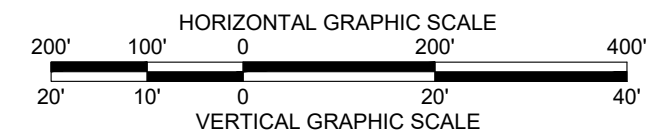
MCBA2 MARSH CREATION BORROW AREA
4 TYPICAL SECTION



| AVAILABLE BORROW QUANTITY | | |
|---------------------------|----------------|-----------------|
| FEATURE | VOLUME (CY) | AREA (ACRES) |
| MCBA | 4,871,719 | 348 |



DPC DREDGE PIPELINE COORIDOR
4 TYPICAL SECTION

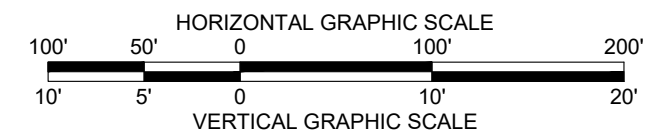
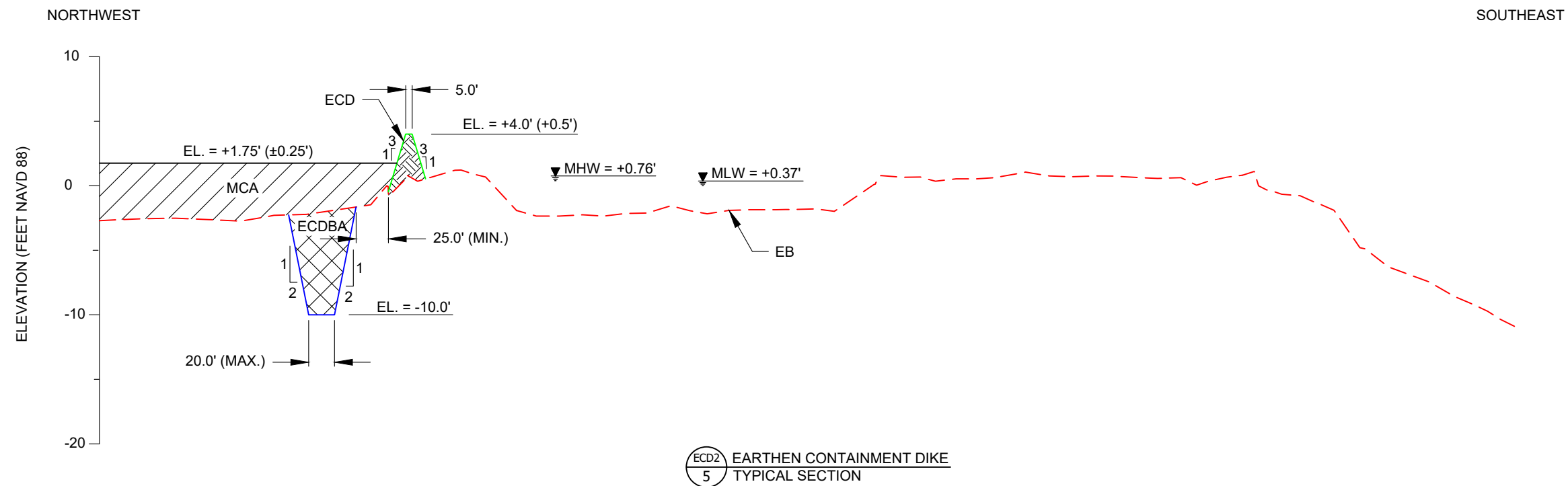
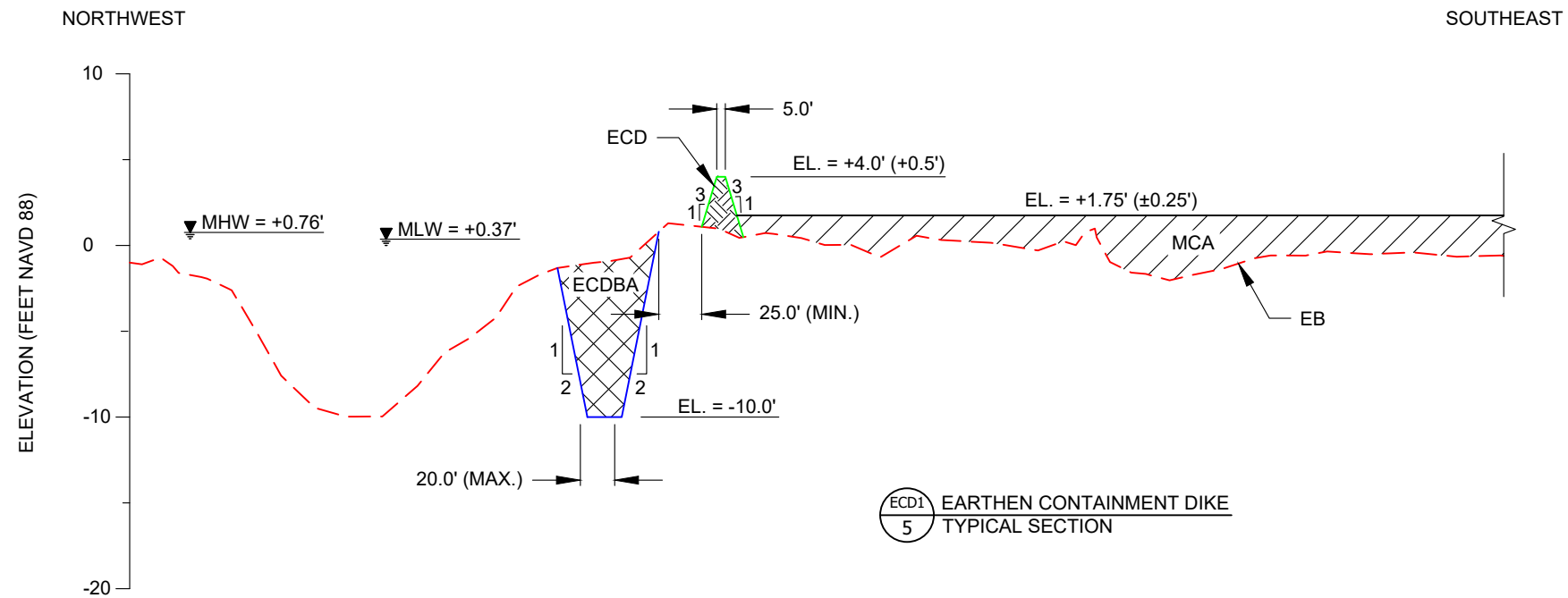


COASTAL PROTECTION AND
RESTORATION AUTHORITY
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

MARSH CREATION BORROW AREA
TYPICAL SECTIONSLAKE DECADE MARSH CREATION
AND RIDGE RESTORATION

DATE: JULY 2018

SHEET 6 OF 9



| | | | | | | |
|--|--|---|--|------|------|-------------|
| DATE: JULY 2018 | | <div>COASTAL PROTECTION AND RESTORATION AUTHORITY</div> <div>150 TERRACE AVENUE</div> <div>BATON ROUGE, LOUISIANA 70802</div> | | | | |
| LAKE DECADE MARSH CREATION AND RIDGE RESTORATION | EARTHEN CONTAINMENT DIKE TYPICAL SECTIONS | | | | | |
| STATE PROJECT NUMBER: TE-0138 | DESIGNED BY: TRAVIS BYLAND, P.E. - | | | | | |
| DRAWN BY: SHANE FAUST | APPROVED BY: | | | | | |
| | | | | REV. | DATE | DESCRIPTION |
| SHEET 7 OF 9 | | | | | | |

