

DEPARTMENT OF THE ARMY PERMIT

Permittee: Coastal Protection and Restoration Authority

Permit No. MVN-2019-0339-EOO

Issuing Office: New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Excavate, fill, and maintain dredged material for the Spanish Pass Ridge and Marsh Restoration Project, in accordance with drawings enclosed in 52 sheets, received on 3/16/2020.

Project Location: Three Mississippi River borrow locations (named B2, DDDD, BBBB) located between Mississippi River miles 0.9 and 17.1, above Head of Passes, two Gulf of Mexico borrow areas (Grand Liard East and West), and nine marsh creation cells west of Venice, Louisiana along Spanish Pass in the Barataria Basin.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **31 August 2025**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

See Special Conditions: Pages 4 - 15

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X _____
(PERMITTEE)

X 8/20/20 _____
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

(DATE)

Michael Farabee, Chief of Eastern Evaluation Section
for Stephen F. Murphy, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE)

(DATE)

Special Conditions

7. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

8. The use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

9. Permittee must install and maintain, at permittee's expense, any safety lights, signs and signals prescribed by the US Coast Guard, through regulations or otherwise, on the authorized facilities.

10. If the authorized project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.) in the waterway, you are advised to notify the Eighth Coast Guard District, so that a Notice to Mariners, if required, may be prepared. Notification, with a copy of your permit approval and drawings, should be mailed to the Commander (dpw) Eighth Coast Guard District, Hale Boggs Federal Building, 500 Poydras Street, Room 1230, New Orleans, Louisiana 70130, about 1 month before you plan to start work. Telephone inquiries can be directed to the Eighth Coast Guard District, Waterways Management at (504) 671-2107.

11. Permitted activities shall not cause more than minimal and temporal water quality degradation of any adjacent wetland, stream, or water body. Appropriate erosion and siltation controls must be utilized during construction to prevent sediment runoff into adjacent wetlands and waterways. Sediment control techniques should include but are not limited to the use of secured hay bales, sediment fencing, wooden or vinyl barriers, and/or seeding of disturbed areas. These techniques shall be maintained in effective operating condition until a point that sediment runoff from construction activities is controlled.

12. The permittee is advised of the requirements set forth in the attached Memorandum for Record and the associated special conditions. All responsibilities and compliance related to the subject conditions are hereby directed to and have oversight by the USACE Navigation Office, Operations Manager, ODB, Michelle Kornick, with this District. Should you have any questions on the requirements and restrictions stipulated, you shall contact the ODB Assistant Operations Manager, Heather Jennings, who may be reached at 504-862-1253 or Heather.L.Jennings@usace.army.mil.

13. The permittee must comply with the enclosed conditions: a) Standard Manatee Conditions for In-Water Activities; b) Sea Turtle and Smalltooth Sawfish Construction Conditions; c) Measures for Reducing the Entrapment Risk to Protected Species; d) Vessel Strike Avoidance Measures and Reporting for Mariners.

14. The permittee must adhere to the following measures to reduce impacts to bottlenose dolphins: a) monitor/observe for dolphins during dredging activities following the same protocols listed under the Standard Manatee Conditions for In-Water Activities; b) if dolphins come within 50 yards of active dredging and are not just traveling through the area (e.g., remaining within the 50 yards to forage), dredge operations shall not start; or if dredging has already begun, it shall cease until the dolphins are beyond the 50-yards and are not likely to re-enter (i.e., are on a dedicated path away from the 50-yard area); c) avoid trans-versing waterbodies with any floating pipelines from the dredge activities, as these could pose a perceived barrier to dolphins.

15. All contract personnel associated with the project shall be informed of the potential presence of the endangered Pallid Sturgeon. The permittee must adhere to the following preventive measures: a) the cutterhead shall remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc.,

the pumping rate shall be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increase; b) during dredging, the pumping rates shall be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom.

16. The following conservation measures shall be implemented to minimize impacts to bald eagles: a) If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, all activities (e.g., walking, camping, clean-up, use of a UTV, ATV, or boat) shall avoid the nest by a minimum of 660 feet. If the nest is protected by a vegetated buffer where there is no line of sight to the nest, then the minimum avoidance distance is 330 feet. This avoidance distance shall be maintained from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months); b) if a similar activity (e.g., driving on a roadway) is closer than 660 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity; c) if a vegetated buffer is present and there is no line of sight to the nest and a similar activity is closer than 330 feet to a nest, then you may maintain a distance buffer as close to the nest as the existing tolerated activity; d) in some instances, activities conducted at a distance greater than 660 feet of a nest may result in disturbance. If an activity appears to cause initial disturbance, the activity shall stop and all individuals and equipment will be moved away until the eagles are no longer displaying disturbance behaviors. If these measures cannot be implemented, then you must contact the U.S. Fish and Wildlife Service's Migratory Bird Permit Office at (404) 679-7070 or by email: permitsR4MB@fws.gov.

17. Mechanized land clearing, filling, or tracking of jurisdictional wetland areas outside the project area for access, staging, and/or implementation of the proposed work is not authorized.

18. Prior to commencing work on the project, the permittee must obtain all necessary federal, state, and parish approvals.

19. If the authorized project requires any additional work not expressly permitted herein, the permittee must apply for an amendment to this authorization.

STANDARD MANATEE CONDITIONS FOR IN-WATER ACTIVITIES

During in-water work in areas that potentially support manatees, all personnel associated with the project shall be instructed and aware of the potential presence of manatees, manatee speed zones, and the need to avoid collisions with, and injury to, manatee. All personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel shall be instructed not to attempt to feed or otherwise interact with the animal.

All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). To minimize potential impacts to manatees in areas of their potential presence, the permittee shall insure the following are adhered to:

- All work, equipment, and vessel operation shall cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).
- If a manatee(s) is sighted in or near the project area, all vessels associated with the project shall operate at “no wake/idle” speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels shall follow routes of deep water whenever possible.
- If used, siltation or turbidity barriers shall be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.
- Temporary signs concerning manatees shall be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities shall display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: “CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSTRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT”. A second temporary sign measuring 8½ " X 11" shall be posted at a location prominently visible to all personnel engaged in water-related activities and shall read language similar to the following: “CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION”.
- Collisions with, injury to, or sightings of manatees shall be immediately reported to the U.S. Fish and Wildlife Service’s, Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701 5505
(727) 824-5312; FAX (727) 824 5309
<http://sero.nmfs.noaa.gov>

Measures for Reducing Entrapment Risk to Protected Species

Bottlenose dolphins, sea turtles, and Gulf sturgeon (protected species) are known to inhabit coastal waters of the northern Gulf of Mexico. Bottlenose dolphins are protected under the Marine Mammal Protection Act (MMPA) and sea turtles and Gulf sturgeon are protected under the Endangered Species Act (ESA). Because of the potential for these protected species to become entrapped within coastal waters of construction sites along the northern Gulf coast, projects that enclose shallow open water areas for wetland creation or nourishment will use the following measures to minimize the potential for entrapment:

- 1. Pre-construction planning.** During project design, the Federal Action Agency or project proponents must incorporate at least one escape route into the proposed retention structure(s) to allow any protected species to exit the area(s) to be enclosed. Escape routes must lead directly to open water outside the construction site and must have a minimum width of 100 feet. Escape routes should also have a depth as deep as the deepest natural entrance into the enclosure site and must remain open until a thorough survey of the area, conducted immediately prior to complete enclosure, determines no Protected Species are present within the confines of the structure (see item 5 below for details).
- 2. Pre-construction compliance meeting.** Prior to construction, the Federal Action Agency, project proponents, the contracting officer representative, and construction personnel should conduct a site visit and meeting to develop a project-specific approach to implementing these preventative measures.
- 3. Responsible parties.** The Federal Action Agency will instruct all personnel associated with the project of the potential presence of protected species in the area and the need to prevent entrapment of these animals. All construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing protected species. Construction personnel will be held responsible for any protected species harassed or killed as a result of construction activities. All costs associated with monitoring and final clearance surveys are the responsibility of project proponents and must be incorporated in the construction plan.
- 4. Monitoring during retention structure construction.** It is the responsibility of construction personnel to monitor the area for protected species during dike or levee construction. If protected species are regularly sighted over a 2 or 3 day period within the enclosure area during retention structure assembly, construction personnel must notify the Federal Action Agency. It is the responsibility of the Federal Action Agency



to then coordinate with the National Marine Fisheries Service (NMFS) Marine Mammal Health and Stranding Response team (1-877-WHALE HELP [1-877-942-5343]) or the appropriate State Coordinator for the Sea Turtle Stranding and Salvage Network (see http://www.sefsc.noaa.gov/species/turtles/stranding_coordinators.htm) to determine what further actions may be required. Construction personnel may not attempt to scare, herd, disturb, or harass the protected species to encourage them to leave the area.

5. **Pre-closure final clearance.** Prior to completing any retention structure by closing the escape route, the Federal Action Agency will insure that the area to be enclosed is observed for protected species. Surveys must be conducted by experienced marine observers during daylight hours beginning the day prior to closure and continuing during closure. This is best accomplished by small vessel or aerial surveys with 2-3 experienced marine observers per vehicle (vessel/helicopter) scanning for protected species. Large areas (e.g. >300 acres) will likely require the use of more than one vessel or aerial survey to insure full coverage of the area. These surveys will occur in a Beaufort sea state (BSS) of 3 feet or less, as protected species are difficult to sight in choppy water. Escape routes may not be closed until the final clearance determines the absence of protected species within the enclosure sight.
6. **Post closure sightings.** If protected species become entrapped in an enclosed area, the Federal Action Agency and NMFS must be immediately notified. If observers note entrapped animals are visually disturbed, stressed, or their health is compromised then the Action Agency may require any pumping activity to cease and the breaching of retention structures so that the animals can either leave on their own or be moved under the direction of NMFS.
 - a. In coordination with the local stranding networks and other experts, NMFS will conduct an initial assessment to determine the number of animals, their size, age (in the case of dolphins), body condition, behavior, habitat, environmental parameters, prey availability and overall risk.
 - b. If the animal(s) is/are not in imminent danger they will need to be monitored by the Stranding Network for any significant changes in the above variables.
 - c. Construction personnel may not attempt to scare, herd, disturb, or harass the protected species to encourage them to leave the area. Coordination by the Federal Action Agency with the NMFS SER Stranding Coordinator may result in authorization for these actions.
 - d. NMFS may intervene (catch and release and/or rehabilitate) if the protected species are in a situation that is life threatening and evidence suggests the animal is unlikely to survive in its immediate surroundings.
 - e. Surveys will be conducted throughout the area at least twice or more in calm surface conditions (BSS 3 feet or less), with experienced marine observers, to determine whether protected species are no longer present in the area.

Revised: May 22, 2012

While NMFS recommends these best management practices to prevent the future takes of marine mammals by entrapment, use of these measures cannot guarantee a take will not occur. Following these measures does not constitute compliance with the MMPA's Incidental Take requirements and take is not authorized.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

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MEMORANDUM FOR RECORD: Chief, Regulatory Branch ATTN: Brad Laborde

SUBJECT: MFR IN ACCORDANCE WITH EC 1165-2-220, APPENDIX G –
Coastal Protection and Restoration Authority of Louisiana (CPRA), MVN-2019-0339-EOO

1. The Operations Manager for Mississippi River, Baton Rouge to the Gulf navigation project (ODB) has reviewed the application from Coastal Protection and Restoration Authority of Louisiana (CPRA) to construct the Barataria Basin Ridge and Marsh Creation Project, Spanish Pass Increment with three borrow locations located in the Mississippi River ranging from Mile 0.9 AHP to 17.1 AHP near Venice, in Plaquemines Parish, Louisiana.
2. It has been determined that the subject application is within the Mississippi River navigation servitude but is outside of the navigation fairway limits. Therefore, this request has no impact to the usefulness of the project and will not be injurious to the public interest.

The scope of this analysis for Section 408 evaluation is limited to the federal limits of the Federal Navigation Channel.

3. ODB has no objections to the subject request provided the following navigation conditions are included as part of the Section 10 permit documents as per EC 1165-2-220, APPENDIX K (enclosed):

PROJECT- SPECIFIC CONDITIONS:

- a. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.
- b. The applicant shall contact the USACE Mississippi River Operations Manager, at least 1 month in advance of the start of dredging to coordinate dredging and disposal activities.
- c. For dredging in the DDDD (Venice Anchorage) and BBBB (Pilottown Anchorage) borrow area, the applicant shall submit a detailed dredging plan. The plan shall be submitted at least 30 days prior to the scheduled commencement of work in the site and shall include hydrographic surveys of the borrow area with plans for dredging; thereby identifying the material to be removed. USACE must approve the dredging plan prior to the commencement of applicant's work. The surveys and plans shall be updated every 30 days until project completion. All updated plans must also be approved before the applicant can implement the updated plan. The surveys and dredging plan shall be submitted in electronic format and hardcopy to the USACE Mississippi River Operations Manager.
- d. The applicant is advised to carefully review Standard Conditions 4, 8, 9, and 12 as they relate to the proposed dredging of the DDDD (Venice Anchorage) and BBBB (Pilottown Anchorage) borrow areas and possible adverse shoaling of the navigation channel unquantified by application review materials. In the event that apparent adverse shoaling occurs in the navigation channel coincident with dredging of either borrow site, the applicant will be responsible for remediating these damages to the Federal project.
- e. To address navigation safety prior to and during construction of the project, the applicant will initiate a conference call; to include representatives of the dredging contractor, the U.S. Coast Guard, pertinent members of the U.S. Army Corps of Engineers, and other navigation stakeholders.

During construction, the frequency of the conference call will be as determined necessary by the U.S. Coast Guard and U.S. Army Corps of Engineers.

f. The applicant will, at his or her expense, install and maintain any safety light, signals, and signs prescribed by the United States Coast Guard, through regulations or otherwise, on authorized facilities or on equipment used in performing work under the authorization.

g. The applicant is advised to notify the appropriate Captain of the Port so that a Notice to Mariners, if required, may be provided about one month before you plan to start work. Contact information for the local Captain of the Port's offices may be located at <https://homeport.uscg.mil> under "port directory". In addition, a copy of your permit approval and drawings should be mailed to the Commander, Eighth Coast Guard District, Hale Boggs Federal Building, 500 Poydras Street, Room 1230, New Orleans, Louisiana 70130, or emailed to D08-DG-District-DPW@uscg.mil. Telephone inquiries can be directed to the Eighth Coast Guard District, Waterways Management at (504) 671-2330.

4. The above Section 408 special conditions and standard conditions enclosed are enforceable by the USACE Navigation Operations Manager for the Mississippi River, Baton Rouge to the Gulf of Mexico as per Appendix G, EC 1165-2-220. The point of contact for enforcing such Section 408 conditions in the Section 10 permit is Heather Jennings, 504-862-1253. Heather.L.Jennings@usace.army.mil.

5. If there are any questions regarding these conditions, please contact me at 504-862-1253.

JENNINGS.HEATHER
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for Michelle Kornick
Operations Manager
Operations Division

Enclosure (Standard 408 conditions)

U.S. Army Corps of Engineers
New Orleans District
Section 408
EC-1165-2-220 Appendix K
Standard Terms and Conditions

LIMITS OF THE AUTHORIZATION

1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.
2. The time limit for completing the work authorized end on 5 years from the date of the Regulatory permit if a Regulatory permit is required. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.
4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

INDEMNIFICATION AND HOLD HARMLESS

5. The United States will in no case be liable for:
 - a. Any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or
 - b. Damage claims associated with any future modification, suspension, or revocation of this permission.
6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents, servants, or employees, or others who may be on your premises or project work areas of the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, **indemnify** and **hold harmless** the United States and USACE from any and all such claims, subject to any limitations in law.
7. Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

REEVALUATION OF PERMISSION

8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.
9. This office, at its sole discretion, may reevaluate the decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permission;
 - b. The information provided in support of your application for permission proves to have been inaccurate or incomplete; or
 - c. Significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest.

CONDUCT OF WORK UNDER THIS PERMISSION

10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.
11. Work/usage allowed under this permission must proceed in a manner that avoids interference with inspection, operation, and maintenance of the federal project.
12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.
13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purpose, to make inspections, to operate and/or to make any other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.
14. You must provide copied of pertinent design, construction, and/or usage submittal/documents. USACE may request that survey and photographic documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.
15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.
16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.



Vessel Strike Avoidance Measures and Reporting for Mariners NOAA Fisheries Service, Southeast Region

Background

The National Marine Fisheries Service (NMFS) has determined that collisions with vessels can injure or kill protected species (e.g., endangered and threatened species, and marine mammals). The following standard measures should be implemented to reduce the risk associated with vessel strikes or disturbance of these protected species to discountable levels. NMFS should be contacted to identify any additional conservation and recovery issues of concern, and to assist in the development of measures that may be necessary.

Protected Species Identification Training

Vessel crews should use an Atlantic and Gulf of Mexico reference guide that helps identify protected species that might be encountered in U.S. waters of the Atlantic Ocean, including the Caribbean Sea, and Gulf of Mexico. Additional training should be provided regarding information and resources available regarding federal laws and regulations for protected species, ship strike information, critical habitat, migratory routes and seasonal abundance, and recent sightings of protected species.

Vessel Strike Avoidance

In order to avoid causing injury or death to marine mammals and sea turtles the following measures should be taken when consistent with safe navigation:

1. Vessel operators and crews shall maintain a vigilant watch for marine mammals and sea turtles to avoid striking sighted protected species.
2. When whales are sighted, maintain a distance of 100 yards or greater between the whale and the vessel.
3. When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards or greater between the animal and the vessel whenever possible.
4. When small cetaceans are sighted while a vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
5. Reduce vessel speed to 10 knots or less when mother/calf pairs, groups, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity; therefore, prudent precautionary measures should always be exercised. The vessel shall attempt to route around the animals, maintaining a minimum distance of 100 yards whenever possible.

6. Whales may surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel and when safety permits, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

Additional Requirements for the North Atlantic Right Whale

1. If a sighted whale is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yards be maintained from the animal (50 CFR 224.103 (c)).
2. Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System.
3. Mariners shall check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard NAVTEX broadcasts, and Notices to Mariners. Commercial mariners calling on United States ports should view the most recent version of the NOAA/USCG produced training CD entitled "A Prudent Mariner's Guide to Right Whale Protection" (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD).
4. Injured, dead, or entangled right whales should be immediately reported to the U.S. Coast Guard via VHF Channel 16.

Injured or Dead Protected Species Reporting

Vessel crews shall report sightings of any injured or dead protected species immediately, regardless of whether the injury or death is caused by your vessel.

Report marine mammals to the Southeast U.S. Stranding Hotline: 877-433-8299

Report sea turtles to the NMFS Southeast Regional Office: 727-824-5312

If the injury or death of a marine mammal was caused by a collision with your vessel, responsible parties shall remain available to assist the respective salvage and stranding network as needed. NMFS' Southeast Regional Office shall be immediately notified of the strike by email (takereport.nmfsser@noaa.gov) using the attached vessel strike reporting form.

For additional information, please contact the Protected Resources Division at:

NOAA Fisheries Service
Southeast Regional Office

263 13th Avenue South
St. Petersburg, FL 33701

Tel: (727) 824-5312

Visit us on the web at <http://sero.nmfs.noaa.gov>

NMFS Southeast Region Vessel Strike Avoidance Measures and Reporting for Mariners; revised February 2008.

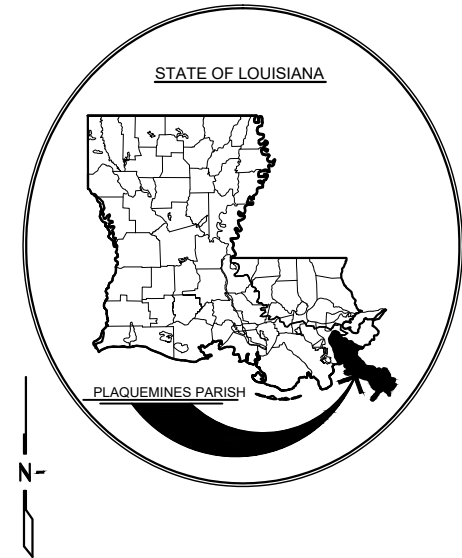
STATE OF LOUISIANA
 COASTAL PROTECTION AND RESTORATION AUTHORITY

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
 SPANISH PASS INCREMENT
 BA-0203
 PLAQUEMINES PARISH

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NOT FOR CONSTRUCTION
 DOCUMENTS ARE NOT TO BE USED FOR
 CONSTRUCTION, BIDDING, RECORDATION,
 CONVEYANCE OR SALES

 PROJECT ENGINEER

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT STATE PROJECT NUMBER: BA-0203	TITLE SHEET DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 01 OF 52

recd: March 16, 2020

GENERAL NOTES

- ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) GEOID 12B, U.S. SURVEY FEET. ALL HORIZONTAL COORDINATES ARE GIVEN IN THE NORTH AMERICAN DATUM OF 1983 (NAD 83, LOUISIANA STATE PLANE SOUTH ZONE U.S. FEET). ELEVATIONS ARE BASED ON THE FOLLOWING SECONDARY MONUMENTS:

<u>SECONDARY MONUMENT</u>	<u>ELEVATION</u>	<u>NORTHING</u>	<u>EASTING</u>
CRMS BA-SM-14 N 367	2.27' 0.97'	275,747.40 314,850.54	3,881,961.78 3,878,540.64

- MEAN HIGH WATER (MHW) AND MEAN LOW WATER (MLW) WERE CALCULATED FROM THE GAGE CRMS0163 LOCATED 4 MILES SOUTH OF VENICE. DATA FROM JUNE 25, 2007 TO OCTOBER 15, 2018 WAS USED. ELEVATIONS ARE REFERENCED TO NAVD 88, US FEET. MHW = 1.07' AND MLW = - 0.7'.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING SAFE ACCESS TO THE PROJECT AND FOR NAVIGATING WITHIN THE LIMITS OF THE PROJECT AREA. ALL EQUIPMENT SHALL BE FLOATING AT ALL TIMES DURING TRANSIT TO AND FROM THE PROJECT SITE. THE CPRA CONSTRUCTION ENGINEER OR THEIR REPRESENTATIVE SHALL MONITOR THE LOCATION OF EQUIPMENT DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOT, AT ANYTIME, TRAVERSE EXISTING MARSH OR VEGETATIVE WETLANDS OUTSIDE FILL AREAS UNLESS OTHERWISE DIRECTED BY THE CPRA CONSTRUCTION ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE OPERATORS THREE (3) WORKING DAYS IN ADVANCE OF THE WORK. ALL PIPELINES SHALL BE MARKED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN BUOYS DURING CONSTRUCTION AND HAVE ADEQUATE NAVIGATIONAL EQUIPMENT ON THE DREDGE TO AVOID DREDGING IN RESTRICTED AREAS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE CLEARANCES FROM THE PIPELINES SET FORTH IN THE PLANS AND SPECIFICATIONS. SEE SP-7 OF THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL NOT ANCHOR OR EXCAVATE WITHIN 50 FEET OF ANY PIPELINE. **CALL LOUISIANA ONE CALL AT 800-368-5898 PRIOR TO ANY EXCAVATION AND/OR DREDGING TO LOCATE ALL PIPELINES OR UTILITIES**


- THE CONTRACTOR SHALL PERFORM A MAGNETOMETER SURVEY OF THE BORROW AREAS AND ALL PROPOSED ACCESS CORRIDORS PRIOR TO MOBILIZATION FOR CONSTRUCTION. DRAWINGS SHOWING THE TRACK LINES, ANY MAGNETOMETER HITS, COORDINATES, AMPLITUDE, SIGNATURE TYPE, AND SIGNATURE WIDTH OF ALL MAGNETOMETER HITS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO MOBILIZATION. ADDITIONAL TRACK LINES SHALL BE RUN IN ACCORDANCE WITH TS-24 OF THE SPECIFICATIONS.
- THE GEOTECHNICAL INVESTIGATION AND ANALYSES FOR FILL AREAS WERE PERFORMED FROM OCTOBER THROUGH DECEMBER OF 2018 BY GEOENGINEERS, INC. GEOTECHNICAL INVESTIGATION OF RIVERINE BORROW SOURCES TOOK PLACE FROM JUNE-AUGUST 2019. THE GEOTECHNICAL BORING LOGS CAN BE FOUND IN APPENDIX I OF THE SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTAINING ALL DREDGED MATERIAL WITHIN THE BOUNDARIES OF THE PROPOSED MARSH CREATION AREAS.
- EARTHEN RIDGE TO BE PLANTED WITH WOODY VEGETATION AT OWNER'S DISCRETION.
- SUMMARY OF QUANTITIES:

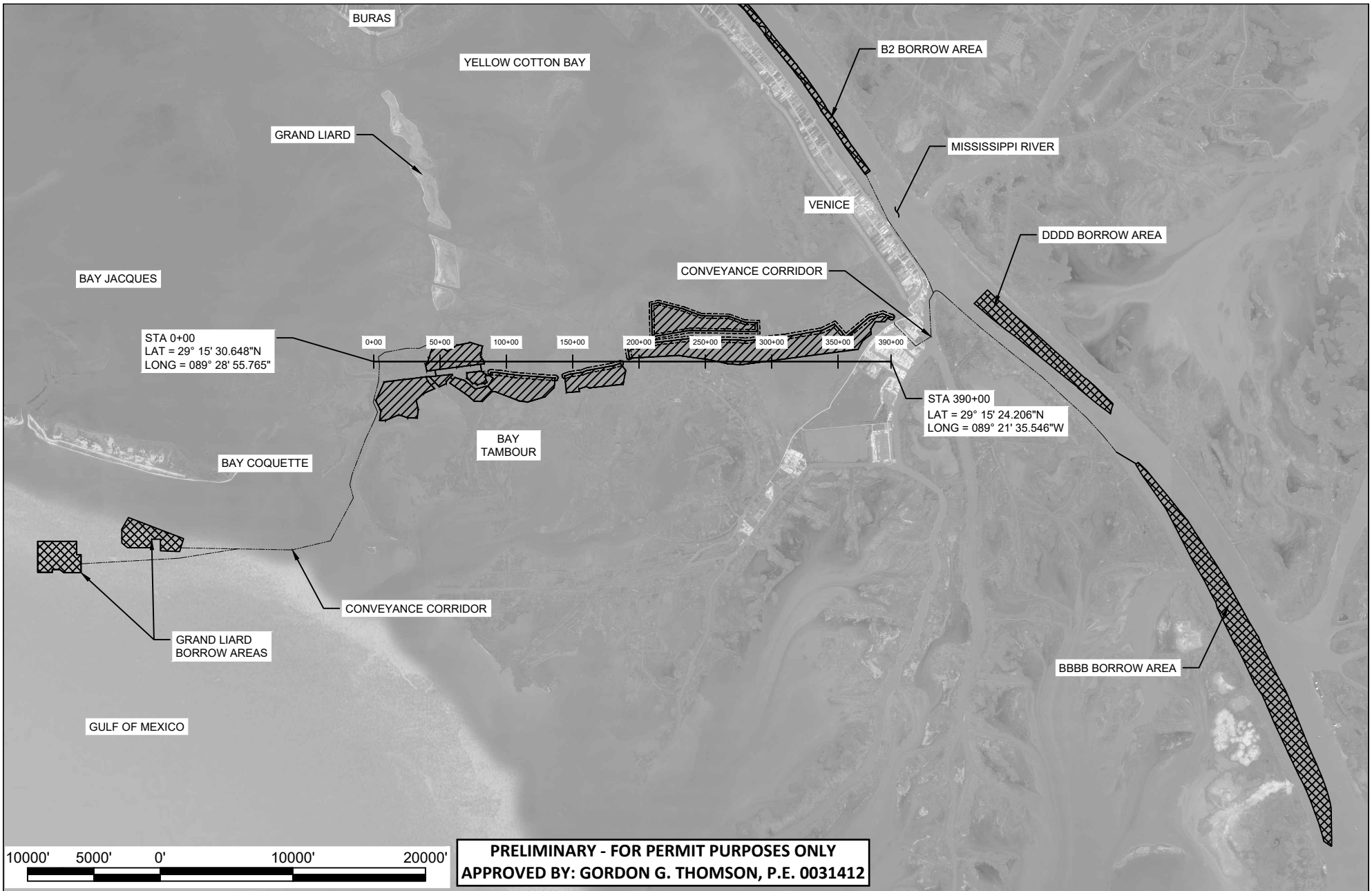
MAXIMUM EARTHEN CONTAINMENT DIKES	49,483 L.F.
MAXIMUM MARSH AND RIDGE FILL	18,800,000 C.Y.

<u>AMERICAN MIDSTREAM</u> ROBIN "BUBBA" ASEVADO 504-800-6686	<u>CHEVRON PIPELINE</u> TODD DORE 985-773-6389	<u>COLUMBIA GULF TRANSMISSION</u> ERIC THERIOT 985-879-3301
<u>CRIMSON GULF</u> RANDY JONES 985-217-3713	<u>GULF SOUTH</u> HAROLD SYLVE 504-415-1864	<u>HILCORP ENERGY COMPANY</u> RONALD DARDAR 985-258-1421
<u>PHILLIPS 66</u> DANE SUTTON 335-615-2621	<u>PLAINS</u> ROCKY GROW 985-870-4837	<u>SPECTRA</u> JEROME SNYDER 985-876-6761
<u>TARGA</u> KELLY VARNADO 713-584-1570		

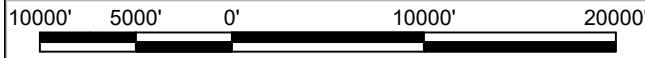
- ANY DAMAGE TO EXISTING U.S. COAST GUARD NAVIGATION AIDS OR PRIVATE NAVIGATION AIDS SHALL BE REPAIRED BY THE CONTRACTOR TO U.S. COAST GUARD STANDARDS AT THE EXPENSE OF THE CONTRACTOR.
- MARSH CREATION AREA ELEVATIONS SHOWN ON THE PLANS ARE BASED ON THE SURVEYS PERFORMED BETWEEN MAY 14, 2018 THROUGH NOVEMBER 30, 2018 BY MORRIS P. HEBERT, INC. FOR THE CPRA. BORROW AREA ELEVATIONS SHOWN ON THE PLANS ARE BASED ON THE SURVEYS PERFORMED DURING FEBRUARY AND SEPTEMBER 2018 BY OCEAN SURVEYS, INC. FOR THE CPRA. ESTIMATED HYDRAULIC DREDGING QUANTITIES SHOWN ARE FOR BIDDING PURPOSES ONLY AND WERE CALCULATED USING AUTOCAD CIVIL3D AND SURVEY DATA COLLECTED FOR THESE TIME PERIODS.
- AN UPDATED PRE-CONSTRUCTION SURVEY SHALL BE PERFORMED AS PART OF THIS CONTRACT PER TS-23 OF THE SPECIFICATIONS.
- THE EARTHEN RIDGE, EARTHEN CONTAINMENT DIKES, MARSH CREATION AREAS, OFFSHORE BORROW AREAS, STRUCTURES MAY BE REVISED BY THE CPRA CONSTRUCTION ENGINEER AT THE TIME OF CONSTRUCTION TO REFLECT CHANGES IN FIELD CONDITIONS.


**PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412**

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	GENERAL NOTES
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	STATE PROJECT NUMBER: BA-0203 DATE: 2019-12-06 FEDERAL PROJECT NUMBER: SHEET 02 OF 52

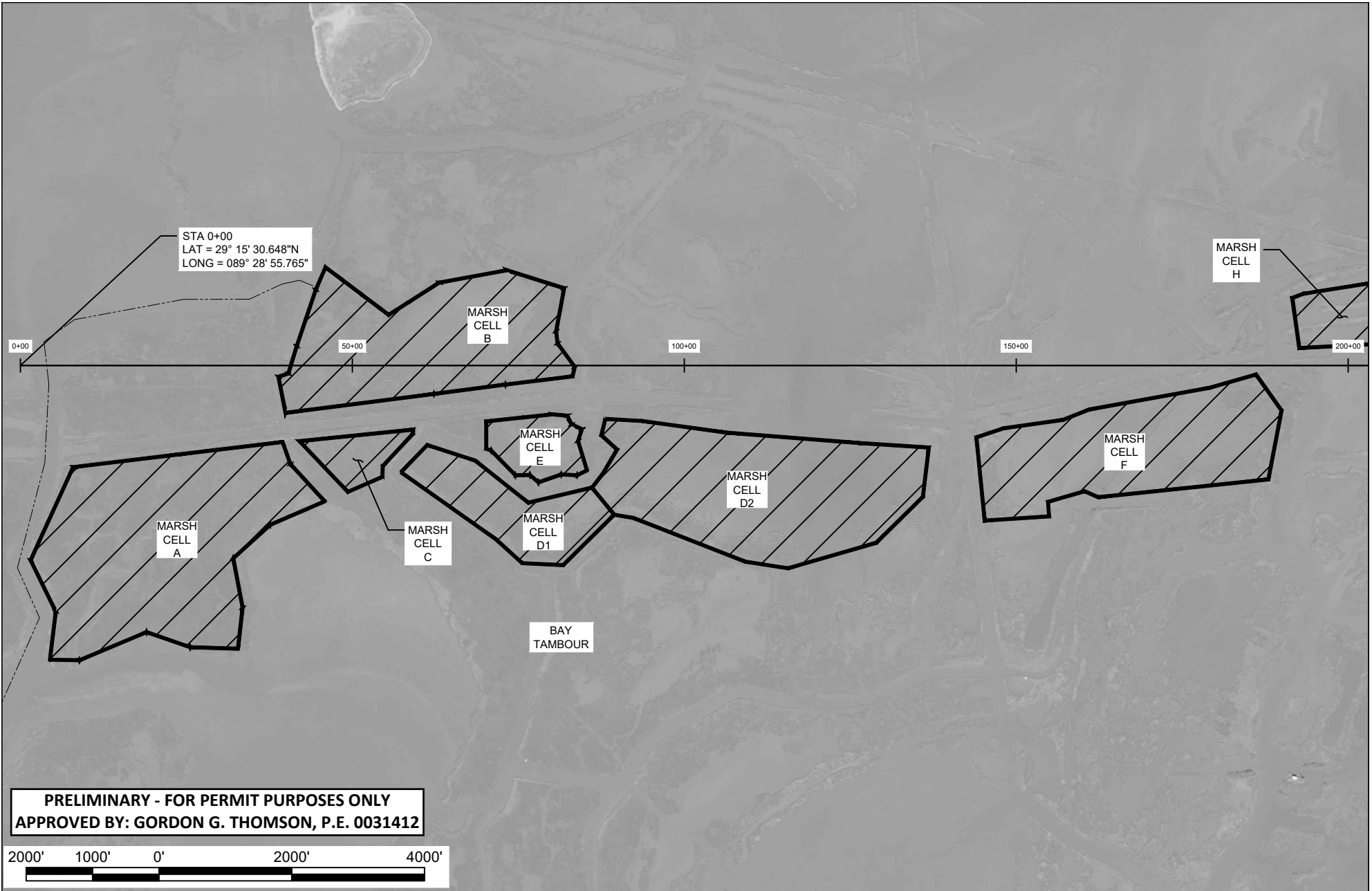


PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412




APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	PROJECT OVERVIEW
DRAWN BY: SNL		STATE PROJECT NUMBER: BA-0203	DATE: 2019-04-26
DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 03 OF 52

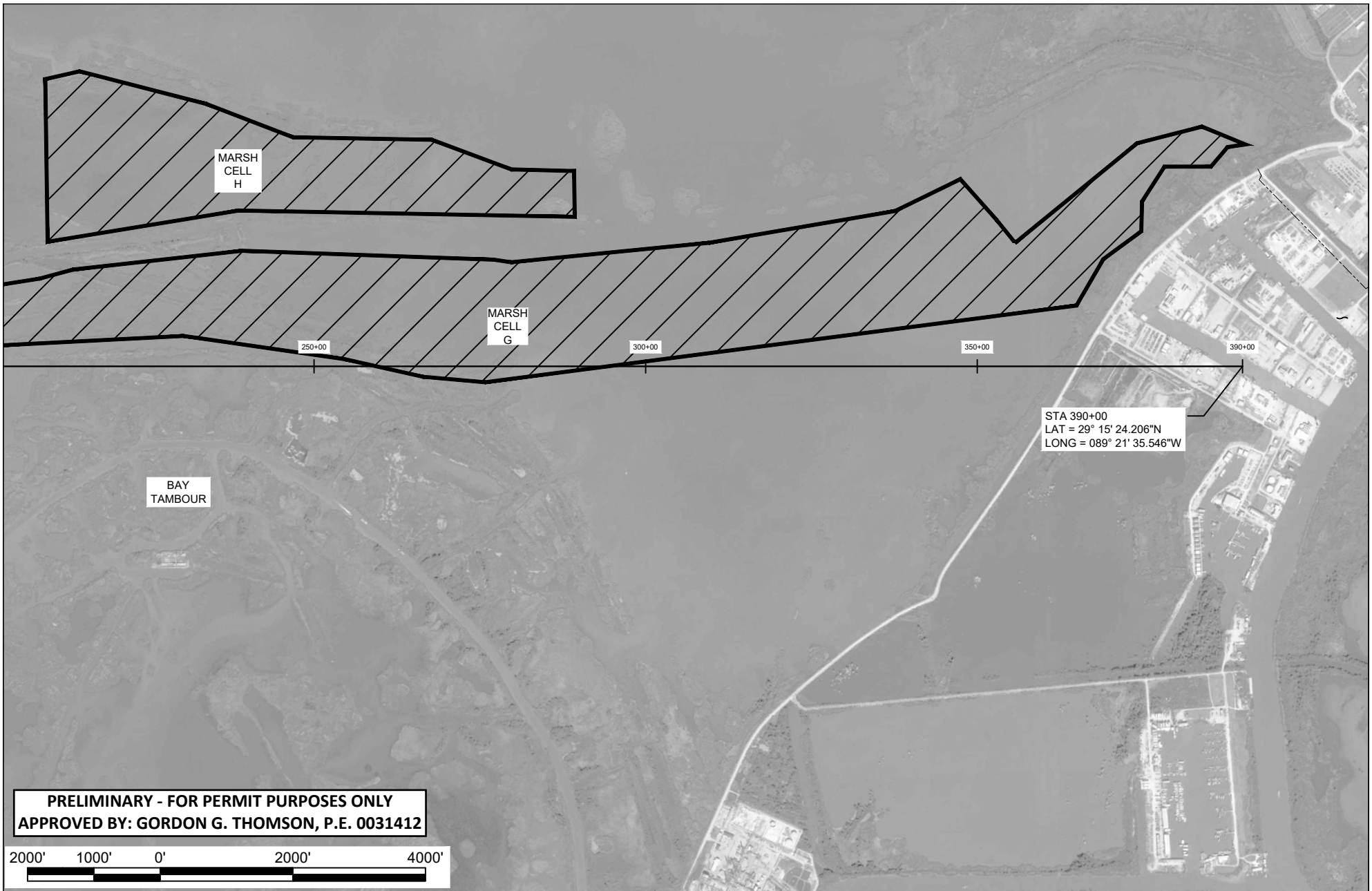
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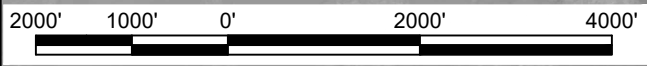
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412


APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	PROJECT SITE LAYOUT (1 OF 2)
DRAWN BY: SNL		DESIGNED BY: BJH, P.E.	STATE PROJECT NUMBER: BA-0203
		APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 04 OF 52

recd: March 16, 2020



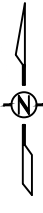
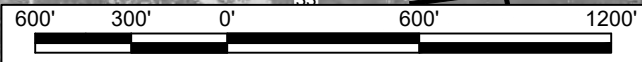
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	PROJECT SITE LAYOUT (2 OF 2)
DRAWN BY: SNL		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 05 OF 52

recd: March 16, 2020

- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.



EARTHEN CONTAINMENT DIKE

CONTRACTOR MAY CHOOSE TO CONSTRUCT EITHER TEMPORARY SAND ACCESS ROUTE, BUT SHALL NOT CONSTRUCT BOTH. LOCATION 1, SEE SHEET 18.

MARSH CREATION FILL AREA A

INTERIOR ACCESS CORRIDOR

EARTHEN CONTAINMENT DIKE BORROW AREA

INTERIOR ACCESS STOCKPILE - CONTRACTOR TO USE AS NEEDED

EQUIPMENT ACCESS ROUTE

MARSH CREATION AREA A		
	LATITUDE	LONGITUDE
1	29°15'1.6"N	89°28'54.64"W
2	29°15'15.36"N	89°28'47.15"W
3	29°15'16.98"N	89°28'29.31"W
4	29°15'18.6"N	89°28'11.46"W
5	29°15'15.31"N	89°28'10.21"W
6	29°15'9.64"N	89°28'4.48"W
7	29°15'6.31"N	89°28'13.78"W
8	29°15'1.38"N	89°28'20.18"W
9	29°14'54"N	89°28'18.72"W
10	29°14'47.9"N	89°28'19.63"W
11	29°14'48.24"N	89°28'27.74"W
12	29°14'50.59"N	89°28'35.12"W
13	29°14'46.56"N	89°28'46.62"W
14	29°14'46.72"N	89°28'51.62"W
15	29°14'53.88"N	89°28'50.5"W
134	29°15'12.48"N	89°28'7.34"W

LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE
	EARTHEN RIDGE
	EARTHEN RIDGE TOE
	TEMPORARY SAND ACCESS ROUTE
	DREDGE PIPELINE CORRIDOR/ACCESS

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



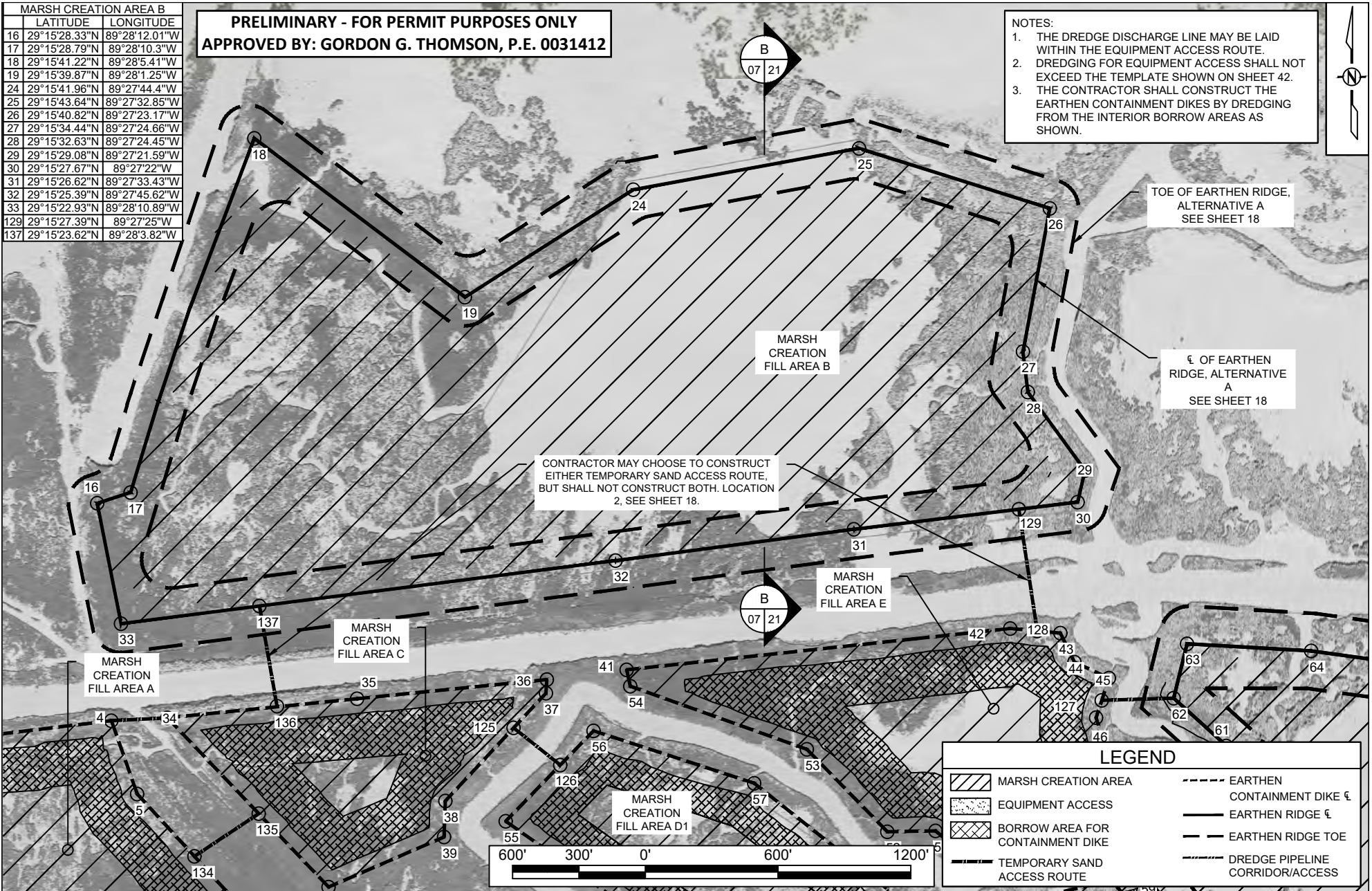
APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA A LAYOUT
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 06 OF 52

recd: March 16, 2020

MARSH CREATION AREA B		
	LATITUDE	LONGITUDE
16	29°15'28.33"N	89°28'12.01"W
17	29°15'28.79"N	89°28'10.3"W
18	29°15'41.22"N	89°28'5.41"W
19	29°15'39.87"N	89°28'1.25"W
24	29°15'41.96"N	89°27'44.4"W
25	29°15'43.64"N	89°27'32.85"W
26	29°15'40.82"N	89°27'23.17"W
27	29°15'34.44"N	89°27'24.66"W
28	29°15'32.63"N	89°27'24.45"W
29	29°15'29.08"N	89°27'21.59"W
30	29°15'27.67"N	89°27'22"W
31	29°15'26.62"N	89°27'33.43"W
32	29°15'25.39"N	89°27'45.62"W
33	29°15'22.93"N	89°28'10.89"W
129	29°15'27.39"N	89°27'25"W
137	29°15'23.62"N	89°28'3.82"W

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

- NOTES:**
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.



APPLICATION BY:
Baird.
 Innovation Engineered.

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

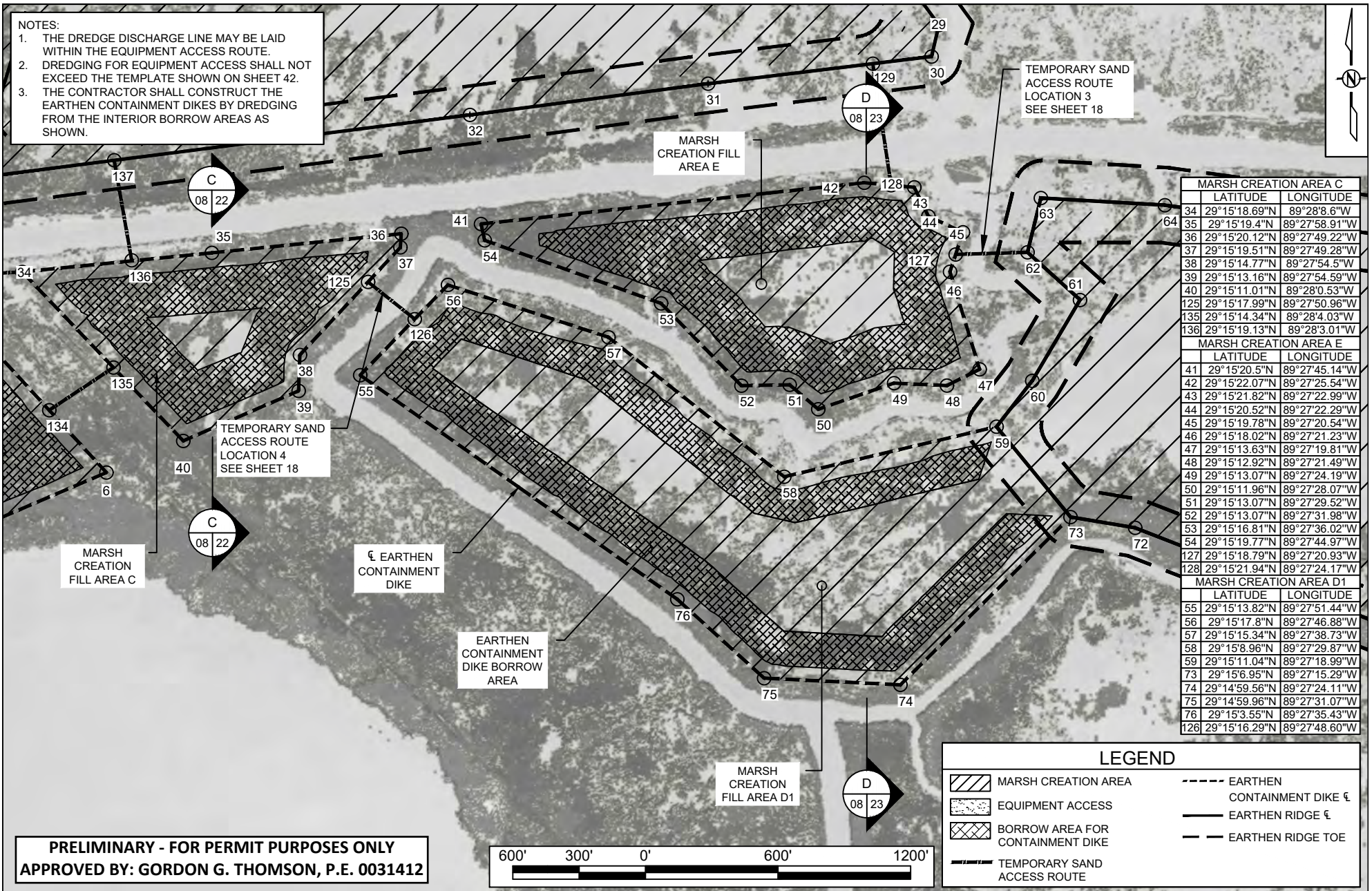
BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
 SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203
 FEDERAL PROJECT NUMBER:

MARSH CREATION AREA B LAYOUT

DATE: 2019-12-06
 SHEET 07 OF 52

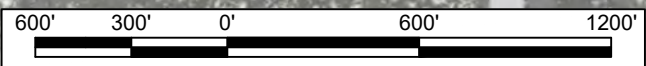
- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
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 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.



MARSH CREATION AREA C		
	LATITUDE	LONGITUDE
34	29°15'18.69"N	89°28'8.6"W
35	29°15'19.4"N	89°27'58.91"W
36	29°15'20.12"N	89°27'49.22"W
37	29°15'19.51"N	89°27'49.28"W
38	29°15'14.77"N	89°27'54.5"W
39	29°15'13.16"N	89°27'54.59"W
40	29°15'11.01"N	89°28'0.53"W
125	29°15'17.99"N	89°27'50.96"W
135	29°15'14.34"N	89°28'4.03"W
136	29°15'19.13"N	89°28'3.01"W
MARSH CREATION AREA E		
	LATITUDE	LONGITUDE
41	29°15'20.5"N	89°27'45.14"W
42	29°15'22.07"N	89°27'25.54"W
43	29°15'21.82"N	89°27'22.99"W
44	29°15'20.52"N	89°27'22.29"W
45	29°15'19.78"N	89°27'20.54"W
46	29°15'18.02"N	89°27'21.23"W
47	29°15'13.63"N	89°27'19.81"W
48	29°15'12.92"N	89°27'21.49"W
49	29°15'13.07"N	89°27'24.19"W
50	29°15'11.96"N	89°27'28.07"W
51	29°15'13.07"N	89°27'29.52"W
52	29°15'13.07"N	89°27'31.98"W
53	29°15'16.81"N	89°27'36.02"W
54	29°15'19.77"N	89°27'44.97"W
127	29°15'18.79"N	89°27'20.93"W
128	29°15'21.94"N	89°27'24.17"W
MARSH CREATION AREA D1		
	LATITUDE	LONGITUDE
55	29°15'13.82"N	89°27'51.44"W
56	29°15'17.8"N	89°27'46.88"W
57	29°15'15.34"N	89°27'38.73"W
58	29°15'8.96"N	89°27'29.87"W
59	29°15'11.04"N	89°27'18.99"W
73	29°15'6.95"N	89°27'15.29"W
74	29°14'59.56"N	89°27'24.11"W
75	29°14'59.96"N	89°27'31.07"W
76	29°15'3.55"N	89°27'35.43"W
126	29°15'16.29"N	89°27'48.60"W

LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE
	EARTHEN RIDGE
	EARTHEN RIDGE TOE
	TEMPORARY SAND ACCESS ROUTE

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

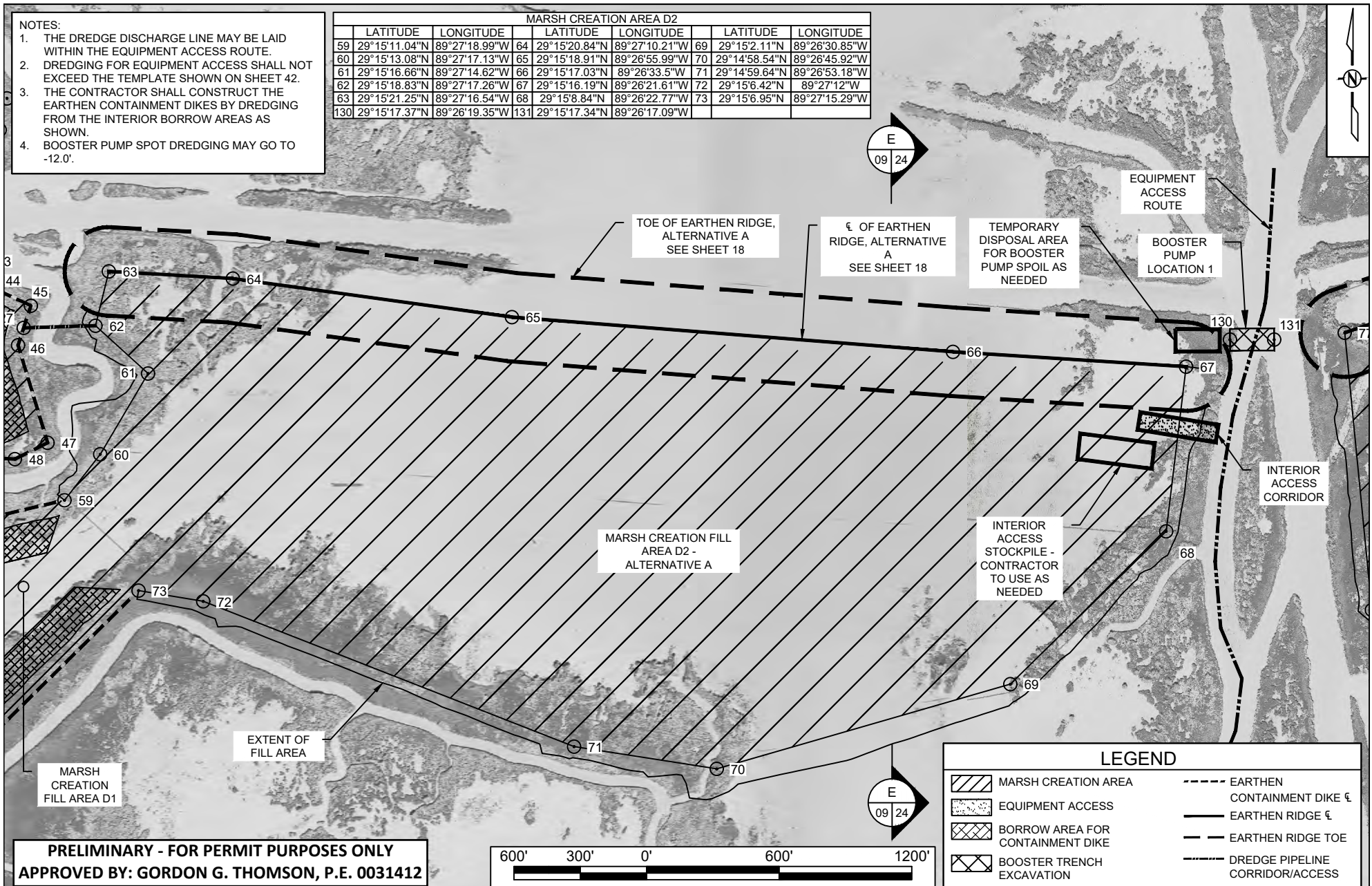


APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA C, D1 & E LAYOUT ALTERNATIVE A
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 08 OF 52

recd: March 16, 2020

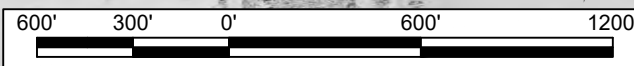
- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.
 4. BOOSTER PUMP SPOT DREDGING MAY GO TO -12.0'.

MARSH CREATION AREA D2								
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		
59	29°15'11.04"N	89°27'18.99"W	64	29°15'20.84"N	89°27'10.21"W	69	29°15'2.11"N	89°26'30.85"W
60	29°15'13.08"N	89°27'17.13"W	65	29°15'18.91"N	89°26'55.99"W	70	29°14'58.54"N	89°26'45.92"W
61	29°15'16.66"N	89°27'14.62"W	66	29°15'17.03"N	89°26'33.5"W	71	29°14'59.64"N	89°26'53.18"W
62	29°15'18.83"N	89°27'17.26"W	67	29°15'16.19"N	89°26'21.61"W	72	29°15'6.42"N	89°27'12"W
63	29°15'21.25"N	89°27'16.54"W	68	29°15'8.84"N	89°26'22.77"W	73	29°15'6.95"N	89°27'15.29"W
130	29°15'17.37"N	89°26'19.35"W	131	29°15'17.34"N	89°26'17.09"W			



LEGEND	
	MARSH CREATION AREA
	EARTHEN CONTAINMENT DIKE
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN RIDGE
	EARTHEN RIDGE TOE
	BOOSTER TRENCH EXCAVATION
	DREDGE PIPELINE CORRIDOR/ACCESS

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

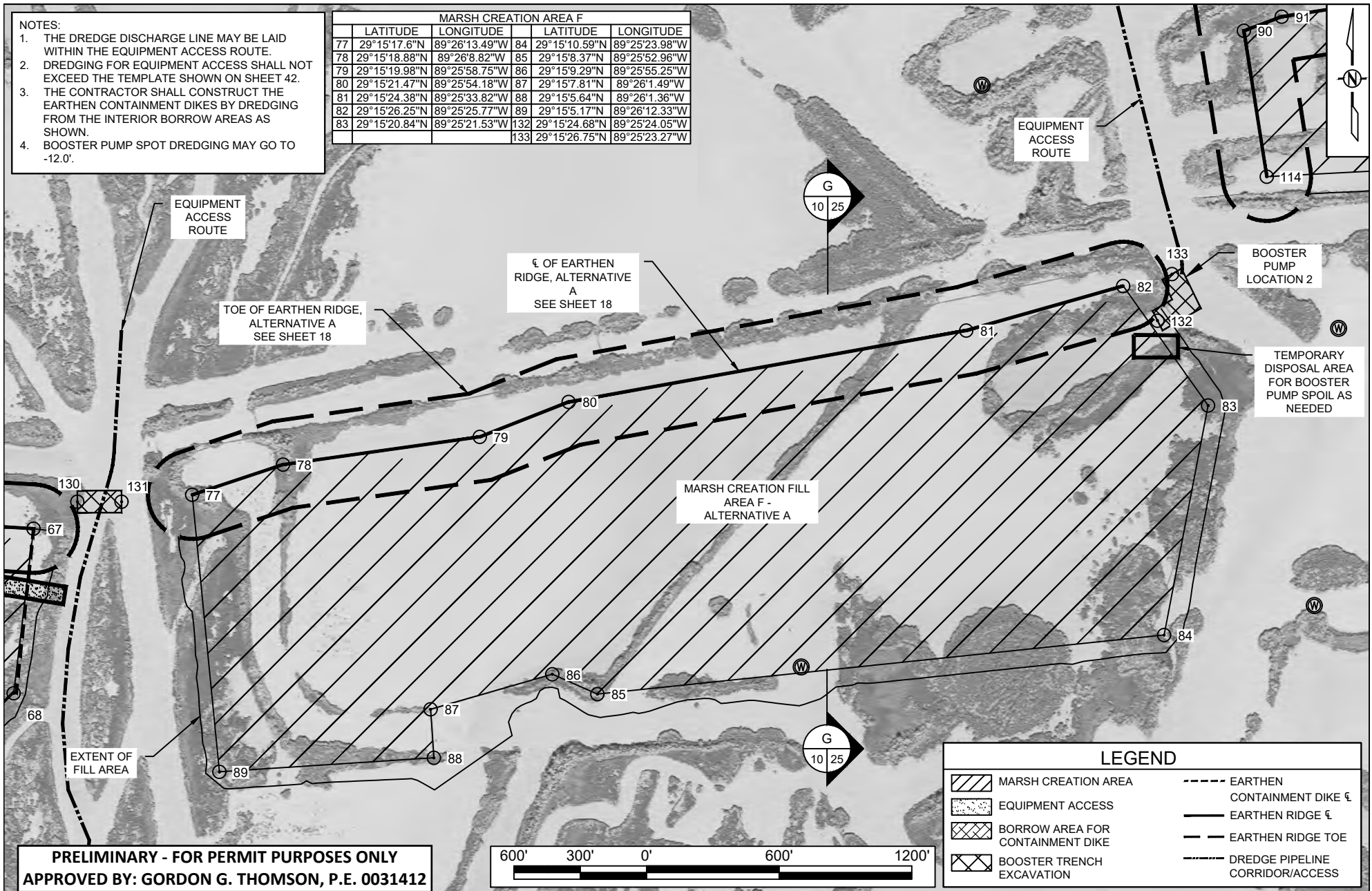


APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA D2 LAYOUT ALTERNATIVE A
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 09 OF 52

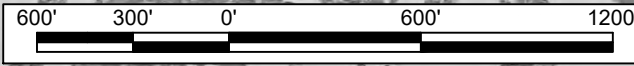
recd: March 16, 2020

- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.
 4. BOOSTER PUMP SPOT DREDGING MAY GO TO -12.0'.

MARSH CREATION AREA F					
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
77	29°15'17.6"N	89°26'13.49"W	84	29°15'10.59"N	89°25'23.98"W
78	29°15'18.88"N	89°26'8.82"W	85	29°15'8.37"N	89°25'52.96"W
79	29°15'19.98"N	89°25'58.75"W	86	29°15'9.29"N	89°25'55.25"W
80	29°15'21.47"N	89°25'54.18"W	87	29°15'7.81"N	89°26'1.49"W
81	29°15'24.38"N	89°25'33.82"W	88	29°15'5.64"N	89°26'1.36"W
82	29°15'26.25"N	89°25'25.77"W	89	29°15'5.17"N	89°26'12.33"W
83	29°15'20.84"N	89°25'21.53"W	132	29°15'24.68"N	89°25'24.05"W
			133	29°15'26.75"N	89°25'23.27"W



PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	BOOSTER TRENCH EXCAVATION
	EARTHEN CONTAINMENT DIKE ϵ
	EARTHEN RIDGE ϵ
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS

APPLICATION BY:
Baird.
 Innovation Engineered.

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

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
 SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203

MARSH CREATION AREA F LAYOUT
 ALTERNATIVE A

DATE: 2019-12-06

DRAWN BY: SNL

DESIGNED BY: BJH, P.E.

APPROVED BY: GGT, P.E.

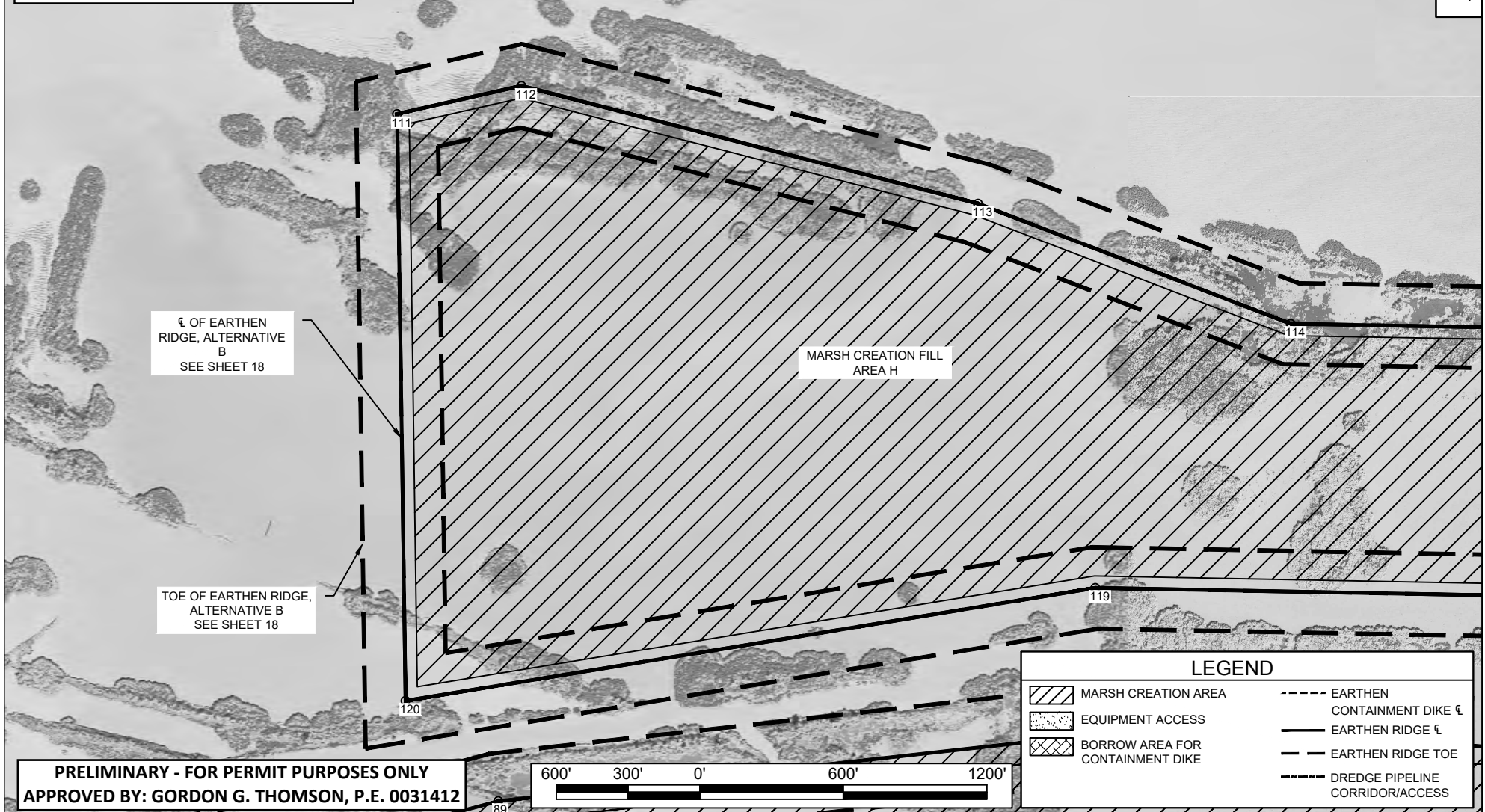
FEDERAL PROJECT NUMBER:

SHEET 10 OF 52

NOTES:

1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.

MARSH CREATION AREA H RIDGE CENTERLINE					
	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE
115	29°16'10.09"N	89°24'58.57"W	118	29°16'0.79"N	89°24'16.57"W
116	29°16'11.17"N	89°24'52.68"W	123	29°15'50"N	89°24'26"W
117	29°16'5.98"N	89°24'31.23"W	124	29°15'45.81"N	89°24'58.63"W



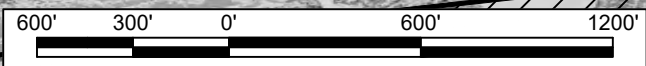
¢ OF EARTHEN RIDGE, ALTERNATIVE B
SEE SHEET 18

TOE OF EARTHEN RIDGE, ALTERNATIVE B
SEE SHEET 18

MARSH CREATION FILL AREA H

LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE ¢
	EARTHEN RIDGE ¢
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA H LAYOUT (1 OF 2)
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 11 OF 52

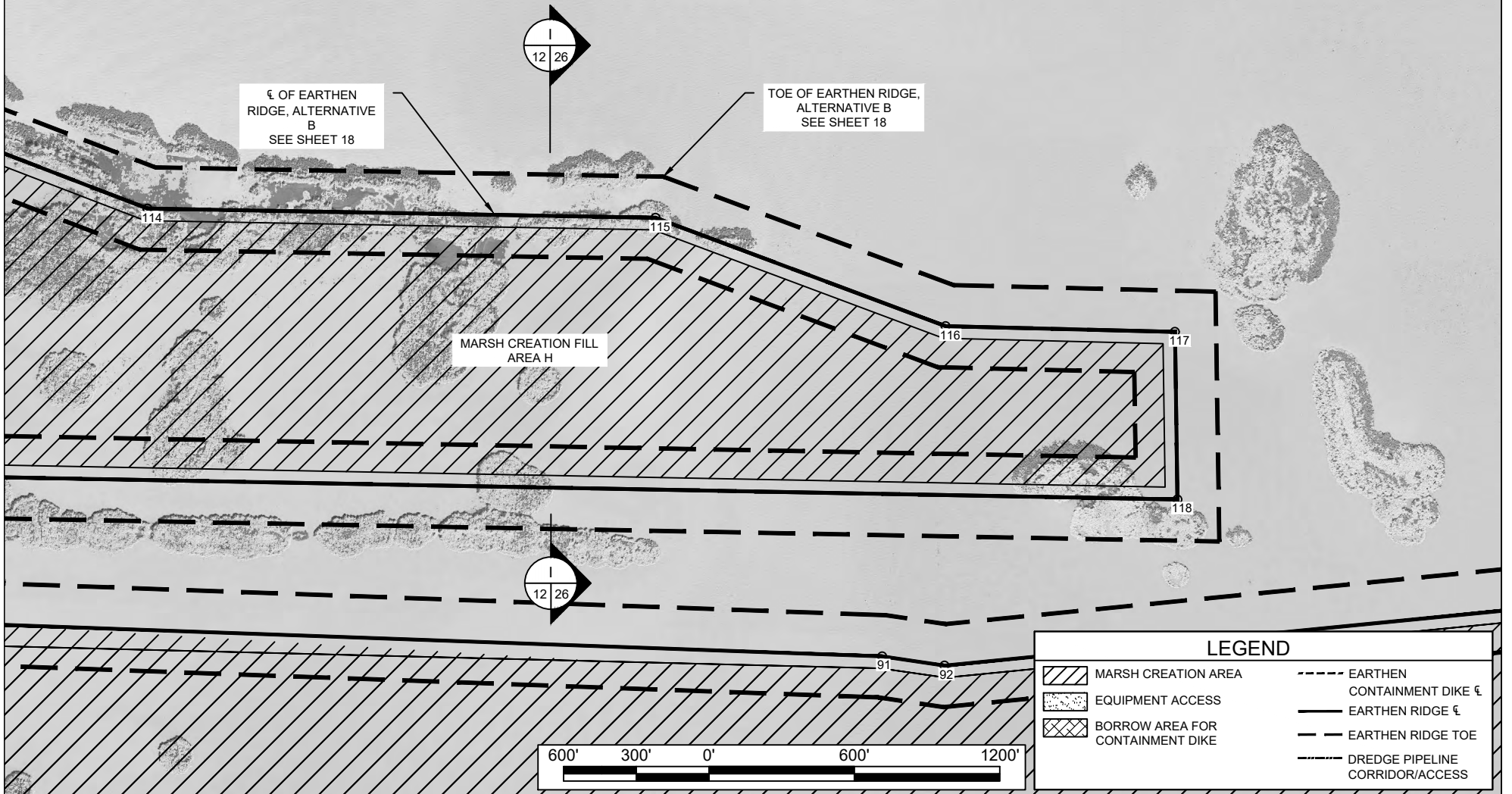
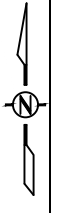
recd: March 16, 2020

NOTES:

1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.

MARSH CREATION AREA H RIDGE CENTERLINE					
	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE
118	29°16'0.79"N	89°24'16.57"W	121	29°15'55.05"N	89°23'28.82"W
119	29°16'0.07"N	89°23'52.92"W	122	29°15'48.2"N	89°23'28.84"W
120	29°15'55.44"N	89°23'39.5"W			

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE ϵ
	EARTHEN RIDGE ϵ
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS

APPLICATION BY:
Baird.
 Innovation Engineered.

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

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
 SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203

MARSH CREATION AREA H LAYOUT
 (2 OF 2)

DATE: 2019-12-06

DRAWN BY: SNL

DESIGNED BY: BJH, P.E.

APPROVED BY: GGT, P.E.

FEDERAL PROJECT NUMBER:

SHEET 12 OF 52

- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.

MARSH CREATION AREA G RIDGE CENTERLINE					
	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE
90	29°15'37.6"N	89°25'19.39"W	94	29°15'43.99"N	89°24'25.51"W
91	29°15'38.2"N	89°25'17.45"W	113	29°15'32.4"N	89°24'35.83"W
92	29°15'40.32"N	89°25'0.13"W	114	29°15'31.04"N	89°25'18.34"W
93	29°15'41.6"N	89°24'54.33"W			

MARSH CREATION FILL AREA H








☐ OF EARTHEN RIDGE, ALTERNATIVE A
SEE SHEET 18

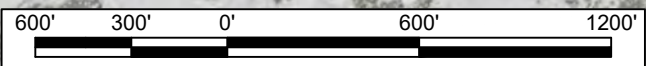
MARSH CREATION FILL AREA G - ALTERNATIVE A

EXTENT OF FILL AREA

TOE OF EARTHEN RIDGE, ALTERNATIVE A
SEE SHEET 18

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE ☐
	EARTHEN RIDGE ☐
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS



APPLICATION BY:
Baird.
Innovation Engineered.

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

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203

MARSH CREATION AREA G LAYOUT ALTERNATIVE A (1 OF 4)

DATE: 2019-12-06

SHEET 13 OF 52

DRAWN BY: SNL

DESIGNED BY: BJH, P.E.

APPROVED BY: GGT, P.E.

FEDERAL PROJECT NUMBER:

- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.

MARSH CREATION AREA G RIDGE CENTERLINE		
	LATITUDE	LONGITUDE
95	29°15'42"N	89°23'42.71"W
96	29°15'41.58"N	89°23'39.81"W
111	29°15'23.73"N	89°23'44.58"W
112	29°15'24.71"N	89°23'55.11"W

MARSH CREATION FILL AREA H

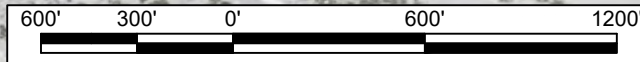
☐ OF EARTHEN RIDGE, ALTERNATIVE A
SEE SHEET 18

TOE OF EARTHEN RIDGE, ALTERNATIVE A
SEE SHEET 18

MARSH CREATION FILL AREA G - ALTERNATIVE A

EXTENT OF FILL AREA

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE ☐
	EARTHEN RIDGE ☐
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS

APPLICATION BY:
Baird.
Innovation Engineered.

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

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203

FEDERAL PROJECT NUMBER:

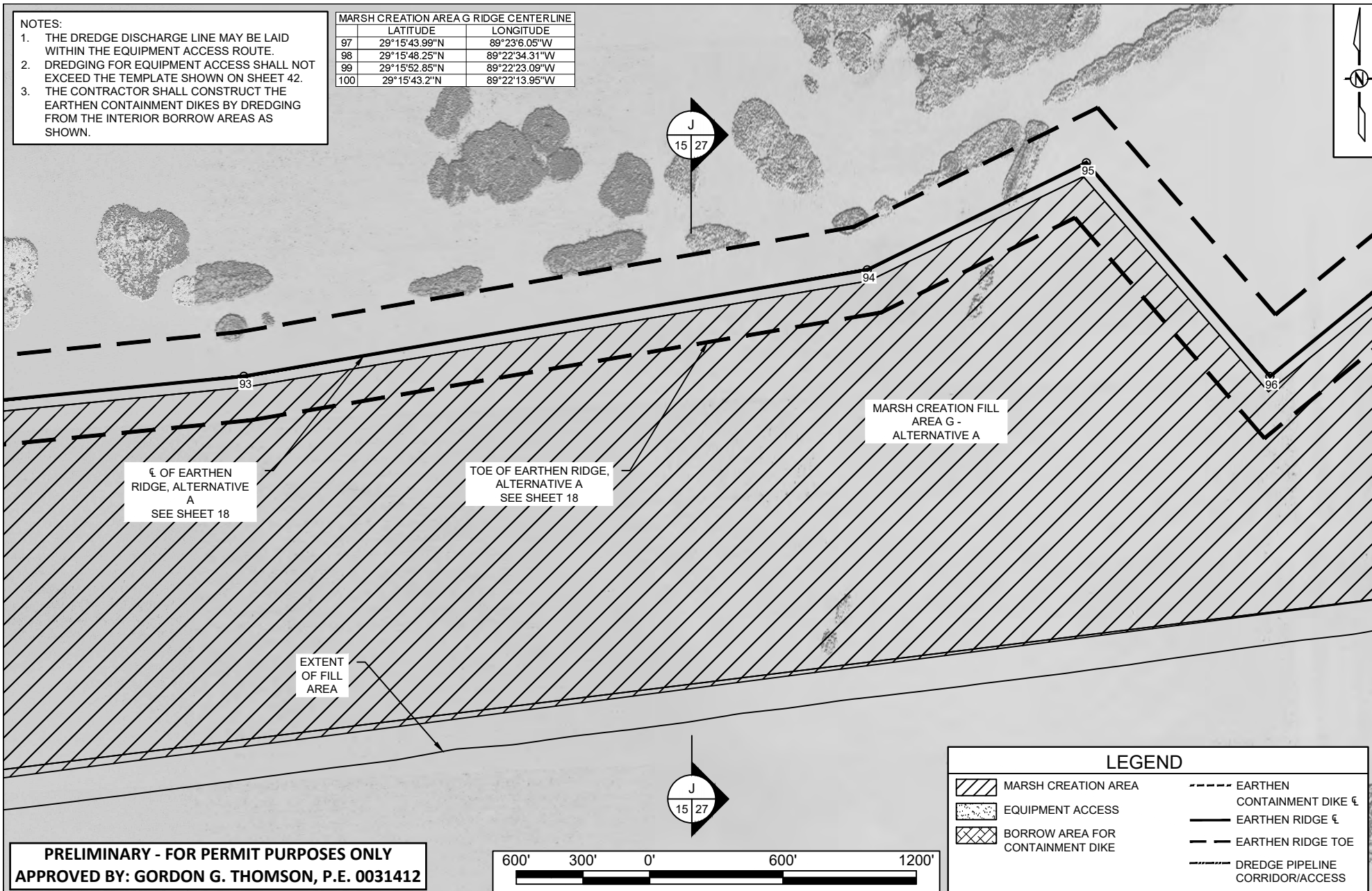
MARSH CREATION AREA G LAYOUT ALTERNATIVE A (2 OF 4)

DATE: 2019-12-06

SHEET 14 OF 52

- NOTES:
1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
 2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
 3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.

MARSH CREATION AREA G RIDGE CENTERLINE		
	LATITUDE	LONGITUDE
97	29°15'43.99"N	89°23'6.05"W
98	29°15'48.25"N	89°22'34.31"W
99	29°15'52.85"N	89°22'23.09"W
100	29°15'43.2"N	89°22'13.95"W



☿ OF EARTHEN RIDGE, ALTERNATIVE A
SEE SHEET 18

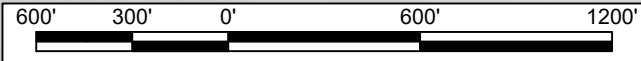
TOE OF EARTHEN RIDGE, ALTERNATIVE A
SEE SHEET 18

MARSH CREATION FILL AREA G - ALTERNATIVE A

EXTENT OF FILL AREA

LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE ☿
	EARTHEN RIDGE ☿
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



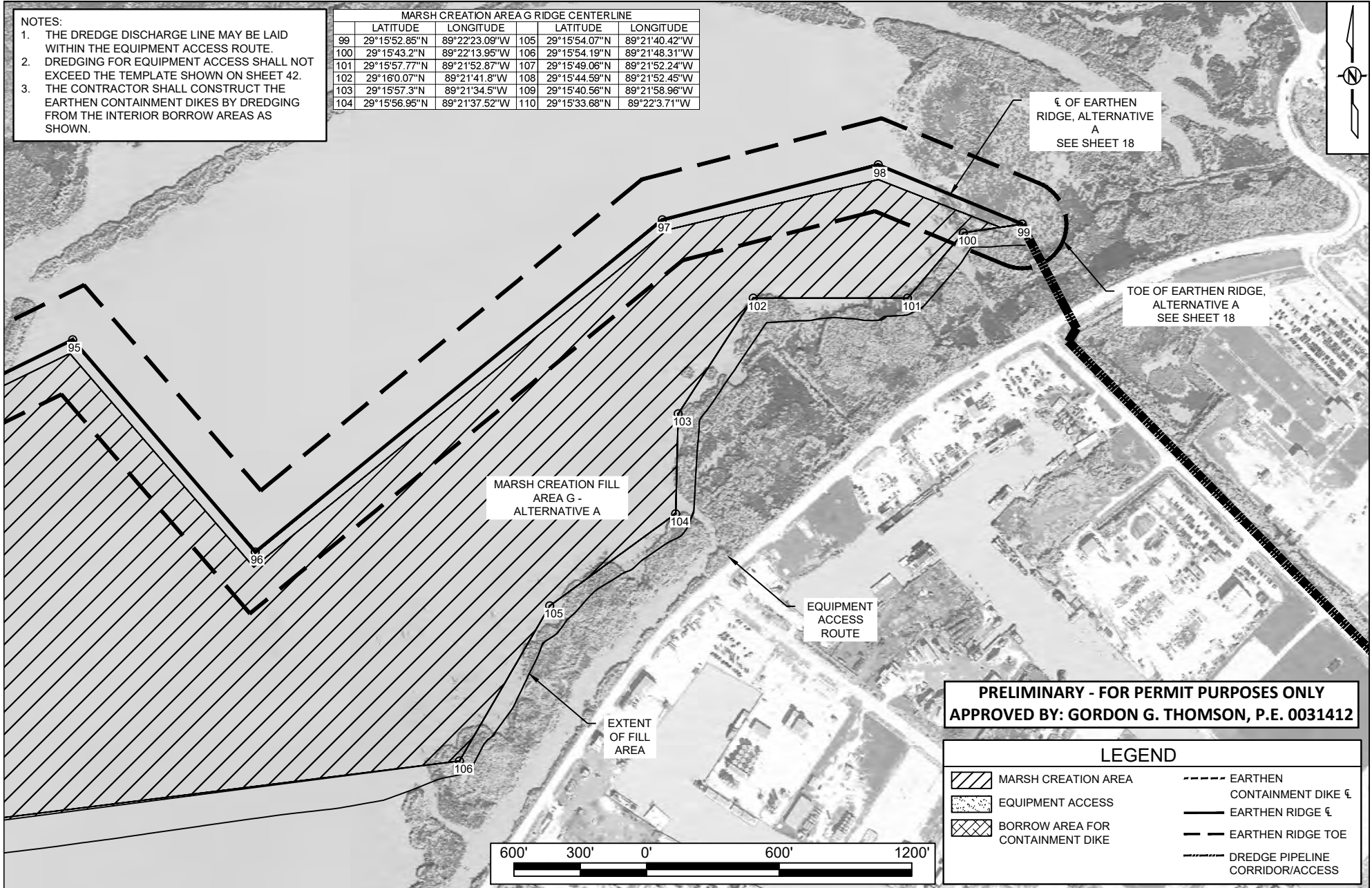
APPLICATION BY: Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA G LAYOUT ALTERNATIVE A (3 OF 4)
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 15 OF 52

recd: March 16, 2020

NOTES:

1. THE DREDGE DISCHARGE LINE MAY BE LAID WITHIN THE EQUIPMENT ACCESS ROUTE.
2. DREDGING FOR EQUIPMENT ACCESS SHALL NOT EXCEED THE TEMPLATE SHOWN ON SHEET 42.
3. THE CONTRACTOR SHALL CONSTRUCT THE EARTHEN CONTAINMENT DIKES BY DREDGING FROM THE INTERIOR BORROW AREAS AS SHOWN.

MARSH CREATION AREA G RIDGE CENTERLINE					
	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE
99	29°15'52.85"N	89°22'23.09"W	105	29°15'54.07"N	89°21'40.42"W
100	29°15'43.2"N	89°22'13.95"W	106	29°15'54.19"N	89°21'48.31"W
101	29°15'57.77"N	89°21'52.87"W	107	29°15'49.06"N	89°21'52.24"W
102	29°16'0.07"N	89°21'41.8"W	108	29°15'44.59"N	89°21'52.45"W
103	29°15'57.3"N	89°21'34.5"W	109	29°15'40.56"N	89°21'58.96"W
104	29°15'56.95"N	89°21'37.52"W	110	29°15'33.68"N	89°22'3.71"W



PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

LEGEND	
	MARSH CREATION AREA
	EQUIPMENT ACCESS
	BORROW AREA FOR CONTAINMENT DIKE
	EARTHEN CONTAINMENT DIKE ξ
	EARTHEN RIDGE ξ
	EARTHEN RIDGE TOE
	DREDGE PIPELINE CORRIDOR/ACCESS

APPLICATION BY:
Baird.
 Innovation Engineered.

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

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
 SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203

MARSH CREATION AREA G LAYOUT
 ALTERNATIVE A
 (4 OF 4)

DATE: 2019-12-06

DRAWN BY: SNL

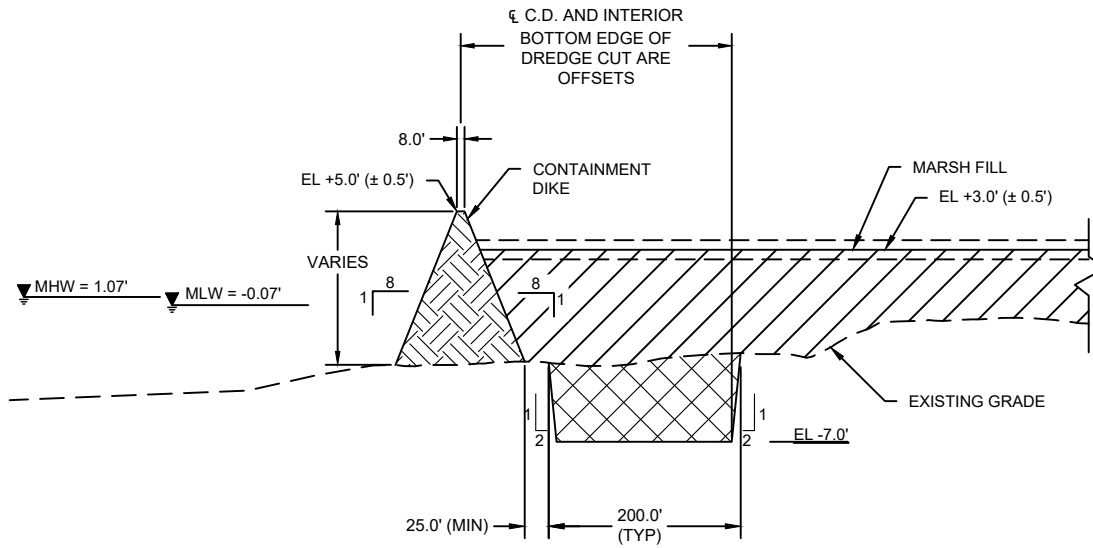
DESIGNED BY: BJH, P.E.

APPROVED BY: GGT, P.E.

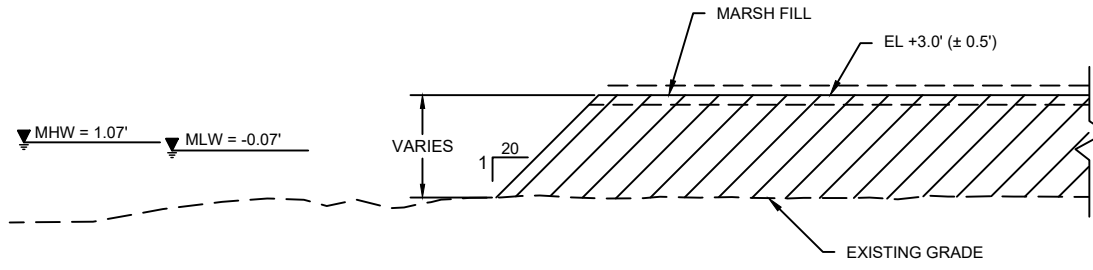
FEDERAL PROJECT NUMBER:

SHEET 16 OF 52

- NOTES:
1. CONTAINMENT DIKES SHALL BE CONSTRUCTED USING IN-SITU MATERIAL. SEE SHEETS 06, 08, & ## FOR EARTHEN CONTAINMENT DIKE LOCATIONS.
 2. NO DREDGING WILL BE ALLOWED WITHIN 20' OF THE CONTAINMENT DIKE TO EARTHEN CONTAINMENT DIKE BORROW AREA.
 3. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) GEOID 12B, U.S. SURVEY FEET.

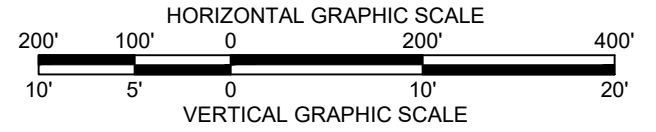


1
17 TYPICAL SECTION
CONTAINMENT DIKE AND INTERIOR BORROW



2
17 TYPICAL SECTION
SAND SLOPE

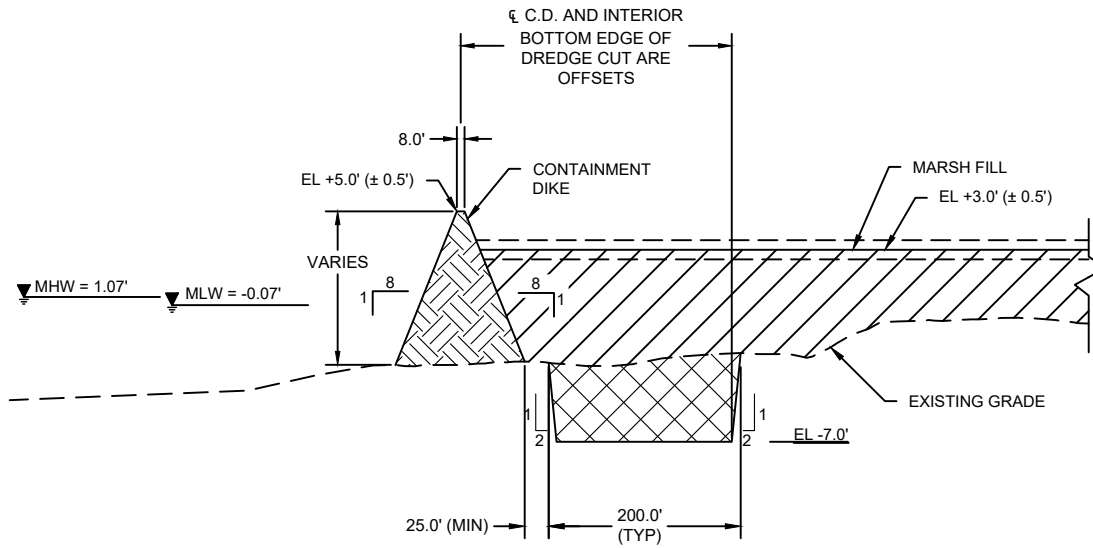
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



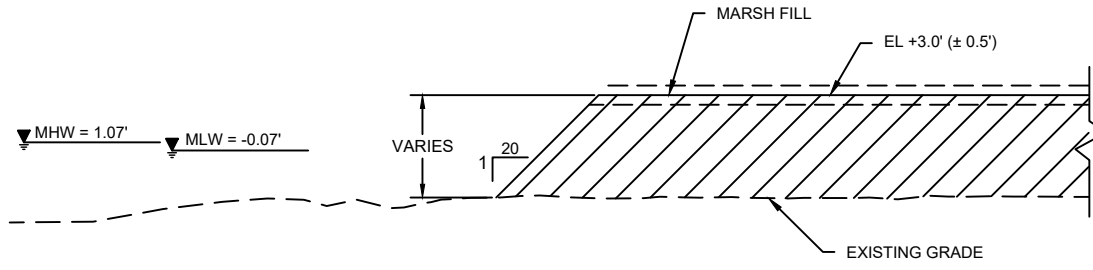
APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	EARTHEN CONTAINMENT DIKE & SAND SLOPE DETAILS
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 17 OF 52

recd: March 16, 2020

- NOTES:
1. CONTAINMENT DIKES SHALL BE CONSTRUCTED USING IN-SITU MATERIAL. SEE SHEETS 06, 08, & ## FOR EARTHEN CONTAINMENT DIKE LOCATIONS.
 2. NO DREDGING WILL BE ALLOWED WITHIN 20' OF THE CONTAINMENT DIKE TO EARTHEN CONTAINMENT DIKE BORROW AREA.
 3. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) GEOID 12B, U.S. SURVEY FEET.

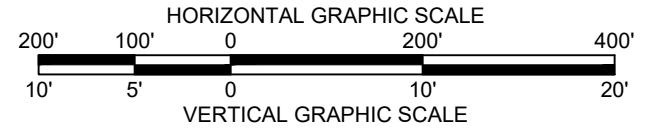


1
17 TYPICAL SECTION
CONTAINMENT DIKE AND INTERIOR BORROW



2
17 TYPICAL SECTION
SAND SLOPE

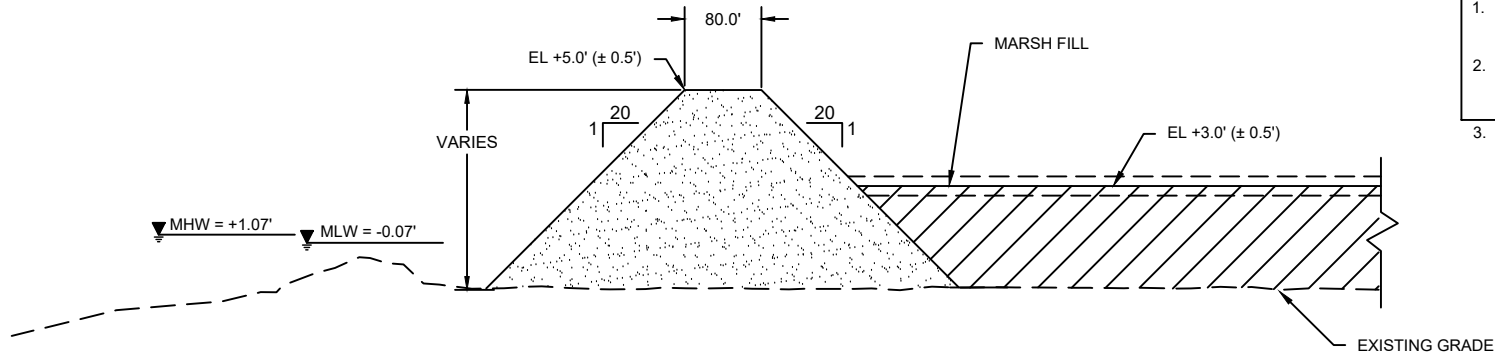
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



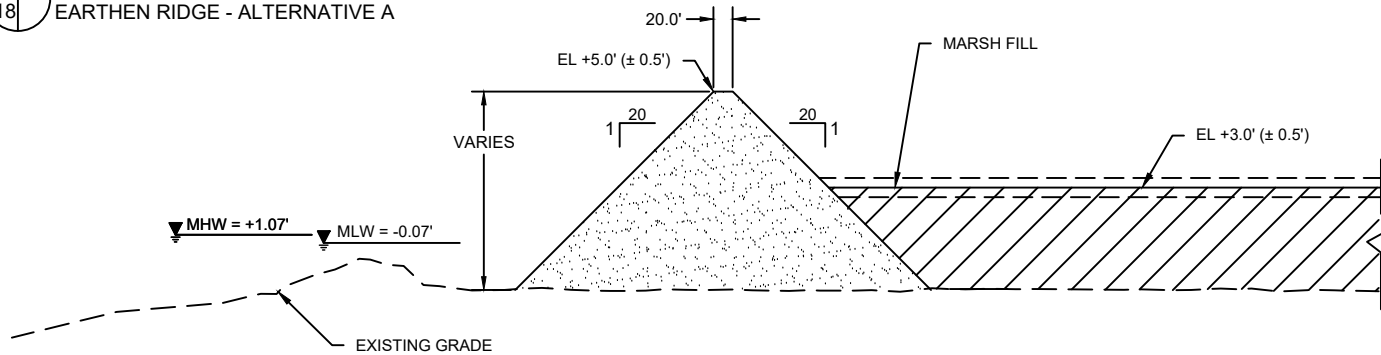
APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	EARTHEN CONTAINMENT DIKE & SAND SLOPE DETAILS
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 17 OF 52

recd: March 16, 2020

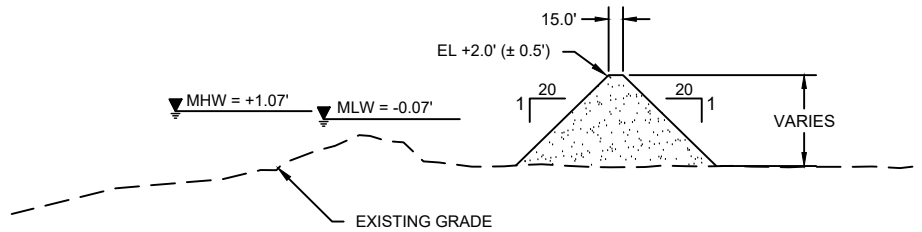
- NOTES:
1. EARTHEN RIDGES SHALL BE CONSTRUCTED USING IN-SITU MATERIAL. SEE SHEETS 07 THRU 16 FOR EARTHEN RIDGE LOCATIONS.
 2. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) GEOID 12B, U.S. SURVEY FEET.
 3. ALL TEMPORARY SAND ACCESS ROUTES WILL BE RETURNED TO PRE-CONSTRUCTION CONDITIONS BEFORE DEMOBILIZATION



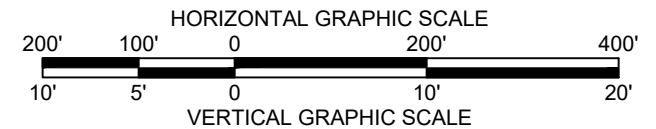
1
18 TYPICAL SECTION
EARTHEN RIDGE - ALTERNATIVE A



2
18 TYPICAL SECTION
EARTHEN RIDGE - ALTERNATIVE B

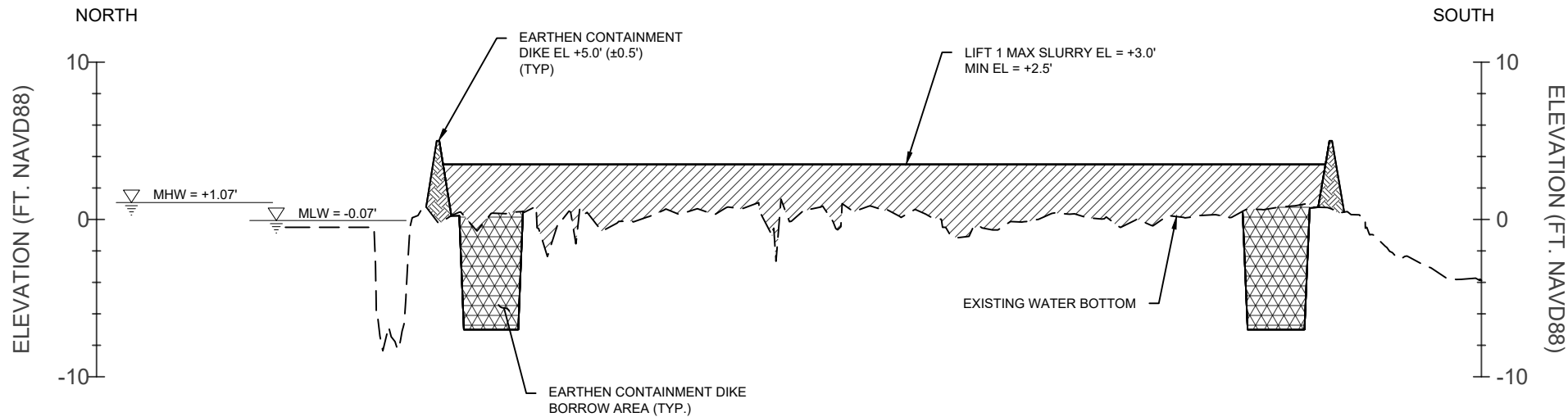


3
18 TYPICAL SECTION
TEMPORARY SAND ACCESS ROUTE

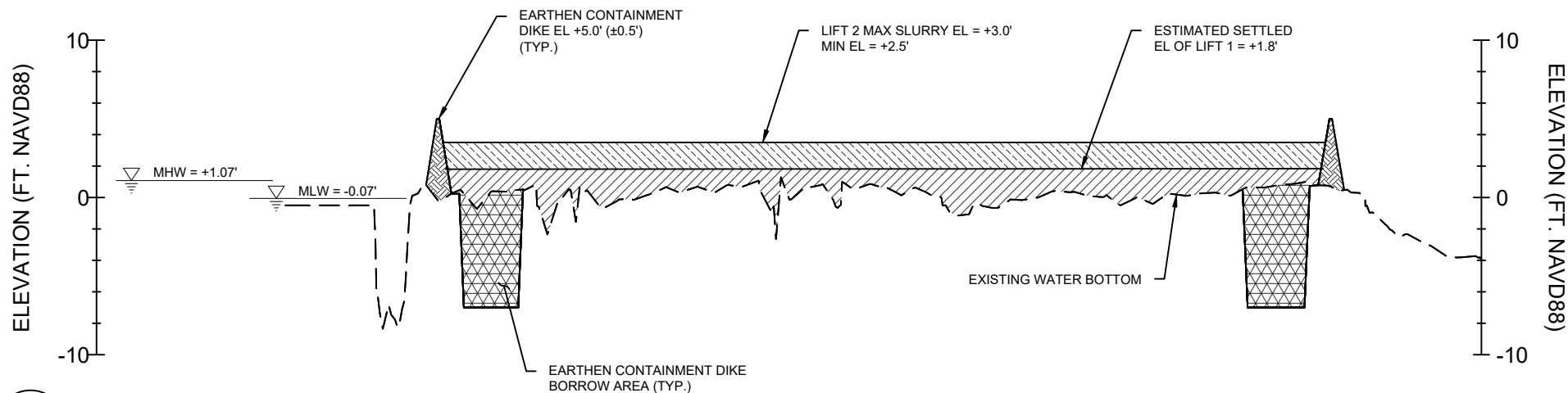


APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	EARTHEN RIDGE & TEMPORARY SAND ACCESS ROUTE DETAILS
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 18 OF 52

recd: March 16, 2020

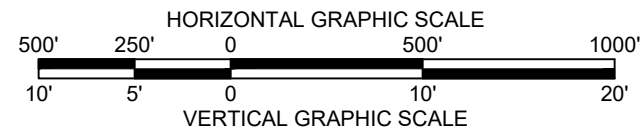



A-A
19/06 TYPICAL SECTION - LIFT 1
MARSH CREATION AREA A



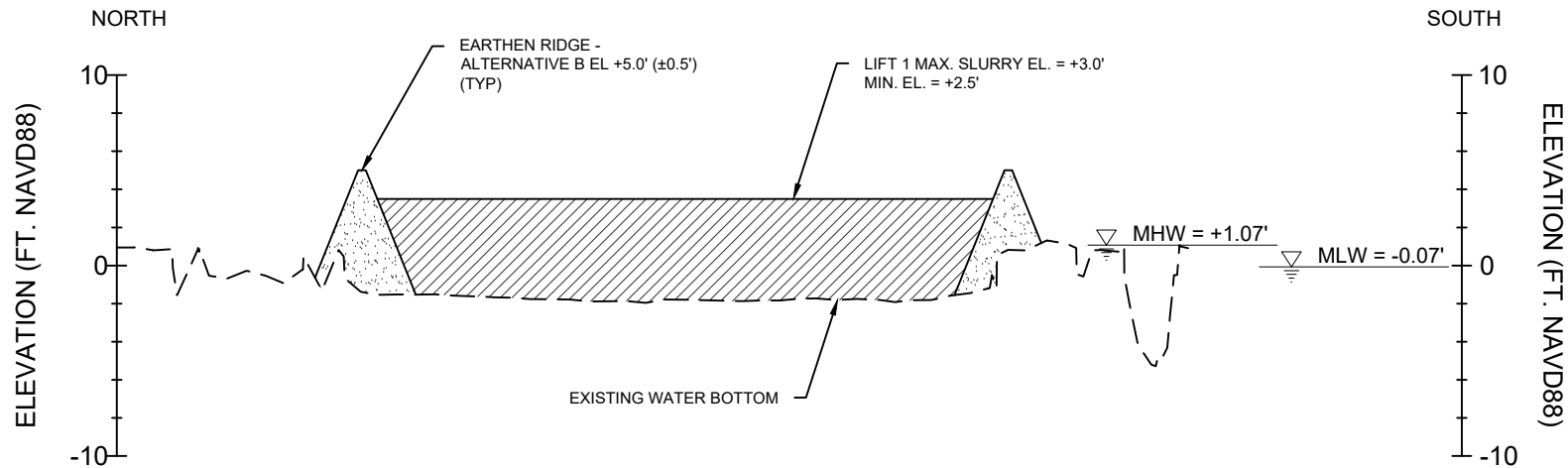
A-A
19/06 TYPICAL SECTION - LIFT 2
MARSH CREATION AREA A

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

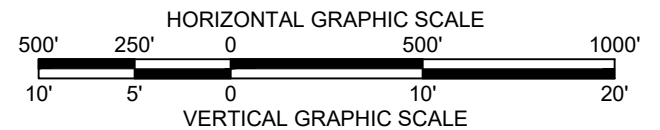


APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA A TYPICAL SECTION A-A
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 19 OF 52


recd: March 16, 2020



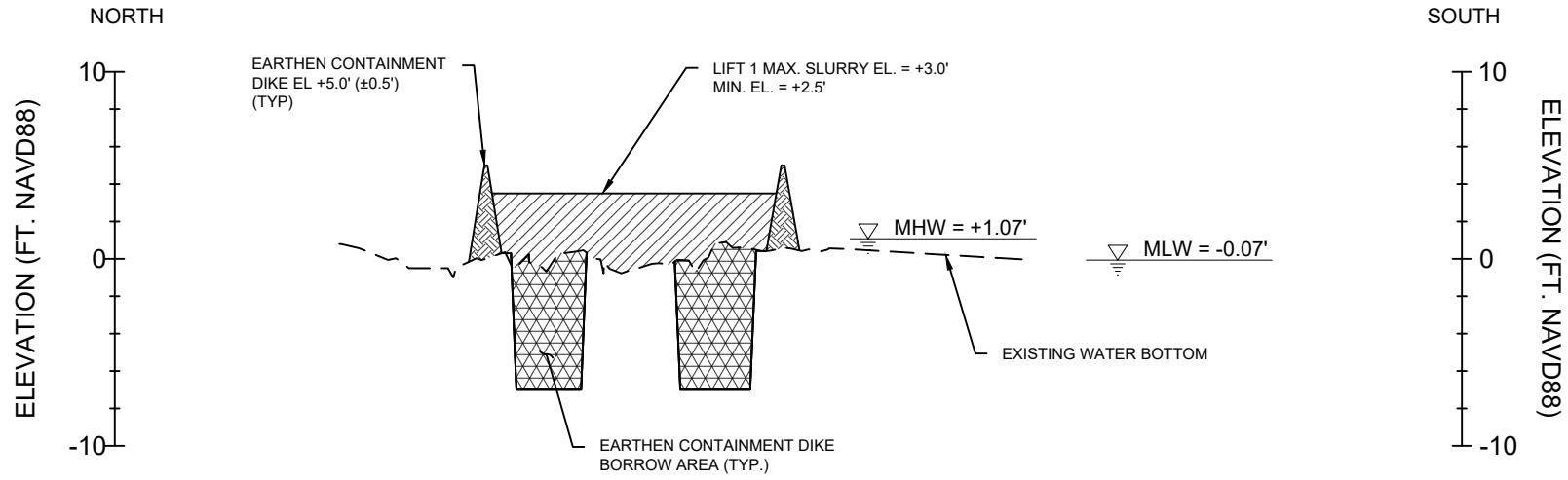
B-B
 21|07 TYPICAL SECTION - LIFT 1
 MARSH CREATION AREA B



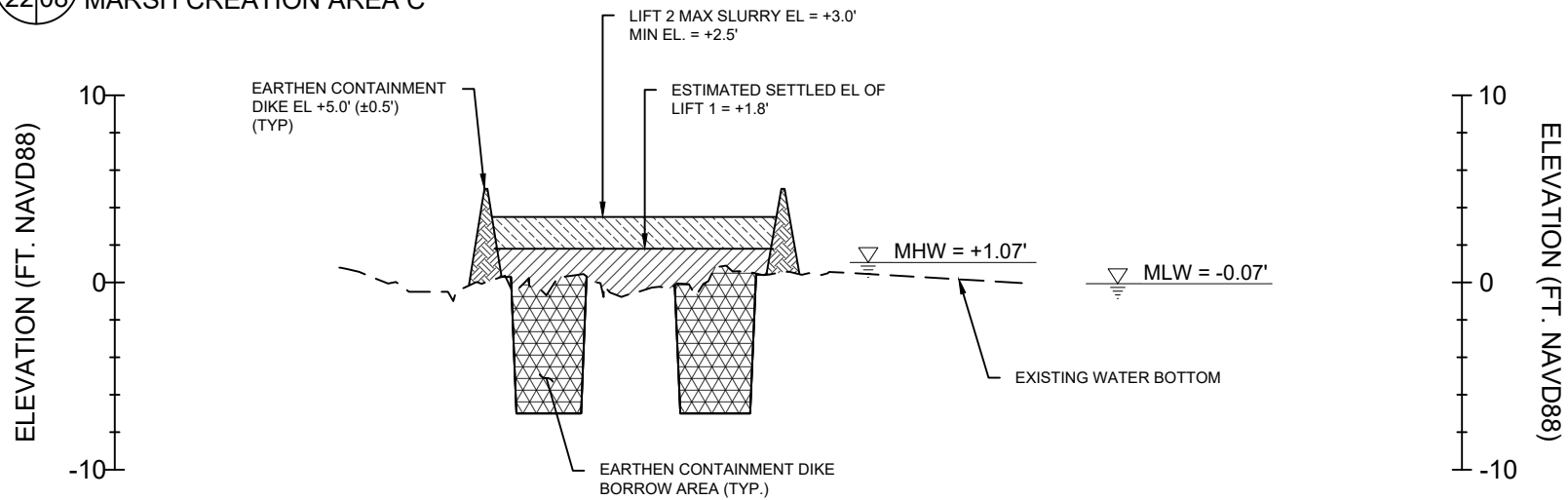
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA B TYPICAL SECTION B-B
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 21 OF 52

recd: March 16, 2020

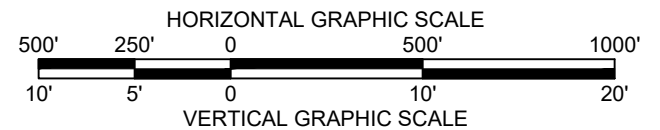



C-C
22/08 TYPICAL SECTION - LIFT 1
MARSH CREATION AREA C

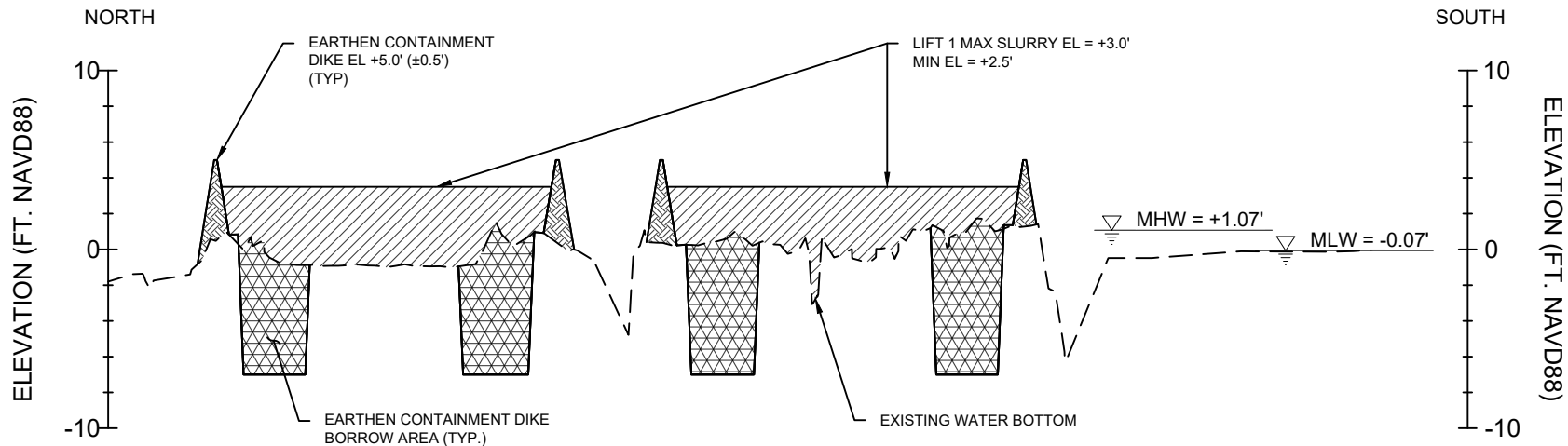


C-C
22/08 TYPICAL SECTION - LIFT 2
MARSH CREATION AREA C

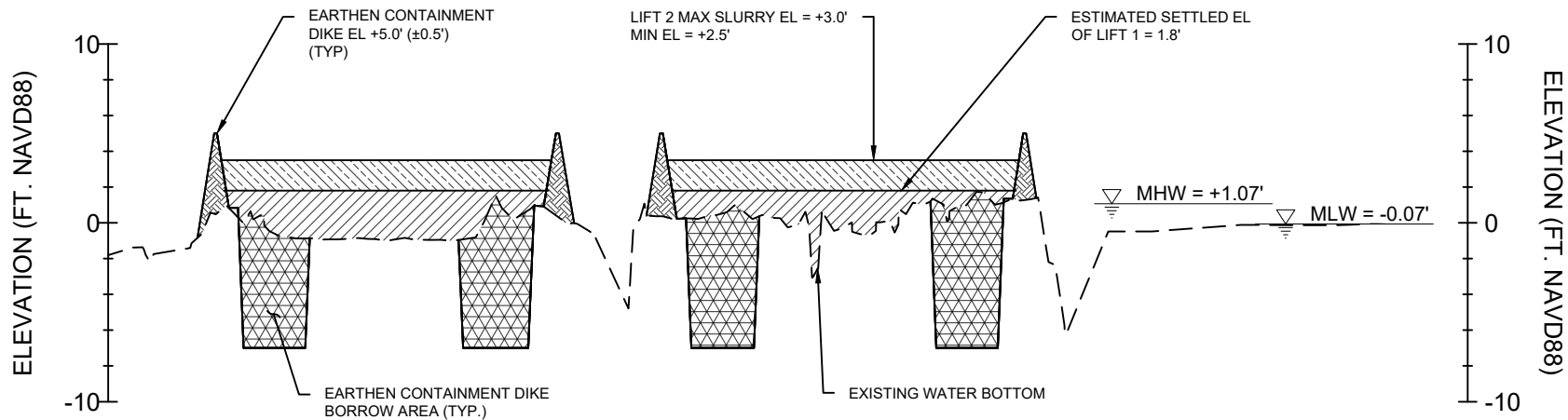
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



APPLICATION BY:  Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA C TYPICAL SECTION C-C
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 22 OF 52

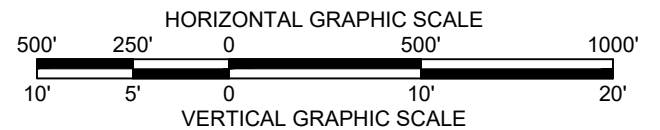


D-D' TYPICAL SECTION - LIFT 1
2308 MARSH CREATION AREA E & D1



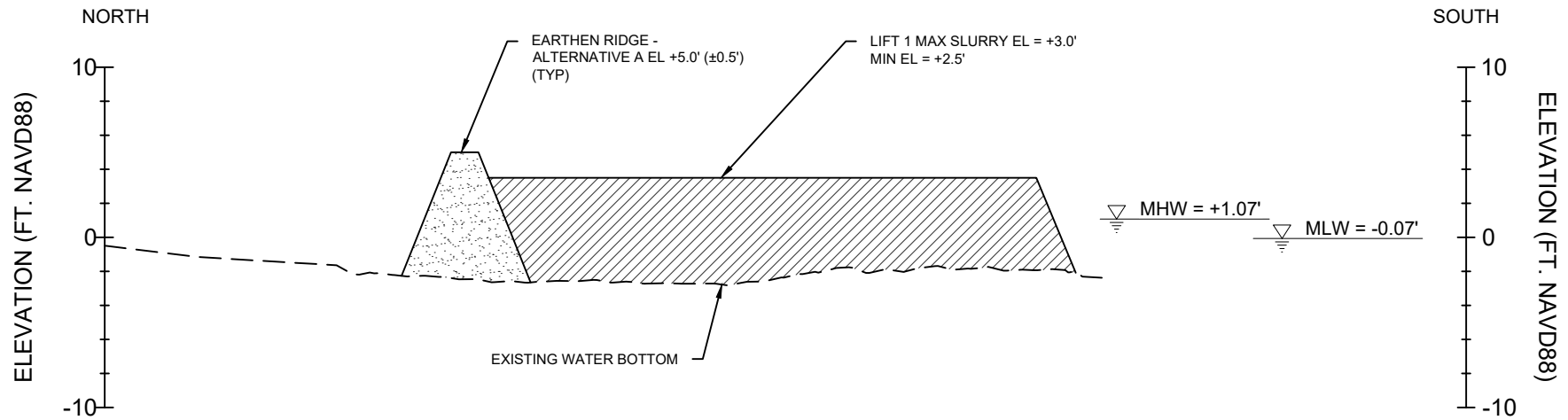
D-D' TYPICAL SECTION - LIFT 2
2308 MARSH CREATION AREA E & D1

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

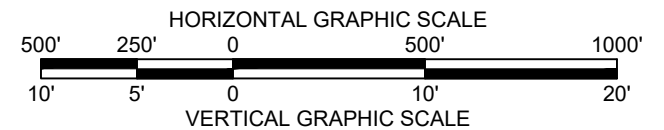


APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA E & D1 TYPICAL SECTION D-D
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 23 OF 52


recd: March 16, 2020

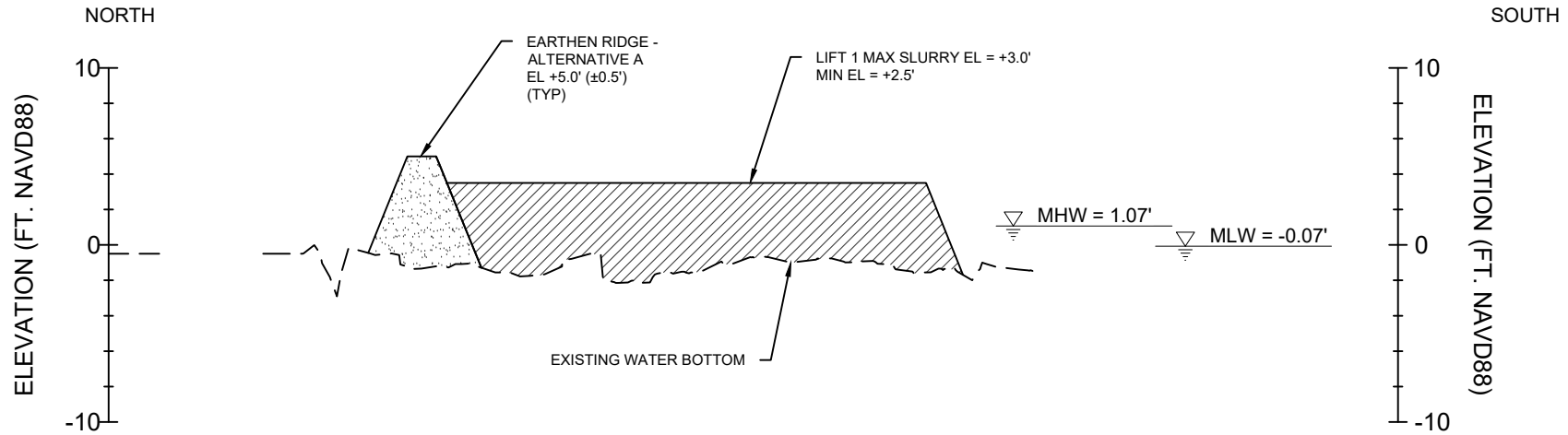


E-E
 24/09 TYPICAL SECTION - ALTERNATIVE A
 MARSH CREATION AREA D2

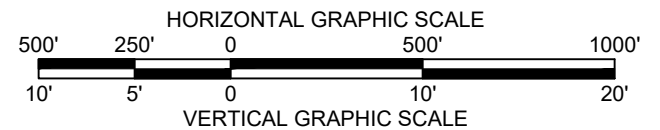


PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA D2 TYPICAL SECTION E-E
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 24 OF 52

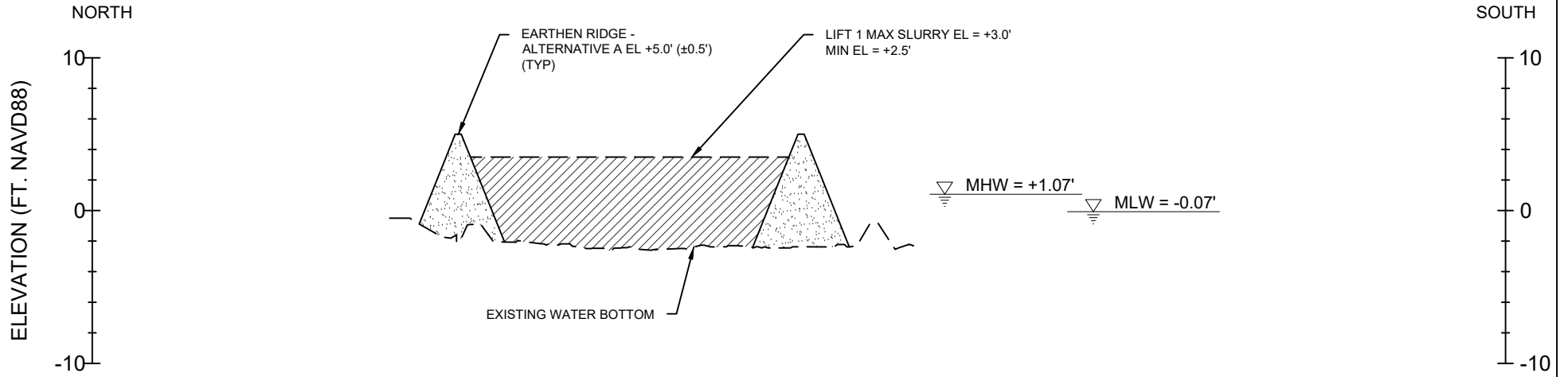


G-G
25/10 TYPICAL SECTION - ALTERNATIVE A
 MARSH CREATION AREA F

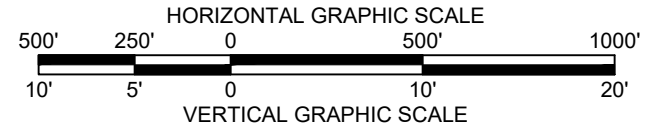


PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA F TYPICAL SECTION G-G
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 25 OF 52

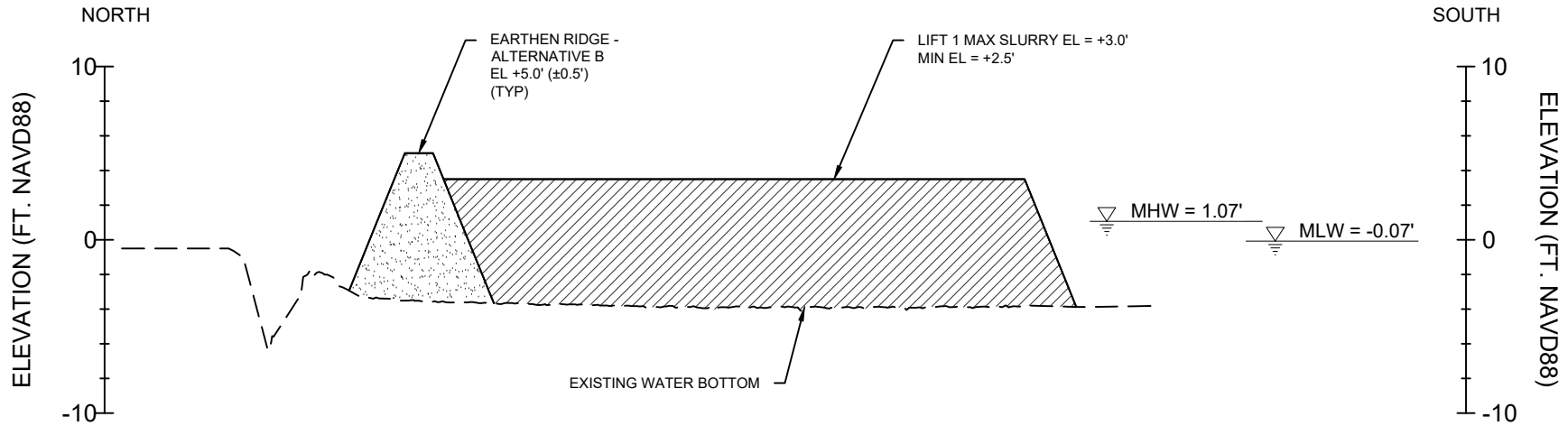


I-I
 26/12
 TYPICAL SECTION - ALTERNATIVE A
 MARSH CREATION AREA H

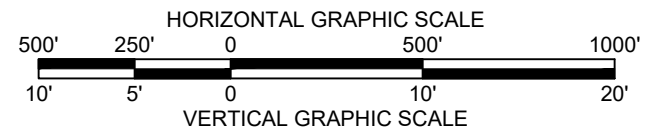


PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412


APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA H TYPICAL SECTION I-I
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 26 OF 52



J-J
27## TYPICAL SECTION - ALTERNATIVE A
MARSH CREATION AREA G



PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	MARSH CREATION AREA G TYPICAL SECTION J-J
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 27 OF 52

WEST BORROW AREA

PT.	LATITUDE	LONGITUDE
1	29° 13' 20.36" N	089° 33' 44.11" W
2	29° 13' 20.02" N	089° 33' 18.78" W
3	29° 13' 19.91" N	089° 33' 10.96" W
4	29° 13' 09.94" N	089° 33' 11.14" W
5	29° 13' 09.89" N	089° 33' 07.37" W
6	29° 13' 02.43" N	089° 33' 07.51" W
7	29° 12' 56.52" N	089° 33' 07.62" W
8	29° 12' 56.69" N	089° 33' 19.65" W
9	29° 12' 56.73" N	089° 33' 22.29" W
10	29° 12' 59.11" N	089° 33' 25.59" W
11	29° 12' 59.21" N	089° 33' 32.02" W
12	29° 12' 57.11" N	089° 33' 32.06" W
13	29° 12' 57.28" N	089° 33' 44.49" W
14	29° 13' 10.28" N	089° 33' 34.61" W
15	29° 13' 10.06" N	089° 33' 18.96" W
16	29° 13' 09.99" N	089° 33' 14.74" W
17	29° 13' 02.53" N	089° 33' 14.88" W
18	29° 13' 01.05" N	089° 33' 19.56" W
19	29° 13' 03.70" N	089° 33' 31.92" W
20	29° 13' 03.74" N	089° 33' 34.74" W

EAST BORROW AREA

PT.	LATITUDE	LONGITUDE
21	29° 13' 37.18" N	089° 32' 26.61" W
22	29° 13' 20.75" N	089° 31' 39.94" W
23	29° 13' 11.19" N	089° 31' 43.47" W
24	29° 13' 11.95" N	089° 31' 59.80" W
25	29° 13' 20.61" N	089° 31' 59.65" W
26	29° 13' 20.71" N	089° 32' 07.19" W
27	29° 13' 14.38" N	089° 32' 07.30" W
28	29° 13' 14.40" N	089° 32' 08.98" W
29	29° 13' 14.66" N	089° 32' 27.70" W
30	29° 13' 18.30" N	089° 32' 32.55" W
31	29° 13' 22.59" N	089° 32' 32.47" W
32	29° 13' 28.65" N	089° 32' 32.36" W
33	29° 13' 21.93" N	089° 32' 08.79" W

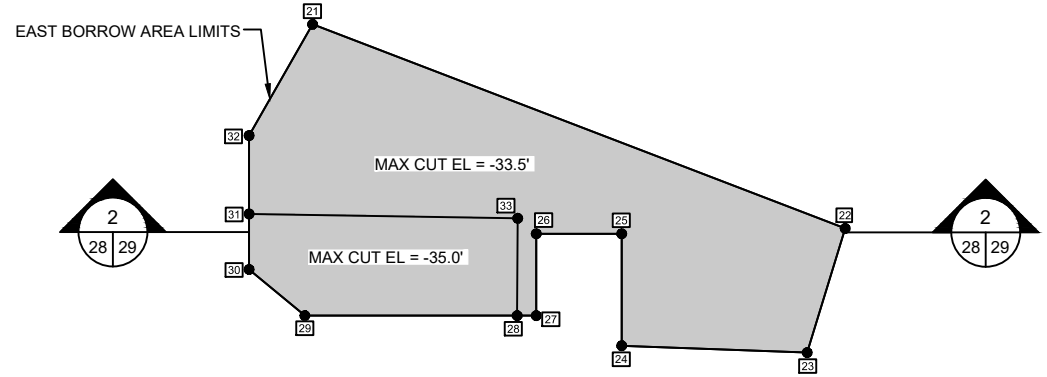
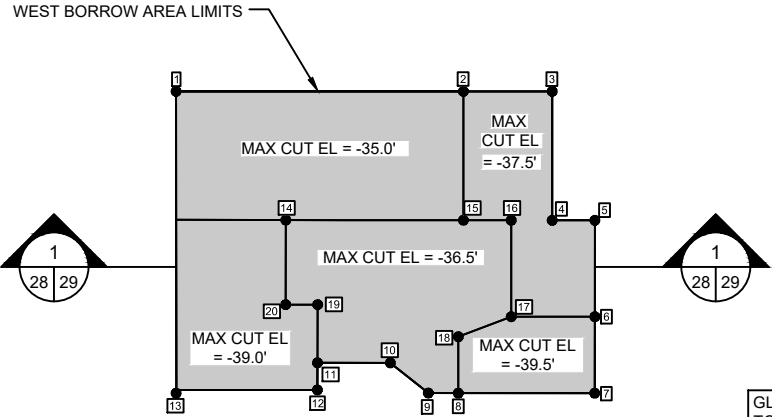
LEGEND

- BORROW AREA
- BORROW AREA NODE
- BATHYMETRIC CONTOUR



GULF OF MEXICO

GLE BORROW AREA
TOTAL VOLUME = 4,770,000 C.Y.



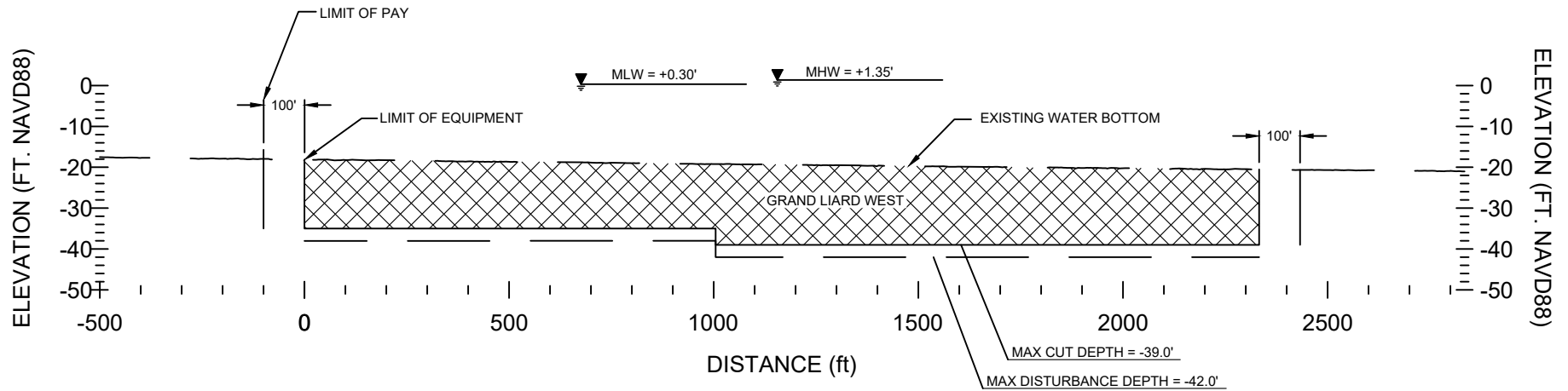
GLW BORROW AREA
TOTAL VOLUME = 4,590,000 C.Y.



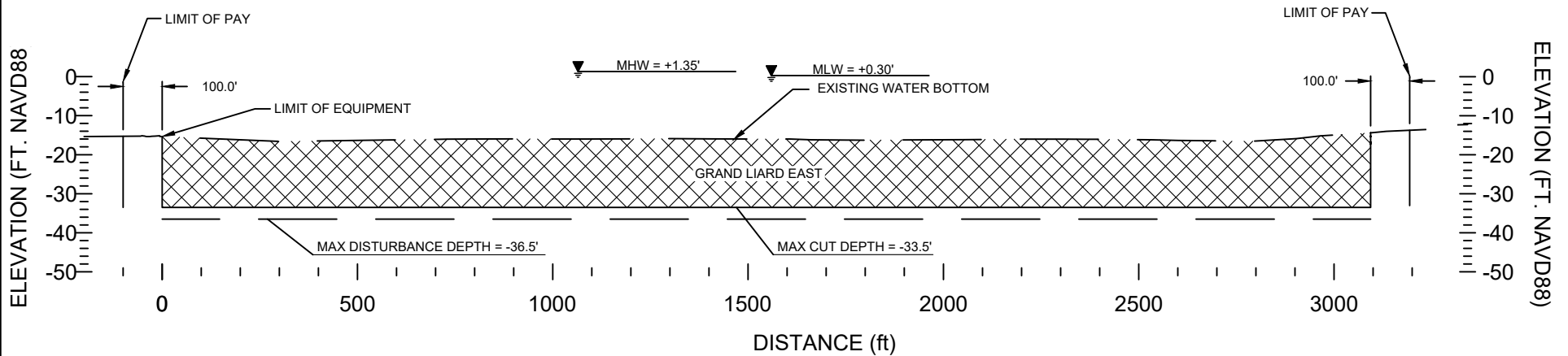
- NOTES:**
- ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.
 - COORDINATES ARE SHOWN IN LATITUDE LONGITUDE DEGREES, MINUTES AND SECONDS.

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

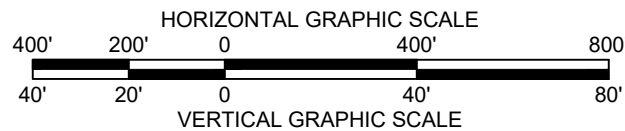
<p>APPLICATION BY:</p>	<p>COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802</p>	<p>BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT</p>	<p>GRAND LIARD BORROW AREA PLAN VIEW</p>
		<p>STATE PROJECT NUMBER: BA-0203</p>	<p>DATE: 2019-12-06</p>
<p>DRAWN BY: SNL</p>	<p>DESIGNED BY: BJH, P.E.</p>	<p>APPROVED BY: GGT, P.E.</p>	<p>FEDERAL PROJECT NUMBER:</p>



1
29/28
GLW - SECTIONS



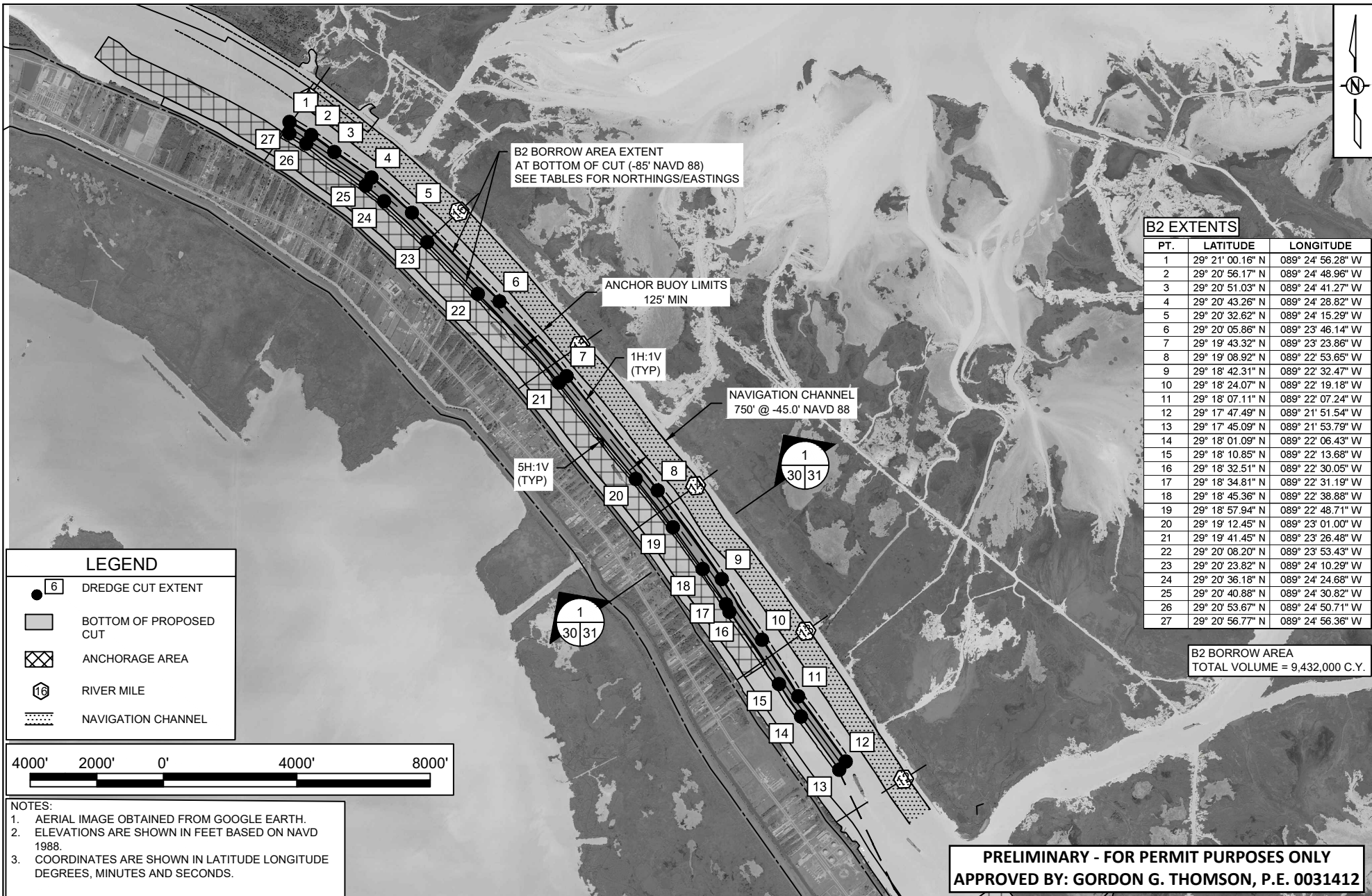
2
29/28
GLE - SECTIONS



PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	GRAND LIARD BORROW AREA TYPICAL SECTIONS
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 29 OF 52

recd: March 16, 2020



B2 BORROW AREA EXTENT
AT BOTTOM OF CUT (-85' NAVD 88)
SEE TABLES FOR NORTHINGS/EASTINGS

ANCHOR BUOY LIMITS
125' MIN

1H:1V
(TYP)

NAVIGATION CHANNEL
750' @ -45.0' NAVD 88

5H:1V
(TYP)

B2 EXTENTS

PT.	LATITUDE	LONGITUDE
1	29° 21' 00.16" N	089° 24' 56.28" W
2	29° 20' 56.17" N	089° 24' 48.96" W
3	29° 20' 51.03" N	089° 24' 41.27" W
4	29° 20' 43.26" N	089° 24' 28.82" W
5	29° 20' 32.62" N	089° 24' 15.29" W
6	29° 20' 05.86" N	089° 23' 46.14" W
7	29° 19' 43.32" N	089° 23' 23.86" W
8	29° 19' 08.92" N	089° 22' 53.65" W
9	29° 18' 42.31" N	089° 22' 32.47" W
10	29° 18' 24.07" N	089° 22' 19.18" W
11	29° 18' 07.11" N	089° 22' 07.24" W
12	29° 17' 47.49" N	089° 21' 51.54" W
13	29° 17' 45.09" N	089° 21' 53.79" W
14	29° 18' 01.09" N	089° 22' 06.43" W
15	29° 18' 10.85" N	089° 22' 13.68" W
16	29° 18' 32.51" N	089° 22' 30.05" W
17	29° 18' 34.81" N	089° 22' 31.19" W
18	29° 18' 45.36" N	089° 22' 38.88" W
19	29° 18' 57.94" N	089° 22' 48.71" W
20	29° 19' 12.45" N	089° 23' 01.00" W
21	29° 19' 41.45" N	089° 23' 26.48" W
22	29° 20' 08.20" N	089° 23' 53.43" W
23	29° 20' 23.82" N	089° 24' 10.29" W
24	29° 20' 36.18" N	089° 24' 24.68" W
25	29° 20' 40.88" N	089° 24' 30.82" W
26	29° 20' 53.67" N	089° 24' 50.71" W
27	29° 20' 56.77" N	089° 24' 56.36" W

B2 BORROW AREA
TOTAL VOLUME = 9,432,000 C.Y.

LEGEND

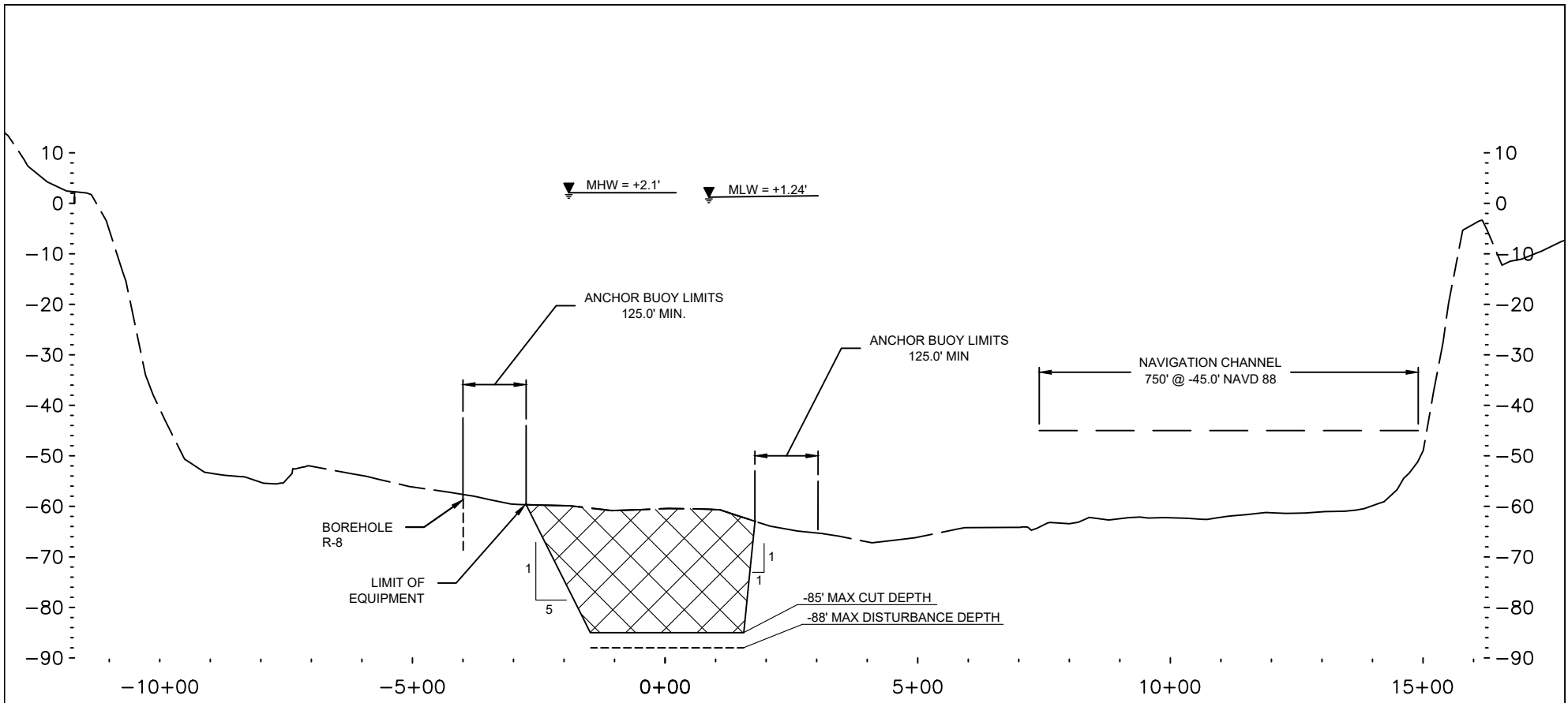
- 6 DREDGE CUT EXTENT
- BOTTOM OF PROPOSED CUT
- ANCHORAGE AREA
- RIVER MILE
- NAVIGATION CHANNEL



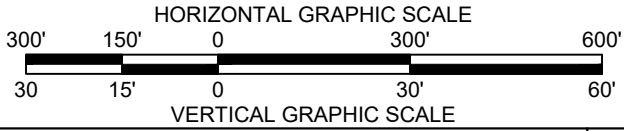
NOTES:
1. AERIAL IMAGE OBTAINED FROM GOOGLE EARTH.
2. ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.
3. COORDINATES ARE SHOWN IN LATITUDE LONGITUDE DEGREES, MINUTES AND SECONDS.

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	B2 BORROW AREA PLAN VIEW
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 30 OF 52



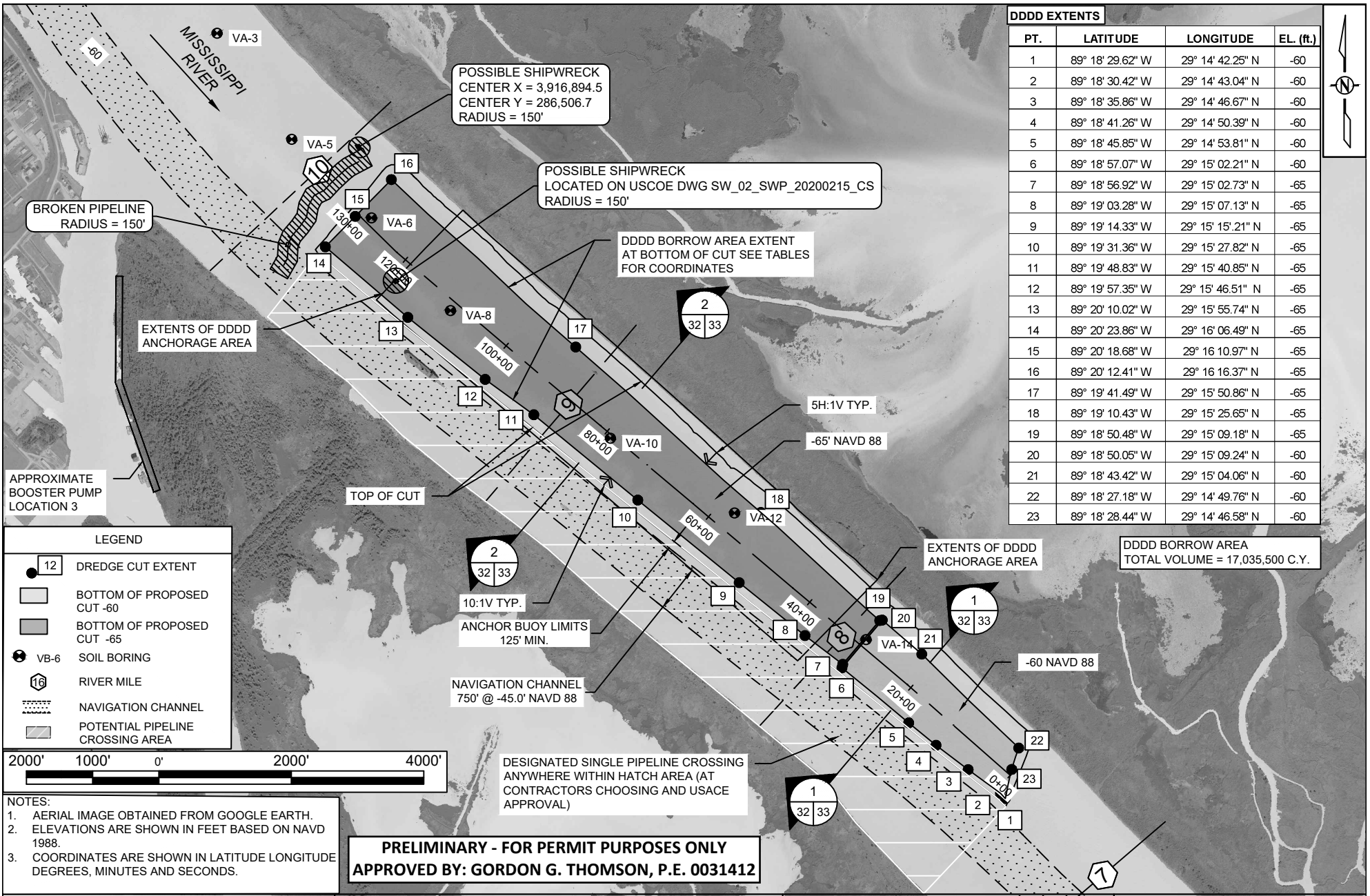
1 B2 BORROW AREA - TYPICAL SECTION
31|30



NOTES:
1. ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

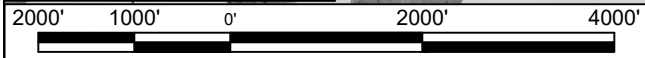
APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	B2 BORROW AREA TYPICAL SECTION
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 31 OF 52



DDDD EXTENTS			
PT.	LATITUDE	LONGITUDE	EL. (ft.)
1	89° 18' 29.62" W	29° 14' 42.25" N	-60
2	89° 18' 30.42" W	29° 14' 43.04" N	-60
3	89° 18' 35.86" W	29° 14' 46.67" N	-60
4	89° 18' 41.26" W	29° 14' 50.39" N	-60
5	89° 18' 45.85" W	29° 14' 53.81" N	-60
6	89° 18' 57.07" W	29° 15' 02.21" N	-60
7	89° 18' 56.92" W	29° 15' 02.73" N	-65
8	89° 19' 03.28" W	29° 15' 07.13" N	-65
9	89° 19' 14.33" W	29° 15' 15.21" N	-65
10	89° 19' 31.36" W	29° 15' 27.82" N	-65
11	89° 19' 48.83" W	29° 15' 40.85" N	-65
12	89° 19' 57.35" W	29° 15' 46.51" N	-65
13	89° 20' 10.02" W	29° 15' 55.74" N	-65
14	89° 20' 23.86" W	29° 16' 06.49" N	-65
15	89° 20' 18.68" W	29° 16' 10.97" N	-65
16	89° 20' 12.41" W	29° 16' 16.37" N	-65
17	89° 19' 41.49" W	29° 15' 50.86" N	-65
18	89° 19' 10.43" W	29° 15' 25.65" N	-65
19	89° 18' 50.48" W	29° 15' 09.18" N	-65
20	89° 18' 50.05" W	29° 15' 09.24" N	-60
21	89° 18' 43.42" W	29° 15' 04.06" N	-60
22	89° 18' 27.18" W	29° 14' 49.76" N	-60
23	89° 18' 28.44" W	29° 14' 46.58" N	-60

LEGEND

- 12 DREDGE CUT EXTENT
- BOTTOM OF PROPOSED CUT -60
- BOTTOM OF PROPOSED CUT -65
- VB-6 SOIL BORING
- RIVER MILE
- NAVIGATION CHANNEL
- POTENTIAL PIPELINE CROSSING AREA

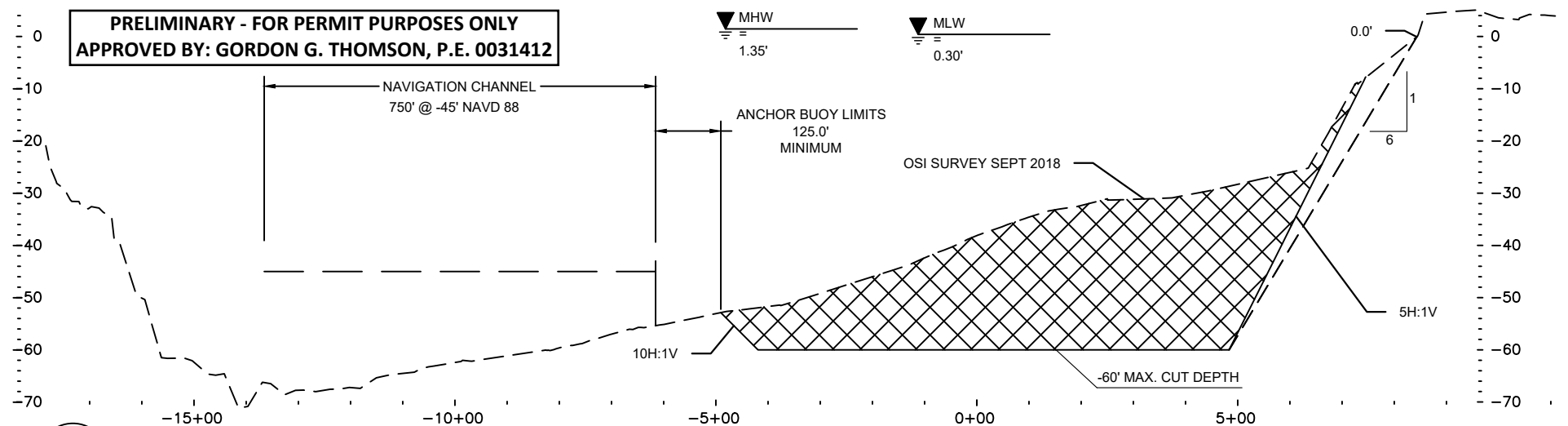


- NOTES:**
- AERIAL IMAGE OBTAINED FROM GOOGLE EARTH.
 - ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.
 - COORDINATES ARE SHOWN IN LATITUDE LONGITUDE DEGREES, MINUTES AND SECONDS.

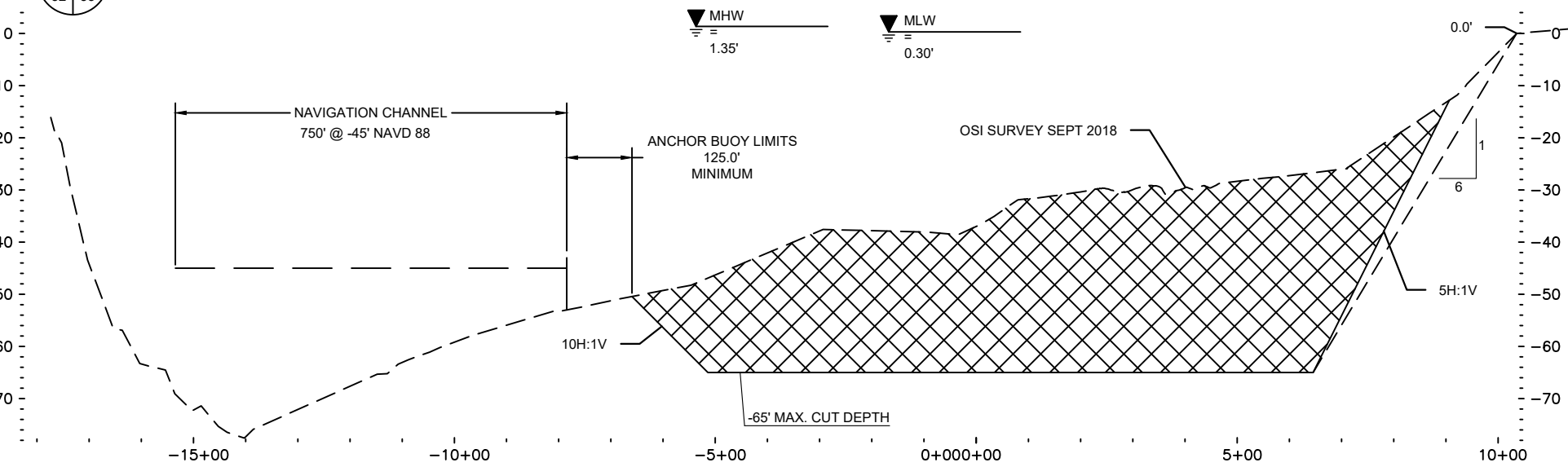
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	DDDD BORROW AREA PLAN VIEW
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	STATE PROJECT NUMBER: BA-0203 DATE: 2019-04-26
FEDERAL PROJECT NUMBER:			SHEET 32 OF 52

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

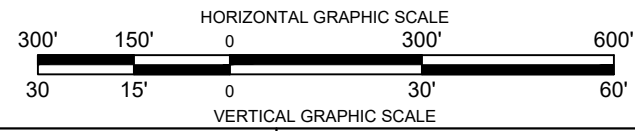


1
 32 33
 DDDD BORROW AREA - TYPICAL SECTION
 STA. 0+00 TO 30+00



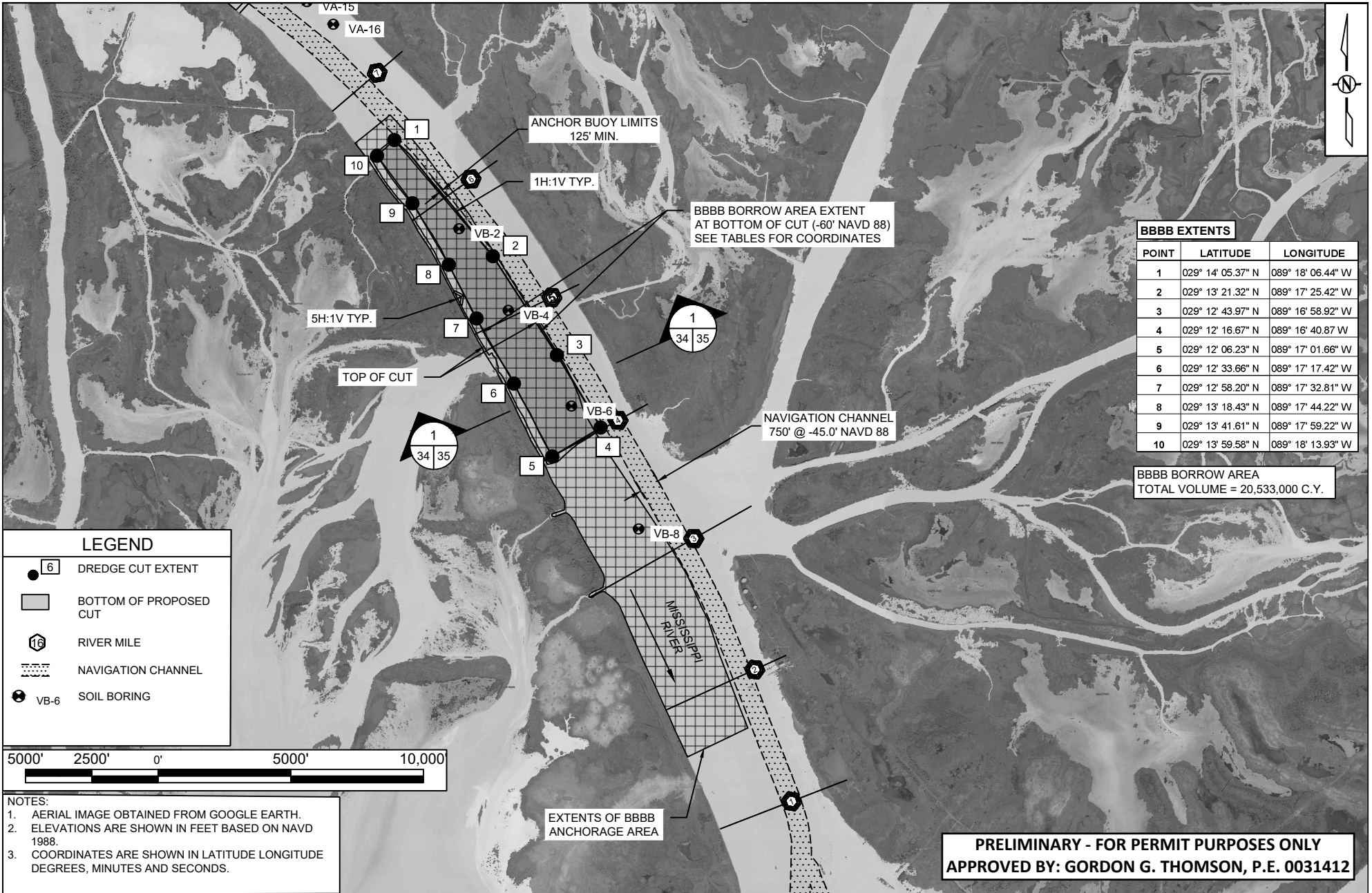
2
 32 33
 DDDD BORROW AREA - TYPICAL SECTION
 STA. 30+00 TO 130+00

NOTES:
 1. ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.



APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	DDDD BORROW AREA TYPICAL SECTION
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-04-26
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 33 OF 52

recd: March 16, 2020

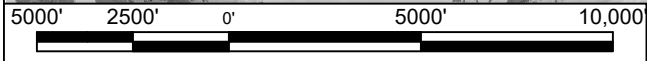


BBBB EXTENTS		
POINT	LATITUDE	LONGITUDE
1	029° 14' 05.37" N	089° 18' 06.44" W
2	029° 13' 21.32" N	089° 17' 25.42" W
3	029° 12' 43.97" N	089° 16' 58.92" W
4	029° 12' 16.67" N	089° 16' 40.87" W
5	029° 12' 06.23" N	089° 17' 01.66" W
6	029° 12' 33.66" N	089° 17' 17.42" W
7	029° 12' 58.20" N	089° 17' 32.81" W
8	029° 13' 18.43" N	089° 17' 44.22" W
9	029° 13' 41.61" N	089° 17' 59.22" W
10	029° 13' 59.58" N	089° 18' 13.93" W

BBBB BORROW AREA
TOTAL VOLUME = 20,533,000 C.Y.

LEGEND

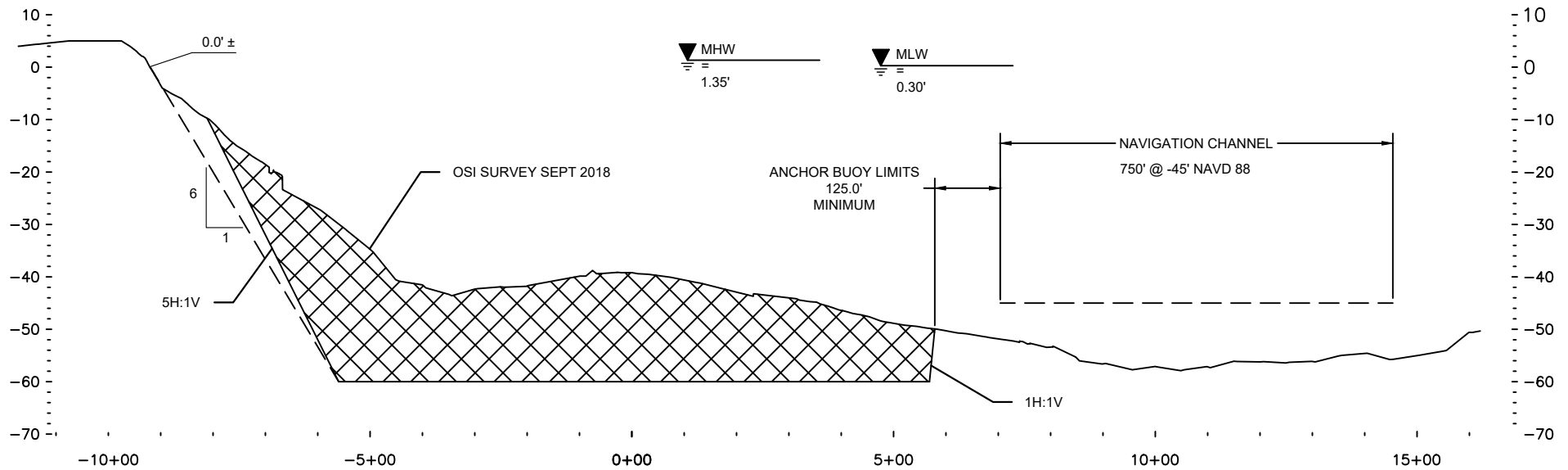
- DREDGE CUT EXTENT
- BOTTOM OF PROPOSED CUT
- RIVER MILE
- NAVIGATION CHANNEL
- VB-6 SOIL BORING



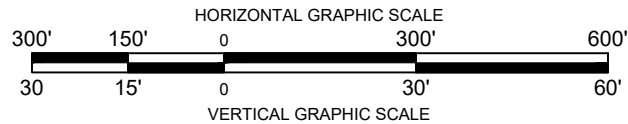
NOTES:
 1. AERIAL IMAGE OBTAINED FROM GOOGLE EARTH.
 2. ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.
 3. COORDINATES ARE SHOWN IN LATITUDE LONGITUDE DEGREES, MINUTES AND SECONDS.

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	BBBB BORROW AREA PLAN VIEW
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 34 OF 52



1
34 35
BBBB BORROW AREA - TYPICAL SECTION

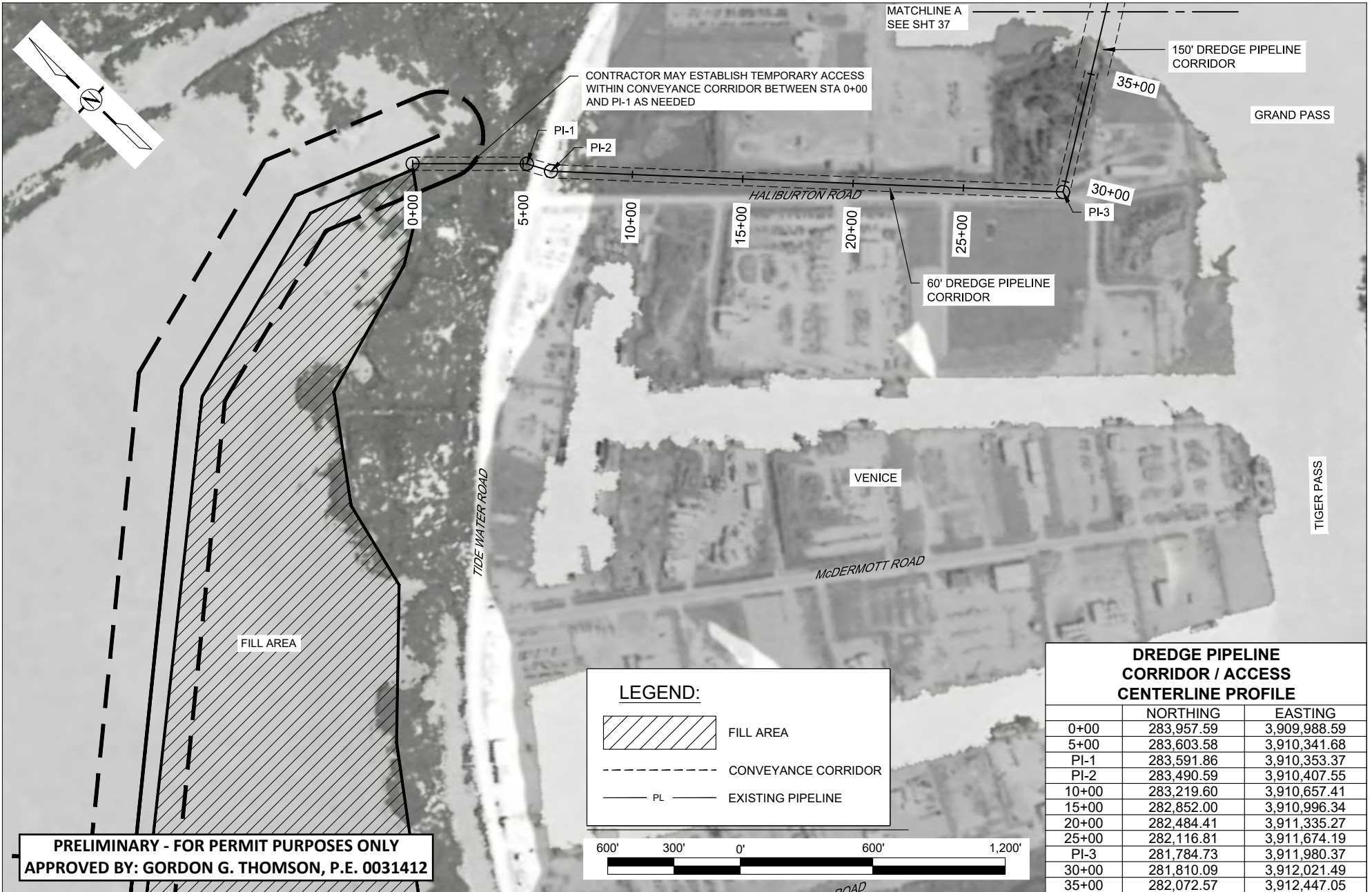


NOTES:
1. ELEVATIONS ARE SHOWN IN FEET BASED ON NAVD 1988.

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: Baird. Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	BBBB BORROW AREA TYPICAL SECTION
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: SNL	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 35 OF 52

recd: March 16, 2020

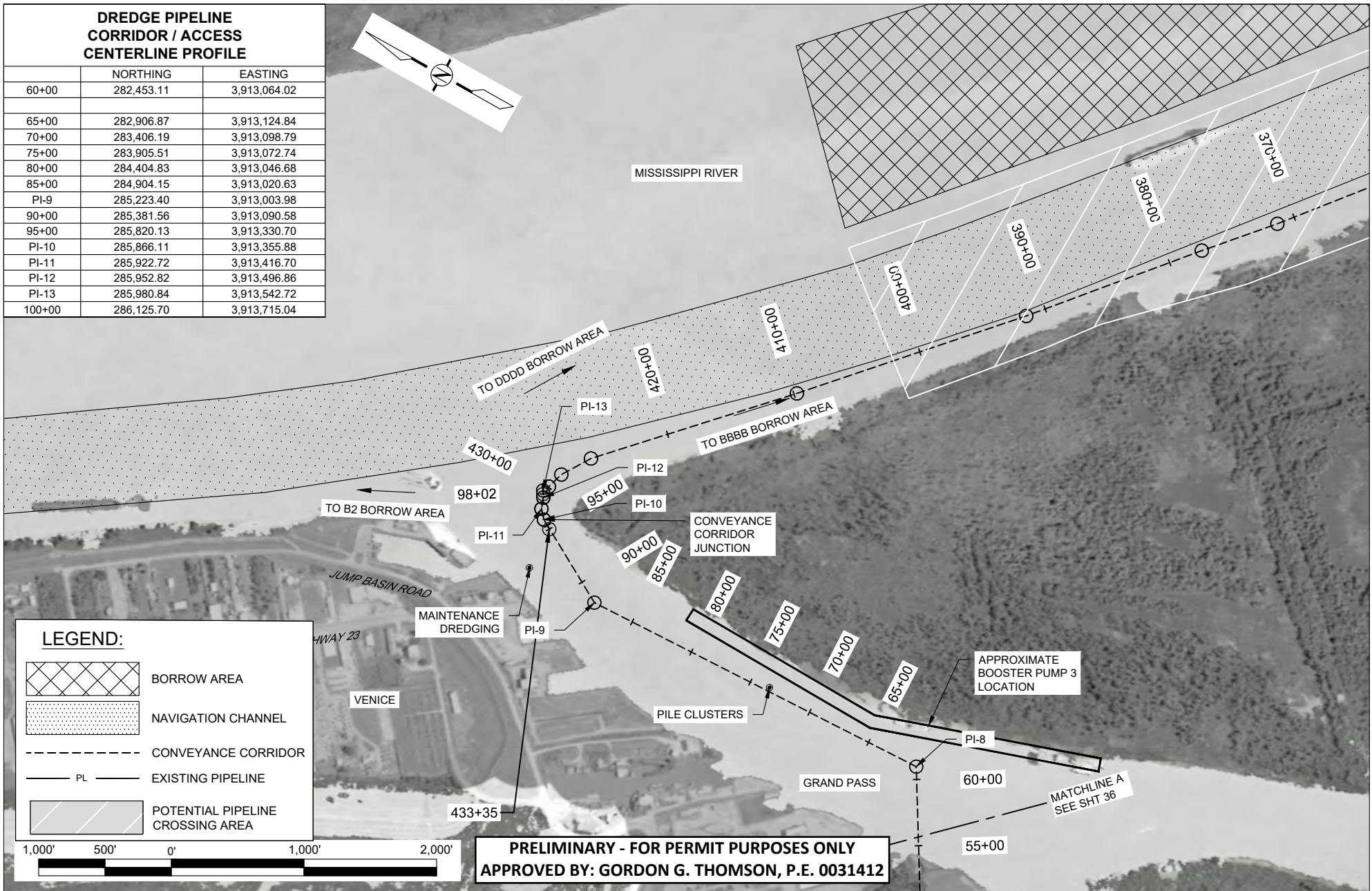


APPLICATION BY: 		COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT		FILL SITE - LAND ACCESS	
DRAWN BY:		DESIGNED BY: BJH, P.E.		APPROVED BY: GGT, P.E.		STATE PROJECT NUMBER: BA-0203	
				FEDERAL PROJECT NUMBER:		DATE: 2019-12-06	
						SHEET 36 OF 52	



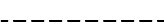


recd: March 16, 2020

**DREDGE PIPELINE
CORRIDOR / ACCESS
CENTERLINE PROFILE**


	NORTHING	EASTING
60+00	282,453.11	3,913,064.02
65+00	282,906.87	3,913,124.84
70+00	283,406.19	3,913,098.79
75+00	283,905.51	3,913,072.74
80+00	284,404.83	3,913,046.68
85+00	284,904.15	3,913,020.63
PI-9	285,223.40	3,913,003.98
90+00	285,381.56	3,913,090.58
95+00	285,820.13	3,913,330.70
PI-10	285,866.11	3,913,355.88
PI-11	285,922.72	3,913,416.70
PI-12	285,952.82	3,913,496.86
PI-13	285,980.84	3,913,542.72
100+00	286,125.70	3,913,715.04



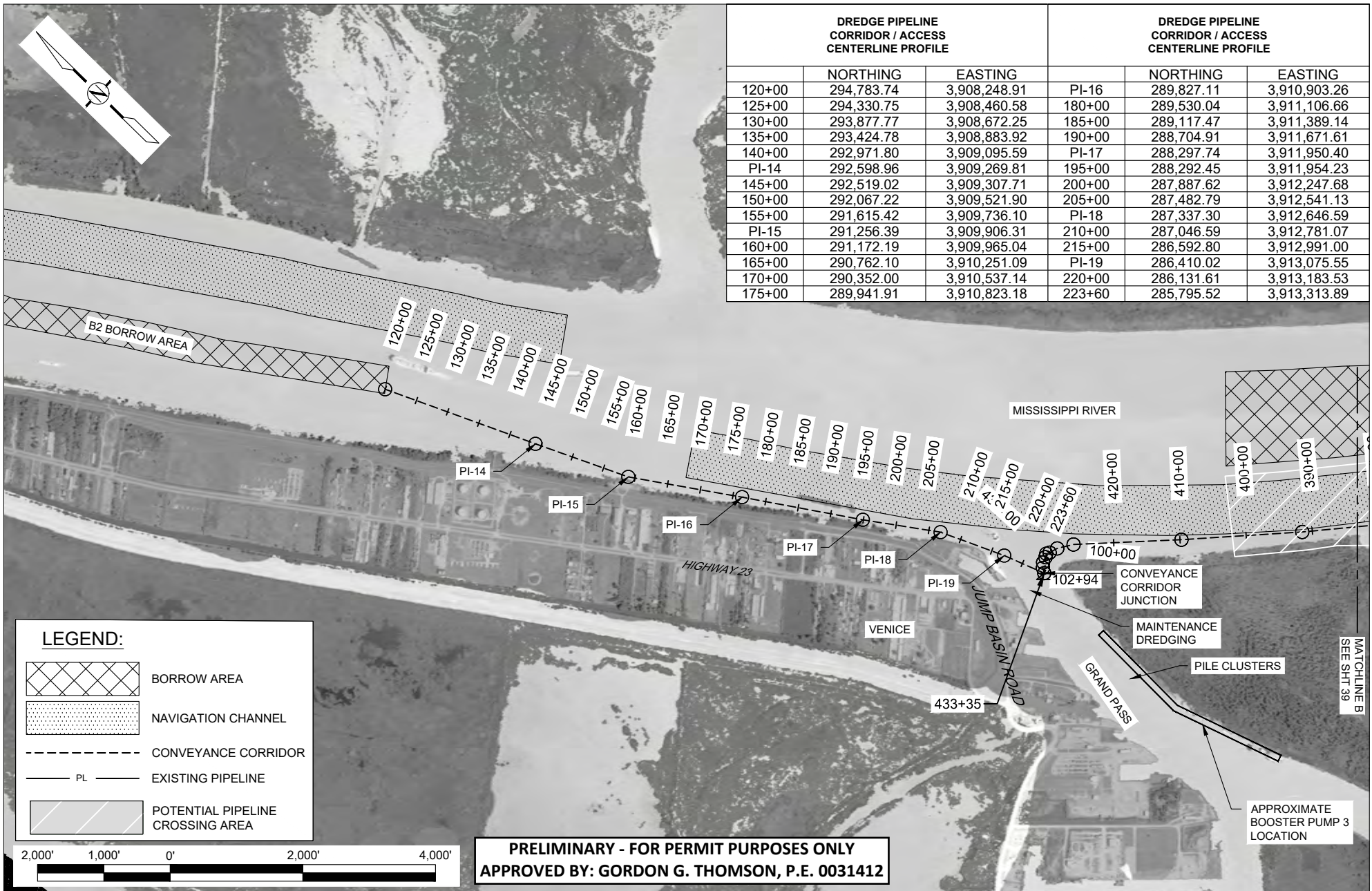
LEGEND:

-  BORROW AREA
-  NAVIGATION CHANNEL
-  CONVEYANCE CORRIDOR
-  EXISTING PIPELINE
-  POTENTIAL PIPELINE CROSSING AREA


PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	LAND ACCESS - GRAND PASS
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-04-26
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 37 OF 52

recd: March 16, 2020


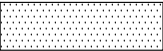
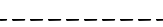
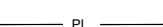



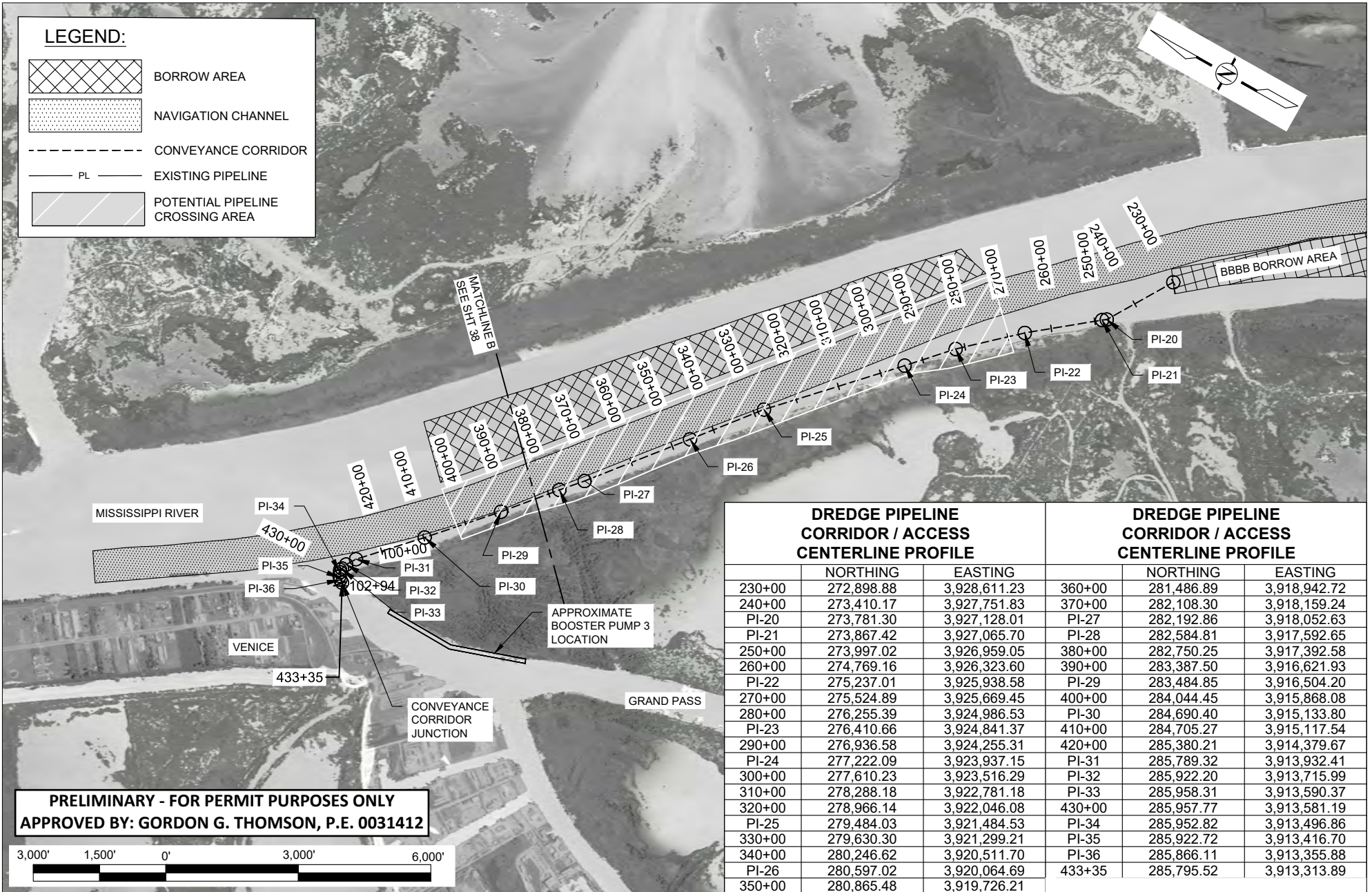
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT STATE PROJECT NUMBER: BA-0203	B2 - GRAND PASS DATE: 2019-04-26
DRAWN BY: REC			DESIGNED BY: BJH, P.E.

recd: March 16, 2020

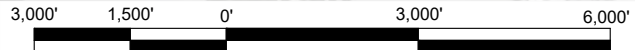
LEGEND:


-  BORROW AREA
-  NAVIGATION CHANNEL
-  CONVEYANCE CORRIDOR
-  PL EXISTING PIPELINE
-  POTENTIAL PIPELINE CROSSING AREA



DREDGE PIPELINE CORRIDOR / ACCESS CENTERLINE PROFILE			DREDGE PIPELINE CORRIDOR / ACCESS CENTERLINE PROFILE		
	NORTHING	EASTING		NORTHING	EASTING
230+00	272,898.88	3,928,611.23	360+00	281,486.89	3,918,942.72
240+00	273,410.17	3,927,751.83	370+00	282,108.30	3,918,159.24
PI-20	273,781.30	3,927,128.01	PI-27	282,192.86	3,918,052.63
PI-21	273,867.42	3,927,065.70	PI-28	282,584.81	3,917,592.65
250+00	273,997.02	3,926,959.05	380+00	282,750.25	3,917,392.58
260+00	274,769.16	3,926,323.60	390+00	283,387.50	3,916,621.93
PI-22	275,237.01	3,925,938.58	PI-29	283,484.85	3,916,504.20
270+00	275,524.89	3,925,669.45	400+00	284,044.45	3,915,868.08
280+00	276,255.39	3,924,986.53	PI-30	284,690.40	3,915,133.80
PI-23	276,410.66	3,924,841.37	410+00	284,705.27	3,915,117.54
290+00	276,936.58	3,924,255.31	420+00	285,380.21	3,914,379.67
PI-24	277,222.09	3,923,937.15	PI-31	285,789.32	3,913,932.41
300+00	277,610.23	3,923,516.29	PI-32	285,922.20	3,913,715.99
310+00	278,288.18	3,922,781.18	PI-33	285,958.31	3,913,590.37
320+00	278,966.14	3,922,046.08	430+00	285,957.77	3,913,581.19
PI-25	279,484.03	3,921,484.53	PI-34	285,952.82	3,913,496.86
330+00	279,630.30	3,921,299.21	PI-35	285,922.72	3,913,416.70
340+00	280,246.62	3,920,511.70	PI-36	285,866.11	3,913,355.88
PI-26	280,597.02	3,920,064.69	433+35	285,795.52	3,913,313.89
350+00	280,865.48	3,919,726.21			

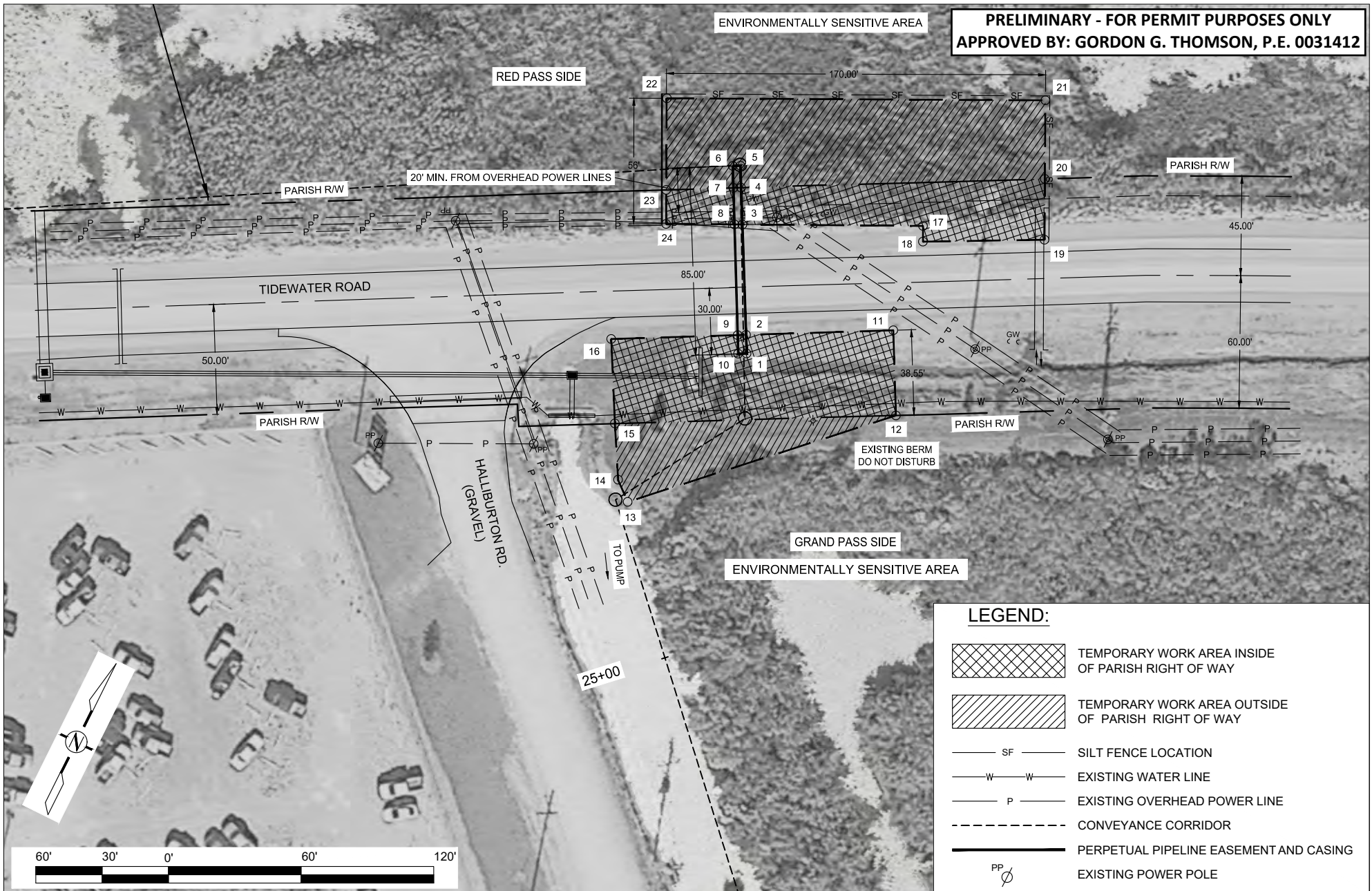
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412







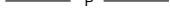

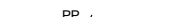

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	BBBB - GRAND PASS
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-04-26
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 39 OF 52

recd: March 16, 2020

PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412



LEGEND:

-  TEMPORARY WORK AREA INSIDE OF PARISH RIGHT OF WAY
-  TEMPORARY WORK AREA OUTSIDE OF PARISH RIGHT OF WAY
-  SILT FENCE LOCATION
-  EXISTING WATER LINE
-  EXISTING OVERHEAD POWER LINE
-  CONVEYANCE CORRIDOR
-  PERPETUAL PIPELINE EASEMENT AND CASING
-  EXISTING POWER POLE

APPLICATION BY:
Baird.
 Innovation Engineered.

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

BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT
 SPANISH PASS INCREMENT

STATE PROJECT NUMBER: BA-0203

FEDERAL PROJECT NUMBER:

HWY 23 CROSSING

DATE: 2019-12-06

SHEET 40 OF 52

DRAWN BY: REC


DESIGNED BY: BJH, P.E.

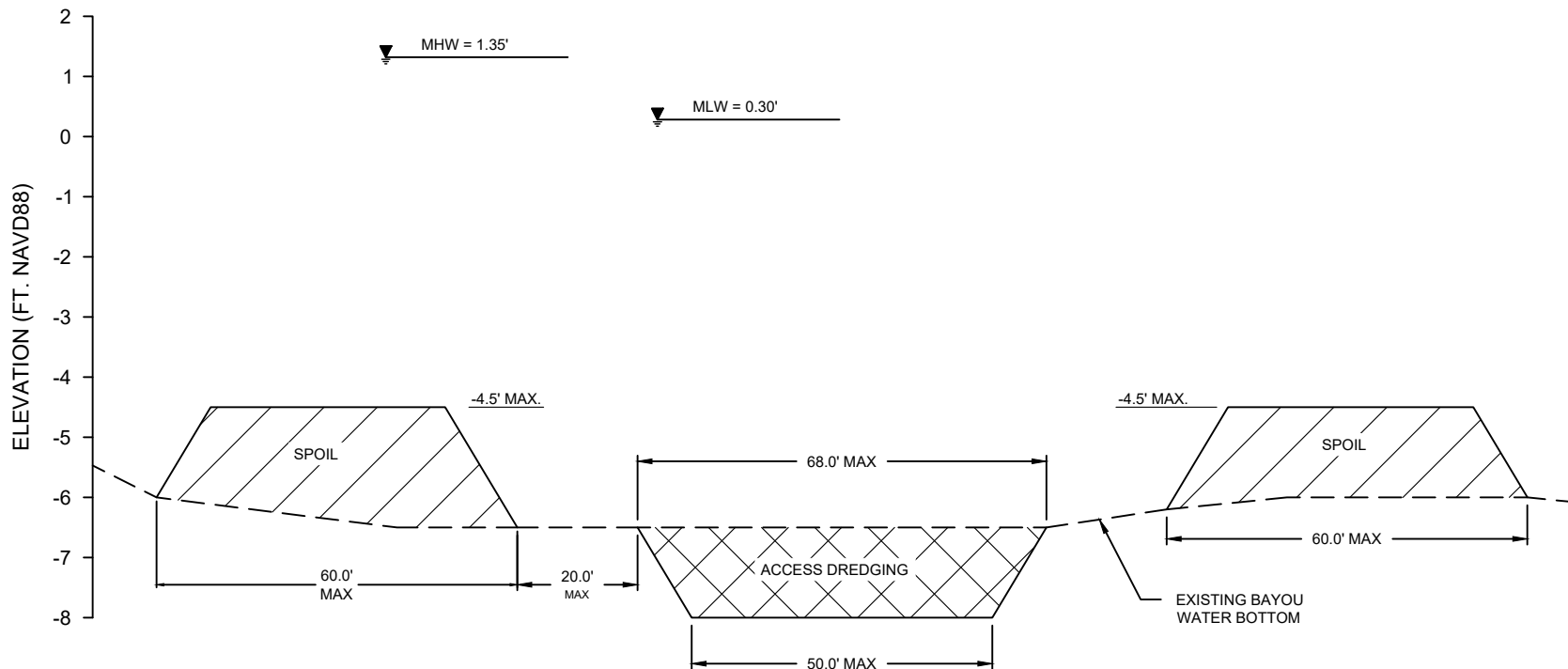
APPROVED BY: GGT, P.E.

recd: March 16, 2020

POINT ID	NORTHING	EASTING	DESCRIPTION	SIDE
1	283,517.17	3,910,394.84	CORNER OF PERPETUAL EASEMENT	GRAND PASS
2	283,524.55	3,910,390.76	CORNER OF PERPETUAL EASEMENT	GRAND PASS
3	283,568.30	3,910,366.60	CORNER OF PERPETUAL EASEMENT	RED PASS
4	283,582.89	3,910,358.55	CORNER OF PERPETUAL EASEMENT	RED PASS
5	283,591.57	3,910,353.75	CORNER OF PERPETUAL EASEMENT	RED PASS
6	283,589.88	3,910,350.69	CORNER OF PERPETUAL EASEMENT	RED PASS
7	283,581.18	3,910,355.47	CORNER OF PERPETUAL EASEMENT	RED PASS
8	283,566.71	3,910,363.41	CORNER OF PERPETUAL EASEMENT	RED PASS
9	283,522.72	3,910,387.42	CORNER OF PERPETUAL EASEMENT	GRAND PASS
10	283,515.32	3,910,391.46	CORNER OF PERPETUAL EASEMENT	GRAND PASS
11	283,556.63	3,910,449.16	CORNER OF STAGING AREA	GRAND PASS
12	283,522.85	3,910,467.73	CORNER OF STAGING AREA	GRAND PASS
13	283,432.90	3,910,377.35	CORNER OF STAGING AREA	GRAND PASS
14	283,439.87	3,910,368.92	CORNER OF STAGING AREA	GRAND PASS
15	283,461.92	3,910,356.07	CORNER OF STAGING AREA	GRAND PASS
16	283,495.17	3,910,337.27	CORNER OF STAGING AREA	GRAND PASS
17	283,604.82	3,910,439.72	CORNER OF STAGING AREA	RED PASS
18	283,598.48	3,910,442.90	CORNER OF STAGING AREA	RED PASS
19	283,624.18	3,910,491.53	CORNER OF STAGING AREA	RED PASS
20	283,648.76	3,910,479.18	CORNER OF STAGING AREA	RED PASS
21	283,680.57	3,910,463.22	CORNER OF STAGING AREA	RED PASS
22	283,603.62	3,910,310.14	CORNER OF STAGING AREA	RED PASS
23	283,566.58	3,910,328.84	CORNER OF STAGING AREA	RED PASS
24	283,552.81	3,910,335.79	CORNER OF STAGING AREA	RED PASS


PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	HWY 23 CROSSING COORDINATE TABLE
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 41 OF 52

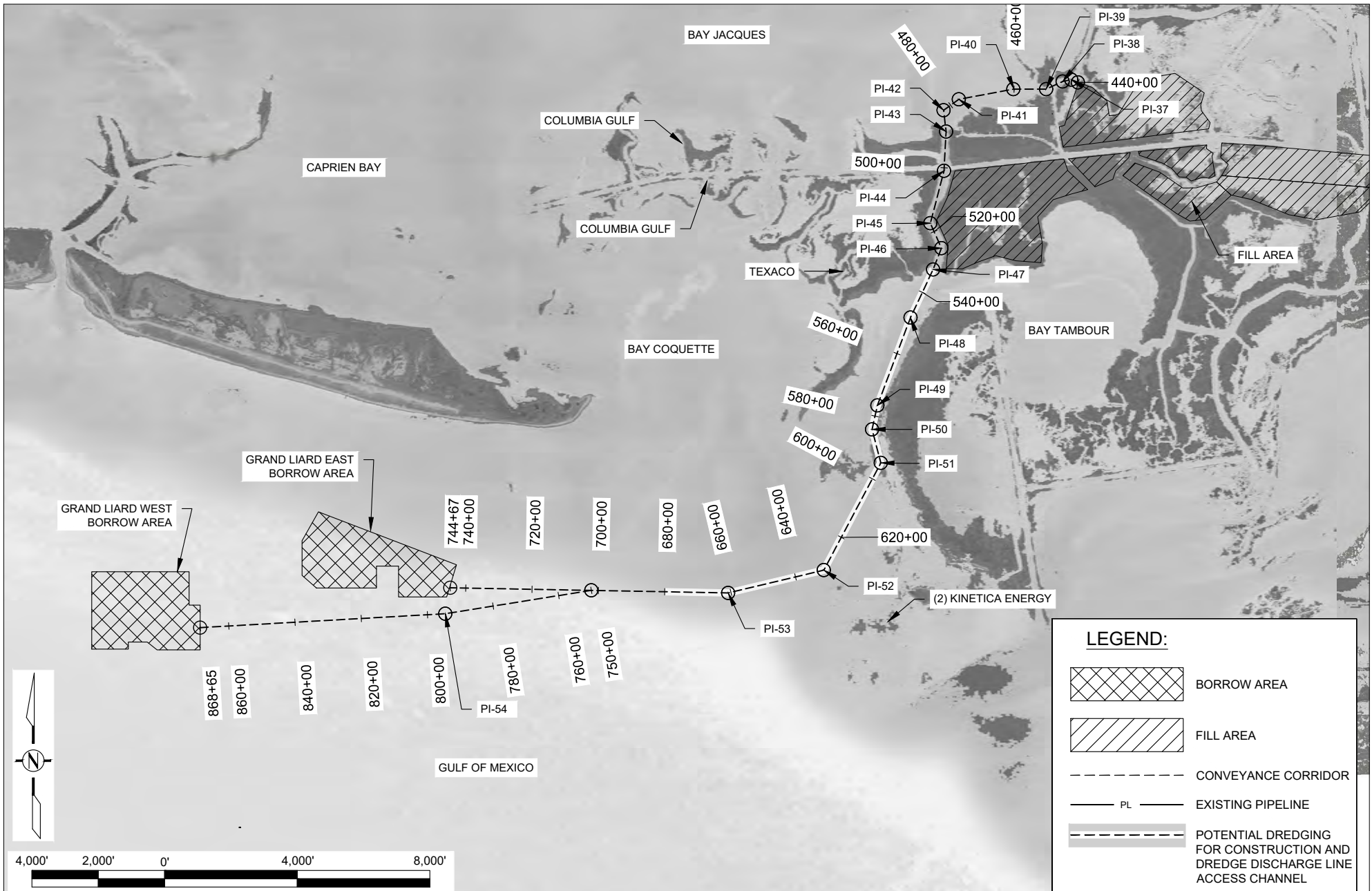


NOTE:
 POTENTIAL ACCESS DREDGING TO TAKE PLACE BETWEEN PI-47 AND PI-52,
 SEE SHEET 43



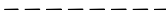

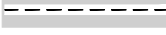
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412


APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	DREDGE ACCESS SECTION
DRAWN BY: SNL		DESIGNED BY: BJH, P.E.	STATE PROJECT NUMBER: BA-0203
APPROVED BY: GGT, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 43 OF 52

recd: March 16, 2020



LEGEND:

-  BORROW AREA
-  FILL AREA
-  CONVEYANCE CORRIDOR
-  PL EXISTING PIPELINE
-  POTENTIAL DREDGING FOR CONSTRUCTION AND DREDGE DISCHARGE LINE ACCESS CHANNEL


APPLICATION BY:  Innovation Engineered.	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT STATE PROJECT NUMBER: BA-0203	GRAND LIARD TO BORROW DATE: 2019-12-06	
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 43 OF 52

recd: March 16, 2020

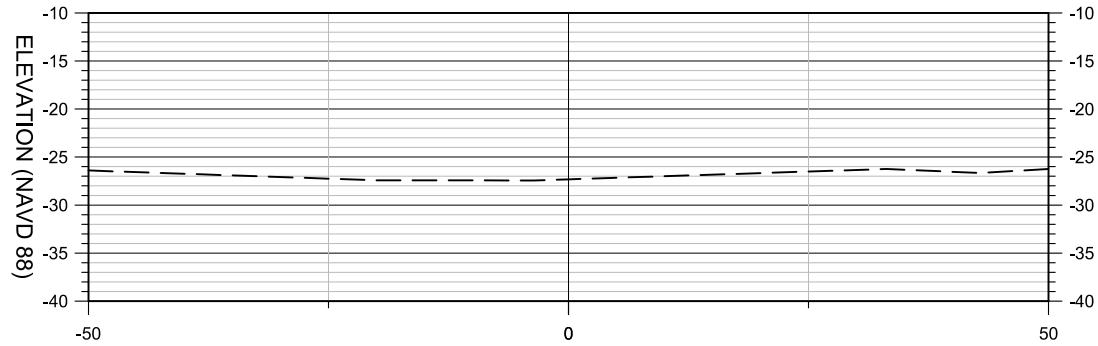
DREDGE PIPELINE CORRIDOR / ACCESS CENTERLINE PROFILE		
	NORTHING	EASTING
440+00	281,817.63	3,875,527.21
PI-37	281,900.15	3,875,324.19
PI-38	281,844.90	3,875,066.00
PI-39	281,614.38	3,874,567.62
460+00	281,613.10	3,873,599.92
PI-40	281,613.07	3,873,579.96
PI-41	281,307.58	3,871,937.16
480+00	281,127.24	3,871,686.15
PI-42	280,976.27	3,871,476.02
PI-43	280,333.41	3,871,550.68
500+00	279,240.88	3,871,492.49
PI-44	279,148.62	3,871,487.58
PI-45	277,569.53	3,871,077.05
520+00	277,316.96	3,871,188.42
PI-46	276,817.27	3,871,408.73
PI-47	276,173.19	3,871,158.54
540+00	275,482.70	3,870,834.07
PI-48	274,724.22	3,870,477.65
560+00	273,636.95	3,870,067.81
PI-49	272,074.41	3,869,478.81
580+00	271,752.16	3,869,407.08
PI-50	271,350.24	3,869,317.60

DREDGE PIPELINE CORRIDOR / ACCESS CENTERLINE PROFILE		
	NORTHING	EASTING
PI-51	270,340.39	3,869,582.94
600+00	269,859.90	3,869,327.63
620+00	268,093.75	3,868,389.16
PI-52	267,105.03	3,867,863.79
640+00	266,900.97	3,867,007.40
660+00	266,437.38	3,865,061.87
PI-53	266,417.77	3,864,979.58
680+00	266,453.18	3,863,064.51
700+00	266,490.15	3,861,064.85
720+00	266,527.12	3,859,065.19
740+00	266,564.10	3,857,065.53
744+67	266,572.73	3,856,598.71
750+00	266,495.27	3,860,852.89
760+00	266,337.33	3,859,865.44
780+00	266,021.44	3,857,890.55
PI-54	265,791.05	3,856,450.23
800+00	265,760.37	3,855,909.72
820+00	265,647.02	3,853,912.94
840+00	265,533.66	3,851,916.15
860+00	265,420.31	3,849,919.37
868+65	265,371.26	3,849,055.26

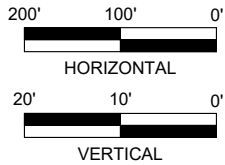
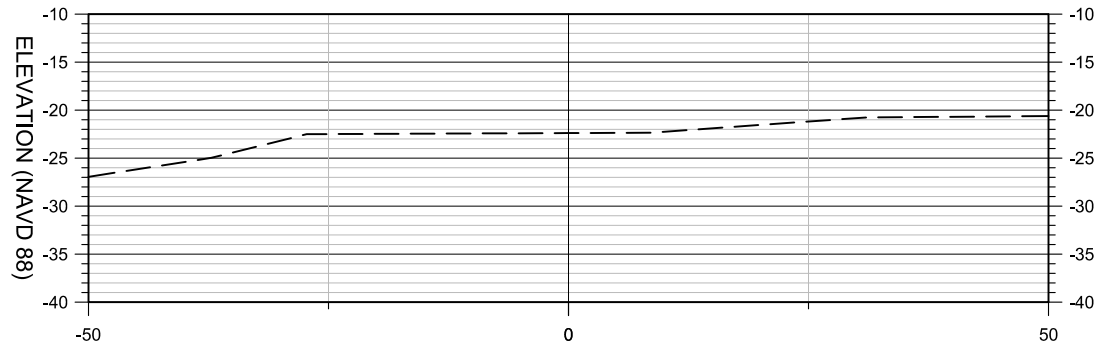
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	GRAND LIARD TO BORROW COORDINATE TABLE
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 44 OF 52


GRAND PASS TO HALIBURTON RD.
STA. 60+00



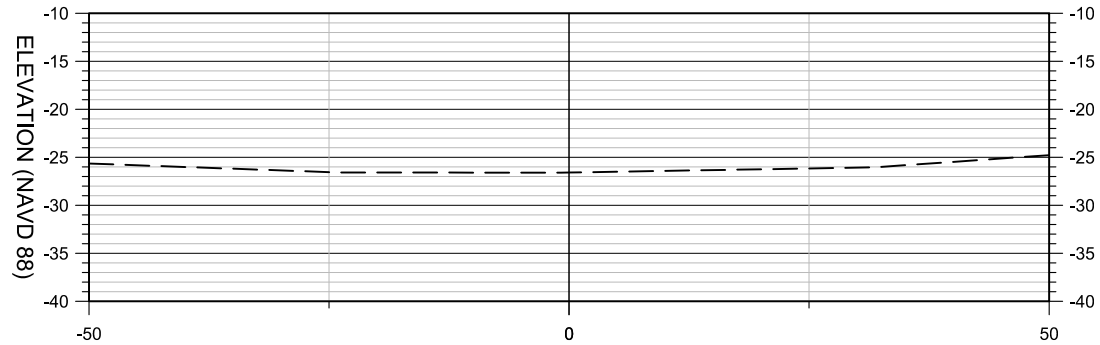
GRAND PASS TO HALIBURTON RD.
STA. 70+00



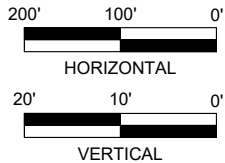
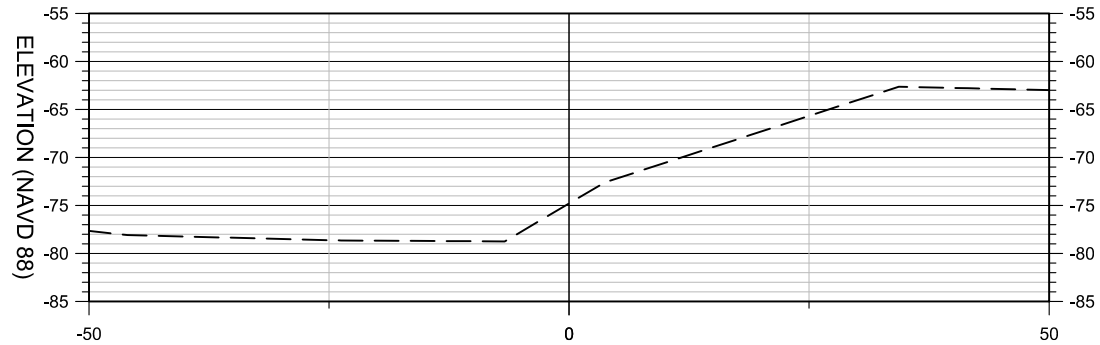
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	CROSS SECTIONS (1 OF 8)
		STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER: SHEET 45 OF 52

GRAND PASS TO HALIBURTON RD.
STA. 80+00



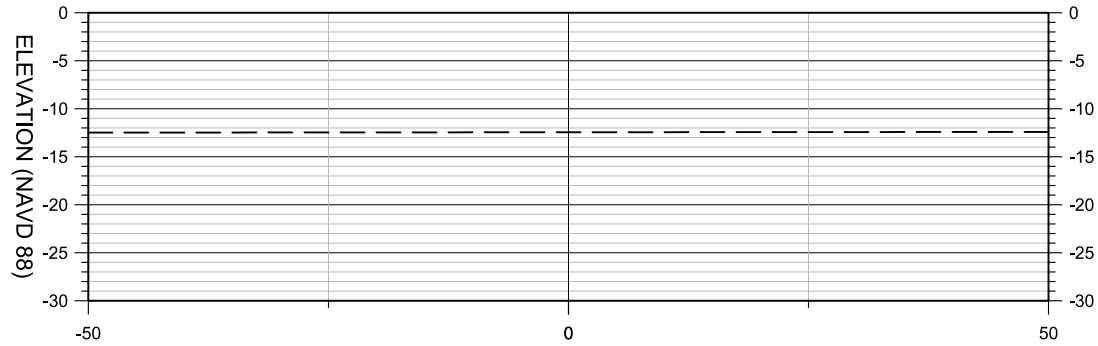
GRAND PASS TO HALIBURTON RD.
STA. 90+00



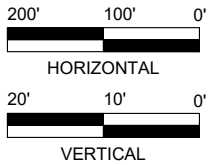
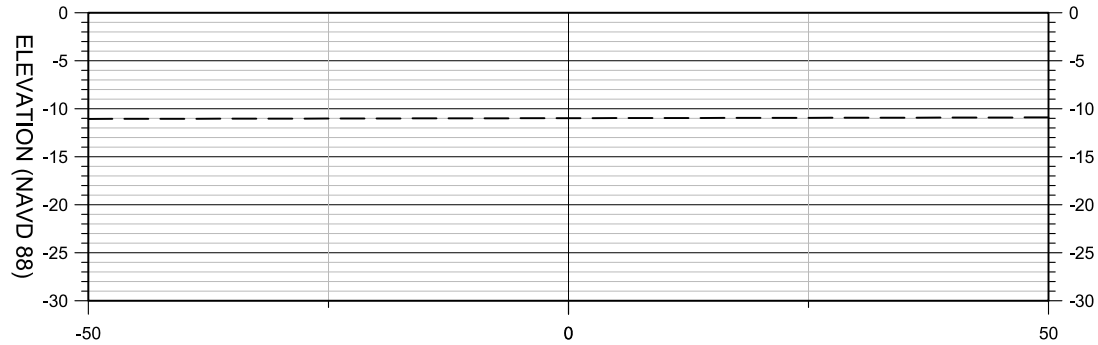
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

<p>APPLICATION BY:</p> <p>Baird. Innovation Engineered.</p>	<p>COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802</p>	<p>BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT</p>	<p>CROSS SECTIONS (2 OF 8)</p>
<p>DRAWN BY: REC</p>	<p>DESIGNED BY: BJH, P.E.</p>	<p>APPROVED BY: GGT, P.E.</p>	<p>STATE PROJECT NUMBER: BA-0203</p>
		<p>FEDERAL PROJECT NUMBER:</p>	<p>DATE: 2019-12-06</p>
			<p>SHEET 46 OF 52</p>

GRAND LIARD TO WEST END
STA. 440+00



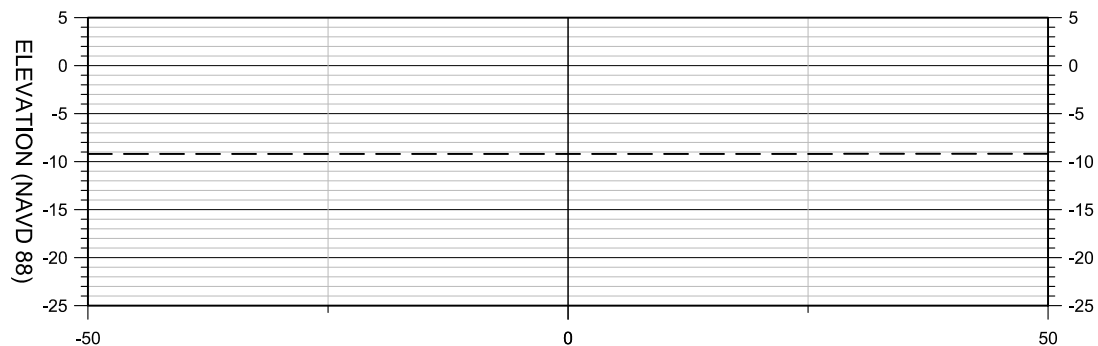
GRAND LIARD TO WEST END
STA. 450+00



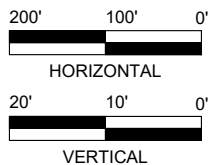
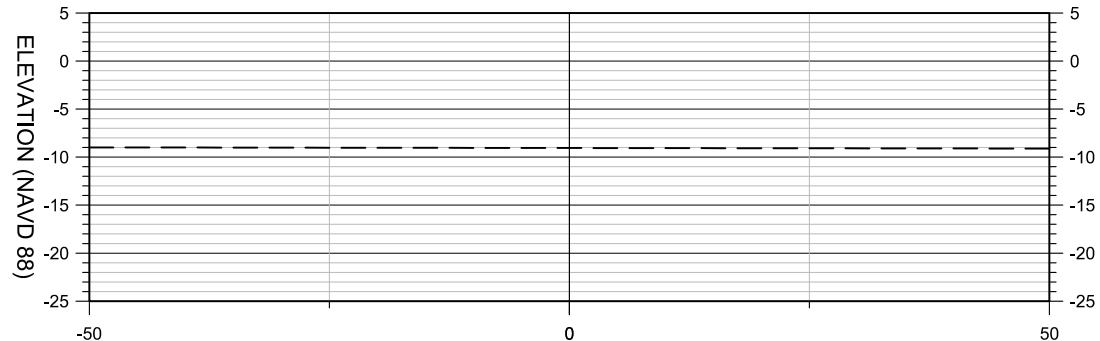
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

<p>APPLICATION BY:</p> <p>Baird. Innovation Engineered.</p>	<p>COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802</p>	<p>BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT</p>	<p>CROSS SECTIONS (3 OF 8)</p>
<p>DRAWN BY: REC</p>	<p>DESIGNED BY: BJH, P.E.</p>	<p>APPROVED BY: GGT, P.E.</p>	<p>STATE PROJECT NUMBER: BA-0203</p>
		<p>FEDERAL PROJECT NUMBER:</p>	<p>DATE: 2019-12-06</p>
		<p>SHEET 47 OF 52</p>	


GRAND LIARD TO WEST END
STA. 460+00



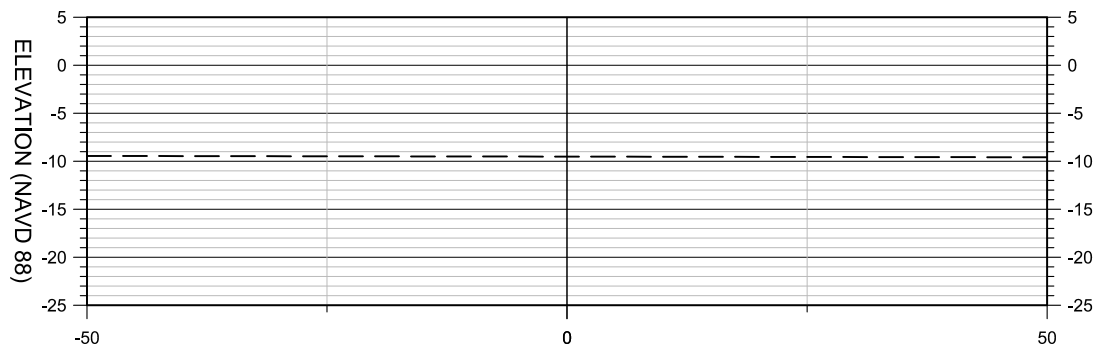
GRAND LIARD TO WEST END
STA. 470+00



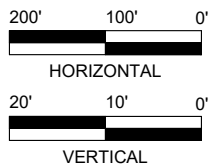
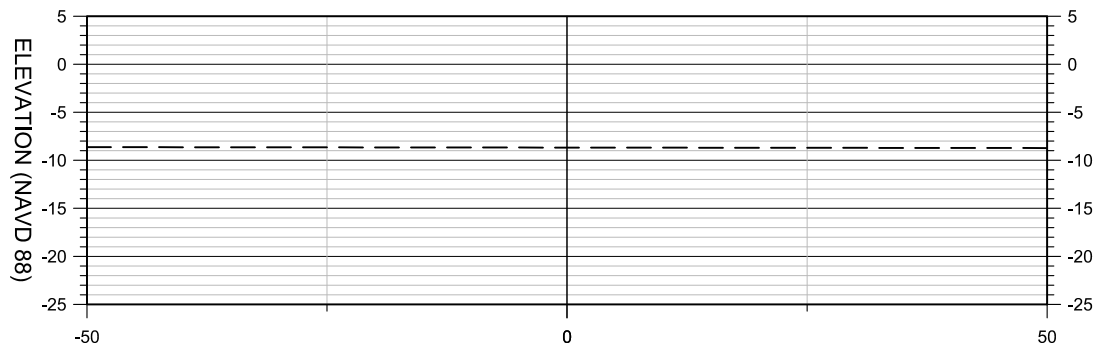
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	CROSS SECTIONS (4 OF 8)
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 48 OF 52

GRAND LIARD TO WEST END
STA. 480+00



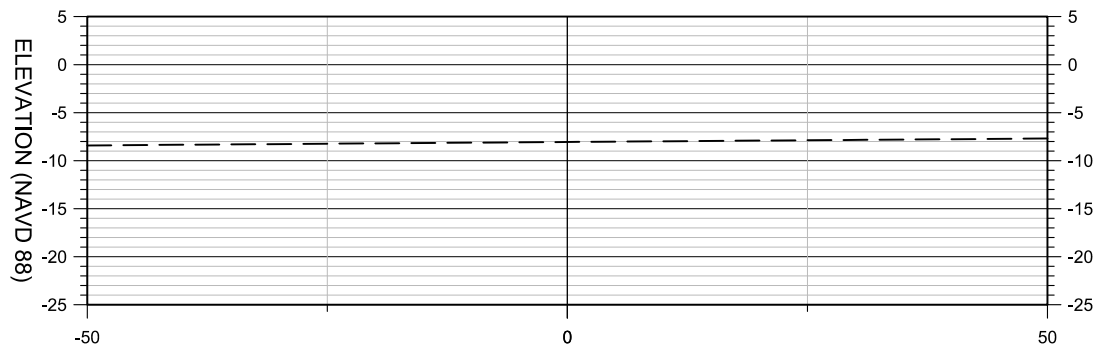
GRAND LIARD TO WEST END
STA. 490+00



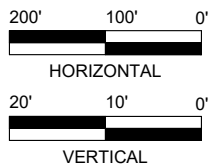
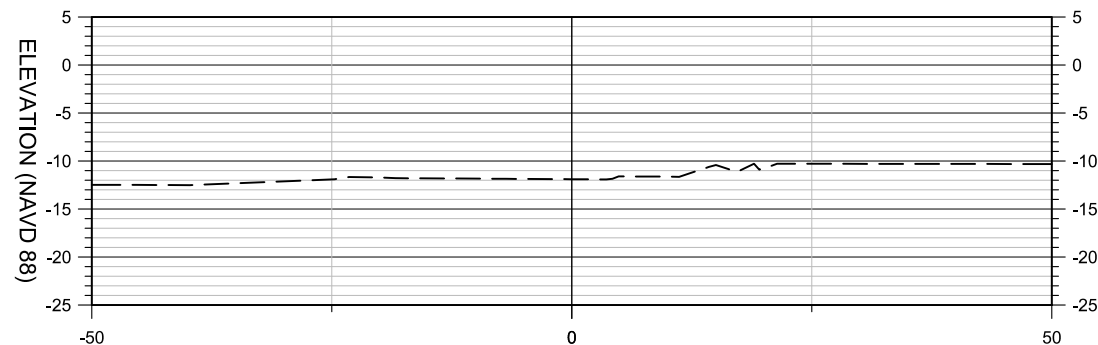
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

<p>APPLICATION BY:</p> <p>Baird. Innovation Engineered.</p>	<p>COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802</p>	<p>BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT</p>	<p>CROSS SECTIONS (5 OF 8)</p>	
<p>DRAWN BY: REC</p>	<p>DESIGNED BY: BJH, P.E.</p>	<p>APPROVED BY: GGT, P.E.</p>	<p>STATE PROJECT NUMBER: BA-0203</p> <p>FEDERAL PROJECT NUMBER:</p>	<p>DATE: 2019-12-06</p> <p>SHEET 49 OF 52</p>

GRAND LIARD TO WEST END
STA. 500+00



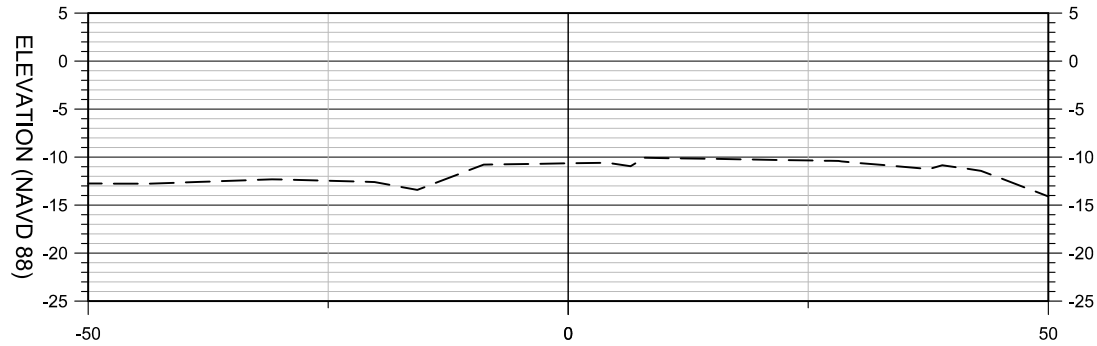
GRAND LIARD TO WEST END
STA. 510+00



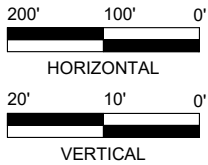
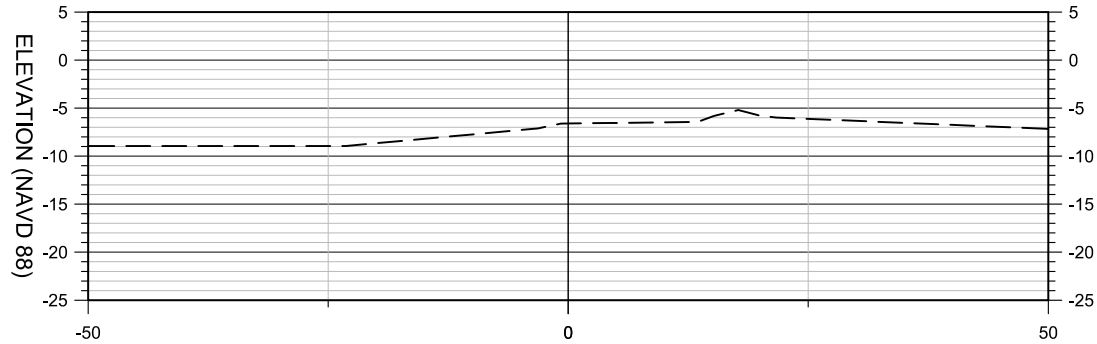
PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

<p>APPLICATION BY:</p> <p>Baird. Innovation Engineered.</p>	<p>COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802</p>	<p>BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT</p>	<p>CROSS SECTIONS (6 OF 8)</p>
<p>DRAWN BY: REC</p>	<p>DESIGNED BY: BJH, P.E.</p>	<p>APPROVED BY: GGT, P.E.</p>	<p>STATE PROJECT NUMBER: BA-0203</p>
<p>FEDERAL PROJECT NUMBER:</p>			<p>DATE: 2019-12-06 SHEET 50 OF 52</p>


GRAND LIARD TO WEST END
STA. 520+00



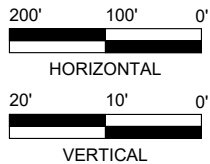
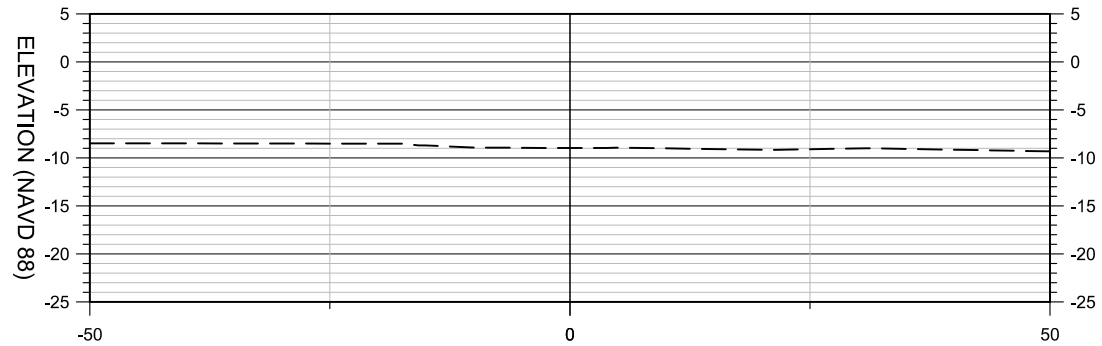
GRAND LIARD TO WEST END
STA. 530+00



PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

APPLICATION BY: 	COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802		BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT	CROSS SECTIONS (7 OF 8)
			STATE PROJECT NUMBER: BA-0203	DATE: 2019-12-06
DRAWN BY: REC	DESIGNED BY: BJH, P.E.	APPROVED BY: GGT, P.E.	FEDERAL PROJECT NUMBER:	SHEET 51 OF 52

GRAND LIARD TO WEST END
STA. 540+00



PRELIMINARY - FOR PERMIT PURPOSES ONLY
APPROVED BY: GORDON G. THOMSON, P.E. 0031412

<p>APPLICATION BY:</p> <p>Baird. Innovation Engineered.</p>	<p>COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802</p>	<p>BARATARIA BASIN RIDGE AND MARSH CREATION PROJECT SPANISH PASS INCREMENT</p>	<p>CROSS SECTIONS (8 OF 8)</p>	
<p>DRAWN BY: REC</p>	<p>DESIGNED BY: BJH, P.E.</p>	<p>APPROVED BY: GGT, P.E.</p>	<p>STATE PROJECT NUMBER: BA-0203 FEDERAL PROJECT NUMBER:</p>	<p>DATE: 2019-12-06 SHEET 52 OF 52</p>