JOINT PUBLIC NOTICE

October 7, 2019

United States Army Corps of Engineers New Orleans District Attn: Regulatory Branch 7400 Leake Avenue New Orleans, Louisiana 70118

Project Manager: James W. Little, Jr. (225) 342-3099 / fax: (225) 342-9439 James.little@usace.army.mil Permit Application Number: MVN-2011-02735-WII

State of Louisiana
Department of Environmental Quality
Attn: Water Quality Certification Sec.
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

Project Manager: Elizabeth Hill (225) 219-3225 / fax: (225) 219-3156 WQC Application Number: WQC 190913-01

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [X] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [X] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

The application has also been mailed to the Louisiana Department of Environmental Quality, for a Water Quality Certification (WQC) in accordance with statutory authority contained in Louisiana Revised Statute 30:2074 A(3), and provisions of Section 401 of the Clean Water Act (P.L. 95-17).

LEVEE RE-FURBISHMENT AND WATER CONTROL STRUCTURE REPLACEMENT WORK NEAR THE MERMENTAU RIVER IN CAMERON PARISH

NAME OF APPLICANT: Cameron Parish Gravity Drainage District #5, c/o Lonnie G. Harper & Associates, Inc., Attn: Mr. Mitch Thomas, 2746 Highway 384, Bell City, LA 70630.

LOCATION OF WORK: In Cameron Parish, Louisiana; located at 29.790792 North, -92.882708 approximately two miles upstream of the Mermentau River bridge near Grand Chenier, Louisiana, as shown on the attached vicinity map.

CHARACTER OF WORK: Restore 133,085 linear feet of five existing levee segments and 29 water control structures for water level management and tidal surge control. Approximately 780,520 cubic yards of adjacent water bottom material will be dredged to restore the levees. Approximately 730 cubic yards of rock will be used as rip-rap and placed around the inlets and outlets of the water control structures for erosion protection. The levee will have a top width varying from 6 to 12 feet and a bottom width varying from 20 to 40 feet with a 1 on 2 side slope. Project implementation will impact approximately 134 acres of non-vegetated water bottoms and 104 acres of existing degraded levees.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **20 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be submitted so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be forwarded to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH**. Individuals or parties may request an extension of time in which to comment on the proposed work by writing, faxing, or emailing the Corps of Engineers Project Manager listed above. Any request must be specific and substantively supportive of the requested extension, and received by this office prior to the end of the initial comment period. The Section Chief will review the request and the requestor will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous to the initial comment period and, inclusive of the initial comment period, will not exceed a total of 30 calendar days. Letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Copies of this public notice are being sent to the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources.

Our initial finding is that the proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species. Based on the South Louisiana Standard Local Operating Procedure for Endangered Species (SLOPES), as signed on October 22, 2014, between the U.S. Army Corps of Engineers, New Orleans and the U.S. Fish and Wildlife Service, the proposed project was evaluated under the determination key on 17 September 2019 and it has been determined that portions of the project are located in waters known to be utilized by the West Indian Manatee (*Trichechus manatus*) and determined that the activity is not likely to adversely affect the species. If this permit is issued, the permittee will be required to follow the SLOPES Special Conditions for the West Indian Manatee.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal may result in the destruction or alteration of <u>238.0</u> acres of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, before a permit is issued.

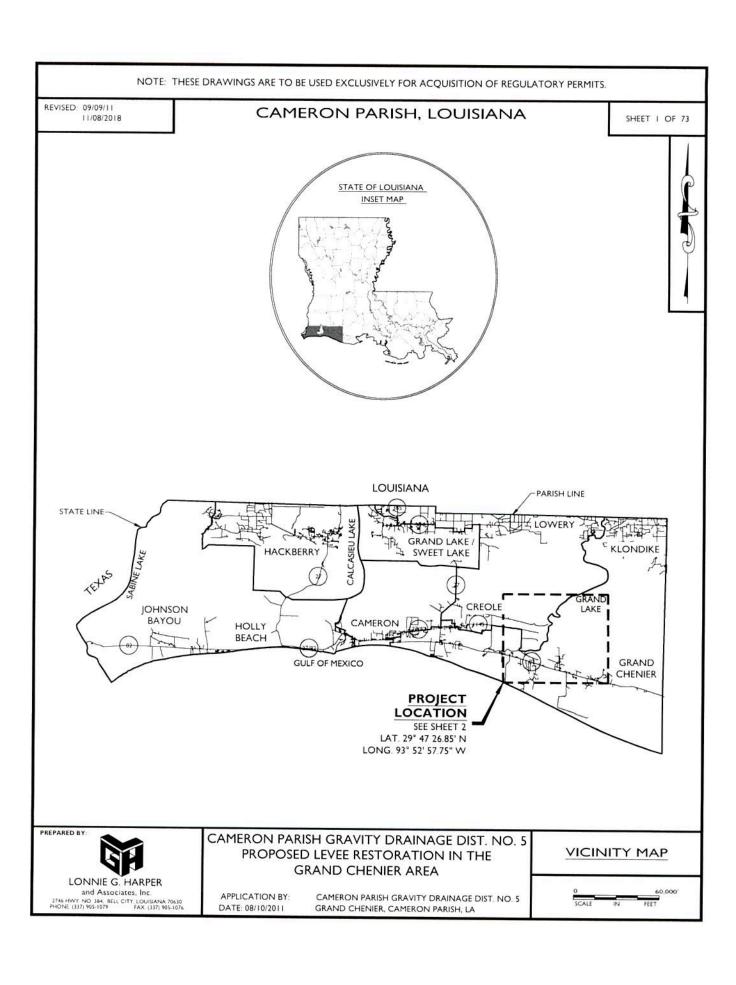
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

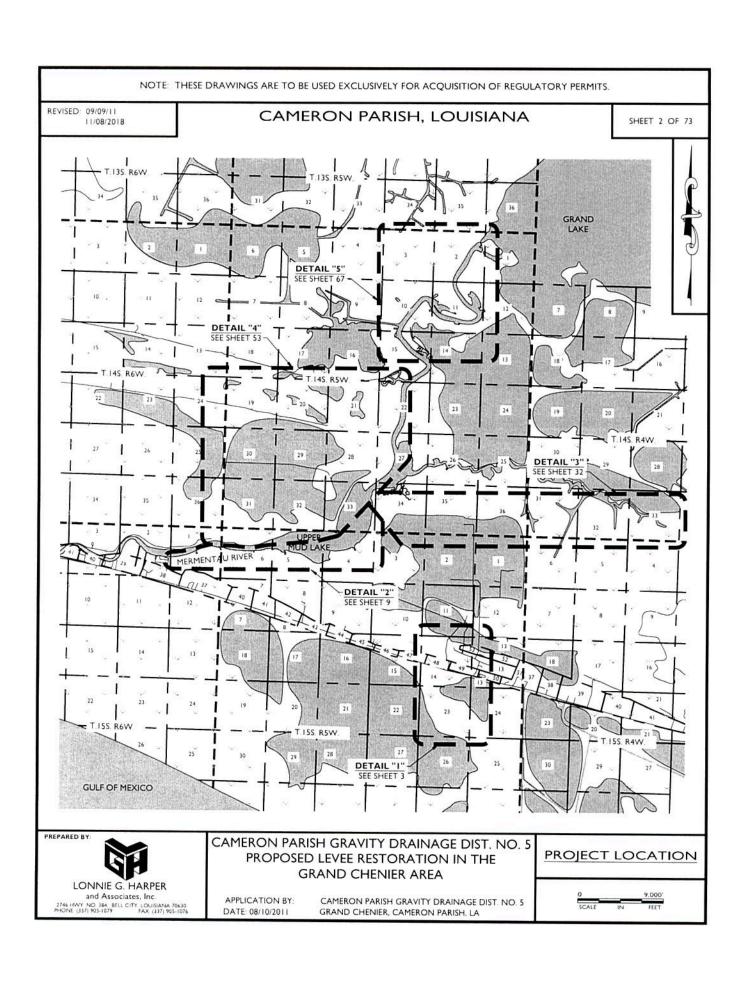
The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. The Department of the Army permit will not be issued unless the applicant received approval or a waiver of the Coastal Use Permit by the Department of Natural Resources.

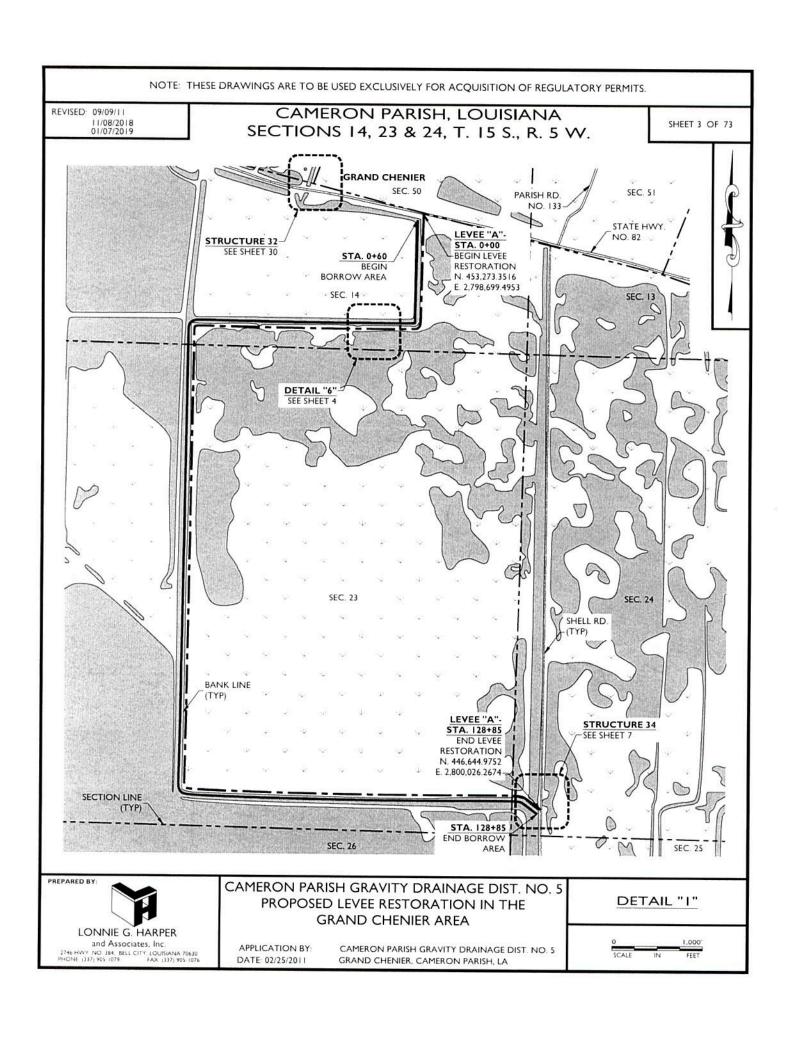
You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

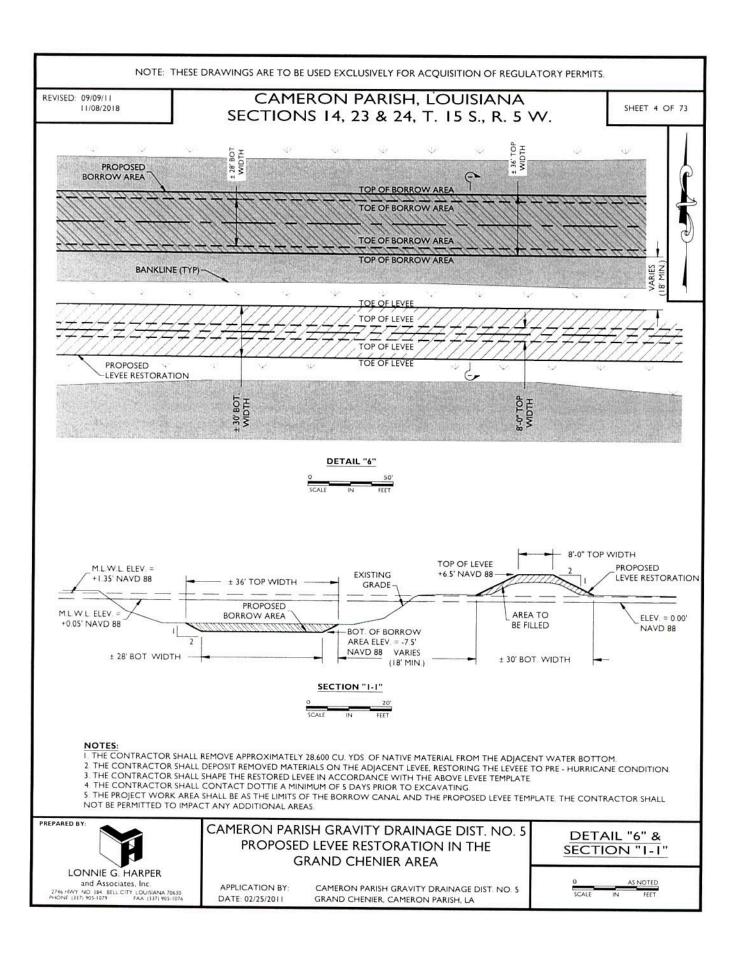
Darrell S. Barbara Chief, Western Evaluation Section Regulatory Branch

Enclosure









REVISED: 09/09/11 11/08/2018 01/07/2019

CAMERON PARISH, LOUISIANA SEC. 14, T. 15 S., R. 5 W.

SHEET 5 OF 73



OMITTED

PREPARED BY:



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5
PROPOSED LEVEE RESTORATION IN THE
GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON, LOUISIANA STRUCTURE NO. 33 PLAN VIEW



REVISED: 09/09/11 11/08/2018 01/07/2019

CAMERON PARISH, LOUISIANA SEC. 14, T. 15 S., R. 5 VV.

SHEET 6 OF 73

OMITTED

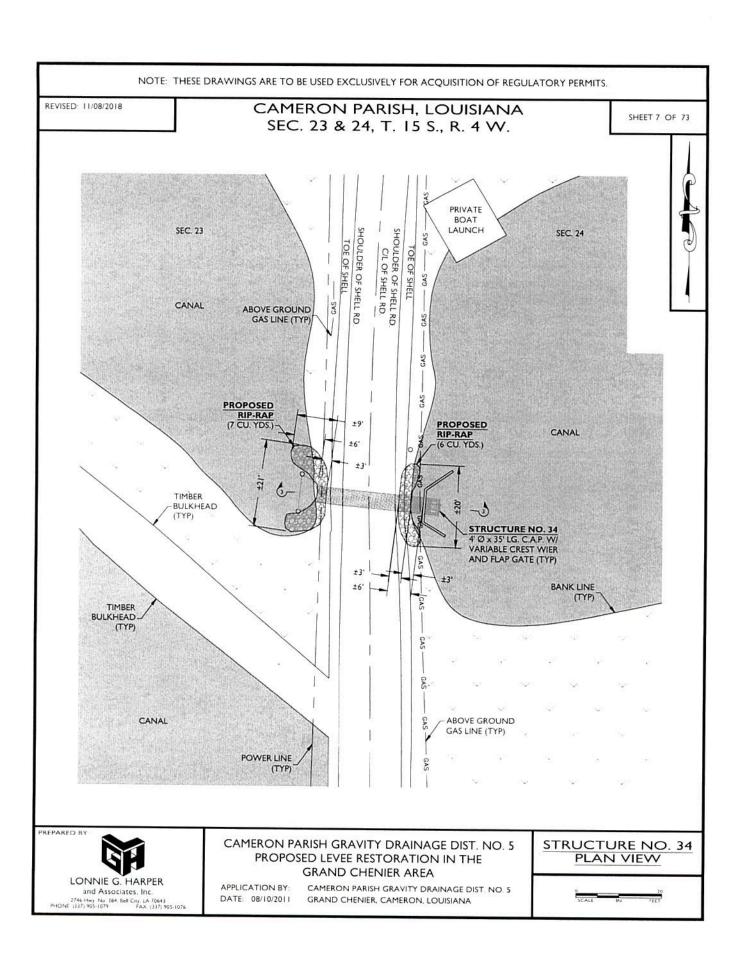
PREPARED BY:



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON, LOUISIANA STRUCTURE NO. 33
SECTION VIEWS

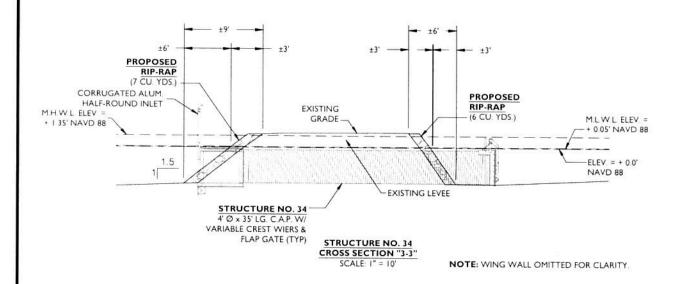


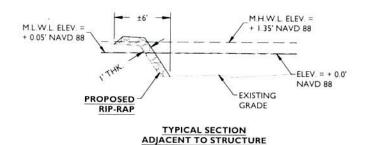


REVISED: 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 23 & 24, T. 15 S., R. 4 W.

SHEET 8 OF 73





SCALE: NOT TO SCALE

STRUCTURE NO. 34 NOTES:

- I. STRUCTURE NO. 34 CONSIST OF A SINGLE FOUR FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE AND A VARIABLE CREST WEIR ON INLET SIDE
- 2. APPROXIMATELY 13 CU. YDS. (20 TONS) OF MAN-SIZED (55# CLASS) (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS
- STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY

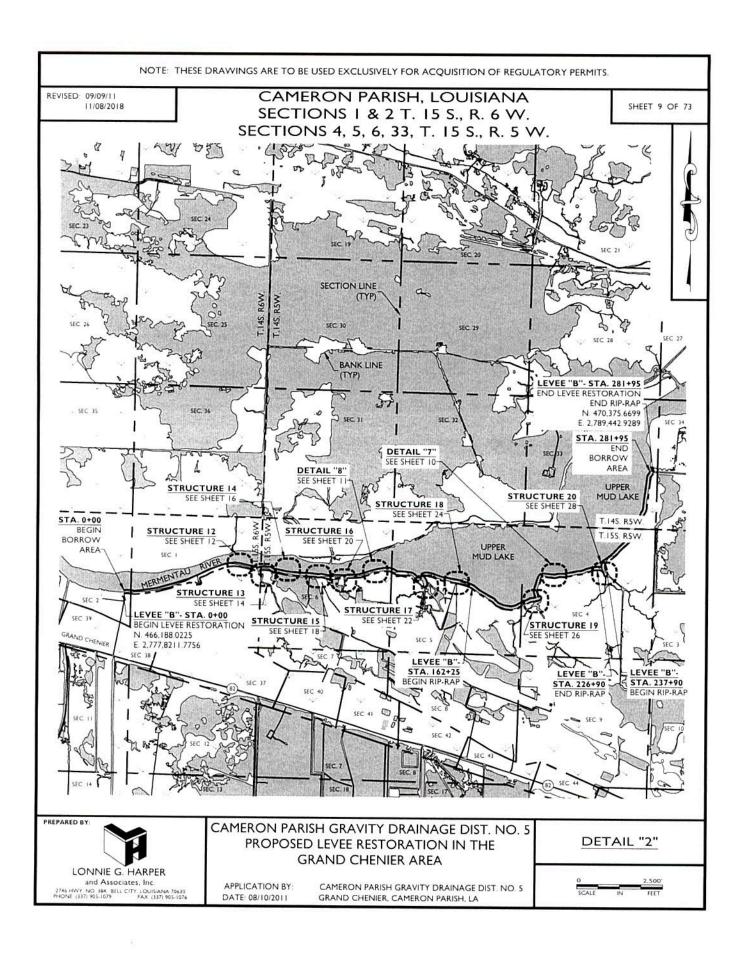


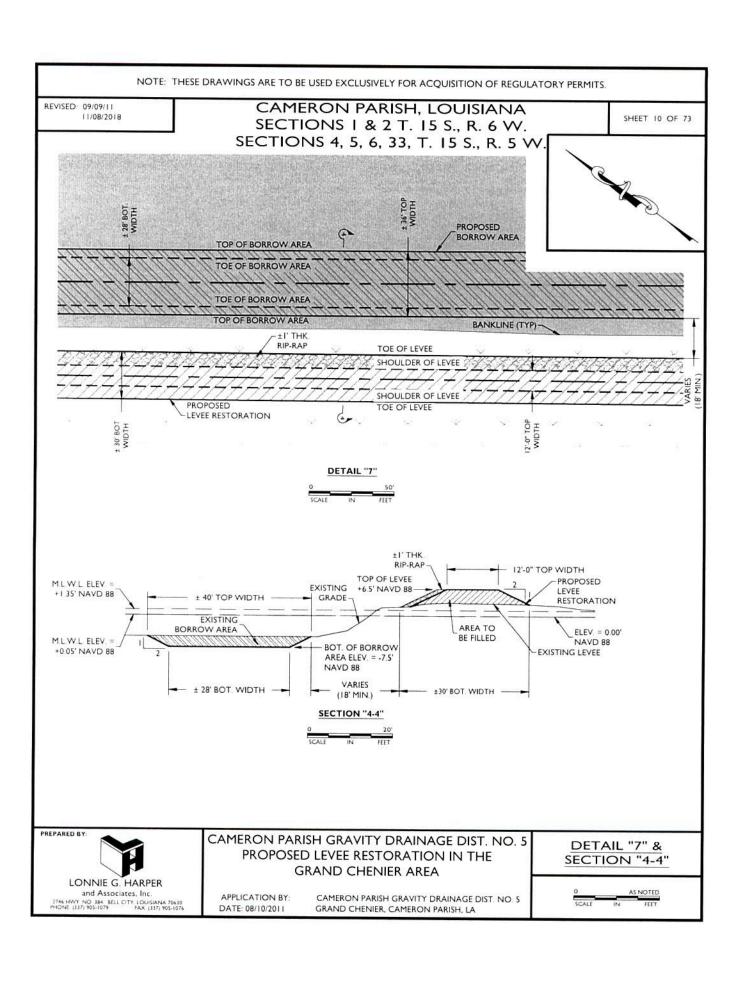
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

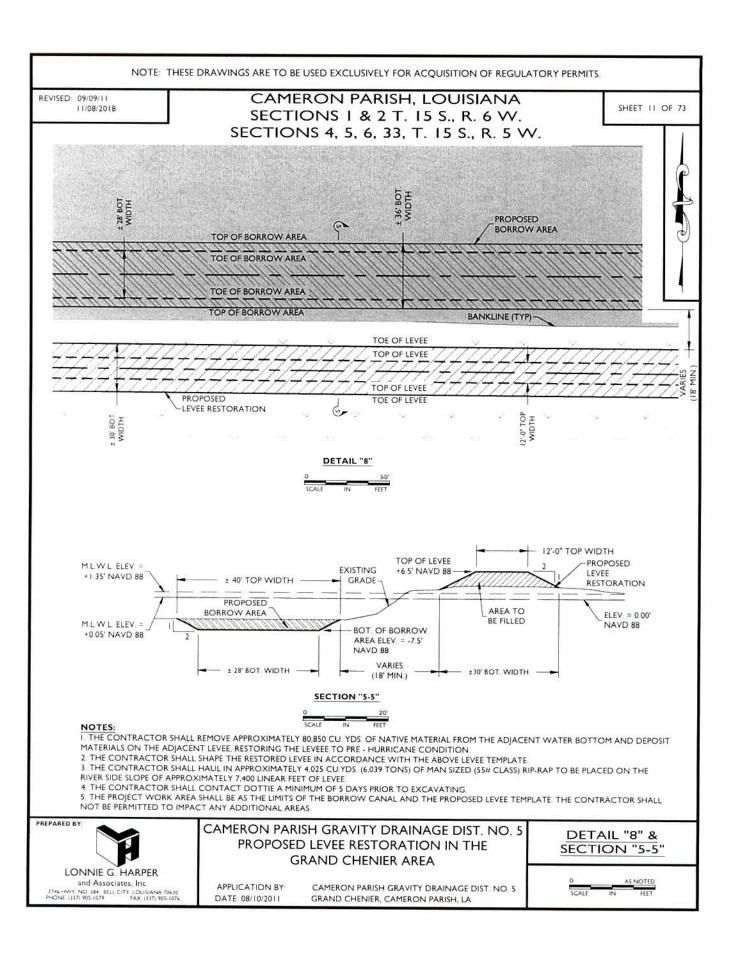
APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON, LOUISIANA

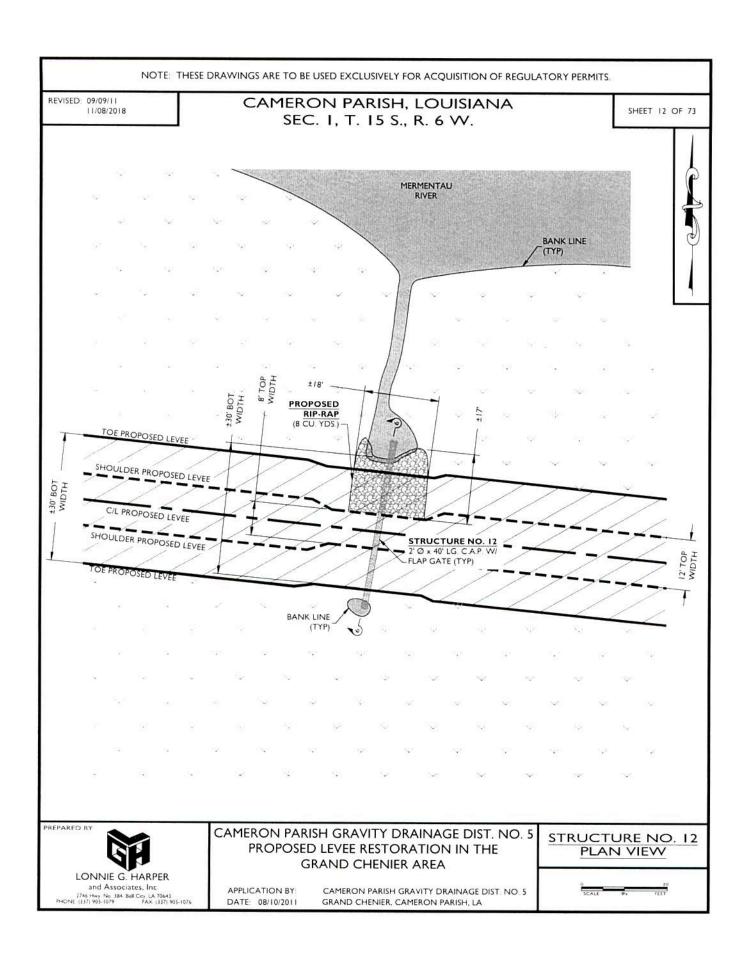
STRUCTURE NO. 34 SECTION VIEWS







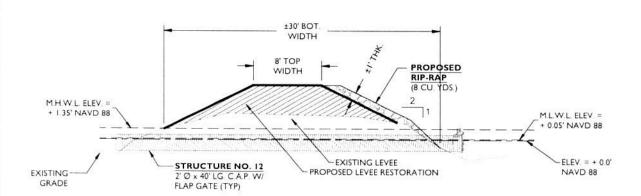




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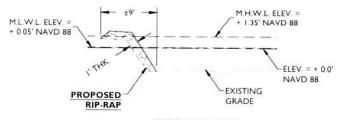
CAMERON PARISH, LOUISIANA SEC. I, T. 15 S., R. 6 W.

SHEET 13 OF 73



STRUCTURE NO. 12 CROSS SECTION "6-6" SCALE: 1" = 10'

NOTE: WING WALL OMITTED FOR CLARITY.



TYPICAL SECTION
ADJACENT TO STRUCTURE
SCALE: NOT TO SCALE

STRUCTURE NO. 12 NOTES:

- I. STRUCTURE NO. 12 CONSIST OF A SINGLE TWO FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 8 CU. YDS. (12 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACED ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS
- STRUCTURE USING SIMILAR MATERIALS.

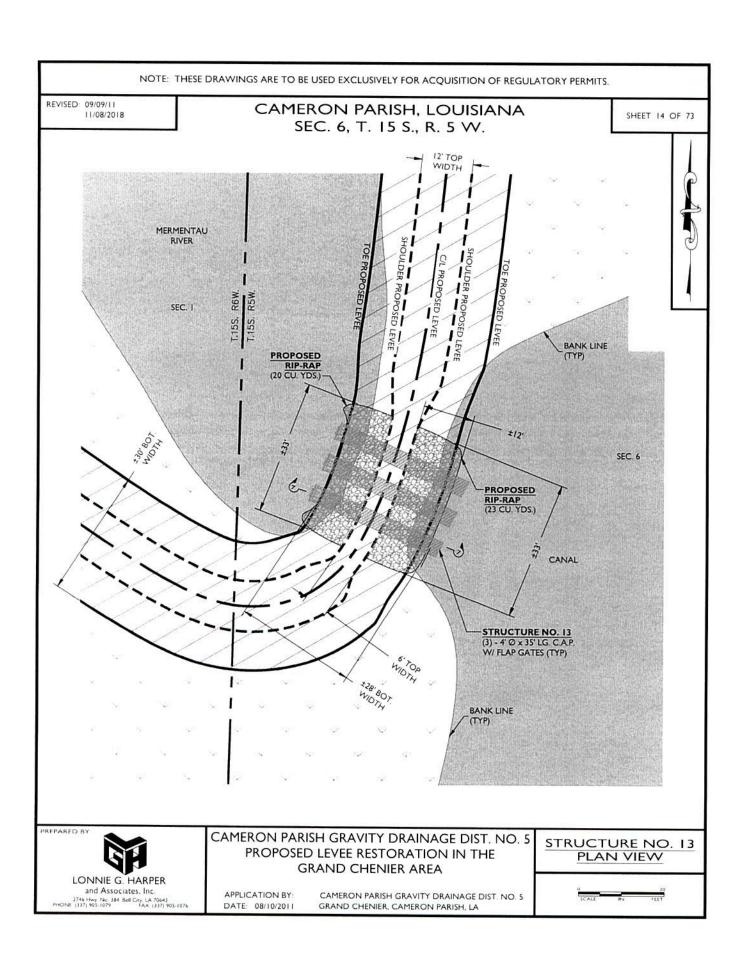
PREPARED BY



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 12 SECTION VIEWS

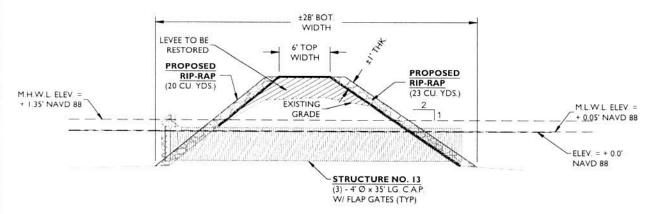




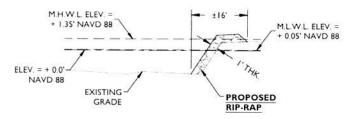
REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 6, T. 15 S., R. 5 W.

SHEET 15 OF 73



STRUCTURE NO. 13 **CROSS SECTION "7-7"** SCALE: I" = 10"



TYPICAL SECTION ADJACENT TO STRUCTURE SCALE: NOT TO SCALE

STRUCTURE NO. 13 NOTES:

- 1. STRUCTURE NO. 13 CONSIST OF (3) FOUR FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 43 CU. YDS. (65 TONS) OF MAN-SIZED (55# CLASS) (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH

THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



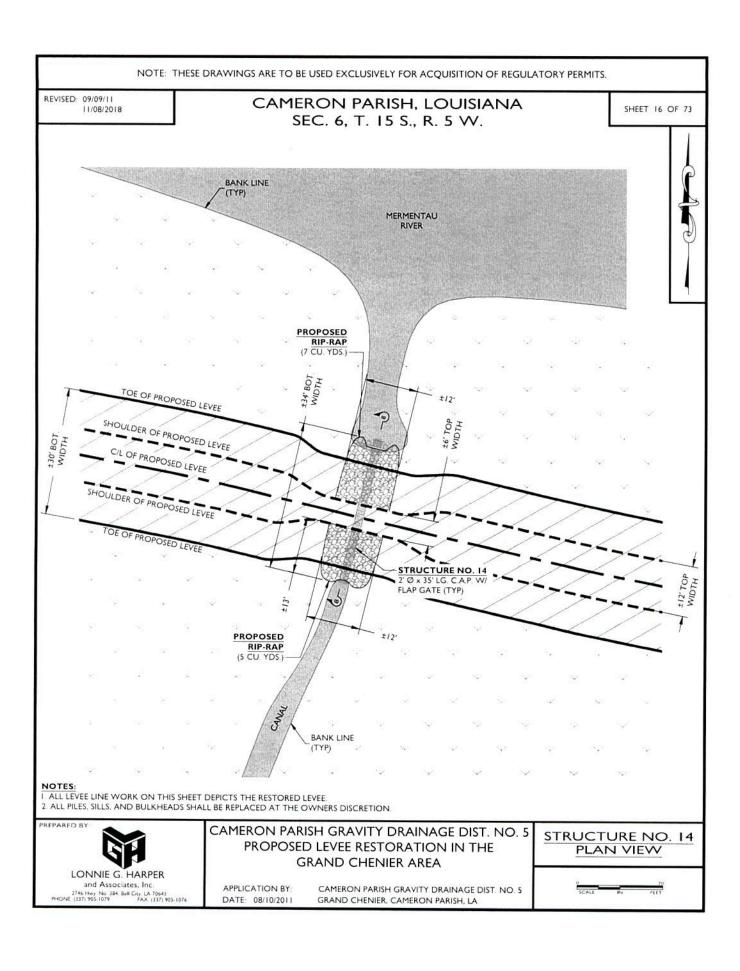
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY: DATE: 08/10/2011

CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 13 SECTION VIEWS

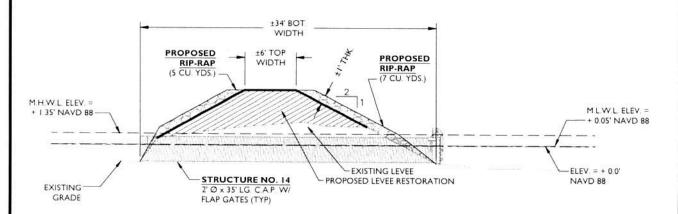




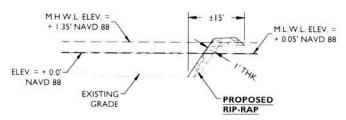
REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 6, T. 15 S., R. 5 W.

SHEET 17 OF 73



STRUCTURE NO. 14 CROSS SECTION "8-8" SCALE: 1" = 10'



TYPICAL SECTION ADJACENT TO STRUCTURE SCALE: NOT TO SCALE

STRUCTURE NO. 14 NOTES:

- 1. STRUCTURE NO. 14 CONSIST OF A SINGLE TWO FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH. A FLAP GATE ON THE OUTLET SIDE.

 2. APPROXIMATELY12 CU. YDS. (18 TONS) OF MAN-SIZED (55# CLASS) (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY

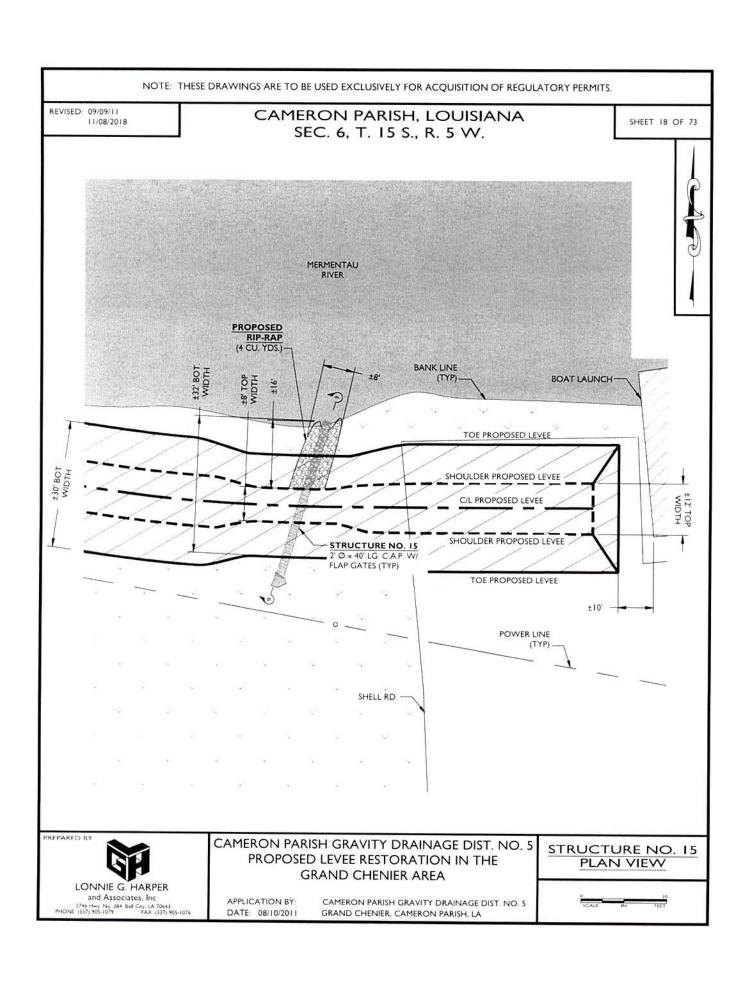


CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 14
SECTION VIEWS

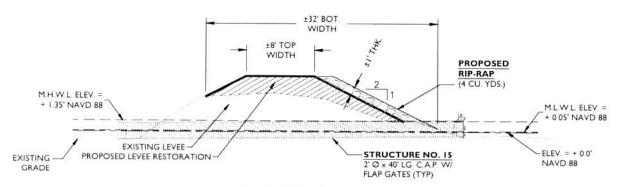




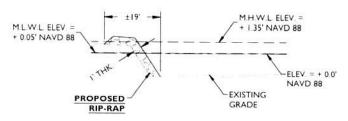
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CAMERON PARISH, LOUISIANA SEC. 6, T. 15 S., R. 5 W.

SHEET 19 OF 73



STRUCTURE NO. 15 CROSS SECTION "9-9" SCALE: I" = 10'



TYPICAL SECTION
ADJACENT TO STRUCTURE
SCALE: NOT TO SCALE

STRUCTURE NO. 15 NOTES:

- I STRUCTURE NO. IS CONSIST OF A SINGLE TWO FOOT DIAMETER BY 40 FOOT LONG
- CORRUGATED ALUMINUM PIPE WITH FLAP GATES ON THE OUTLET SIDE
- 2. APPROXIMATELY 4 CU. YDS. (6 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS

STRUCTURE USING SIMILAR MATERIALS.

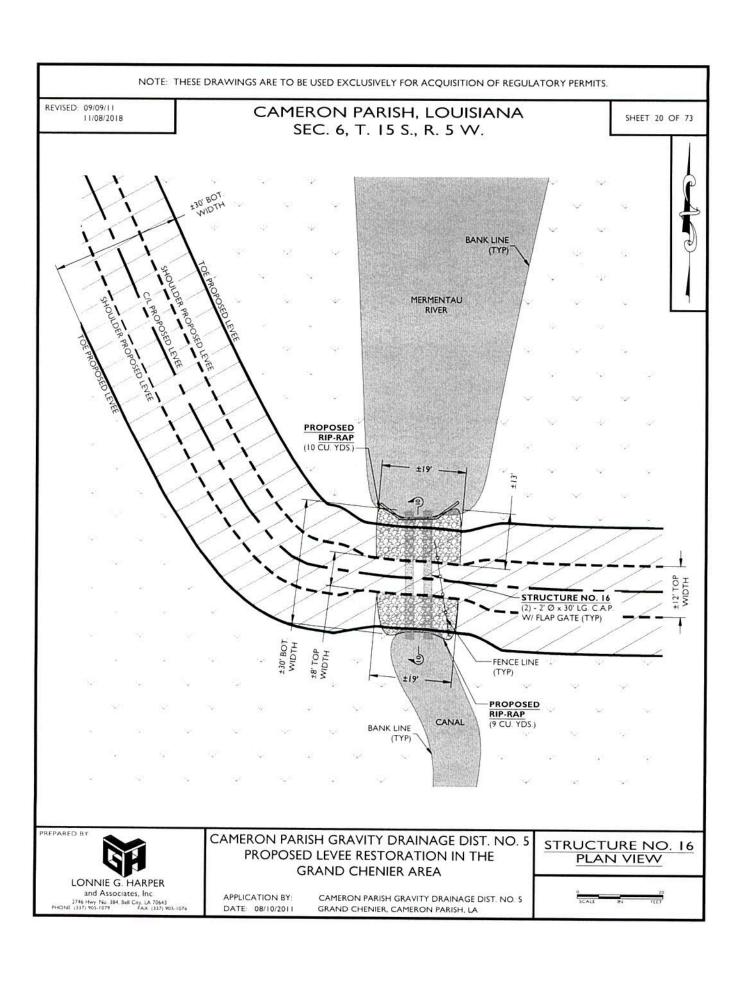
PREPARED BY



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 15 SECTION VIEWS

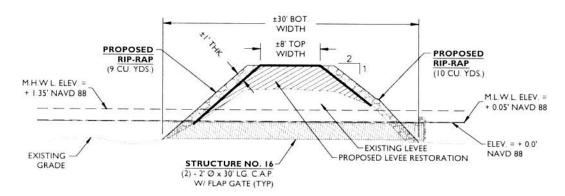




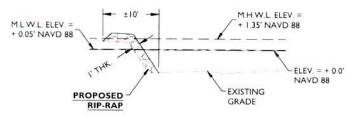
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CAMERON PARISH, LOUISIANA SEC. 6, T. 15 S., R. 5 W.

SHEET 21 OF 73



STRUCTURE NO. 16 CROSS SECTION "10-10" SCALE: 1" = 10'



TYPICAL SECTION
ADJACENT TO STRUCTURE
SCALE: NOT TO SCALE

STRUCTURE NO. 16 NOTES:

STRUCTURE USING SIMILAR MATERIALS.

I. STRUCTURE NO. 16 CONSIST OF (2) TWO FOOT DIAMETER BY 30 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.

2. APPROXIMATELY 19 CU. YDS. (28 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.

3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.

4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS

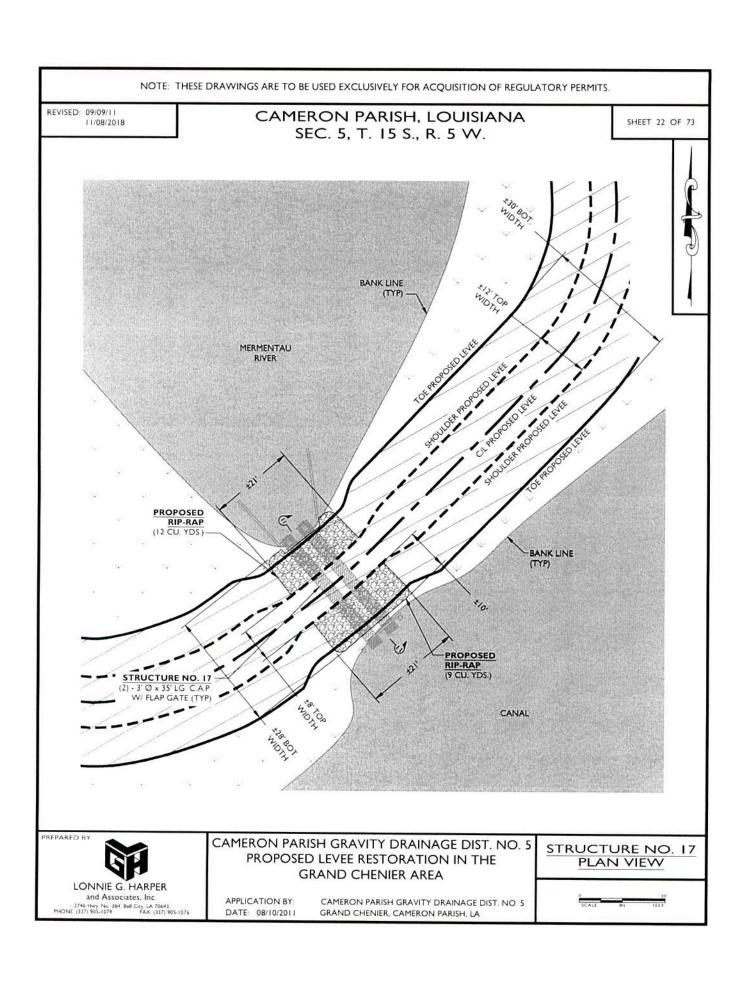
PREPARED BY



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5
PROPOSED LEVEE RESTORATION IN THE
GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 16 SECTION VIEWS

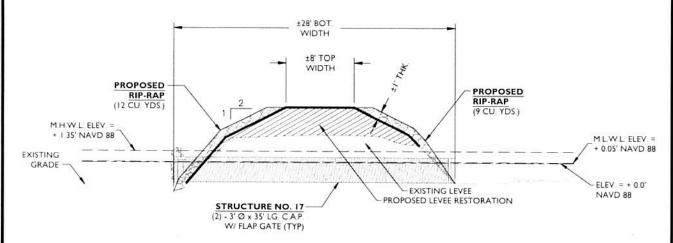




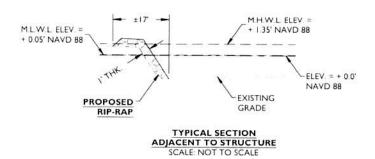
REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 5, T. 15 S., R. 5 W.

SHEET 23 OF 73



STRUCTURE NO. 17 CROSS SECTION "11-11" SCALE: 1" = 10'



STRUCTURE NO. 17 NOTES:

I. STRUCTURE NO. 17 CONSIST OF (2): THREE FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.

2. APPROXIMATELY 21 CU. YDS. (32 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.

3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.

4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS STRUCTURE USING SIMILAR MATERIALS.

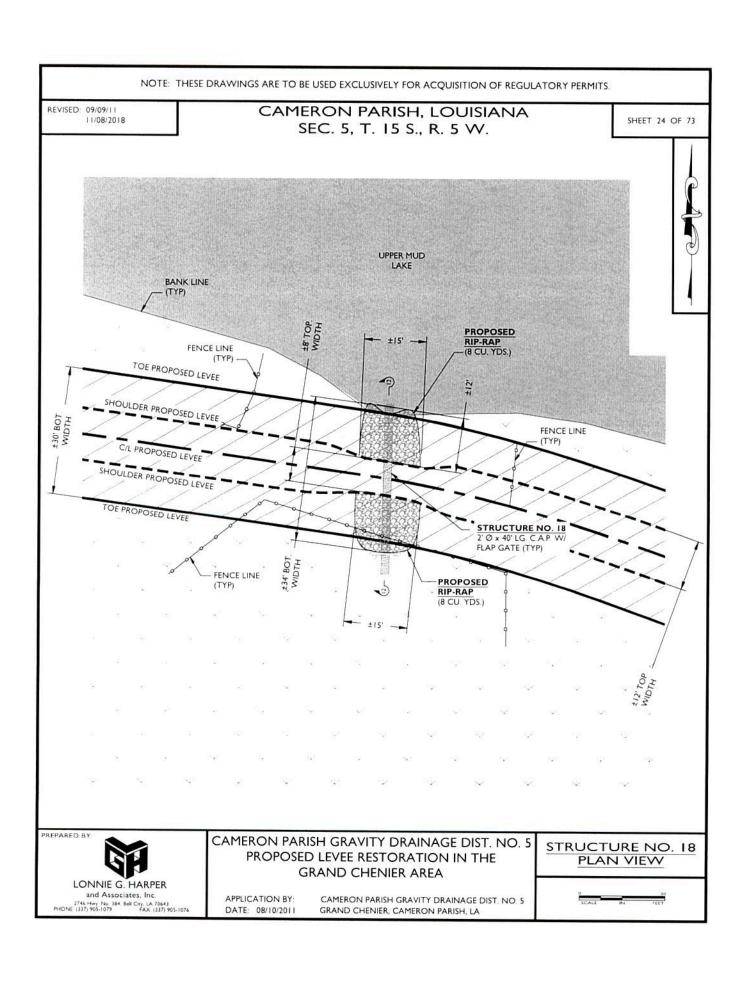
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CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 17 SECTION VIEWS

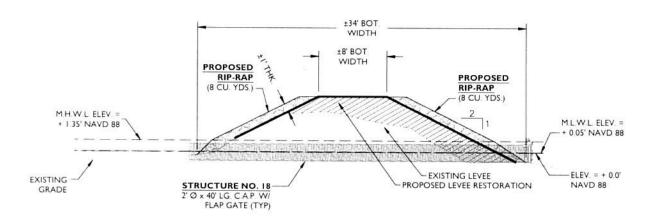




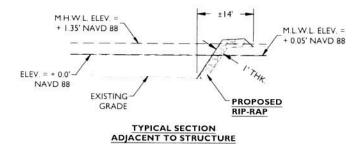
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CAMERON PARISH, LOUISIANA SEC. 5, T. 15 S., R. 5 W.

SHEET 25 OF 73



STRUCTURE NO. 18 CROSS SECTION "12-12" SCALE: I" = 10'



SCALE: NOT TO SCALE

STRUCTURE NO. 18 NOTES:

STRUCTURE USING SIMILAR MATERIALS.

I. STRUCTURE NO. 18 CONSIST OF A SINGLE TWO FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.

2. APPROXIMATELY 16 CU. YDS. (24 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.

3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT

4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS

PREPARED BY

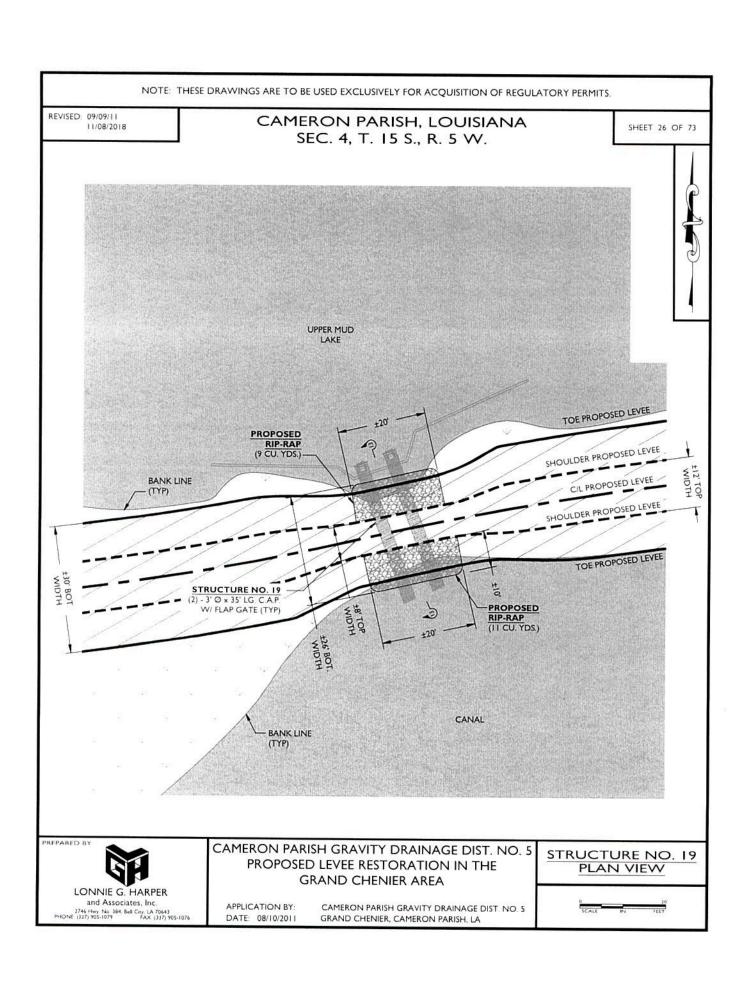


CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5
GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 18 SECTION VIEWS

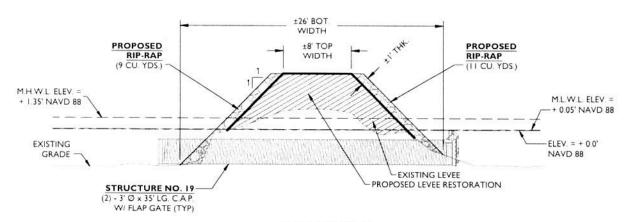




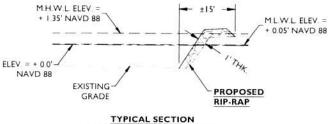
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CAMERON PARISH, LOUISIANA SEC. 4, T. 15 S., R. 5 W.

SHEET 27 OF 73



STRUCTURE NO. 19 SCALE: I" = 10'



ADJACENT TO STRUCTURE SCALE: NOT TO SCALE

STRUCTURE NO. 19 NOTES:

- 1. STRUCTURE NO. 19 CONSIST OF (2) THREE FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 20 CU. YDS. (30 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS
- STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



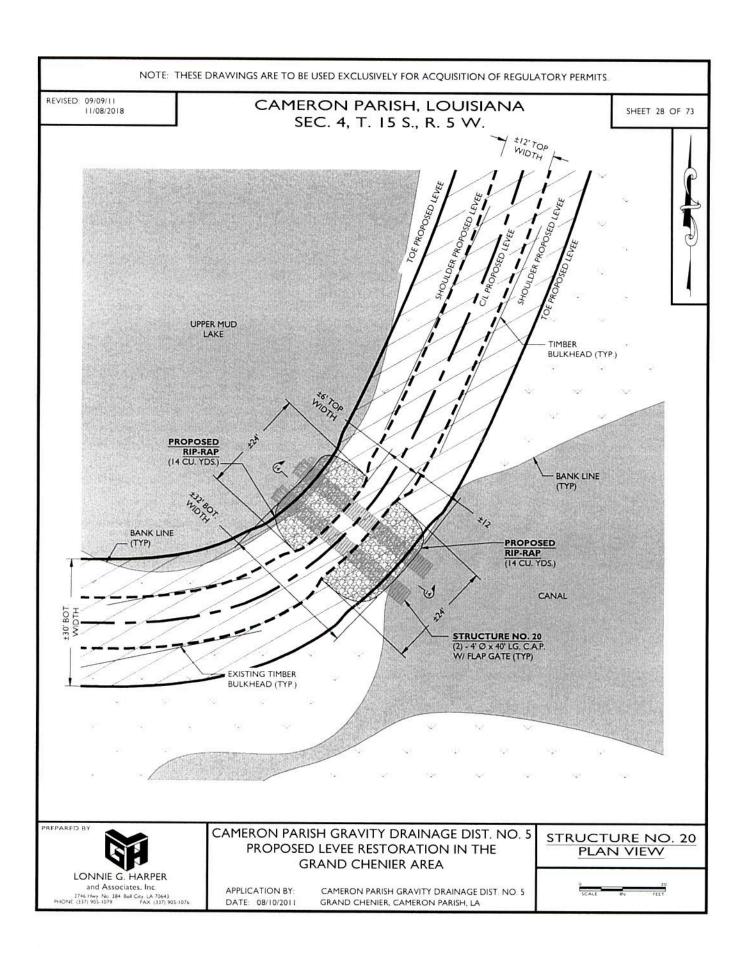
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY: DATE: 08/10/2011

CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 19 SECTION VIEWS

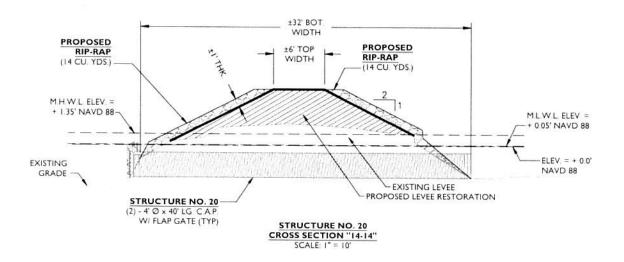


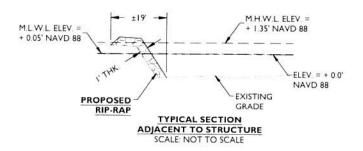


REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 4, T. 15 S., R. 5 W.

SHEET 29 OF 73





STRUCTURE NO. 20 NOTES:

- I. STRUCTURE NO. 20 CONSIST OF (2) FOUR FOOT DIAMETER BY 40 FOOT LONG CORRUGATED
- ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.

 2. APPROXIMATELY 28 CU YDS. (42 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.

 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS
- STRUCTURE USING SIMILAR MATERIALS

PREPARED BY



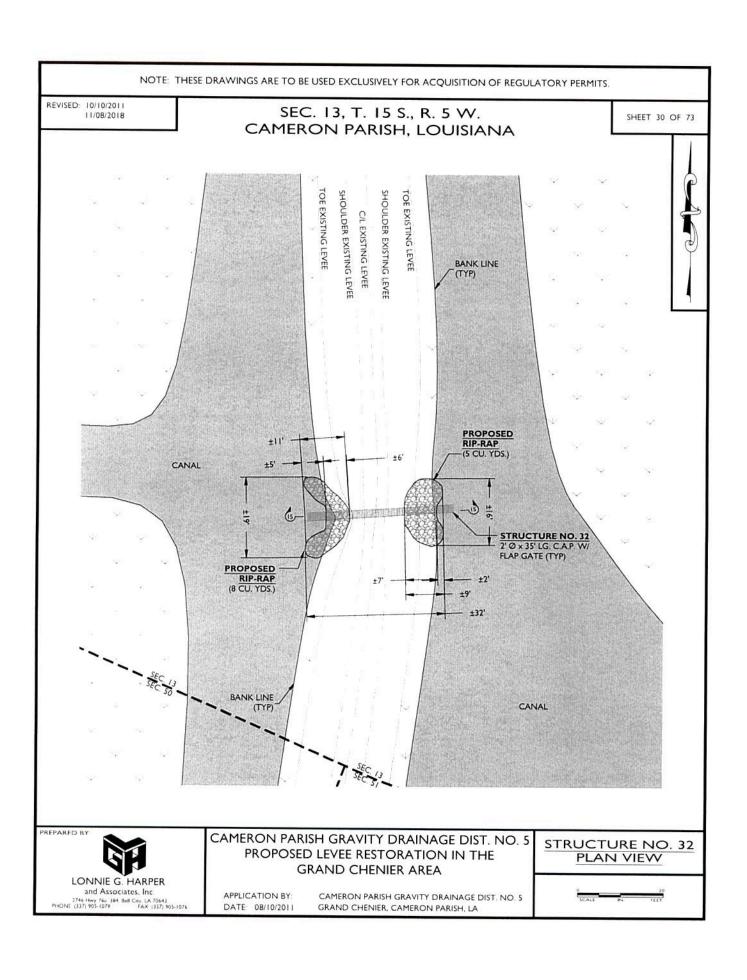
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY: DATE: 08/10/2011

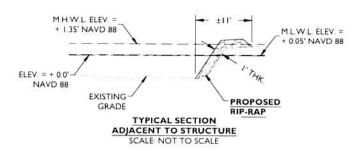
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 20 SECTION VIEWS





NOTE: THESE DRAWINGS ARE TO BE USED EXCLUSIVELY FOR ACQUISITION OF REGULATORY PERMITS. REVISED: SEC. 48, 49, T. 15 S., R. 5 W. SHEET 31 OF 73 11/08/2018 CAMERON PARISH, LOUISIANA — ±32° — ±11' -±5' EXISTING PROPOSED **PROPOSED** GRADE RIP-RAP RIP-RAP (8 CU. YDS.) M.H.W.L. ELEV. = (5 CU. YDS.) + 1.35' NAVD 88 M.L.W.L. ELEV. = + 0.05' NAVD 88 ELEV. = + 0.0" NAVD 88 EXISTING LEVEE PROPOSED STRUCTURE NO. 32 RIP-RAP PROPOSED 0 x 35' LG. C.A.P. W/ (137 CU. FT.) RIP-RAP FLAP GATE (TYP) (200 CU. FT.) STRUCTURE NO. 32 SCALE: I" = 10' NOTE: WING WALL OMITTED FOR CLARITY.



STRUCTURE NO. 32 NOTES:

- 1. STRUCTURE NO. 32 CONSIST OF A SINGLE TWO FOOT DIAMETER BY 35 FOOT LONG
- CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE
- 2. APPROXIMATELY 13 CU. YDS. (20 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH

THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



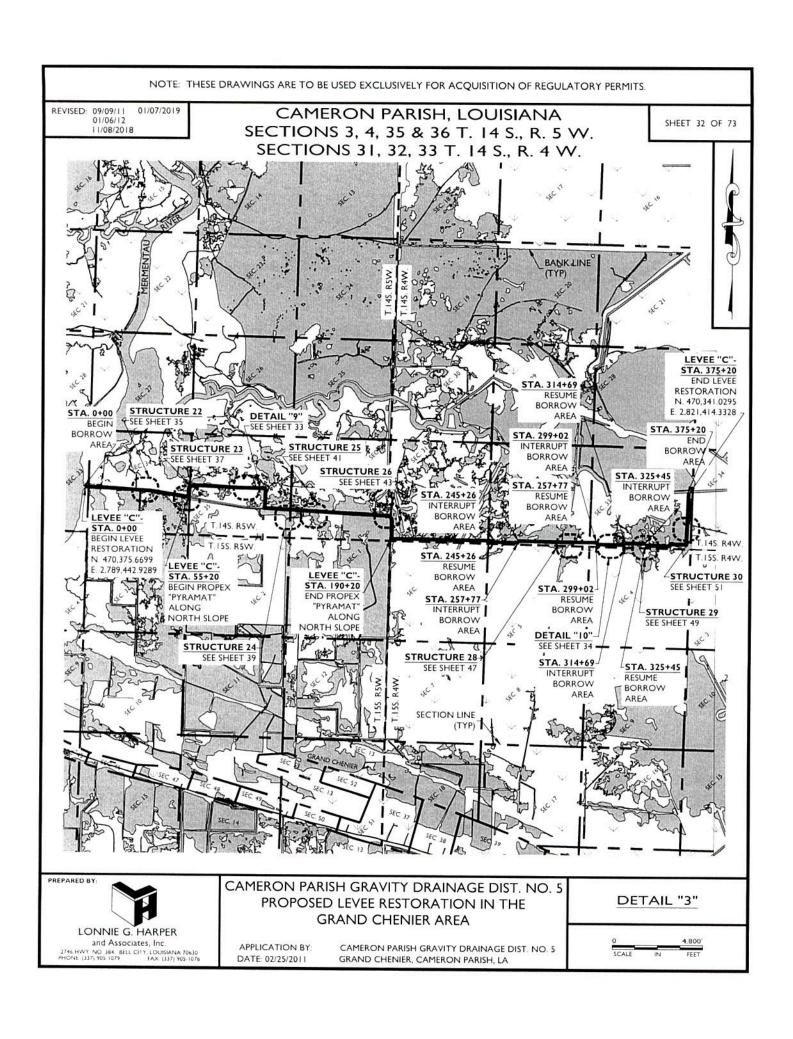
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

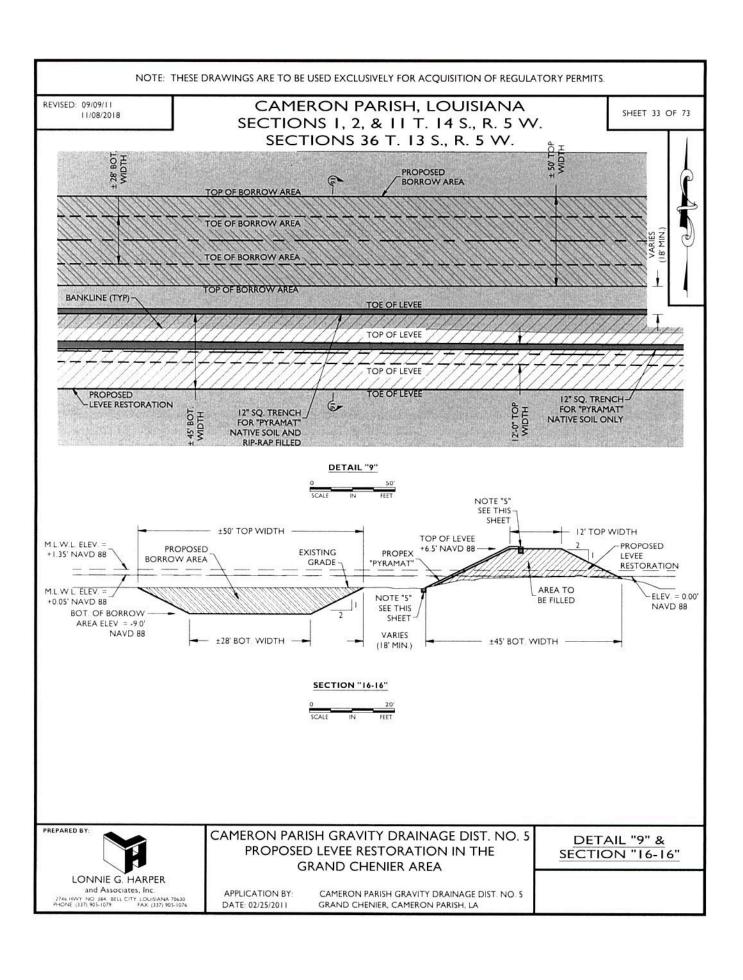
APPLICATION BY DATE: 08/10/2011

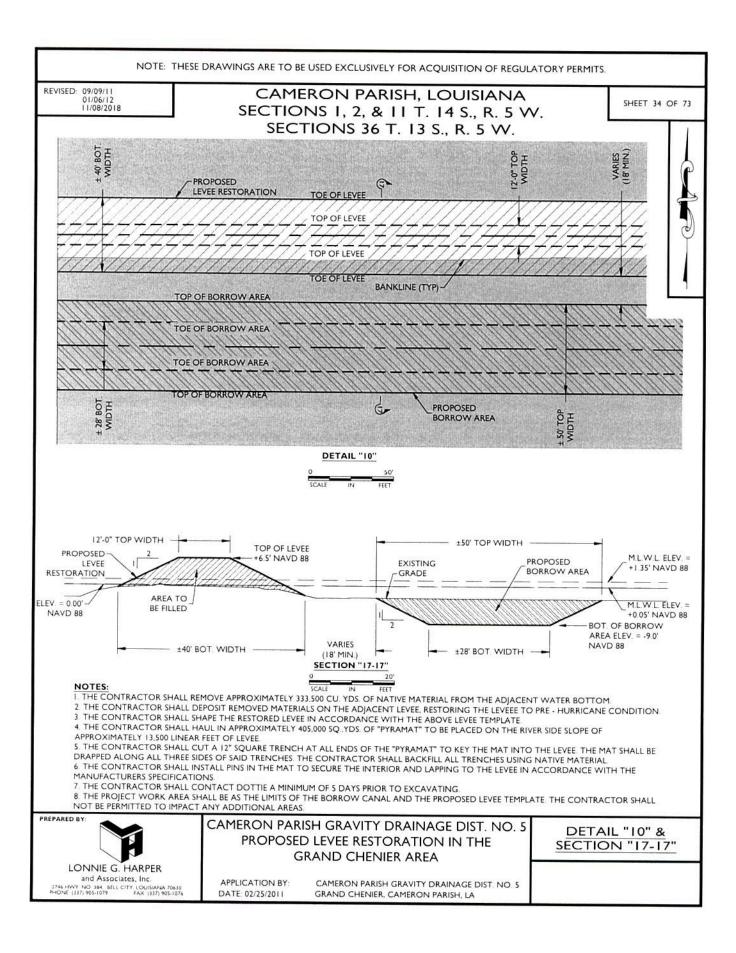
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

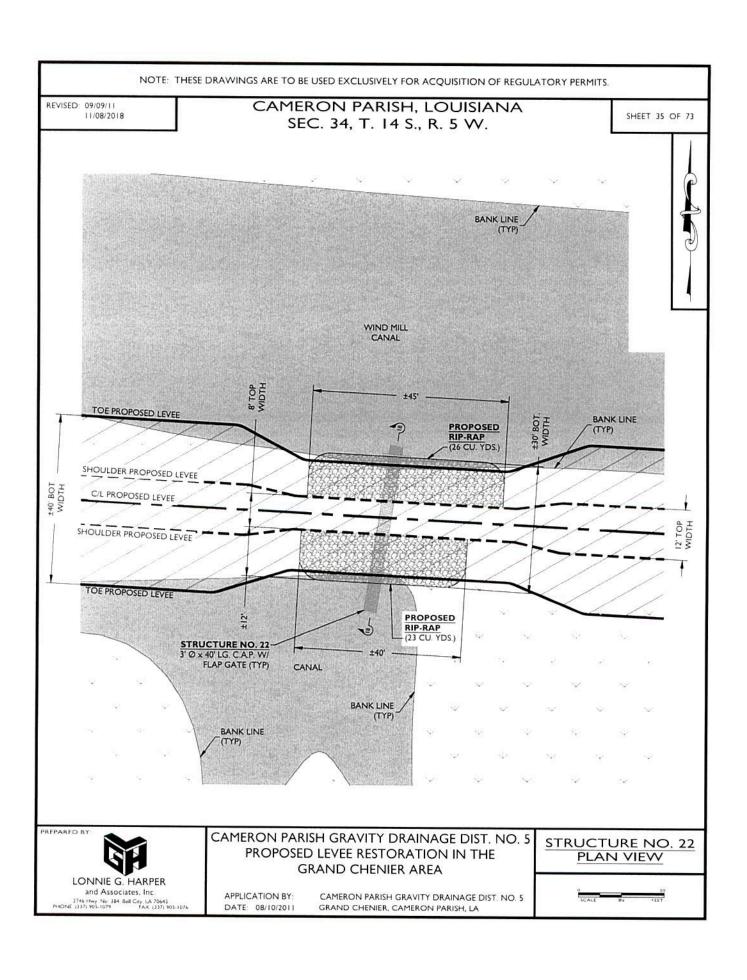
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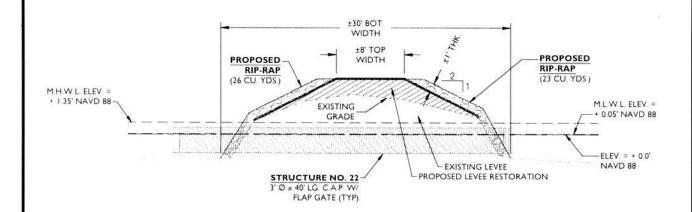




REVISED: 09/09/11 11/08/2018

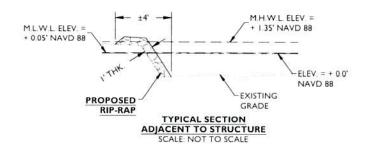
CAMERON PARISH, LOUISIANA SEC. 34, T. 14 S., R. 5 W.

SHEET 36 OF 73



STRUCTURE NO. 22 CROSS SECTION "18-18" SCALE: I" = 10'

NOTE: WING WALL OMITTED FOR CLARITY.



STRUCTURE NO. 22 NOTES:

- I. STRUCTURE NO. 22 CONSIST OF A SINGLE THREE FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.

 2. APPROXIMATELY 49 CU. YDS. (74 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY

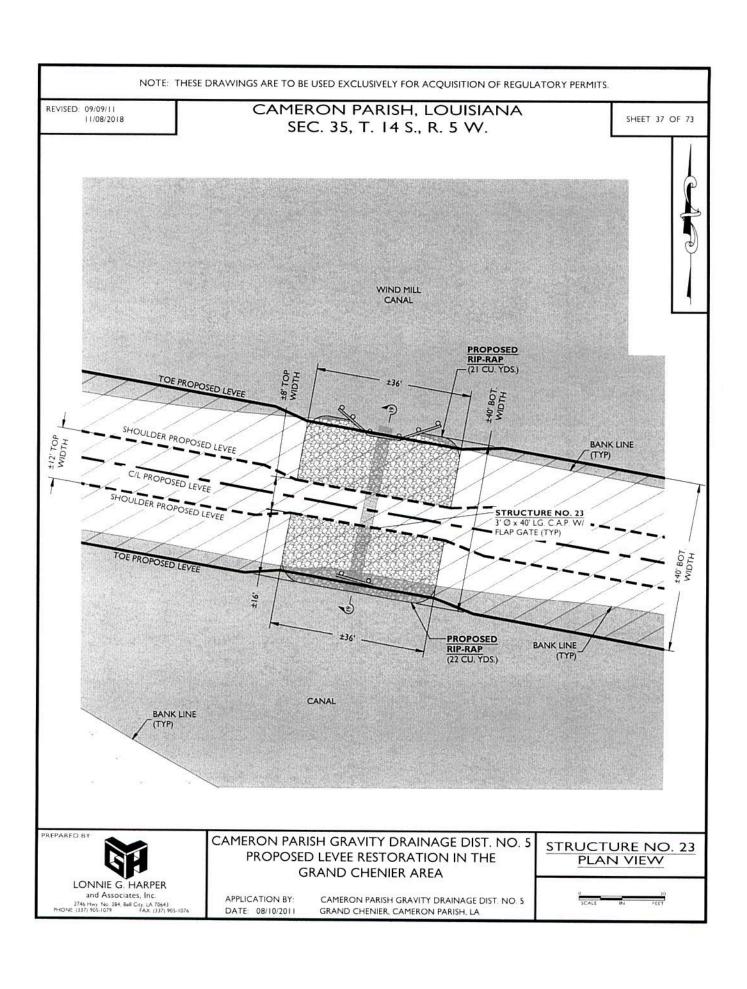


CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 22 SECTION VIEWS

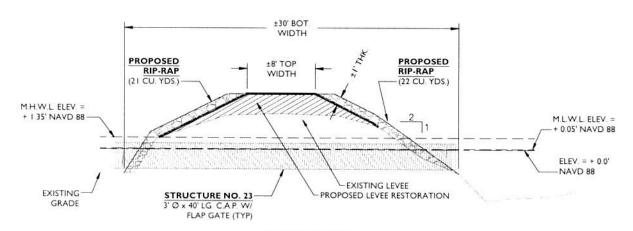




REVISED: 09/09/11 11/08/2018

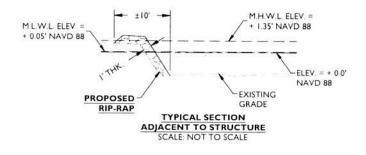
CAMERON PARISH, LOUISIANA SEC. 35, T. 14 S., R. 5 W.

SHEET 38 OF 73



STRUCTURE NO. 23 CROSS SECTION "19-19" SCALE: 1" = 10"

NOTE: WING WALL OMITTED FOR CLARITY



STRUCTURE NO. 23 NOTES:

- I. STRUCTURE NO. 23 CONSIST OF A SINGLE THREE FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 43 CU. YDS. (65 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY

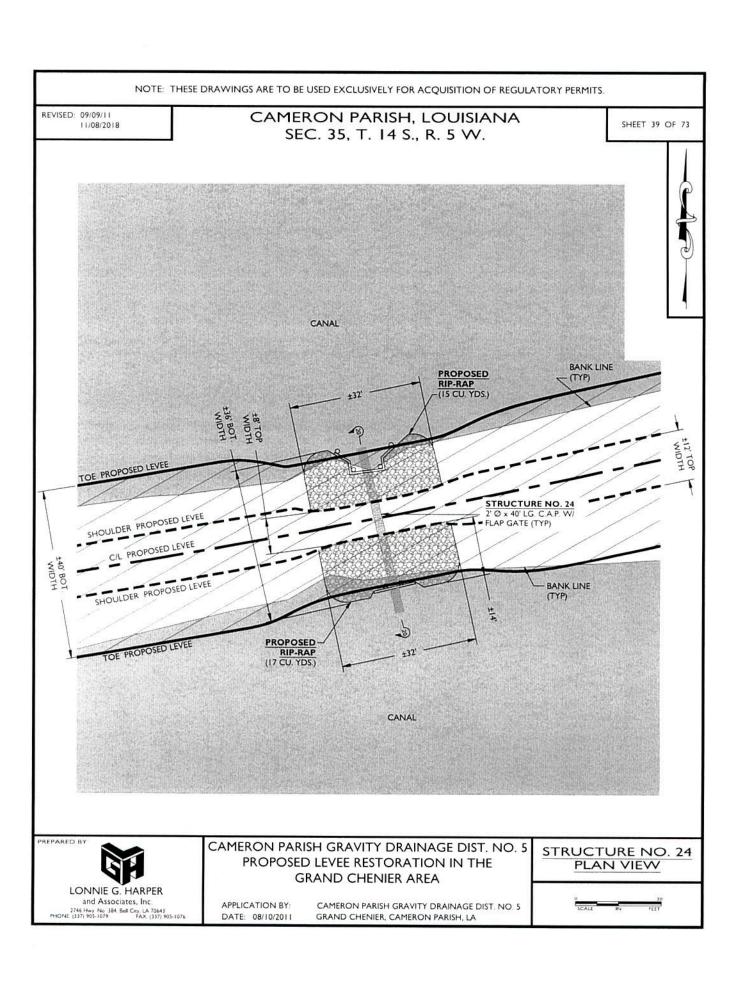


CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 23 SECTION VIEWS

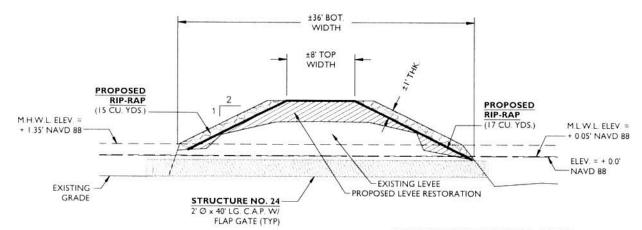




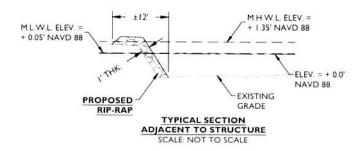
REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 35, T. 14 S., R. 5 W.

SHEET 40 OF 73



NOTE: WING WALL OMITTED FOR CLARITY. STRUCTURE NO. 24 CROSS SECTION "20-20" SCALE: 1" = 10"



STRUCTURE NO. 24 NOTES:

- 1. STRUCTURE NO. 24 CONSIST OF A SINGLE TWO FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 32 CU. YDS. (48 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH

THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



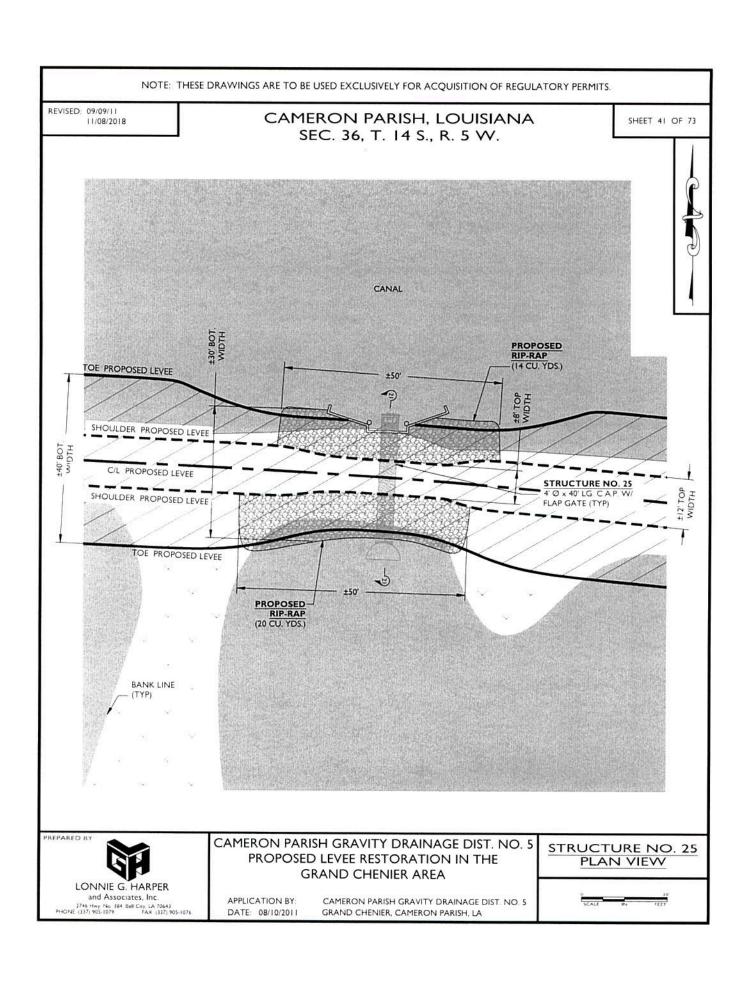
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5

GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 24 SECTION VIEWS

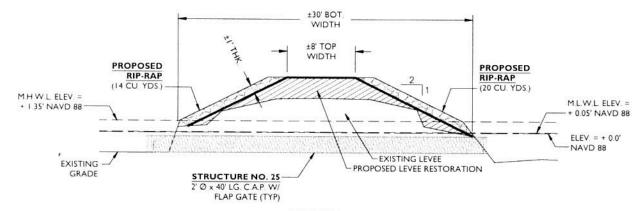




REVISED: 09/09/11 11/08/2018

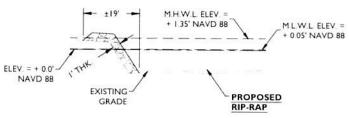
CAMERON PARISH, LOUISIANA SEC. 36, T. 14 S., R. 5 W.

SHEET 42 OF 73



STRUCTURE NO. 25 CROSS SECTION "21-21" SCALE: 1" = 10'

NOTE: WING WALL OMITTED FOR CLARITY.



TYPICAL SECTION ADJACENT TO STRUCTURE SCALE: NOT TO SCALE

STRUCTURE NO. 25 NOTES:

- I. STRUCTURE NO. 25 CONSIST OF A SINGLE TWO FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 34 CU. YDS. (50 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH

THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY

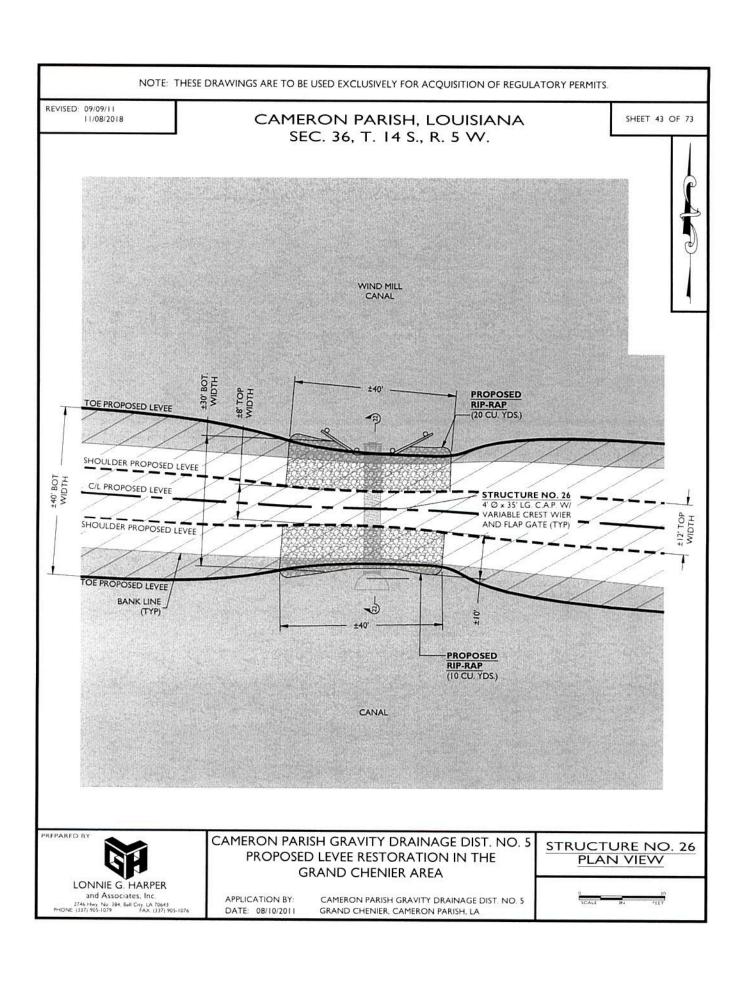


CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 25 SECTION VIEWS

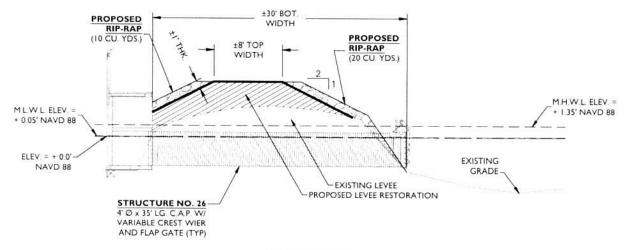




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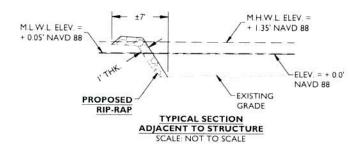
CAMERON PARISH, LOUISIANA SEC. 36, T. 14 S., R. 5 W.

SHEET 44 OF 73



STRUCTURE NO. 26 CROSS SECTION "22-22" SCALE: I" = 10'

NOTE: WING WALL OMITTED FOR CLARITY.



STRUCTURE NO. 26 NOTES:

- I. STRUCTURE NO. 26 CONSIST OF A SINGLE FOUR FOOT DIAMETER BY 35 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.

 2. APPROXIMATELY 30 CU. YDS. (45 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
 OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 26 SECTION VIEWS



REVISED: 09/09/11 11/08/2018 01/07/2019

CAMERON PARISH, LOUISIANA SEC. 31, T. 15 S., R. 5 VV.

SHEET 45 OF 73



OMITTED

PREPARED BY



CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 27 PLAN VIEW



REVISED: 09/09/11 11/08/2018 01/07/2019

CAMERON PARISH, LOUISIANA SEC. 31, T. 15 S., R. 5 W.

SHEET 46 OF 73

OMITTED

PREPARED BY:

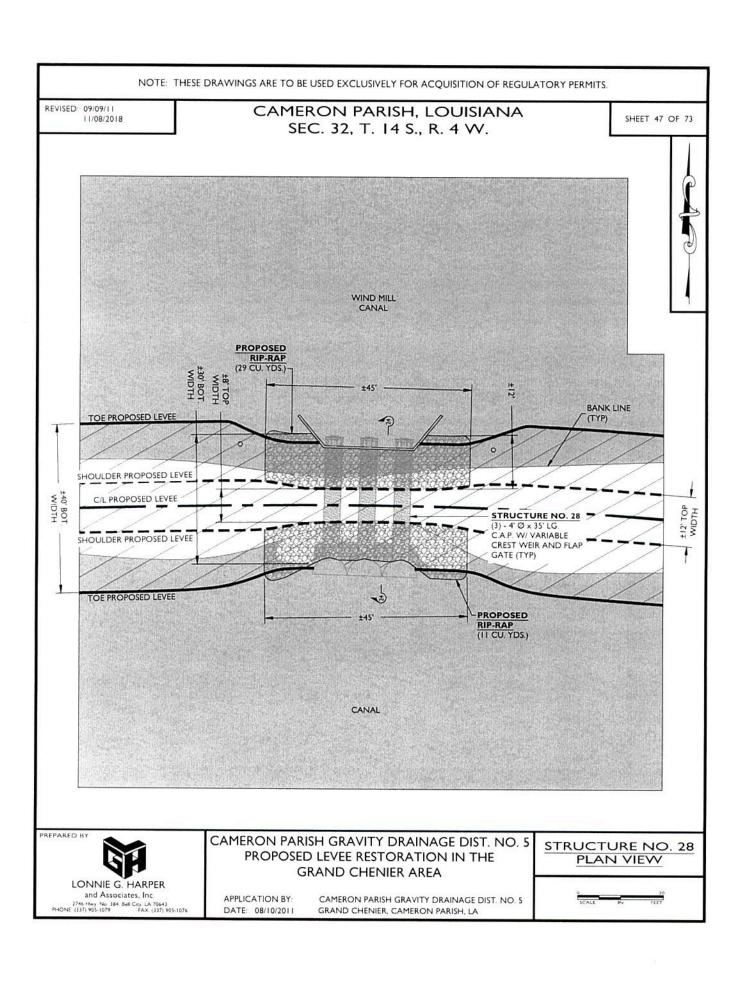


CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011

CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 27 SECTION VIEWS

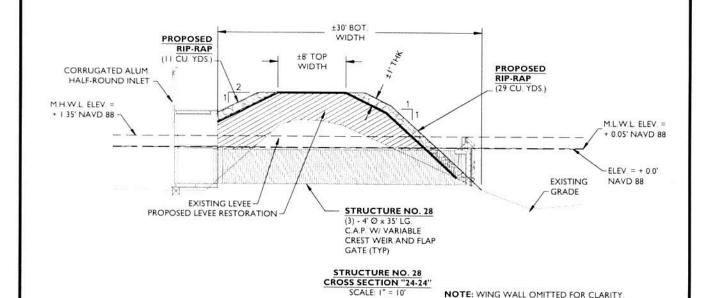


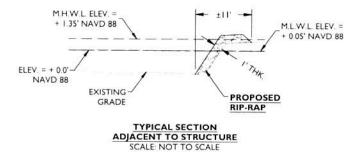


REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 32, T. 14 S., R. 4 W.

SHEET 48 OF 73





STRUCTURE NO. 28 NOTES:

- 1. STRUCTURE NO. 28 CONSIST OF (3) FOUR FOOT DIAMETER BY 35 FOOT LONG
- CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 40 CU. YDS. (60 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH
- THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



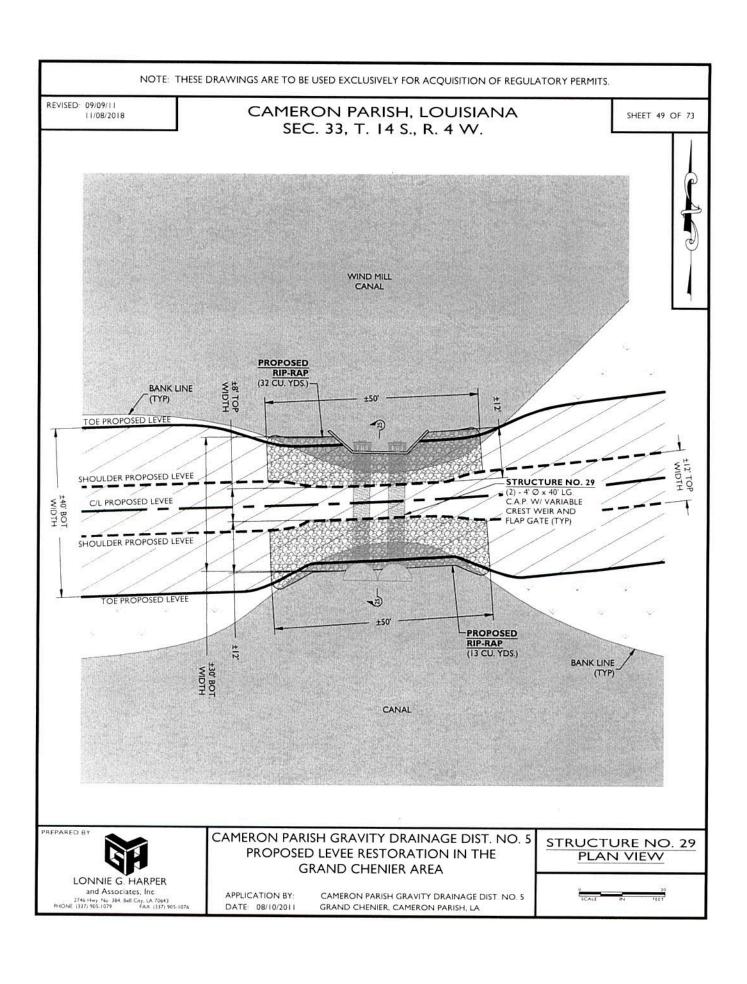
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY: DATE: 08/10/2011

CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 28 SECTION VIEWS

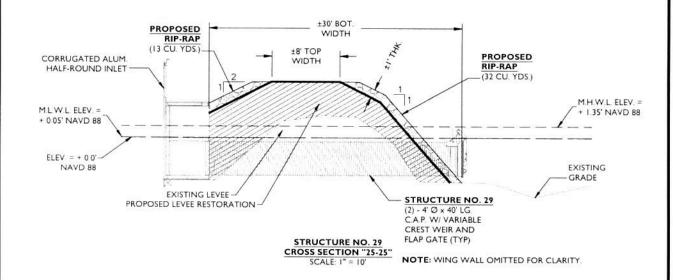


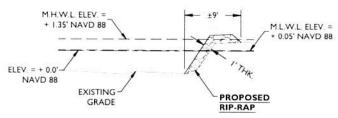


REVISED: 09/09/11 11/08/2018

CAMERON PARISH, LOUISIANA SEC. 33, T. 14 S., R. 4 W.

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TYPICAL SECTION ADJACENT TO STRUCTURE SCALE: NOT TO SCALE

STRUCTURE NO. 29 NOTES:

- I. STRUCTURE NO. 29 CONSIST OF (2) FOUR FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 45 CU. YDS. (68 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS
- STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



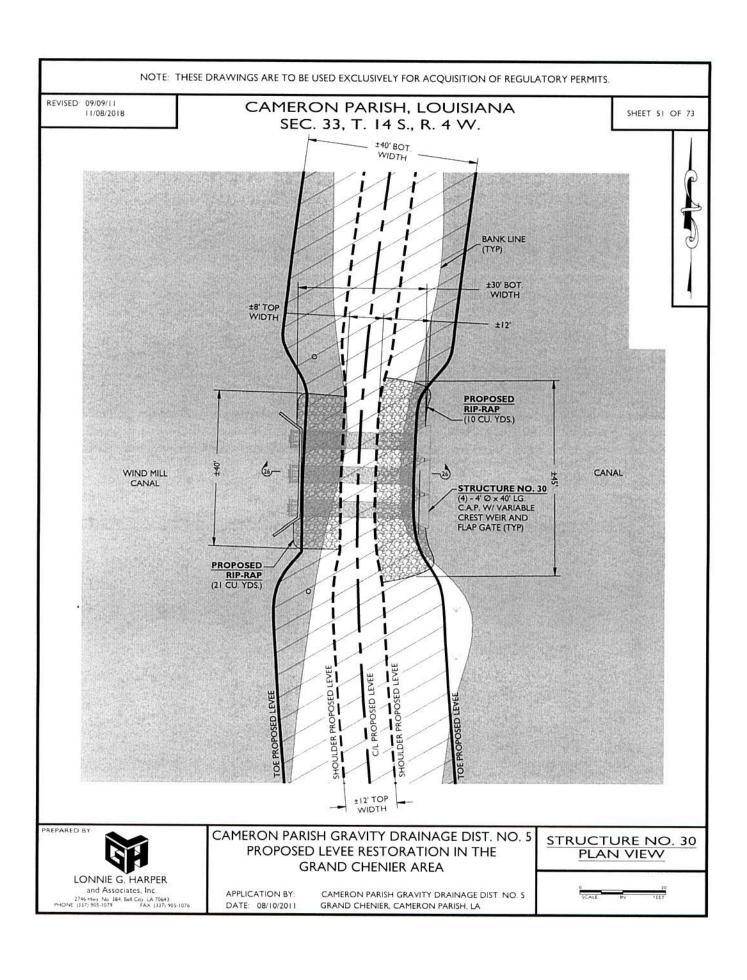
CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE **GRAND CHENIER AREA**

APPLICATION BY: DATE: 08/10/2011

CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA

STRUCTURE NO. 29 SECTION VIEWS

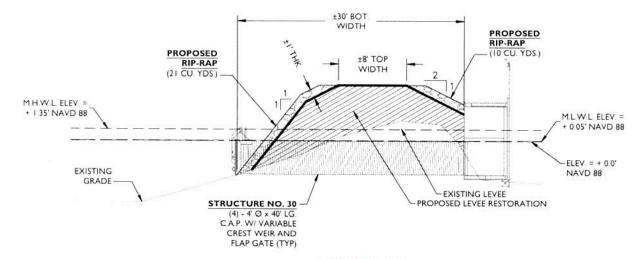




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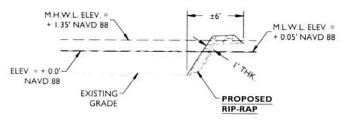
CAMERON PARISH, LOUISIANA SEC. 33, T. 14 S., R. 4 W.

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STRUCTURE NO. 30 CROSS SECTION "26-26"

NOTE: WING WALL OMITTED FOR CLARITY.



TYPICAL SECTION ADJACENT TO STRUCTURE SCALE: NOT TO SCALE

STRUCTURE NO. 30 NOTES:

- I. STRUCTURE NO. 30 CONSIST OF (4) FOUR FOOT DIAMETER BY 40 FOOT LONG
- CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE.
- 2. APPROXIMATELY 31 CU. YDS. (47 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACE ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH

THIS STRUCTURE USING SIMILAR MATERIALS.

PREPARED BY



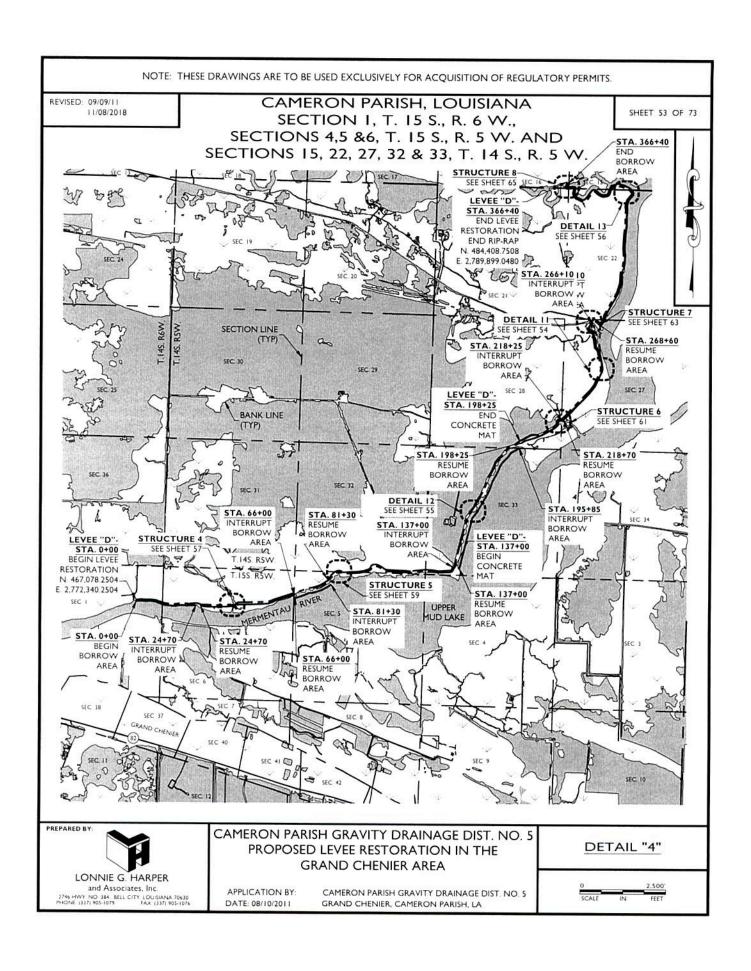
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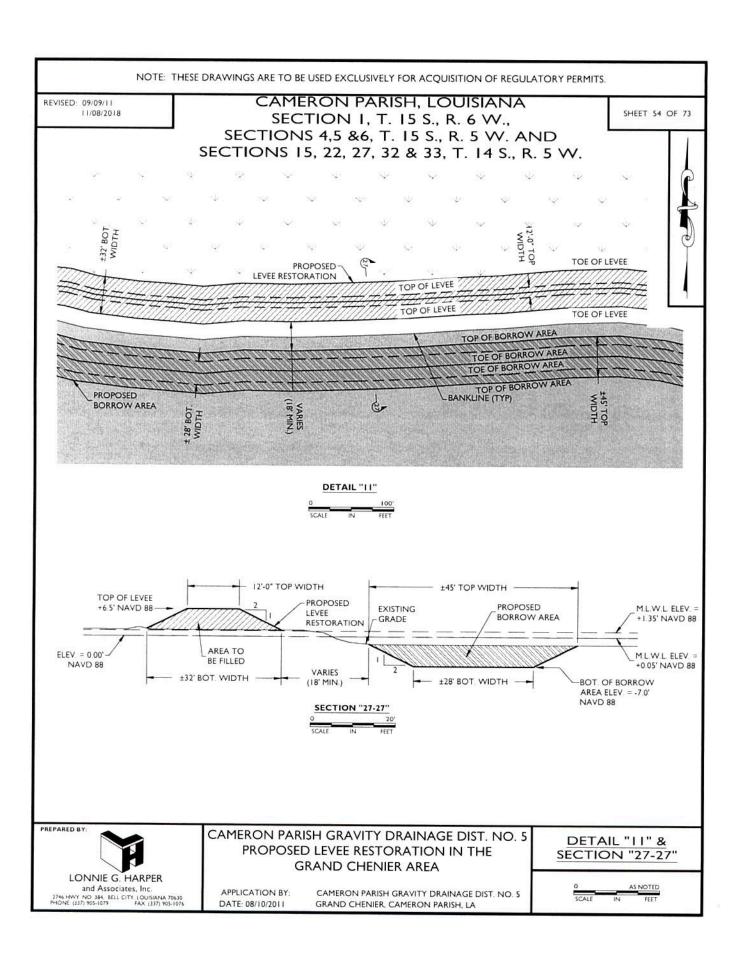
APPLICATION BY: DATE: 08/10/2011

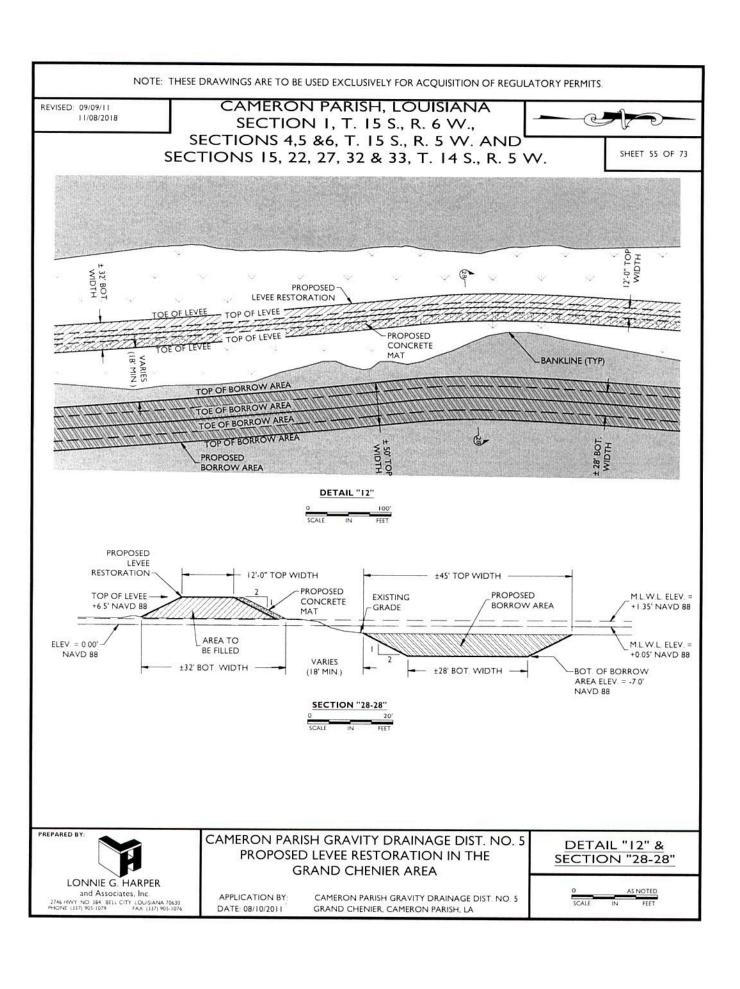
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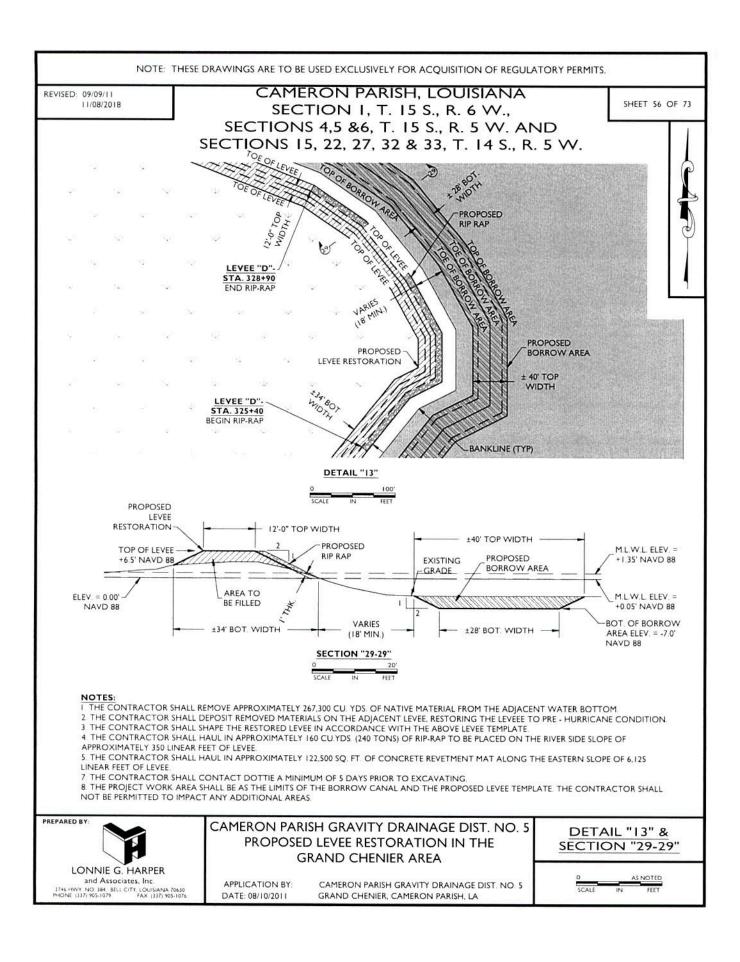
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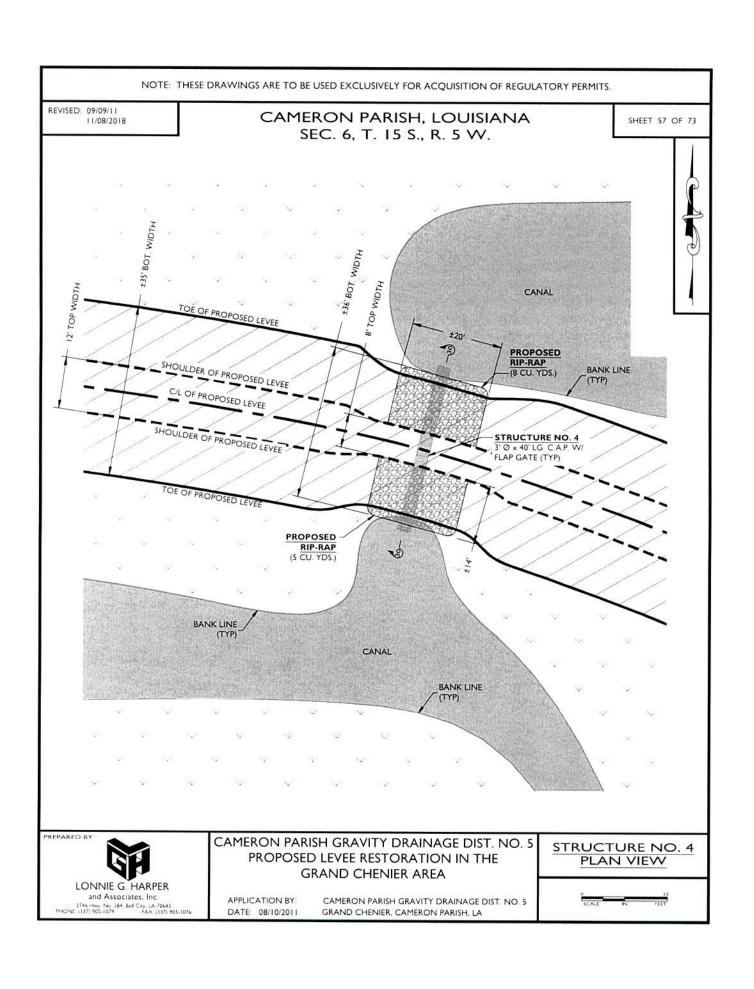












NOTE: THESE DRAWINGS ARE TO BE USED EXCLUSIVELY FOR ACQUISITION OF REGULATORY PERMITS. REVISED: 09/09/11 CAMERON PARISH, LOUISIANA SHEET 58 OF 73 11/08/2018 SEC. 6, T. 15 S., R. 5 W. ±36' BOT. WIDTH PROPOSED B' TOP RIP-RAP PROPOSED WIDTH (5 CU. YDS.) RIP-RAP (8 CU. YDS.) EXISTING M.H.W.L. ELEV. = GRADE M.L.W.L. ELEV. = + 1.35' NAVD 88 + 0.05' NAVD 88 ELEV = + 0.0'-NAVD 88 STRUCTURE NO. 4 **EXISTING LEVEE -**3' Ø x 40' LG. C.A.P. W/ PROPOSED LEVEE RESTORATION FLAP GATE (TYP) STRUCTURE NO. 4 CROSS SECTION "30-30" SCALE: I" = 10' NOTE: WING WALL OMITTED FOR CLARITY. M.H.W.L. ELEV. = + 1.35' NAVD 88 M.L.W.L. ELEV. = + 0.05' NAVD 88 ELEV. = + 0.0'-NAVD 88 EXISTING PROPOSED GRADE RIP-RAP TYPICAL SECTION ADJACENT TO STRUCTURE SCALE: NOT TO SCALE STRUCTURE NO. 4 NOTES: 1. STRUCTURE NO. 4 CONSIST OF A SINGLE 3 FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE. 2. APPROXIMATELY 13 CU. YDS. (20 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACED

- ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE.
- 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT.
- 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS
- STRUCTURE USING SIMILAR MATERIALS.

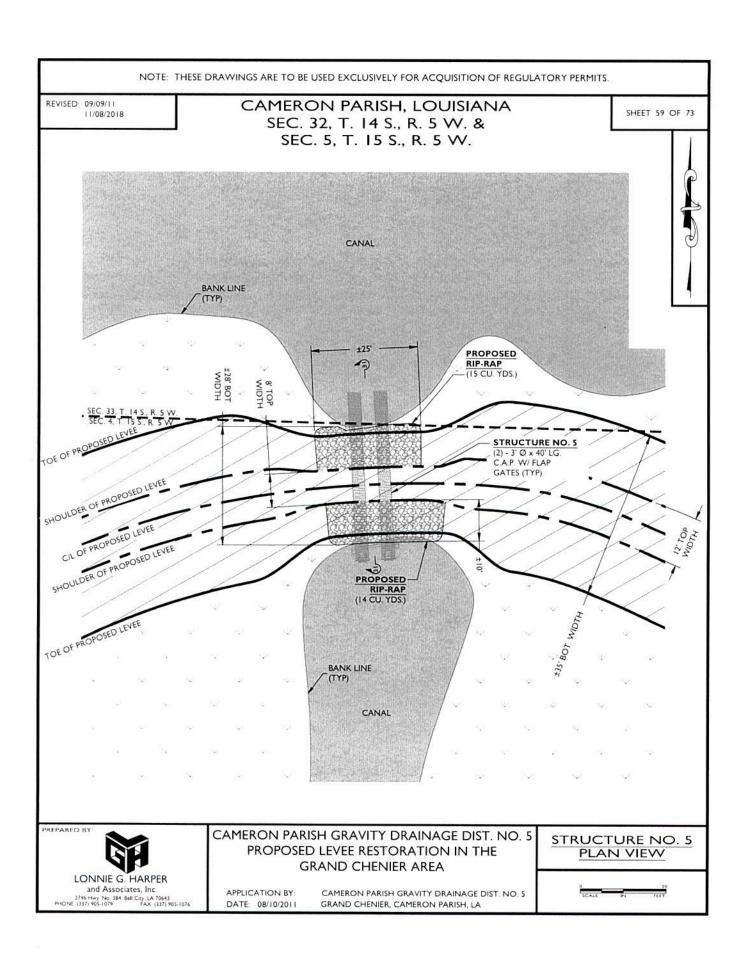
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CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 PROPOSED LEVEE RESTORATION IN THE GRAND CHENIER AREA

APPLICATION BY: DATE: 08/10/2011 CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 GRAND CHENIER, CAMERON PARISH, LA STRUCTURE NO. 4
SECTION VIEWS





NOTE: THESE DRAWINGS ARE TO BE USED EXCLUSIVELY FOR ACQUISITION OF REGULATORY PERMITS. CAMERON PARISH, LOUISIANA REVISED: 09/09/11 SHEET 60 OF 73 11/08/2018 SEC. 32, T. 14 S., R. 5 W. & SEC. 5, T. 15 S., R. 5 W. ±28' BOT. WIDTH PROPOSED RIP-RAP 8' TOP (14 CU. YDS.) WIDTH PROPOSED RIP-RAP (15 CU. YDS.) M.H.W.L. ELEV. = + 1.35' NAVD 88 M.L.W.L. ELEV. = + 0.05' NAVD 88 ELEV. = + 0.0' NAVD 88 EXISTING LEVEE STRUCTURE NO. 5 PROPOSED LEVEE RESTORATION (2) - 3' Ø x 40' LG C.A.P. W/ FLAP EXISTING GATES (TYP) GRADE STRUCTURE NO. 5 CROSS SECTION "31-31" SCALE: I" = 10' NOTE: WING WALL OMITTED FOR CLARITY. M.H.W.L. ELEV. = ±12' -+ 1.35' NAVD 88 M.L.W.L. ELEV. = + 0.05' NAVD 88 ELEV. = + 0.0°-NAVD 88 EXISTING **PROPOSED** GRADE **TYPICAL SECTION** ADJACENT TO STRUCTURE SCALE: NOT TO SCALE STRUCTURE NO. 5 NOTES: I. STRUCTURE NO. 5 CONSIST OF (2) THREE FOOT DIAMETER BY 40 FOOT LONG CORRUGATED ALUMINUM PIPE WITH A FLAP GATE ON THE OUTLET SIDE. 2. APPROXIMATELY 29 CU. YDS. (44 TONS) OF MAN-SIZED (55# CLASS) RIP RAP SHALL BE PLACED ALONG THE BANK LINE AT BOTH ENDS TO PREVENT EROSION ADJACENT TO THE STRUCTURE. 3. ALL RIP RAP SHALL BE HAULED AND PLACED ON SITE BY UTILIZING MARINE EQUIPMENT 4. OWNER MAY ELECT TO RECONSTRUCT ANY WAKEFIELD WALLS ASSOCIATED WITH THIS STRUCTURE USING SIMILAR MATERIALS. PREPARED BY CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5 STRUCTURE NO. 5

PROPOSED LEVEE RESTORATION IN THE

GRAND CHENIER AREA

CAMERON PARISH GRAVITY DRAINAGE DIST. NO. 5

GRAND CHENIER, CAMERON PARISH, LA

APPLICATION BY

DATE: 08/10/2011

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