

OPERATION, MAINTENANCE AND REHABILITATION PLAN
FOR THE
GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT
NO.4 (TE-43)



November 2015



**Coastal Protection and
Restoration Authority of Louisiana**



**OPERATION, MAINTENANCE, AND REHABILITATION
PLAN**

**GIWW BANK RESTORATION OF CRITICAL AREAS
SEGMENT NO.4
(TE-43)**

November 2015

Prepared by:
Coastal Protection and Restoration Authority
Operations Division

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History of Revisions

**OPERATION, MAINTENANCE, AND REHABILITATION PLAN FOR THE
GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4 (TE-43)**

The Coastal Protection and Restoration Authority (CPRA) and the Natural Resources Conservation Service (NRCS) agree to carry out the terms of the this Operation, Maintenance and Rehabilitation Plan (hereinafter referred to as the “Plan”) of the accepted, completed project features in accordance with Cost Share Agreement No. CPRRA-01-01, DNR Agreement No.2511-01-25 dated May 16, 2001, amended on March 29, 2010 (Attachment I – Cost Share Agreement and Amendments).

Construction of the GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) project was authorized by Section 303(a) of Title III Public Law 101-646 the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended. The GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) project was approved on the 10th Priority Project List.

CPRA intends to use this plan to maintain the project in a condition that will generally provide the anticipated benefits on which the project was based. There is no requirement that this project function to any standard beyond the 20-year project life, except that it is not left as a hazard to navigation or a detriment to the environment.

The property associated with the GIWW Bank Restoration of Critical Areas – Segment No.4 is owned by Continental Land and Fur, Inc.

1. PROJECT DESCRIPTION, PURPOSE, AND LOCATION

The GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) project is located along the south bank of the Gulf Intracoastal Waterway (GIWW), approximately 10 miles east of the Lower Atchafalaya River and approximately 10 miles southwest of Houma, La. in Terrebonne Parish, Louisiana. (Attachment II – to be included in final version)

Within the project area, increased Atchafalaya River flow and marine traffic through the GIWW has resulted in breaches in the shoreline bank and subsequent scouring of the interior marshes (Draft ER, Stead, 2004). The GIWW Bank Restoration of Critical Areas in Terrebonne Parish intends to address these causes of landloss by stabilizing the most severely degraded south bank of the GIWW (Draft ER, Stead, 2004).

The GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) is intended to slow erosion along approximately 10,500 linear feet of the southern bank of the GIWW over the 20 year project life (Draft ER, Stead, 2004). The project consists of a rock dike with a lightweight aggregate core. Due to poor soil conditions in the area, the rock dike was constructed in two (2) lifts with a 90 day waiting period between lifts to allow for initial

consolidation of soils.

The GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) has a twenty-year (20 year) project life, which began in April 2014.

2. CONSTRUCTION COMPLETION

The GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) project completion report is included in Attachment III of this Plan and the “As-Built” drawings are included in Attachment IV. Within the Project Completion Report is a summary of information and significant events including: project personnel, final as-built project features and benefited acres, construction cost and CWPPRA project estimates, construction oversight costs, construction activities and change orders, pipeline and utility crossing owner information, and other significant milestone dates and comments. The project as-built drawings contain construction drawings updated to include all field changes and modifications that occurred during the construction of the project.

3. PROJECT PERMITS

Project permit applications were completed and submitted to appropriate agencies and permits were received prior to construction. These permits and permit amendments are included in Attachment V.

4. ITEMS REQUIRING OPERATIONS, MAINTENANCE AND REHABILITATION

The following completed project features jointly accepted by CPRA and NRCS will require operation, maintenance and rehabilitation throughout the twenty (20) year life of the project.

Segment No.4 is a continuous 10,579 linear foot composite rock dike section with a light-weight aggregate core along the southern bank of the Gulf Intracoastal Waterway (GIWW), east of the Copasaw Canal. The rock dike was constructed to a +3.5’ NAVD crest elevation with a 3’ wide top width and 3:1 side slopes. The structure was constructed above a geotextile fabric material. The spoil material excavated for access was temporarily stock piled and used to fill in the floatation channel upon completion of the dike construction. Other features included 2,262 linear feet of rock riprap apron on both ends of the rock dike between the marsh and dike, nine (9) galvanized steel settlement plates, forty-six (46) timber warning signs and three (3) navigational aid lights at channel locations.

5. **OPERATION AND MAINTENANCE BUDGET**

The cost associated with the Operations, Maintenance and Rehabilitation of the GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) is included and summarized in Attachment VI.

6. **STRUCTURE OPERATIONS**

No operation is necessary for this project. (Attachment VII intentionally blank)

7. **RESPONSIBILITIES – MAINTENANCE AND REHABILITATION**

A. **CPRA will:**

1. In accordance with the Cost Sharing Agreement, assume all responsibilities for maintenance and rehabilitation of the accepted and completed project features identified in Section 4.
2. Conduct joint project site inspections with NRCS and the landowners at least annually and after major storm events if determined to be necessary by CPRA and/or NRCS. CPRA will submit to NRCS a report detailing the condition of the project features and recommendations for any corrective action. If CPRA recommends that corrective actions are needed, the report will include the entire estimated cost for engineering and design, supervision and inspection, construction, contingencies, and an assessment of the urgency of such action.
3. Perform or have performed any corrective actions needed, if such corrections have been approved by CPRA and NRCS. NRCS will participate with CPRA, or its appointed representative, in the engineering and design phases of the corrective actions for the project. Oversight of engineering and construction of the corrective actions for the project will be the responsibility of CPRA or its appointed representative. At least 30 calendar days prior to the date of formal request for construction bids, CPRA or its appointed representative shall provide NRCS with final copies of all project corrective action design plans and specifications for review and concurrence by NRCS. NRCS or its appointed representative shall approve the final project corrective action, design plans and specifications prior to proceeding with bid solicitations on all project corrective action construction contracts in coordination with bid solicitations on all project corrective action construction contracts in coordination with CPRA. Any plan and/or specification change both before and after award of construction contracts,

shall be approved by CPRA in coordination with NRCS.

4. Provide a total contribution equal to the amount outlined in the Cost Share Agreement for the operation, maintenance and rehabilitation cost needed for the life of the project.

B. NRCS will:

1. Conduct joint project site inspections with CPRA and the landowners at least annually and after major storm events if determined to be necessary by CPRA or NRCS.
2. Provide guidance for the development of plans and implementation of the project, review final copies of any maintenance and rehabilitation project designs and specifications, and provide review and approval of all plan and construction details prior to formal request for construction bids or any corrective actions for the project.
3. Provide a total contribution equal to the amount outlined in the Cost Share Agreement for operation, maintenance and rehabilitation cost needed for the life of the project.

The undersigned parties, acting on behalf of their respective agencies, agree to operate, maintain, and rehabilitate the GIWW Bank Restoration of Critical Areas – Segment No.4 (TE-43) project according to this document, referenced Cost Sharing Agreement, plans, and all applicable permits and laws.

NATURAL RESOURCES CONSERVATION SERVICE

By: _____

Date: _____

Title: _____

COASTAL PROTECTION AND RESTORATION AUTHORITY

By: _____

Date: _____

Title: _____

ATTACHMENT I

GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4
(TE-43)

COST SHARING AGREEMENT



AMENDMENT NO. 1

TO

COST SHARE AGREEMENT

BETWEEN

USDA-NATURAL RESOURCES CONSERVATION SERVICE

AND

THE STATE OF LOUISIANA

FOR PLANNING, ENGINEERING AND DESIGN, CONSTRUCTION, OPERATION,

MAINTENANCE, REHABILITATION AND MONITORING OF THE

GIWW BANK RESTORATION OF CRITICAL AREAS IN TERREBONNE PROJECT (TE-43)

Reference is made to **ARTICLE XX – AMENDMENTS TO BE IN WRITING**, of the Cost Sharing Agreement for the captioned Project entered into the 16th day of May, 2001, by and between the U.S. Department of Agriculture, represented by the Natural Resources Conservation Service (hereinafter referred to as “NRCS”), acting by and through the State Conservationist, and the State of Louisiana, through the Coastal Protection and Restoration Authority of Louisiana (hereinafter referred to as “CPRA”), acting by and through the Chairman of the CPRA, as authorized by CPRA Resolution on the 18th day of February, 2009 and the provisions of La R.S. 49:213.3 and 49:213.4; which allows for the Cost Sharing Agreement to be amended in writing. Therefore,

WITNESSETH, THAT:

WHEREAS, pursuant to La. R.S. 49:213.4(A)(1), Coastal Protection and Restoration Authority of Louisiana (hereinafter referred to as CPRA) represents the State of Louisiana's position in policy implementation relative to the protection, conservation, and restoration of the coastal area of the state through oversight of coastal restoration, hurricane protection, and infrastructure projects and programs, consistent with the intent as expressed in La. R.S. 49:213.1, and has the power and authority under La. 49:213.4(A)(7) to enter into any contract with the federal government or any federal agency or any political subdivision of the state or private individual for the construction, operation, maintenance, repair, rehabilitation, or replacement of any coastal restoration, hurricane, infrastructure, storm damage reduction, or flood control project and to this end, may contract for the acceptance of any grant of money upon the terms and conditions, including any requirement of matching grants in whole or part, which may be necessary;

WHEREAS, expenditure of Phase I funding for the GIWW Bank Restoration of Critical Areas in Terrebonne Project (TE-43) is substantially completed;

WHEREAS, Phase II was authorized by the Task Force on January 20, 2010, for an estimated total (100%) cost of \$11,286,262.00;

NOW, THEREFORE, the parties agree as follows:

ARTICLE VI – METHOD OF PAYMENT

Paragraph “a.” contained in the May 16, 2001, Cost Share Agreement is deleted in its entirety and the following is substituted therefor:

a. CPRA shall provide the contributions required under Article II of this Agreement. The PL 101-646 Task Force has estimated a Phase I cost of \$1,735,983.00 and a Phase II cost of \$11,286,262.00, for this particular Project. To meet its share, CPRA will contribute, through in-kind services or in cash, the non-federal share of the Phase I and Phase II costs. The amount of CPRA’s contribution for Phase I is \$260,397.00 and Phase II is \$1,692,940.00, for a total of \$1,953,337.00. This figure is subject to modification as provided for in Section 303(f) of CWPPRA. Any costs in excess of the Phase I cost of \$1,735,983.00 or the Phase II cost of \$11,286,262.00 are subject to amendment of this Agreement and Task Force approval, as provided in Article XIX. The amount of CPRA’s required minimum five percent (5%) cash contribution for Phase I is \$86,799.00 and Phase II is \$564,313.00. Funding methods and limits of obligations are specified in Article XIX – Project Cost Limits.

ARTICLE XVII – NOTICES

Paragraph “a.” contained in the Agreement is deleted in its entirety and the following is substituted therefor:

a. All notices, requests, demands, and other communications required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally, given by prepaid telegram, or mailed by first-class (postage pre-paid), registered, or certified mail, as follows:

If to NRCS:

State Conservationist
USDA, Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

If to CPRA:

Chairman, Coastal Protection and Restoration Authority
Capitol Annex – State of Louisiana
P. O. Box 44027
Baton Rouge, LA 70804-4027
(225) 342-7669

ARTICLE XIX – PROJECT COST LIMITS

Paragraph “a.” contained in the May 16, 2001, Cost Share Agreement is deleted in its entirety and the following is substituted therefore:

a. The PL 101-646 Task Force estimated Phase I cost at \$1,735,983.00, and Phase II cost at \$11,286,262.00 for this Project. Phase I funding is comprised of those funds needed for any necessary analysis of environmental benefits, any necessary hydrologic data collection and analysis, Pre – construction Biological Monitoring, Monitoring Plan development, draft OMRR&R Plan, and Engineering and Design. Engineering and Design includes Engineering, Design, Environmental Clearances, Permitting, Project Management and Real Estate requirements up to, but not including, the acquisition of real estate. Phase II funding is comprised of those funds needed for Construction, Post-construction Biological Monitoring, Operation, Maintenance and Rehabilitation and the Purchase of Real Estate. Construction includes Project Management, Contract Management, Construction Supervision and Inspection. Any cost in excess of the total Phase I and Phase II cost is subject to Task Force approval and amendment of this Agreement, as provided in Article XX. The budget for each Phase by funding category includes the following:

PHASE I

1.	E & D (including supervision & administration)	\$1,667,149.00
2.	Easements and Landrights	\$ 52,529.00
3.	Pre -- Construction Monitoring	\$ 14,954.00
4.	Draft OMRR&R Plan	\$ -0-
5.	U.S. Army Corps of Engineers Proj. Mgmt.	\$ 1,351.00
	Total Phase I	\$1,735,983.00

Upon execution of this Amendment, both the NRCS and OCPR agree that the funding obligation for Phase II activities will be provided for Construction, Corps Project Management, Operation, Maintenance, Repair, Replacement, and Rehabilitation (OMRR&R), and the Purchase of Real Estate.

PHASE II

1. Construction (including Project & construction management, construction supervision & inspection, and construction supervision & administration)	\$ 8,555,872.00
2. Post-construction Monitoring	\$ -0-
3. OMRR&R (State & Federal)	\$ 2,698,621.00
4. U.S. Corps of Engineers Project Management	\$ 31,769.00
5. Contingency	\$ -0-
Total Phase II	\$11,286,262.00

Paragraph "b." of the Agreement is deleted in its entirety and the following is substituted therefor:

"b. If, at any time during the performance of work for a particular funding category, the actual or anticipated cost of that category exceeds the 100% cost of that particular funding category as set forth in Article XIX.a. of this Agreement, all work in that particular category shall cease. NRCS and CPRA may agree to increase the cost of completing that particular category by transferring funds from one category to the other, but only if such increase would not result in the total Phase I or Phase II costs exceeding the maximum total Phase I or Phase II cost defined in Article XIX.a. of this Agreement. Such agreement regarding transferring funds from one category to the other shall be made by letter agreement confirmed by the mutual written approval of both the NRCS State Conservationist and the CPRA Chairman. Work on that particular funding category shall thereafter resume."

Paragraphs "c." and "d." of the Agreement are deleted in their entirety.


GIWW BANK RESTORATION OF CRITICAL AREAS IN TERREBONNE PROJECT (TE-43)

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the 29th day of March, 2010, before the undersigned witnesses.

USDA
NATURAL RESOURCES
CONSERVATION SERVICE

STATE OF LOUISIANA
Coastal Protection and Restoration
Authority of Louisiana


BY: Sheila Ryland ACTING FOR
Kevin D. Norton
State Conservationist





Garret Graves, Chairman
Coastal Protection and Restoration
Authority of Louisiana

WITNESSES:


WITNESSES:



Kyle Graham


Jackie Guillot


Cheryl Walters



Engen Kinchen

CERTIFICATE OF AUTHORITY

I, David A. Peterson, do hereby certify that I am the Attorney General's designated counsel to the Coastal Protection and Restoration Authority of Louisiana, that the Coastal Protection and Restoration Authority of Louisiana is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Natural Resources Conservation Service and the State of Louisiana in connection with the **GIWW Bank Restoration of Critical Areas in Terrebonne Project (TE-43), Terrebonne Parish, LA**, and that the persons who have executed this Agreement on behalf of the State have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this 5th day of March, 2010.



David A. Peterson
Assistant Attorney General and
Attorney General Designee to CPRA

CERTIFICATION REGARDING LOBBYING

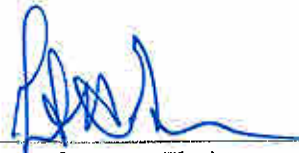
The undersigned certifies, to the best of his or her knowledge and belief that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

DATE: _____

03/05/10




Garret Graves, Chairman
Coastal Protection and Restoration
Authority of Louisiana

STATE OF LOUISIANA

PARISH OF RAPIDES

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for said Parish and State aforesaid, on this 29th day of March, 2010, personally came and appeared ~~Kevin D. Norton~~, to me known, who declared that he is the State Conservationist of the **USDA - Natural Resources Conservation Service**, that he executed the foregoing instrument on behalf of said Federal Agency and that the instrument was signed pursuant to the authority granted to him by said Federal Agency and that he acknowledged the instrument to be the free act and deed of said Federal Agency.

Sheila Ryland, acting for



NOTARY PUBLIC
Cheryl Turbeville # 66514

My commission expires: with life
(SEAL)

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for said Parish and State aforesaid, on this 5th day of March, 2010, personally came and appeared Garret Graves, to me known, who declared that he is the Chairman of the Coastal Protection and Restoration Authority of Louisiana, that he executed the foregoing instrument on behalf of said State Agency and that the instrument was signed pursuant to the authority granted to him by said State Agency and that he acknowledged the instrument to be the free act and deed of said State Agency.


NOTARY PUBLIC
Clifton O. Bingham, Jr.
03052

My commission expires: with life
(SEAL)

CERTIFICATION OF AUTHORITY

I, Clifton O. Bingham, Jr., do hereby certify that I am the General Counsel of the Governor's Office of Coastal Activities and that the Coastal Protection and Restoration Authority of Louisiana is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Natural Resources Conservation Service and the State of Louisiana in connection with the GIWW Bank Restoration of Critical Areas in Terrebonne Project (TE-43), Terrebonne Parish, Louisiana, and that the persons who have executed this Amendment on behalf of the State have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this 5th day of March, 2010.



Clifton O. Bingham, Jr.
General Counsel
Governor's Office of Coastal Activities

**GIWW BANK RESTORATION OF CRITICAL AREAS
IN TERREBONNE (TE-43)**

<u>PHASE I</u>	<u>ORIGINAL ESTIMATE</u>	<u>AMEND. 1</u>
Engineering & Design	\$ 1,113,611.00	\$1,113,611.00
Federal S&A	\$ 286,282.00	\$ 286,282.00
State S&A	\$ 267,256.00	\$ 267,256.00
Easements	\$ 52,529.00	\$ 52,529.00
Pre-Construction Monitoring	\$ 14,954.00	\$ 14,954.00
Corps Project Management	\$ 1,351.00	\$ 1,351.00
Total	\$ 1,735,983.00	\$1,735,983.00
 <u>PHASE II</u>		
Construction		\$ 8,555,872.00
Post-Construction Monitoring		-0-
OMRR&R (State & Federal)		\$ 2,698,621.00
Corps Project Management		\$ 31,769.00
Contingency		\$ -0-
Total		\$11,286,262.00

Maximum Total Project Cost	\$13,022,245.00
State Cost Share Rate (15%)	<u> x 0.15</u>
OCPR's Maximum 15% Contribution	\$ 1,953,337.00

OCPR's Required Minimum 5% Contribution \$ 651,112.00

Approved Under DNR Delegated Authority
CFMS# 573542
Karen Y. Lewis

NRCS Agreement No. 01 PPRA-01-01
DNR Agreement No. 2511-01-25
Approved Format 16A

COST SHARE AGREEMENT
BETWEEN
USDA-NATURAL RESOURCES CONSERVATION SERVICE
AND
THE STATE OF LOUISIANA
FOR PLANNING, ENGINEERING AND DESIGN, CONSTRUCTION, OPERATION,
MAINTENANCE, REHABILITATION AND MONITORING OF THE
GIWW BANK RESTORATION OF CRITICAL AREAS IN TERREBONNE PROJECT
TE-43

THIS AGREEMENT, entered into this 16th day of May, 2001 by and between the U.S. Department of Agriculture, represented by the Natural Resources Conservation Service, (hereinafter referred to as "NRCS"), acting by and through the State Conservationist, and the State of Louisiana, acting by and through the Secretary, Department of Natural Resources, (hereinafter referred to as "DNR").

WITNESSETH, THAT:

WHEREAS, expenditure of Phase I funding for the GIWW Bank Restoration of Critical Areas in Terrebonne Project (TE-43) was authorized by the Coastal Wetlands Planning, Protection, and Restoration Act (hereinafter referred to as "CWPPRA") of 1990, 16 U.S.C. Section 3961 *et seq.*, (Public Law 101-646, Title III), and for local sponsorship by the Louisiana Coastal Wetlands Conservation and Restoration Plan, by the State of Louisiana in January 2001; and,

WHEREAS, upon successful completion of Phase I, expenditure of Phase II funding for the GIWW Bank Restoration of Critical Areas in Terrebonne Project may be authorized by the PL 101-646 Task Force;

WHEREAS, the State's Coastal Wetlands Conservation Plan was approved on November 30, 1997; all costs incurred on or after December 1, 1997 are shared at eighty-five percent (85%) Federal and fifteen percent (15%) non-Federal;

WHEREAS, Section 303(e) of CWPPRA states that the Secretary of the Army shall not fund the identified project unless said project is subject to such terms and conditions necessary to ensure that wetlands restored, enhanced, or managed through the project will be administered for the long-term conservation of such lands and waters and dependent fish and wildlife populations; and,

WHEREAS, NRCS is authorized by federal law to enter a cost-sharing agreement with DNR to provide financial cost-share assistance for the construction, operation, maintenance, rehabilitation, and monitoring of the project; and,

WHEREAS, La. R.S. 49:213 and La. R.S. 49:214 state that the Secretary of DNR may enter into cost-sharing agreements with the federal government in order to conserve, restore, create, and enhance vegetated wetlands in coastal Louisiana in accordance with prescribed legislative oversight; and,

WHEREAS, DNR has agreed to pay 5% of the total Project(s) cost in actual cash and the remaining balance of its share in the form of in-kind contributions; and,

WHEREAS, DNR is willing to participate in cost-sharing and financing in accordance with the terms of this Agreement;

NOW, THEREFORE, the parties agree as follows:

ARTICLE I – DEFINITIONS AND GENERAL PROVISIONS

For the purposes of this Agreement:

a. The term “**Project**” shall mean the work authorized by Congress as specified above for the construction of the TE-43 GIWW Bank Restoration of Critical Areas in Terrebonne Project. The GIWW Bank Restoration of Critical Areas in Terrebonne Project is located in Terrebonne Parish. The Project objectives is to enable the Gulf Intracoastal Waterway to function as a conveyance channel to direct Atchafalaya freshwater flow to specific locations that would benefit from increased flows of freshwater and nutrients while providing relief to the Penchant marshes currently suffering from prolonged inundation. This Project will restore critical lengths of deteriorated channel banks, and stabilize/armor selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.

b. The term “**total Project costs**” shall mean all costs incurred by DNR and NRCS directly related to implementation of the Project. Such costs shall be those costs incurred after January 10, 2001; and which shall include, but not necessarily be limited to, the following: actual costs of applicable project management, geotechnical investigations, detailed engineering and design; actual construction costs; construction management, supervision and inspection costs; operation costs; monitoring costs; the cost of land rights acquisition, easements, servitudes, rights-of-way; utility and facility alterations or relocations; maintenance; and rehabilitation for the Project.

NRCS Agreement No. CWPPRA-01-01
DNR Agreement No. 2511-01-25
Approved Format 16A

c. The term “**total first costs**” shall mean all costs incurred by DNR and NRCS directly related to completion of the construction phase of the project as identified in the official CWPPRA authorization document prepared by the CWPPRA Task Force January 10, 2001 and submitted to Congress.

d. The term “**period of construction**” shall mean the time from the advertisement of the first construction contract to the time that the Contracting Officer certifies to DNR that construction of the entire project is complete. The Contracting Officer shall furnish to DNR copies of the government’s written Notice of Acceptance of Complete Work furnished to contractor(s) for all contracts for the Project.

e. The term “**Contracting Officer**” shall mean the warranted Contracting Officer of NRCS awarding the contract.

f. The term “**relocations**” shall mean the preparation of plans and specifications for, and the accomplishment of any alteration, modification, lowering or raising in place, and/or a new construction related to, but not limited to, existing: buildings, pipelines, public utilities (such as municipal water and sewer lines, telephone lines, and storm drains), aerial utilities, cemeteries, and other facilities, structures, and improvements determined by NRCS and DNR to be necessary for the construction, operation, maintenance, monitoring, and rehabilitation of the Project.

g. The term “**utility**” shall mean pipelines, cables, and similar facilities.

h. The term “**fiscal year**” shall mean one fiscal year of the United States Government, unless otherwise specifically indicated. The Government fiscal year begins on October 1 and ends on September 30.

i. The term “**construction management costs**” shall mean costs incurred by NRCS directly supervising and administering construction contracts, to include related overhead costs, as specified in applicable contracting regulations.

j. The term “**Project Monitoring Plan**” shall mean a plan jointly developed and approved by DNR and NRCS specifically for the Project which identifies all monitoring requirements, parameters and procedures. DNR will be responsible for collection of monitoring data and assimilation as part of the local cost-share responsibilities. Monitoring will be conducted for the expected life of the Project or as agreed by NRCS and DNR.

k. The term “**maintenance**” shall mean any action completed after the construction period that is required to maintain the Project at “as built” standards, and costing less than twenty percent (20%) of the original construction cost.

l. The term “**rehabilitation**” shall mean any action completed after the construction period that is required to maintain the Project at “as built” standards, and costing twenty percent (20%) or more of the original construction cost.

m. The term **“Operation, Maintenance, and Rehabilitation Plan”** shall be a plan jointly developed and approved by NRCS and DNR upon completion of the Project and prior to acceptance by DNR of the completed Project or functional portion of the Project. The Operation, Maintenance, and Rehabilitation Plan will address specific items, including any related landrights issues, with estimated costs, to be performed throughout the expected life-span of the Project and will be revised periodically to reflect actual needs.

n. The term **“operation, maintenance, and rehabilitation costs”** shall mean all costs incurred by DNR and NRCS related to operating, maintaining, and rehabilitating the final accepted Project. Specific requirements and responsibilities shall be identified and mutually accepted by both parties in an **“Operations, Maintenance, and Rehabilitation Plan”**.

o. The term **“obligation”** refers to amount of orders placed, contracts awarded, services rendered, or other commitments made during a given period which will require outlay during the same or some future period.

p. The term **“engineering and design costs”** shall mean all costs incurred by DNR and NRCS related to the development, approval, and acceptance of detailed engineering and design plans, specifications, and Project bid documents. This will also include all supervision and administrative costs associated with the engineering and design phase of the Project and will terminate with the award of a Project construction contract.

q. The term **“monitoring costs”** shall mean all costs by DNR and NRCS in developing and implementing the Project Monitoring Plan to evaluate the effectiveness of the Project in reaching Project objectives. This shall include, but not be limited to, such items as plan development and review, conducting pre- and post-construction monitoring procedures, collection and evaluation of data, and preparation of monitoring reports with interpretation for future project application.

r. The term **“functional portion of the Project”** shall mean a completed portion of the Project as determined by the Contracting Officer and DNR in writing to be suitable for tender to DNR for operation and maintenance in advance of completion of the entire Project. To be suitable for tender, the Contracting Officer must determine that the completed portion of the Project can function independently and for a useful purpose, although the balance of the Project is not complete.

s. The term **“life of the Project”** shall mean the next twenty (20) years starting at the date of acceptance of the final Project, or functional portion of the Project, as provided in Article V.e. of this Agreement.

t. The term **“Phase I”** shall include but not be limited to any necessary analysis of environmental benefits, any necessary hydrologic data collection and analysis, Pre-construction Biological Monitoring, and Engineering and Design. Engineering and Design includes Engineering, Design, Environmental Clearances, Permitting, Project Management and Real Estate requirements up to, but not including, the purchase of real estate.

u. The term “Phase II” shall mean Construction, Post-construction Biological Monitoring, Operation, Maintenance and Rehabilitation. Construction includes Project Management, Contract Management, Construction Supervision, Inspection, and the Purchase of Real Estate.

v. The term “CWPPRA Project Standard Operating Procedures Manual” shall mean the standard procedures to be used by NRCS and the State in the management of the Project. These standard procedures shall not supersede nor invalidate any rules or regulations internal to NRCS or the State.

ARTICLE II – OBLIGATIONS OF THE PARTIES

a. No federal funds may be used to meet the DNR share of Project costs under this Agreement unless the expenditure of such funds is expressly authorized by statute as verified in writing by the granting agency.

b. DNR shall:

1. Over the life of the Project, fund a total contribution equal to the non-federal share of the total Project costs, including a minimum cash contribution of five percent (5%) of the total Project costs. Said contribution will include cash and/or credit granted from land rights, easements, servitudes, and rights-of way obtained through or owned by DNR, or relocations credit granted for Project features furnished by DNR, and all administrative and management costs required by DNR to fulfill the obligations specified in this Agreement including pre- and post- construction Project monitoring, permitting coordination, geotechnical investigation, engineering services, landrights amendment processing and or acquisition, maintenance, operation, and/or rehabilitation responsibilities accepted by DNR. Said contribution also includes utilizing State – owned or leased equipment to transport NRCS personnel to fulfill the obligations within this Agreement.

2. Prior to advertisement of each construction contract, and as further specified in Article VI.b.2. hereof, provide a minimum cash contribution of five percent (5%) of that portion of total first costs incurred to date and anticipated to be expended through completion of that construction contract.

3. Prior to the advertisement of each construction contract, and as further specified in Article VI.b.2. hereof, provide a contribution equal to the non-federal share of that portion of total first costs incurred to date and anticipated to be expended through completion of that construction contract. Said contribution will include cash and/or credit granted from land rights, easements, servitudes, and rights-of-way obtained through or owned by DNR, or relocations credit granted for Project features furnished by DNR, administrative and management costs, and any engineering and/or ecological, biological, or hydrological review evaluations required by DNR to fulfill the obligations specified in this Agreement.

4. Implement the Project Monitoring Plan in accordance with procedures jointly developed with NRCS and, as further specified in Article VIII, to assure the performance of the long-term monitoring requirements.

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5. Provide specific engineering services associated with the Project, subject to the cost-sharing provisions, and as mutually agreeable to both DNR and NRCS, or its engineering representative. Specific engineering services to be provided by DNR may include design surveys, plan preparation, post-construction surveys, etc. All such services will be approved by and subject to the supervision and guidance of NRCS engineering representatives.

6. Acquire all land rights, servitudes, rights-of-way, easements, and material borrow and disposal areas associated with the Project which are determined to be necessary, subject to cost-sharing terms previously identified.

7. Jointly develop an Operation, Maintenance, and Rehabilitation Plan with NRCS which will identify specific long-term maintenance, operation, and rehabilitation requirements. Said plan will be developed upon completion of the Project features in accordance with Article Lm., and will be reviewed and modified as necessary after an evaluation conducted by DNR, with NRCS participation, within 12-18 months following completion of construction.

8. Provide for non-federal share of costs identified in the Operation, Maintenance, and Rehabilitation Plan, according to Article VIII.a.

9. Assume all responsibilities (including engineering, design, and construction services) for operation, maintenance, and rehabilitation of the Project upon acceptance of the completed Project, limited only by the provisions of Article XVI. NRCS will reimburse DNR using electronic funds transfer (EFT) procedures in accordance with 31 CFR 208 for the federal share of such costs, subject to availability of funds.

10. Participate in a preliminary design review with NRCS at thirty percent (30%) completion of Phase I project evaluation in accordance with Section 5.(k).8 and 5.(k).9, CWPPRA Project Standard Operating Procedures Manual.

c. NRCS shall:

1. Over the life of the Project, fund a total contribution equal to the federal share of the total Project costs, including any relocation costs associated with the Project. Said contribution also includes utilizing NRCS – owned or leased equipment to transport DNR personnel to fulfill the obligations within this Agreement.

2. Prior to the advertisement of each construction contract, NRCS shall provide a contribution equal to the federal share of that portion of total first costs incurred to date and anticipated to be expended through completion of that construction contract, including any relocation costs associated with the Project.

3. Except as limited by the provisions of Article VIII.b., and subject to the availability of appropriations, reimburse DNR for the federal share of the approved cost of pre- and post- construction monitoring of the Project upon receipt of the request for reimbursement.

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4. Reimburse DNR using electronic funds transfer (EFT) procedures in accordance with 31 CFR 208 for the federal share of the actual costs incurred by DNR for project management, geotechnical and engineering services proved for the Project, permitting coordination, and acquiring all land rights (easements, servitudes, and rights-of-way, including suitable borrow material and disposal areas) as determined by NRCS to be necessary for Project construction, operation, monitoring, maintenance, and rehabilitation.

5. Participate with DNR on the level of design effort needed to determine the effectiveness of a project in achieving intended environmental benefits.

6. Provide all engineering, design, including but not limited to surveying, geotechnical investigations, hydrological modeling as deemed necessary by DNR and NRCS, land services, and construction services, except those mutually agreed as specified in Article II.b.5. and Article II.b.9. associated with the Project, subject to the cost-sharing provisions identified.

7. Participate in a preliminary design review with DNR at thirty percent (30%) completion of Phase I project evaluation in accordance with Section 5.(k).8 and 5.(k).9, CWPPRA Standard Operating Procedure.

8. Provide the federal share of costs identified in the Operation, Maintenance, and Rehabilitation Plan and actually incurred by DNR, subject to the limitations on expenditures set forth in Article XIX.

9. Comply with the Federal Acquisition Regulation (FAR), Agriculture Acquisition Regulation (AGAR), and Natural Resources Conservation Service Acquisition Regulation (NRCSAR) for all federal contracts associated with the Project.

10. Provide authorized technical services including, but not limited to, obtaining basic information; preparation of drawings, design, and specifications; and performance of layout, inspection services, and quality assurance during construction. The design report, preliminary and final plans must be reviewed by the DNR Project Manager and concurred upon prior to advertisement.

11. Arrange for and conduct final inspection of the completed works of improvement with DNR to determine whether all work has been performed in accordance with the contractual requirements. Based on this determination, accept work from the contractor and notify DNR of acceptance.

12. Participate, with DNR, in an evaluation within 12 -- 18 months following the completion of construction to assess maintenance, operation, and rehabilitation needs. NRCS will also participate with DNR in any subsequent evaluations as the parties deem necessary to address long-term maintenance, operation, and rehabilitation of the Project.

13. Ensure that all National Environmental Policy Act (NEPA) and regulatory requirements, including permits, for the Project are met.

14. Submit to DNR the completed As – built Surveys/Construction drawings and Construction Completion Report.

**ARTICLE III – LAND RIGHTS, FACILITIES, AND PUBLIC LAW 91-646
RELOCATION ASSISTANCE**

a. On non-Federal lands, DNR shall acquire all land rights, easements, servitudes, rights-of-way, and material borrow and disposal areas determined to be necessary for construction of the Project and as mutually agreed-to by DNR and NRCS. Prior to the advertisement of any construction contract, DNR shall provide certification to NRCS that all land rights, easements, servitudes, rights-of-way and material borrow and disposal areas required, have been acquired as part of this Agreement and shall furnish to NRCS evidence supporting actual rights-of-way acquired by DNR for Project construction, operation, monitoring, and maintenance.

b. The State shall comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646) as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way for construction and subsequent operation, maintenance, and rehabilitation of the project.

c. No title to the property or minerals affected herein are transferred with any easements, servitudes, rights-of-way, and material borrow and disposal areas provided by DNR pursuant to this Agreement. No public rights of ownership shall be transferred and vested in private parties as a result of the Project. Further, any easements, servitudes, rights-of-way, and material borrow and disposal areas shall provide for reasonable access for mineral exploration and development.

ARTICLE IV – VALUE OF LAND RIGHTS AND FACILITIES

a. The value of the land rights, easements, servitudes, and rights-of-way to be included in total Project costs and credited towards DNR's share of total Project costs will be determined in accordance with the following procedures:

1. The costs associated with securing all land rights, easements, servitudes, and rights-of-way to be acquired by DNR (Article III.a.) shall be the actual costs including, but not limited to, expenses associated with securing legal land rights instruments from all sources (legal reviews, recording fees, etc.) associated with Project activities. An estimate of such costs will be prepared by DNR and approved by NRCS for credit allowance as part of the DNR cost-share. Credit allowance for any costs above this estimate must be approved by NRCS.

2. Any costs incurred for relocations will be included in total Project costs and will be accomplished as part of Project construction through the agreed cost-share arrangement.

ARTICLE V – CONSTRUCTION PHASING AND MANAGEMENT

- a. To provide for consistent and effective communication between DNR and NRCS during the period of construction, DNR and NRCS shall appoint representatives to coordinate scheduling, plans, specifications, modifications, contract costs, and other matters relating to construction of the Project.
- b. DNR will participate with NRCS, or its appointed representative, in the engineering and design phases of the Project. Oversight of engineering and construction of the Project will be the responsibility of NRCS or its appointed representative. At least thirty (30) calendar days prior to the date of formal request for construction bids, NRCS, or its appointed representative, shall provide DNR with final copies of all Project designs and specifications for review and concurrence by DNR. NRCS, or its appointed representative, and DNR shall concur in the final designs and specifications prior to proceeding with bid solicitations on all project construction contracts. Any plan and/or specification(s) changes, both before and after award of construction contracts, shall be jointly approved by NRCS and DNR.
- c. The representatives appointed above shall meet as necessary during the period of construction and shall make such recommendations as they deem warranted to the Contracting Officer.
- d. The Contracting Officer shall consider the recommendations of the representatives in all matters relating to construction of the Project; but the Contracting Officer, having ultimate responsibility for construction of the Project, has complete discretion to accept, reject, or modify the recommendations.
- e. Following completion of the Project, or functional portion of the Project, final acceptance of the Project, or functional portion of the Project, will be jointly made by NRCS and DNR. Should the Project, or functional portion of the Project, not meet plan specification objectives, then DNR will have the option to approve modification of the Operation, Maintenance, and Rehabilitation Plan, or to terminate this Agreement. However, both DNR and NRCS shall endeavor to modify the Project and/or its Operation, Maintenance, and Rehabilitation Plan to ensure that the original plan specification objectives are achieved.

ARTICLE VI – METHOD OF PAYMENT

- a. DNR shall provide the contributions required under Article II of this Agreement. The PL 101-646 Task Force has estimated a Phase I cost of \$1,736,000.00 and authorized a maximum Phase I cost of \$2,170,000.00 for this particular Project. To meet its share, DNR will contribute, through in-kind services or in cash, the non-federal share of the maximum Phase I costs. The maximum amount of DNR's contribution is \$325,500.00. This figure is subject to modification as provided for in Section 303(f) of CWPPRA. Any costs in excess of the maximum Phase I cost of \$2,170,000.00 are subject to amendment of this Agreement and Task Force approval, as provided in Article XIX. The maximum amount of DNR's required minimum five percent (5%) cash contribution for Phase I is \$108,500.00. Funding methods and limits of obligations are specified in Article XIX – Project Cost Limits. Should

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the PL 101-646 Task Force authorize expenditure of Phase II funding, this Agreement shall be amended in accordance with Article XX.

b. DNR shall provide its required cash contribution in proportion to the rate of federal expenditures in accordance with the following provisions:

1. For purposes of budget planning, NRCS shall notify DNR by October 1 of each year of the estimated funds that will be required from DNR to meet its share of total Project costs for the subsequent fiscal year.

2. No later than sixty (60) calendar days prior to the advertisement of each construction contract, NRCS shall notify DNR of DNR's share of that portion of total first costs incurred to date and anticipated to be expended through completion of that construction contract. This amount will include the non-federal share of total first costs in cash and/or credit as described in Article II.b.3., and the minimum cash contribution of five percent (5%) of total first costs as described in Article II.b.2. No later than thirty (30) calendar days thereafter, DNR shall verify to the satisfaction of NRCS or its representative, that it has deposited the requisite amount in an escrow account with interest accruing to DNR.

3. For the second and subsequent fiscal years of Project implementation, no later than sixty (60) calendar days prior to the beginning of the fiscal year, DNR shall make the necessary funds available to NRCS through the funding mechanism specified in Article VI.b.2. of this Agreement. As construction of the Project proceeds, NRCS shall adjust the amount required to be provided under this paragraph to reflect actual costs.

4. If, at any time during the period of construction, NRCS determines that additional funds will be needed from DNR to meet DNR's required share, NRCS shall so notify DNR, and DNR, no later than forty-five (45) calendar days from receipt of such notice, shall make the necessary funds available through the funding mechanism specified in Article VI.b.2. of this Agreement.

c. NRCS will draw on the escrow account such sums as NRCS deems necessary to cover contractual and in-house fiscal obligations attributable to the Project on an annual basis, as well as costs incurred by NRCS prior to the initiation of construction but after January 10, 2001, according to Article I.b.

d. The escrow account will be managed for NRCS by the New Orleans District, U.S. Army Corps of Engineers. Funds will be withdrawn from the account and disbursed to NRCS as requested.

e. Upon completion of the Project, or termination of this Agreement in accordance with Article XV of this Agreement, and resolution of all relevant contract claims and appeals, NRCS shall compute the total Project costs and tender to DNR a final accounting of DNR's share of total Project costs. In the event that the total contribution by DNR is less than its minimum required share of total Project costs, DNR shall, no later than ninety (90) calendar days after receipt of written notice, make a cash payment to NRCS of whatever sum is required to meet its minimum required non-federal share of total Project costs, subject to the availability of appropriations.

f. In the event DNR has made cash contributions in excess of five percent (5%) of total Project costs which result in DNR having provided more than its required share of total Project costs, NRCS shall, no later than ninety (90) calendar days after the final accounting is complete, subject to the availability of appropriations, return said excess to DNR; however, DNR shall not be entitled to any refund of the five percent (5%) cash contribution required pursuant to Article II.b.2. of this Agreement.

g. If DNR's total contribution under this Agreement (including land rights, easements, rights-of-way, relocations, material borrow and disposal areas, and work-in-kind provided by DNR and approved by NRCS) exceeds DNR's required non-federal share of total Project costs, NRCS shall verify the actual exceeded costs and direct the U.S. Army Corps of Engineers, subject to the availability of appropriations for that purpose, and the minimum five percent (5%) cash requirement, refund the excess to DNR no later than ninety (90) calendar days after the final accounting is complete.

ARTICLE VII – DISPUTES

Before any party to this Agreement may bring suit in any court concerning an issue relating to this Agreement, such party must first seek in good faith to resolve the issue through negotiations or other forms of non-binding alternative dispute resolution mutually acceptable to the parties.

ARTICLE VIII – MONITORING, OPERATING, MAINTENANCE, AND REHABILITATION

a. After NRCS has accepted, with the concurrence of DNR, the completed Project, or the functional portion of the Project, DNR shall assume long-term monitoring responsibilities in accordance with the Project Monitoring Plan defined in Article I.j. of this Agreement. At this same time, DNR will also assume responsibilities for operation, maintenance and rehabilitation of the completed Project, or functional portion of the Project, following the recommendations jointly developed and approved by DNR and NRCS in the Project Operation, Maintenance, and Rehabilitation Plan defined in Article I.m. of this Agreement. These responsibilities will remain in effect for the expected life of the Project which is twenty (20) years from the date of acceptance of the completed Project unless otherwise agreed to by NRCS and DNR.

b. DNR grants NRCS the right to enter, at reasonable times and in a reasonable manner, upon land which it owns or maintains access easements to the Project, for the purpose of inspection related to monitoring, operating, maintaining, replacing, or rehabilitating the Project. If an inspection shows that DNR, for any reason, is failing to fulfill its obligations under this Agreement, NRCS will send a written notice to DNR concerning a need for compliance. If DNR persists in such failure for ninety (90) calendar days after receipt of this notice, then NRCS shall have a right to cancel the federal assistance portion of this Agreement for any additional expenses related to monitoring, operation, maintenance, and rehabilitation costs of the Project.

ARTICLE IX -- MAINTENANCE OF RECORDS

NRCS and DNR shall keep books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to this Agreement to the extent and in such detail as will properly reflect total Project costs. NRCS and DNR shall maintain such books, records, documents and other evidence for a minimum of three (3) years after completion of construction, operation, maintenance, repair, replacement, rehabilitation, and monitoring of the Project and resolution of all relevant claims arising therefrom, and shall make available at their offices at reasonable times, such books, records, documents, and other evidence for inspection and audit by authorized representatives of the parties to this Agreement.

ARTICLE X -- GOVERNMENT REVIEW OF RECORDS

NRCS shall have the right to conduct an audit, when appropriate, of DNR's records for the Project to ascertain the reasonableness and allowability of its costs for inclusion as credit against the non-federal share of Project costs.

ARTICLE XI -- STATE REVIEW OF RECORDS

DNR shall have the right to conduct an audit, when appropriate, of NRCS's records for the Project to ascertain the reasonableness and allowability of its costs for inclusion as credit against the federal share of Project costs.

ARTICLE XII -- RELATIONSHIP OF PARTIES

The parties to this Agreement act in an independent capacity in the performance of their respective functions under this Agreement, and neither party is to be considered the officer, agent, or employee of the other.

ARTICLE XIII -- OFFICIALS NOT TO BENEFIT

No member of, or delegate to, the Congress, or resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE XIV -- COVENANT AGAINST CONTINGENT FEES

DNR warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by DNR for the purpose of securing business. For breach or violation of this warranty, NRCS shall have the right to annul this Agreement without liability, or, in its discretion, to add to the Agreement or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE XV – TERMINATION OR SUSPENSION

a. If NRCS or DNR fails to receive annual appropriations for the Project in amount sufficient to meet Project expenditure for the then-current or upcoming fiscal year, NRCS or DNR shall so notify the other Party. After sixty (60) calendar days from such notification either party may elect, without penalty, to terminate this Agreement pursuant to this Article or to defer future performance hereunder; however, deferral of future performance under this Agreement shall not affect existing obligations or relieve the parties of liability for any obligation previously incurred. In the event that either party elects to terminate this Agreement pursuant to this Article, both parties shall conclude their activities relating to the Project and proceed to final accounting in accordance with Article VI of this Agreement. In the event that either party elects to defer future performance under this Agreement pursuant to this Article, such deferral shall remain in effect until such time as NRCS or DNR receives sufficient appropriations or until either party elects to terminate this Agreement.

b. Except as provided in paragraph (a) above, if at any time DNR fails to make the payments required under this Agreement, NRCS shall terminate or suspend work on the Project until DNR is no longer in arrears, unless NRCS determines that continuation of work on the Project is in the best interest of the United States or is necessary in order to satisfy agreements with any other non-federal interests in connection with the Project. DNR shall not be liable for any future payments should NRCS continue work on the Project, but shall remain liable for obligations previously incurred.

ARTICLE XVI – OBLIGATIONS OF FUTURE APPROPRIATIONS

Nothing herein shall constitute, or be deemed to constitute, an obligation of future appropriations by the legislature of the State of Louisiana when obligating future appropriations would be inconsistent with the State's constitutional or statutory limitations.

ARTICLE XVII – NOTICES

a. All notices, requests, demands, and other communications required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally, given by prepaid telegram, or mailed by first-class (postage pre-paid), registered, or certified mail, as follows:

If to DNR:

Secretary, Department of Natural Resources
P.O. Box 94396
Baton Rouge, LA 70804-9396

If to NRCS:

State Conservationist
USDA-Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

b. A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this Article.

c. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at such time as it is personally delivered or seven (7) calendar days after it is mailed, as the case may be.

ARTICLE XVIII – CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

ARTICLE XIX – PROJECT COST LIMITS

a. The PL 101-646 Task Force will finance the Project in two phases. Phase I funding is comprised of those funds needed for any necessary analysis of environmental benefits, any necessary hydrologic data collection and analysis, Pre – construction Biological Monitoring, and Engineering and Design. Engineering and Design includes Engineering, Design, Environmental Clearances, Permitting, Project Management and Real Estate requirements up to, but not including, the purchase of real estate. The PL 101-646 Task Force estimated Phase I cost for this Project at \$1,736,000.00. To provide flexibility in Phase I of the Project, the PL 101-646 Task Force has authorized a maximum Phase I cost of 125% of the estimated Phase I cost or \$2,170,000.00 for this particular Project. This is the total funding and obligation for NRCS and the State until Phase II funding is approved. Any cost in excess of this maximum total Phase I cost is subject to Task Force approval and amendment of this Agreement, as provided in Article XX. The 125% budget for Phase I by funding category includes the following:

1.	E & D (including supervision & administration)	\$2,084,000.00
2.	Easements and Landrights	\$ 65,625.00
3.	Pre – Construction Monitoring	\$ 18,625.00
4.	COE Project Administration	\$ <u>1,750.00</u>
	Total	\$2,170,000.00

b. If, at any time during the performance of work for a particular funding category, the actual or anticipated cost of that category exceeds the 125% cost of that particular funding category as set forth in Article XIX.a. of this Agreement, all work in that particular category shall cease. NRCS and DNR may agree to increase the cost of completing that particular category by transferring funds from one category to the other, but only if such increase would not result in the total Phase costs exceeding the maximum total cost defined in Article XIX.a. of this Agreement. Such agreement regarding transferring funds from one category to the other shall be made by letter agreement confirmed by the mutual written approval of both the NRCS State Conservationist and the DNR Secretary. Work on that particular funding category shall thereafter resume.

c. After Phase I has been substantially completed, the PL 101-646 Task Force may authorize expenditure of Phase II funding. This process will be accomplished as specified in the CWPPRA Project Standard Operating Procedures Manual. This Agreement shall then be amended in accordance with the provisions of Article XX to include the Phase II costs of Construction, Post – construction Biological Monitoring, Operation, Maintenance and Rehabilitation. Construction includes Project Management, Contract Management, Construction Supervision, Inspection, and the purchase of real estate.

d. Post – construction Biological Monitoring and Operation, Maintenance and Rehabilitation costs will be funded in accordance with Section 5.(k).(1),(2),(3) of the CWPPRA Project Standard Operating Procedures Manual. This Agreement will be amended in accordance with the provisions of Article XX to reflect these CWPPRA and State funding obligations as they occur.

ARTICLE XX – AMENDMENTS TO BE IN WRITING

This Agreement may be modified by agreement of the parties, in accordance with the provisions of CWPPRA and applicable federal and state regulations. All such amendments, modifications, revisions, and/or changes to this Agreement must be made in writing and acknowledged by signature of the authorized representatives of all parties of this Agreement. All such amendments, modifications, revisions, and/or changes to this Agreement shall be subject to review and approval by the Division of Administration, State of Louisiana.

ARTICLE XXI – EQUAL OPPORTUNITY AND CIVIL RIGHTS

a. The program or activities conducted under this Agreement will be in compliance with the nondiscrimination provision contained in the Titles VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (Public Law 100-259); and other nondiscrimination statutes: namely, Section 504 of the Rehabilitation Act of 1973, Title IX of the education Amendments of 1972, and the Age Discrimination Act of 1975. They will also be in accordance with regulations of the Secretary of Agriculture (7CFR-15, Subparts A & B), which provide that no person in the United States shall on the grounds of race, color, national origin, age, sex, religion, marital status, or handicap be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance from the Department of Agriculture or any agency thereof.

b. The parties to this Agreement shall not discriminate on the basis of sexual orientation.

ARTICLE XXII – SURVEY

Prior to commencement of any construction activities, NRCS or the Office of Coastal Restoration and Management of DNR, at the option of DNR, shall (1) cause to be conducted, a survey to determine the highest tide during winter season or such other time which will indicate the extent of State ownership existing prior to commencement of any restoration activities, or (2) obtain aerial photographs or satellite images of the project area taken within one (1) year prior to commencement of the restoration activity, or (3) acquire such other information as is acceptable to DNR to indicate the extent

of State ownership. Any costs associated with this Article are considered a part of total Project costs and shall be cost-shared according to the terms previously identified.

ARTICLE XXIII – FEDERAL AND STATE LAWS

a. In exercise of DNR's rights and obligations hereunder, DNR agrees to comply with all applicable Federal and State laws and regulations.

b. NRCS agrees to comply with all applicable Federal and State of Louisiana laws and/or regulations, unless state law and regulations are preempted by federal law.

ARTICLE XXIV – FISCAL FUNDING

The continuation of this contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the Louisiana legislature. If the Louisiana legislature fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced by the veto of the governor or by any means provided in the appropriations act to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract, the contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated.

GIWW BANK RESTORATION OF CRITICAL AREAS IN TERREBONNE PROJECT (TE-43)

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day of May 14th, 2001, before the undersigned witnesses.

USDA
NATURAL RESOURCES CONSERVATION
SERVICE

THE STATE OF LOUISIANA

BY: Donald W. Gohmert
Donald W. Gohmert
State Conservationist

BY: Jack C. Caldwell
Jack C. Caldwell, Secretary
Louisiana Department of
Natural Resources

WITNESSES:

Misty Gallipeau
Sandra Plunkett

WITNESSES:

Julia Luyford
Susan R. Robinson
Suzanne Ferrell

CERTIFICATE OF AUTHORITY

I, Warren A. Fleet, do hereby certify that I am the principal legal officer of the Department of Natural Resources for the State of Louisiana, that the Department of Natural Resources for the State of Louisiana is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Natural Resources Conservation Service and the State of Louisiana in connection with the GIWW BANK RESTORATION OF CRITICAL AREAS IN TERREBONNE PROJECT (TE-43), Terrebonne Parish, LA, and that the persons who have executed this Agreement on behalf of the State have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this 17th day of May, 2001.



Warren A. Fleet
General Counsel

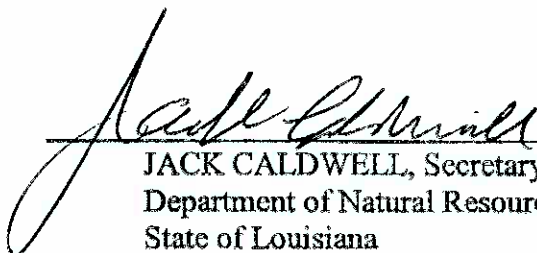
CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

DATE: 5-16-01

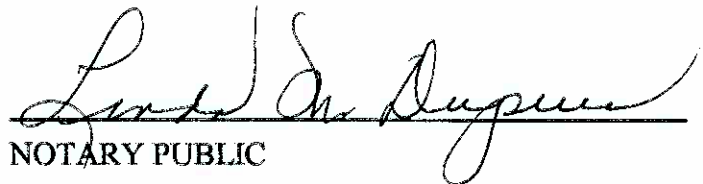


JACK CALDWELL, Secretary
Department of Natural Resources
State of Louisiana

STATE OF LOUISIANA

PARISH OF RAPIDES

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for said Parish and State aforesaid, on this 30th day of May, 2001, personally came and appeared Donald W. Gohmert, to me known, who declared that he is the State Conservationist of the **USDA - Natural Resources Conservation Service**, that he executed the foregoing instrument on behalf of said Federal Agency and that the instrument was signed pursuant to the authority granted to him by said Federal Agency and that he acknowledged the instrument to be the free act and deed of said Federal Agency.

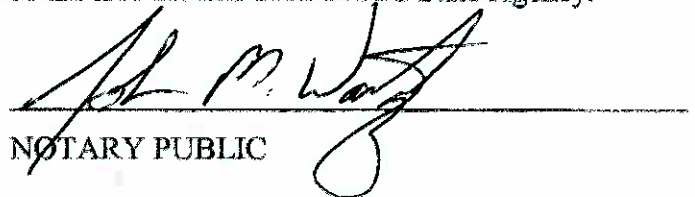

NOTARY PUBLIC

My commission expires: lifetime
(SEAL)

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for said Parish and State aforesaid, on this 16th day of MAY, 2001, personally came and appeared Jack C. Caldwell, to me known, who declared that he is the Secretary of the **Department of Natural Resources, State of Louisiana**, that he executed the foregoing instrument on behalf of said State Agency and that the instrument was signed pursuant to the authority granted to him by said State Agency and that he acknowledged the instrument to be the free act and deed of said State Agency.


NOTARY PUBLIC

My commission expires: with term
(SEAL)

ATTACHMENT II



GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4
(TE-43)

PROJECT FEATURES



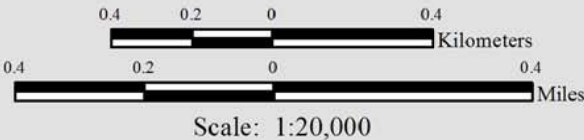
GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)



-  Shoreline Protection
-  Project Boundary



Source:
 Coastal Protection and Restoration
 Authority of Louisiana
 Imagery:
 2013 National Agriculture
 Imagery Program



File Path: //RID2015040107/
 Map Date: March 18, 2015

ATTACHMENT III

GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4
(TE-43)

PROJECT COMPLETION REPORT

**PL-646 CWPPRA
PROJECT COMPLETION REPORT**

PROJECT NAME	GIWW Bank Restoration of Critical Areas – Segment No. 4
CWPPRA/STATE PROJECT NO	TE-43

Report Date October 17, 2014

By: Natural Resources Conservation Service

1. Project Personnel

CPRA Project Manager	Amanda Bordelon	(225) 987-7730
CPRA Construction Project Mgr	Brian Babin	(985) 447-0956
CPRA Monitoring Manager	Glen Curole	(985) 447-0995
Federal Agency Project Manager	Ron Boustany	(337) 291-3067
Federal Agency Contracting Officer	Vicki Supler	(318) 473-7645
Federal Agency Design Engineer	Dain Gillen	(225) 665-4253
Federal Agency COR	Jason Kroll	(225) 665-4253
Federal Agency Inspector	Mel Rodrigue	(985) 447-6050
Federal Agency Inspector	Carol Clement	(337) 783-1257
Federal Agency Inspector	Brandon Guillot	(985) 447-6050

2. Project Location & Description

The project is located along the GIWW, east of Copasaw Canal in the Terrebonne basin, in Terrebonne Parish, Louisiana.

The project consisted of constructing a composite dike along the southern shoreline of the GIWW.

3. Final Constructed Features

The final constructed features consisted of 10,579.1 linear feet of composite dike with light weight aggregate core, 46 permanent warning signs of which 3 of these were lighted warning signs, 2,262 linear feet of a 10' apron made of riprap on both ends of the project on the marsh side of the dike, and 9 settlement plates.

4. Task Force Funding Approval

	Project Cost Estimates
Construction	\$ 8,555,872.00
E & D	\$ 2,306,591.00
Landrights	\$ 52,529.00
Monitoring	\$ 14,954.00
O&M	\$ 2,729,166.00
Total	\$ 13,659,112.00

5. Items of Work

Item	Work	Estimated Quantity	Unit	Gov't Estimate		Original Award		Final Amount		% Over/Under
				Estimated Unit Price	Estimated Amount	Unit Bid Price	Bid Amount	Final Quantity	Final Amount	
1	Mobilization and Demobilization	1	Job	\$200,800.00	\$200,800.00	\$253,000.00	\$253,000.00	1	\$253,000.00	100.00%
2	Pollution Control	1	Job	\$14,300.00	\$14,300.00	\$100,775.00	\$100,775.00	1	\$100,775.00	100.00%
3	Construction Surveys	1	Job	\$240,900.00	\$240,900.00	\$168,350.00	\$168,350.00	1	\$168,350.00	100.00%
4	Contractor Quality Control	1	Job	\$86,500.00	\$86,500.00	\$165,000.00	\$165,000.00	1	\$165,000.00	100.00%
5	Light Weight Aggregate, Encapsulated	15,000	CY	\$127.00	\$1,905,000.00	\$120.00	\$1,800,000.00	15,700.62	\$1,884,074.40	104.67%
6	Excavation, Access Dredging	1	Job	\$371,700.00	\$371,700.00	\$536,000.00	\$536,000.00	1	\$536,000.00	100.00%
7	Rock Riprap	50,300	Ton	\$65.00	\$3,269,500.00	\$51.00	\$2,565,300.00	65,951	\$3,363,501.00	131.12%
8	Geotextile	40,650	SY	\$7.20	\$292,680.00	\$7.50	\$304,875.00	43,137.5	\$323,531.25	106.12%
9	Metal Fabrication, Settlement Plates	9	EA	\$2,200.00	\$19,800.00	\$4,000.00	\$36,000.00	9	\$36,000.00	100.00%
10	Identification Markers & Plaques, Temporary Warning Signs	18	EA	\$2,800.00	\$50,400.00	\$3,713.00	\$66,834.00	18	\$66,834.00	100.00%
11	Identification Markers & Plaques, Permanent Warning Signs	24	EA	\$2,800.00	\$67,200.00	\$5,081.00	\$121,944.00	24	\$121,944.00	100.00%
12	Additive Item: Identification Markers & Plaques, Permanent Warning Signs	22	EA	\$2,800.00	\$61,600.00	\$4,680.00	\$102,960.00	22	\$102,960.00	100.00%
Total Estimate				\$6,580,380.00		\$6,221,038.00		\$7,121,969.65		

Modifications				
M4	This change order increased CLIN 5 - Lightweight Aggregate, Encapsulated and CLIN 8 - Geotextile due to a quantity overrun.			
The following items were changed on the Bid Schedule:				
		Quantity	Unit	Total Cost
5	Light Weight Aggregate, Encapsulated	700.62	CY	\$84,074.40
8	Geotextile	2487.5	SY	\$18,656.25
Total Modification #4				\$102,730.65

M6	This change order added information for bolt patterns and materials for changes in Modification #2 and to increase CLIN 7 - Rock Riprap based on final quantities.			
The following items were changed on the Bid Schedule:				
		Quantity	Unit	Total Cost
7	Rock Riprap	15651	Ton	\$798,201.00
Total Modification #6				\$798,201.00

6. Construction and Construction Oversight

Prime construction contractor	Tarpan Construction, LLC
Subcontractor	Luhr Bros. Inc.
Subcontractor	Hydro Terra Technologies, LLC
Subcontractor	Weeks Marine Inc.
Original construction contract	\$ 6,221,038.00
Change orders	\$ 900,931.65
Over/Under runs	\$ 0.00
Final construction contract	\$ 7,121,969.65

7. Major Equipment Used

4600 Manitowoc dragline	Numerous Deck and Rock Barges
LS-108 Linkbelt dragline	Living Quarters Barge 200'x40'
(2) Cat 385 long reach excavators	20' Cabin Work Boat
Cat 345D long reach excavator	38' Cabin Work Boat
Cat 345 long reach excavator	(3) Open Skiffs
Cat 330 short reach excavator	Tug Boat "Mule"
Cat 375 high cab long reach excavator	Tug Boat "Billy Gene"
Cat 928 Front end loader	Tug Boat "Warren Jr."
Cat 920 Front end loader	Tug Boat "Mary B"
Cat 914 Front end loader	Tug Boat "Jay Gene"
Numerous Spud Barges	Tug Boat "Johnson F."

8. Construction Sequence

Beginning July 9, 2013, Dredging contractor (Weeks) excavated and stockpiled material starting at the access cut-in at Copesaw Canal. They proceeded from west to east (from 0+00 toward 105+84). They excavated each access cut-in location as they came across them from west to east. They completed excavation of access channel on August 26, 2013 and completed surveys of the access channel by August 28, 2013 when Weeks left the jobsite. All buoys and temporary warning signs were installed by a separate deck barge mounted crane. The signs and buoys were placed as the hazards were created moving from west to east.

Tarpan has light weight aggregate (LWA) was being shipped to the Luhr Bros stock yard at Port Allen beginning on July 10, 2013. Luhr Bros began filling bags and placing them on deck barges at the Port Allen site. They loaded 4 or 5 barges with filled bags before they realized that it would be more efficient for them to move their bagging operation to the job site.

Luhr employees staked out the centerline of the dike using RTK surveying equipment a couple days prior to geotextile placement. They laid out the geotextile fabric from a shallow draft small deck barge. The geotextile was placed ahead of LWA bags by 100-200 feet. They began placing LWA in the footprint of the dike on August 7, 2013. Settlement plates were placed in each settlement plate location immediately before the LWA bags were placed progressing from west to east. Rip rap placement began August 10, 2013. The contractor surveyed the LWA bag placement as they proceeded. The rip rap placement operation was trailing the LWA bag placement operation by 500 to 1000 feet. The rip rap was placed with a long reach excavator mounted on a deck barge. The rip rap barge was tied adjacent to the excavator barge. RTK surveying was used to check rip rap elevation and alignment. The contractor surveyed for as-built information as the work progressed from west to east. The onsite bag filling plant was steady filling bags at the rate that they were being placed. Hopper barges of LWA were shipped to the job site to supply the bag filling operation. The Luhr crew was housed in a quarters barge for the duration of the first lift of rip rap. Additional rip rap was shipped to the site in a timely manner so that there was no downtime due to rip rap supply. The contractor finished the first lift and was demobilized from the jobsite by 09/25/2013.

The contractor remobilized to the jobsite on 01/10/2014. Rip rap placement for the second lift began 01/10/2014. The contractor utilized two excavators mounted on two different deck

barges to place the rip rap. One rip rap placement operation started at 0+00 and progressed eastward. The other rip rap placement operation started at 42+90 and progressed eastward. The rip rap placement was controlled by RTK surveying equipment and as-built information was taken as grade was met and the contractor progressed down the dike. Luhr Bros employees were housed in a quarters barge for the duration of the second lift. There were only a few areas that a third lift of material was placed. The third lifts in those areas and the 10' rip rap apron was placed very last. Luhr Bros was finished with rip rap placement by 01/26/14 and demobilized from the jobsite.

Weeks Marine began backfill operations and permanent sign placement on 01/27/14. Weeks had to backfill the channel in two or more passes for the majority of the length of the access channel because there was so much spoil to place back into the access channel. Permanent warning sign piles were driven for the entire length of the dike and with conspicuity tape placed around them. Then the contractor installed the signs on the piles. The lights on the three lighted signs were the last thing to be installed on the piles. Temporary signs and buoys were removed after all the obstructions were cleared and surveyed. Weeks performed some RTK surveying as they progressed, but performed the as-built survey after the entire job was back filled. A final inspection was completed on March 24, 2014 with technical items outstanding. All but the surveying technical issues were completed in the field by April 2, 2014.

9. Contract Modifications & Field Changes

Amendment #1 – The purpose of this amendment to the solicitation was to provide for Questions and Answers from the Site Showing, the Site Showing Sign In List, revised construction specifications, revised material specifications, and revised drawing sheets. Construction Specification 13 – Piling, 21 – Excavation, 25 – Rockfill, and 95 – Geotextile were revised. Material Specification 592 – Geotextile was revised. Drawing sheets 4, 21, 22, 24, 25, and 26 were revised.

Amendment #2 – The purpose of this amendment to the solicitation was to provide for Questions and Answers. Construction Specification 95 – Geotextile was changed. No drawings were changed.

Amendment #3 – The purpose of this amendment to the solicitation was to provide for additional Questions and Answers. No drawings or specifications were changed.

Modification #1 – The purpose of this modification was to modify the drawings to show the arrangement and locations of the CWPPRA signs referenced in the specifications. There was no change to the contract amount or performance time. Drawing sheets 23 and 25A1 were revised. No specifications were changed.

Modification #2 – The purpose of this modification was to show the length of angle iron on Type B and Type C signs and to change which signs would be lighted. There was no change to the contract amount or performance time. Drawing sheets 23M1 and 25M1 were revised. No specifications were changed.

Modification #3 – The purpose of this modification was to change the seam strength and seam types, to change the method of payment for Quality Control to Method 2, allow the acceptance of all factory sewn seams for both the geotextile panels and the LWA bags, and provide the requirements for all existing field sewn seams. There was no change to the contract amount or performance time. Construction Specifications 94 – Contractor Quality Control and 95 – Geotextile were revised. No material specifications or drawings were changed.

Modification #4 – The purpose of this modification was to increase CLIN 5 – Lightweight Aggregate Encapsulated and CLIN 8 – Geotextile due to a quantity overrun. This was a net increase to the contract of \$102,730.65. The performance time was unchanged. No specifications or drawings were changed.

Modification #5 – This was an administrative modification to add the COR approver due to the implementation of IPP. There was no change to the contract amount or performance time. No specifications or drawings were changed.

Modification #6 – The purpose of this modification was to add information for the bolt pattern and materials to be used to connect the horizontal angle aluminum piece to the drawings as a result of Modification #2. In addition, this modification provided for the final quantities as determined by final barge computations and as-built surveys for the construction of the rock dike. This was a net increase to the contract of \$798,201.00. The performance time was unchanged. No specifications or drawings were changed.

10. Pipeline and Utility Crossings

<u>Utility Type</u>	<u>Owner</u>	<u>Rep. To Contact</u>
N/A	N/A	N/A

11. Construction Safety

No safety issues occurred.

12. Additional Comments

See attached NRCS Supplement

13. Significant Construction Dates:

	Date	Bid I.D.
Site Showing	02/13/2013	
Bid Opening	03/08/2013	AG-7217-S-13-0004
Construction Contract Award	05/07/2013	AG-7217-C-13-0006
Preconstruction Conference	05/23/2013	
Notice to Proceed (LIMITED – for magnetometer surveys only)	06/04/2013	
Notice to Proceed (FULL)	06/17/2013	
Mobilization (1 st Lift)	07/09/2013	
Construction Start	07/09/2013	
Demobilization (1 st Lift)	09/25/2013	
Mobilization (2 nd Lift)	01/10/2014	
Construction Completion	04/02/2014	
Final Inspection	08/15/2014	
Release of Claims	04/15/2014	
Close-out Meeting	05/19/2014	

ATTACHMENT IV

GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4
(TE-43)

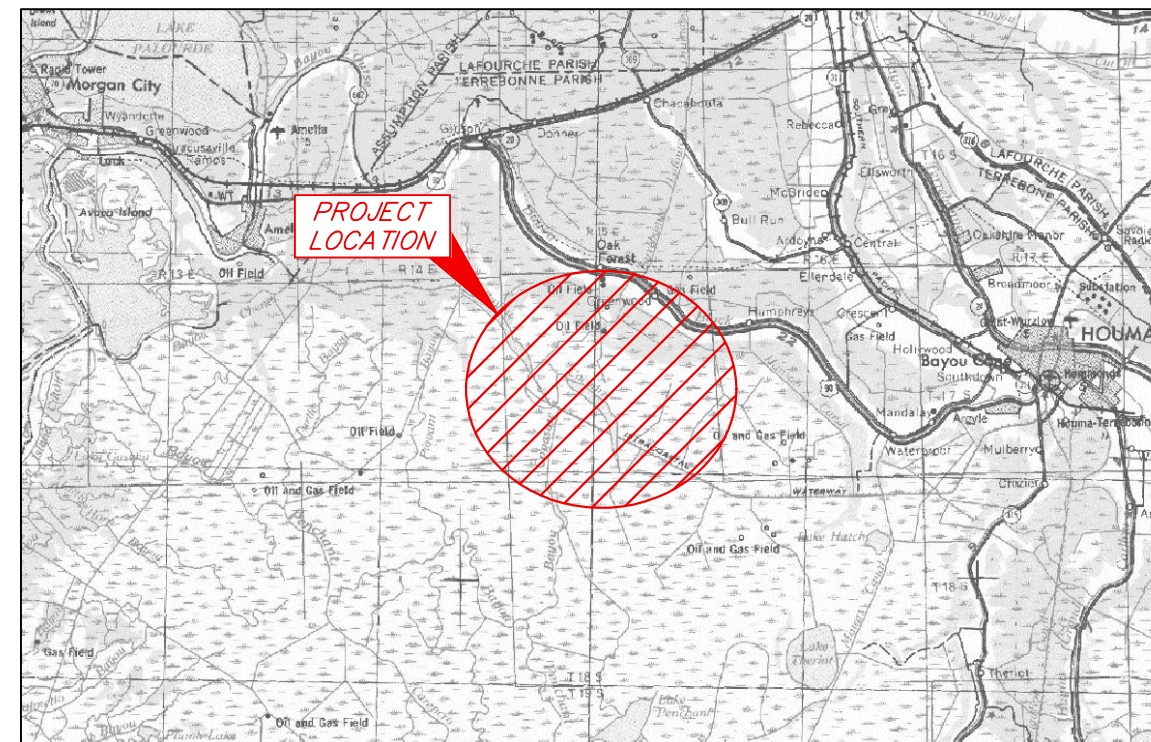
AS-BUILT DRAWINGS

TARPAN CONSTRUCTION, LLC
SEGMENT 4
TE-43 GIWW BANK RESTORATION
AS-BUILT SURVEY (STA 0+06 - 105+78)
TERREBONNE PARISH, LOUISIANA

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE PAGE
2	PLAN VIEW
3 - 19	SECTION VIEWS
20 - 21	PROFILE VIEWS
22	AS-BUILT WARNING SIGN POINT TABLES

"AS-BUILT"



"AS-BUILT PLANS"

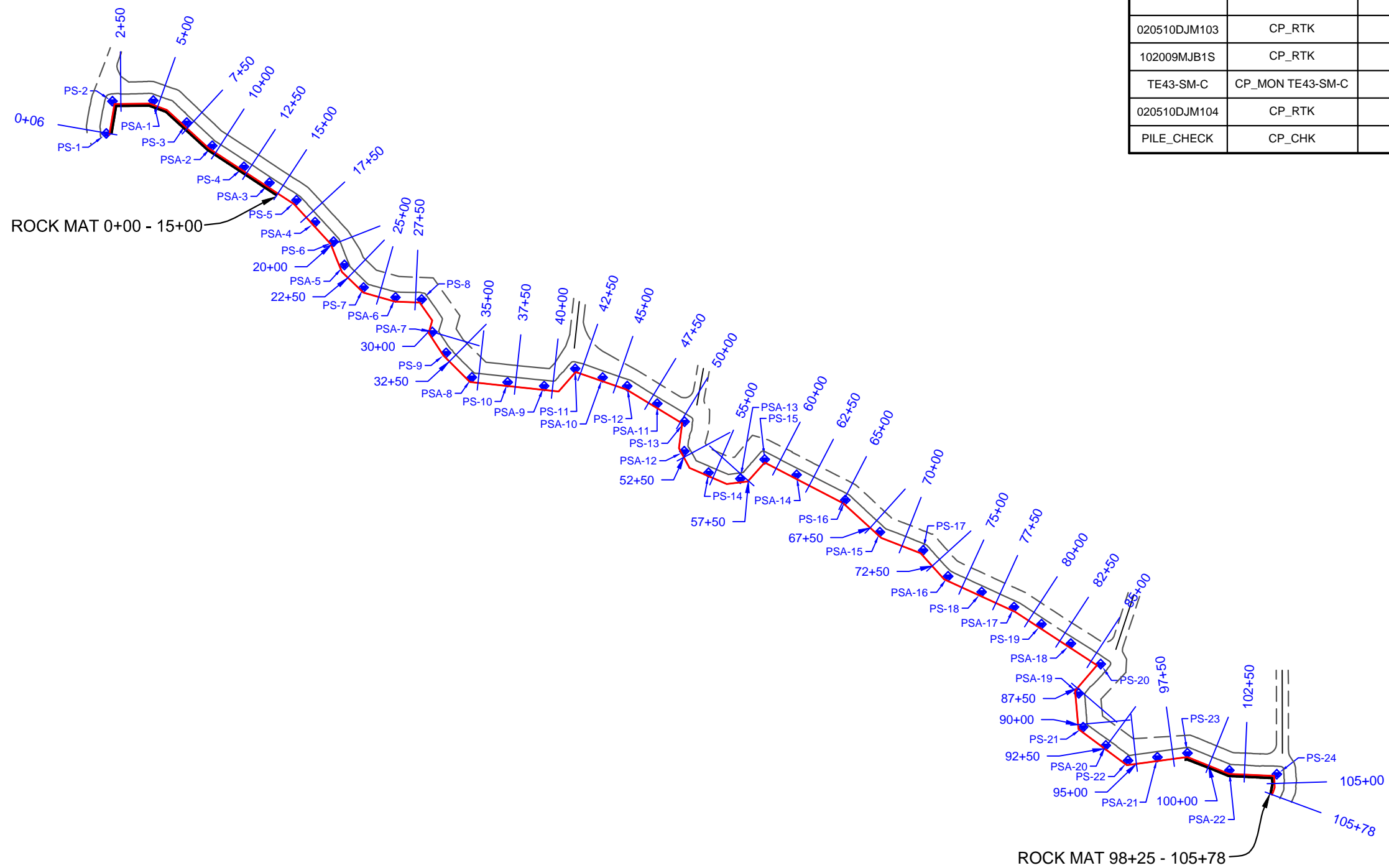
SUBMITTED BY: JASON KROLL 08/21/14
 GOVERNMENT REPRESENTATIVE DATE
 APPROVED BY: BRANDON SAMSON 08/21/14
 ASSISTANT STATE CONSERVATION ENGINEER DATE
MARI GILFORD 08/21/14
 STATE CONSERVATION ENGINEER DATE
 CONTRACT NO. AG-7217-C-13-0006 DATE 6/17/2013
 CONTRACTOR TARPAN CONSTRUCTION LLC
 INSPECTOR CAROL CLEMENT & MEL RODRIGUE
 DATE OF COMPLETION 04/02/14

VICINITY MAP (N.T.S.)

REVISED BY:	DATE:	New Logo-Model 2.jpg	TE-43 GIWW BANK RESTORATION SEGMENT 4 AS-BUILT SURVEY STA 0+06 - 105+78 TITLE PAGE TERREBONNE PARISH, LOUISIANA
PLAN SCALE SCALE: NTS		Tarpan Const LLC.gif	PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583
NTS	NTS	NTS	NTS
DATE: 03/26/2014	JOB# 2131032	FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg	SHEET: 1 OF 22



LOUISIANA SOUTH ZONE - NAD83 HPGN DATUM
DERIVED VIA GPS KINEMATIC OBSERVATIONS.



Project Control Point Table				
Point Name	Raw Description	Elevation (USft)	Northing (USft)	Easting (USft)
020510DJM103	CP_RTK	6.44	385426.36	3412662.80
102009MJB1S	CP_RTK	2.62	390696.19	3401150.56
TE43-SM-C	CP_MON TE43-SM-C	3.35	383893.93	3412721.49
020510DJM104	CP_RTK	6.43	385419.72	3412678.73
PILE_CHECK	CP_CHK	5.15	390707.95	3401177.86

- NOTES
1. ALL HORIZONTAL COORDINATES ARE BASED ON LOUISIANA SOUTH ZONE - NAD83 HPGN DATUM, US SURVEY FOOT AS DERIVED FROM PROJECT CONTROL VIA GPS KINEMATIC OBSERVATIONS.
 2. ELEVATIONS ARE BASED ON NAVD 88 US SURVEY FEET (GEOID 99) AS DERIVED FROM PROJECT CONTROL.
 3. TOPOGRAPHIC SURVEY DATA ACQUISITION PERFORMED WITH RTK AND CONVENTIONAL SURVEY METHODS.
 4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
 5. AS-BUILT SURVEY DATA OF RIPRAP WAS ACQUIRED BY LUHR BROS. FROM AUGUST 8, 2013 TO JANUARY 25, 2014 AND PRESENTED AS SHOWN IN SURVEY CROSS-SECTION VIEWS. AS-BUILT SURVEY DATA OF FLOTATION BACKFILL WAS ACQUIRED BY WEEKS MARINE, INC. ON MARCH 19, 2014 AND PRESENTED AS SHOWN IN SURVEY CROSS-SECTION VIEW.
 6. SEE AS-BUILT PERMANENT WARNING SIGN AND PILE LOCATIONS TABLE ON SHEET 20 OF 22.

LEGEND

- PROPOSED ϵ OF SEGMENT 4 ALIGNMENT
- PROPOSED SURVEY SECTIONS
- - - EXCAVATION TEMPLATE
- AS-BUILT WARNING SIGN

REVISED BY: _____ DATE: _____

HORIZONTAL SCALE

800' 0' 400' 800'

DATE: 03/26/2014 JOB# 2131032

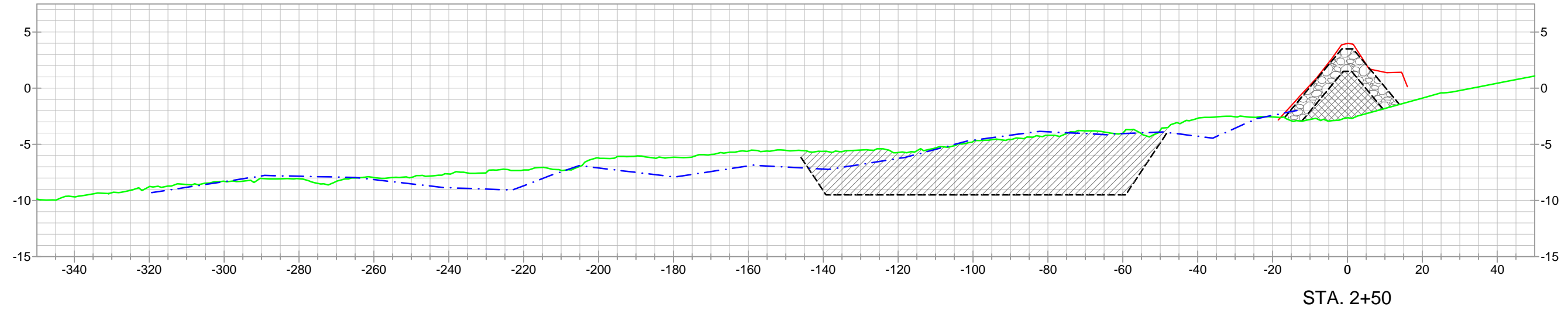
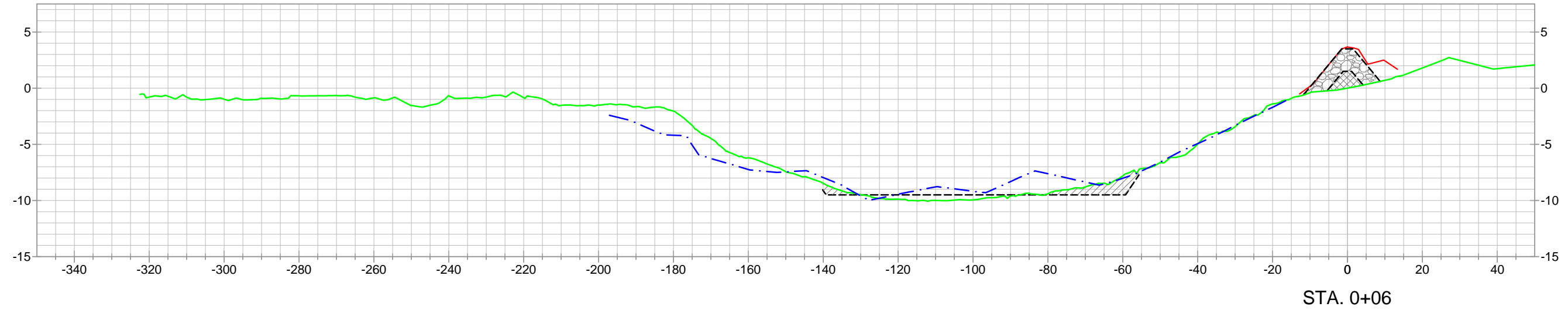
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Tarpan Const LLC.gif

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
PLAN VIEW
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg SHEET: 2 OF 22



"AS-BUILT"

LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

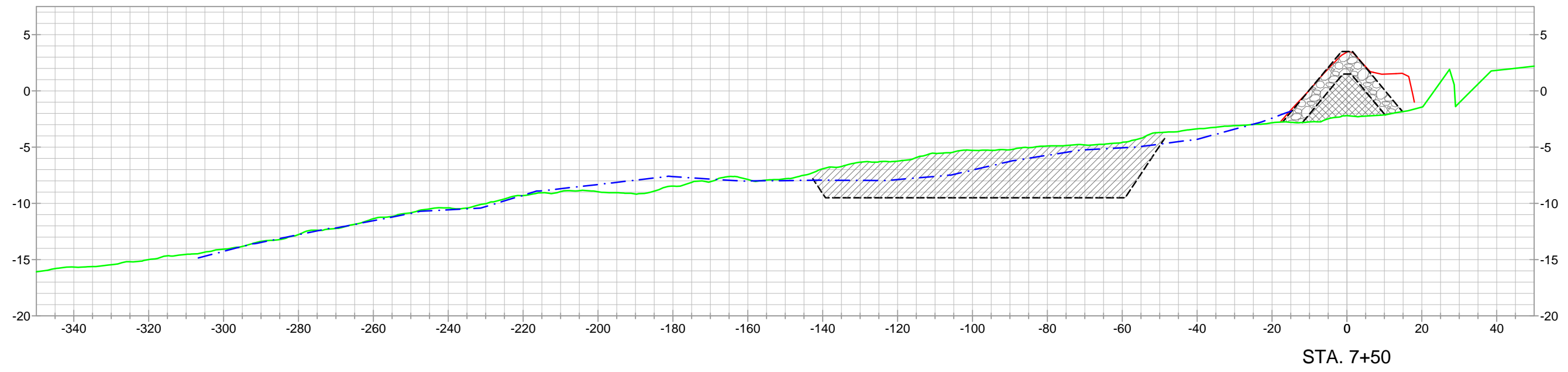
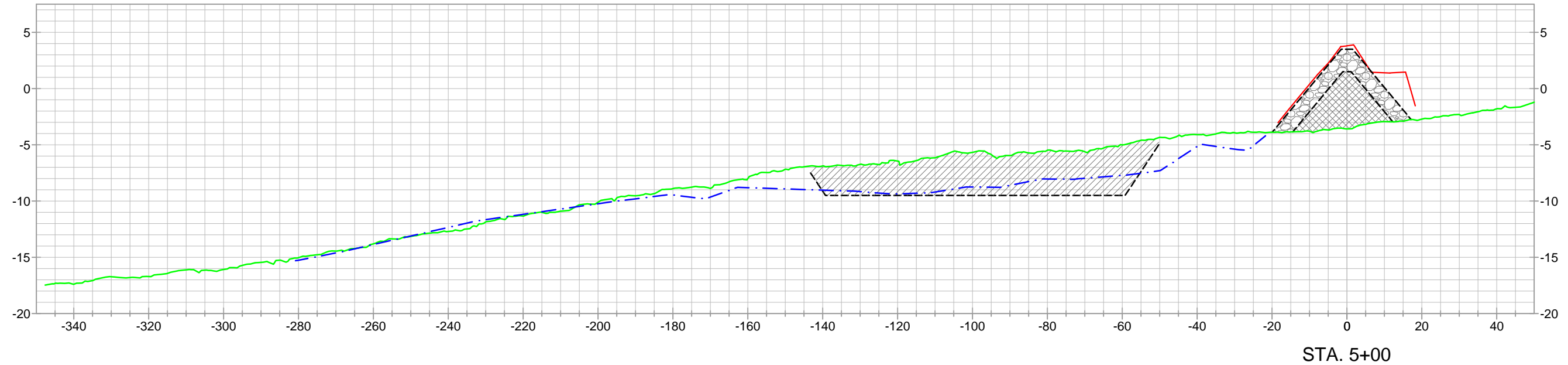
Tarpan Const LLCgfp

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

SHEET: 3 OF 22



"AS-BUILT"

LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

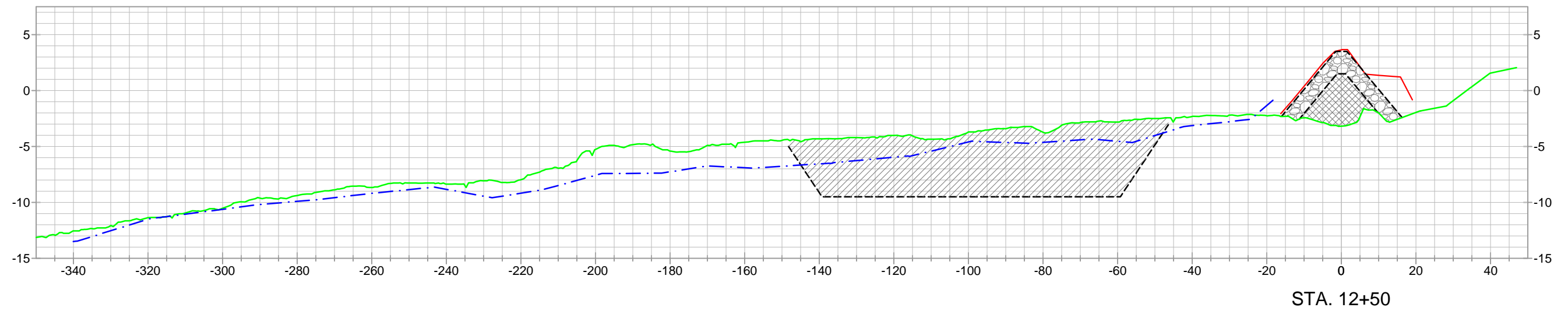
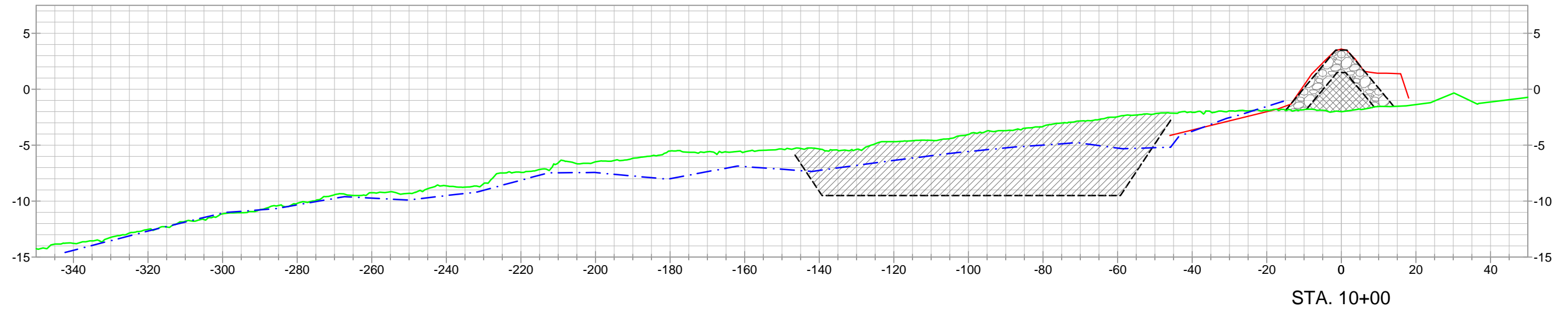
Tarpan Const LLCgif

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

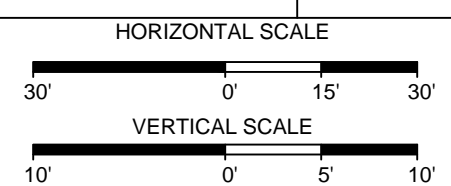
FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

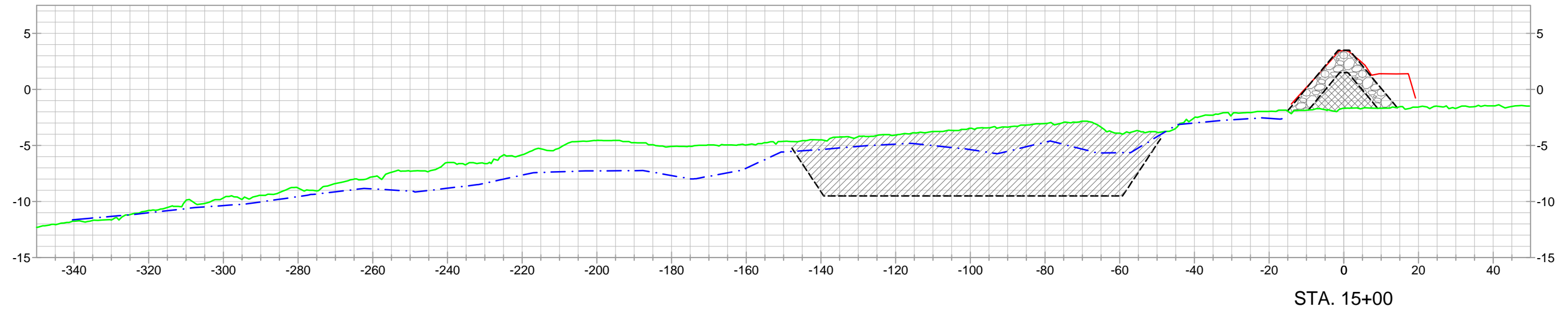
SHEET: 4 OF 22



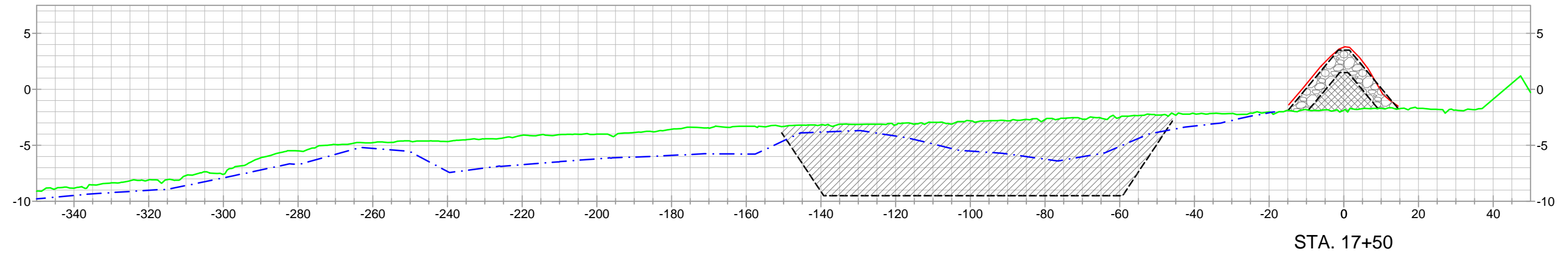
"AS-BUILT"

<p>LEGEND</p> <ul style="list-style-type: none"> PRE - CONSTRUCTION SURVEY TEMPLATE AS-BUILT RIPRAP SURVEY FLOTATION AS-BUILT SURVEY ENCAPSULATED LIGHTWEIGHT AGGREGATE RIPRAP 	<p>REVISED BY:</p>	<p>DATE:</p>	<p>New Logo-Model 2.jpg</p> <p style="text-align: center; font-size: small;">Tarpan Const LLC.gif</p>	<p>TE-43 GIWW BANK RESTORATION SEGMENT 4 <i>AS-BUILT SURVEY</i> STA 0+06 - 105+78 SECTION VIEWS TERREBONNE PARISH, LOUISIANA</p>
	<p>DATE: 03/26/2014</p>	<p>JOB# 2131032</p>		

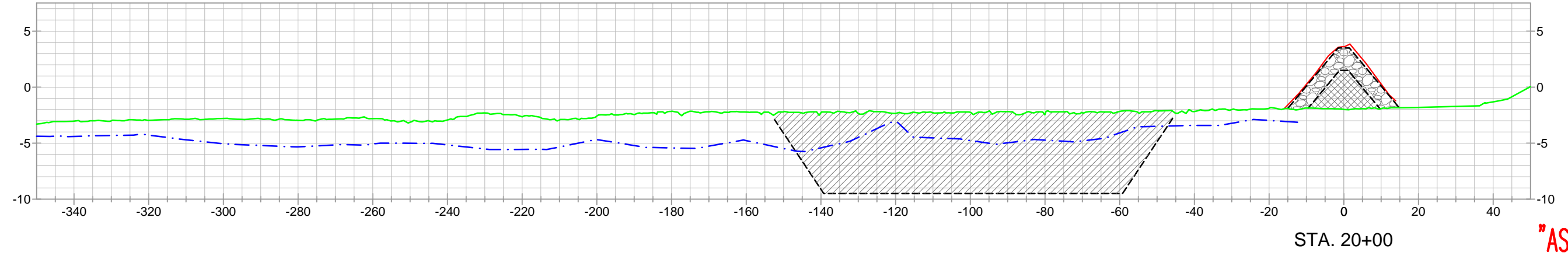




STA. 15+00



STA. 17+50



STA. 20+00

"AS-BUILT"

LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

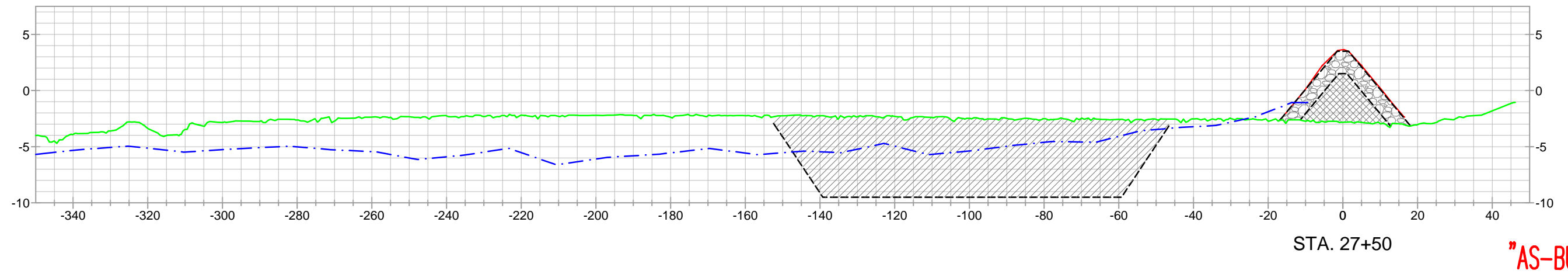
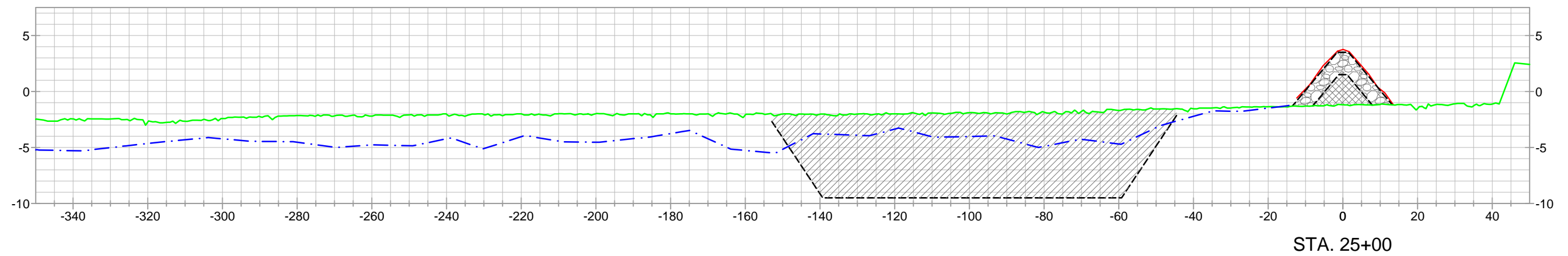
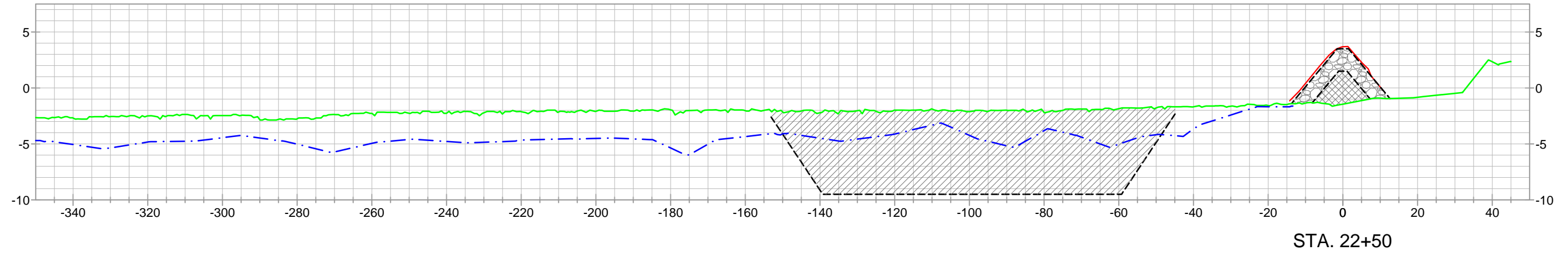
Tarpan Const LLCgif

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

SHEET: 6 OF 22



LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

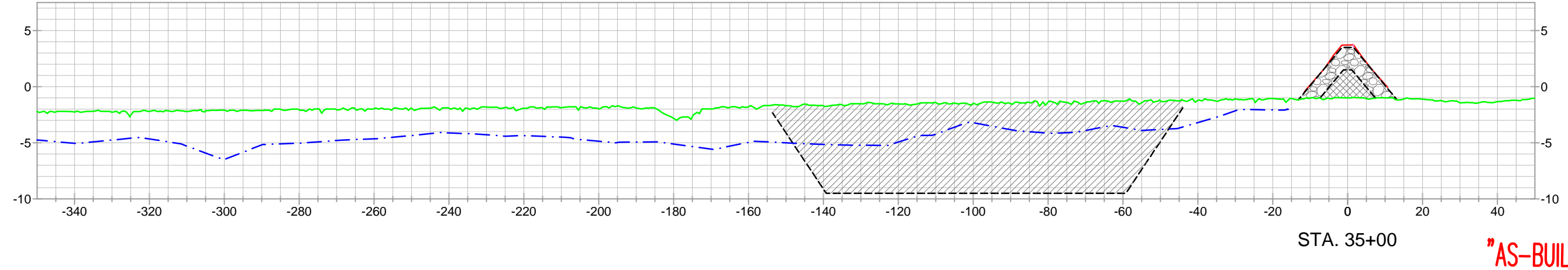
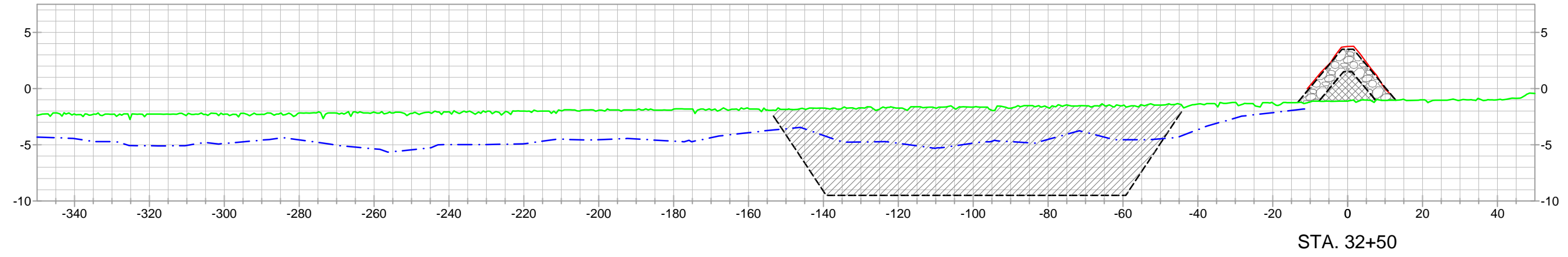
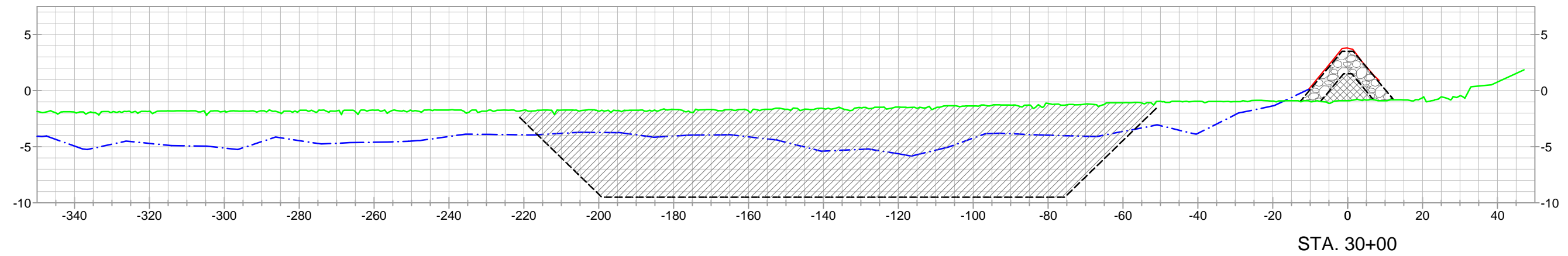
Terpan Const LLCg®

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

SHEET: 7 OF 22



"AS-BUILT"

LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

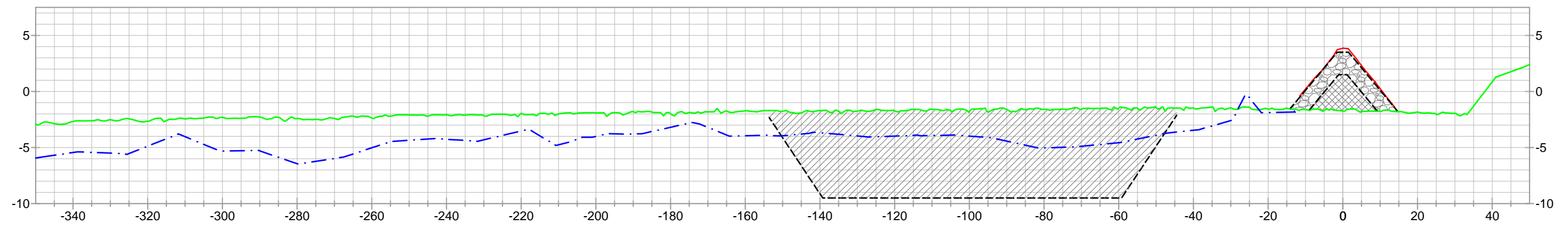
Tarpan Const LLC

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

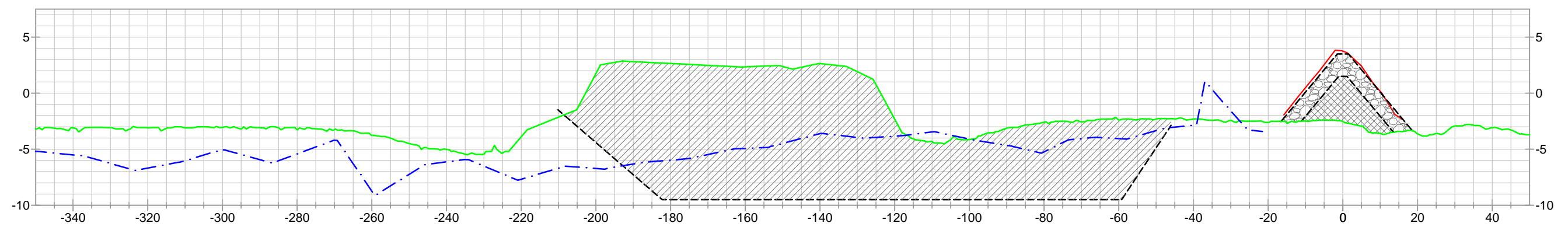
PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

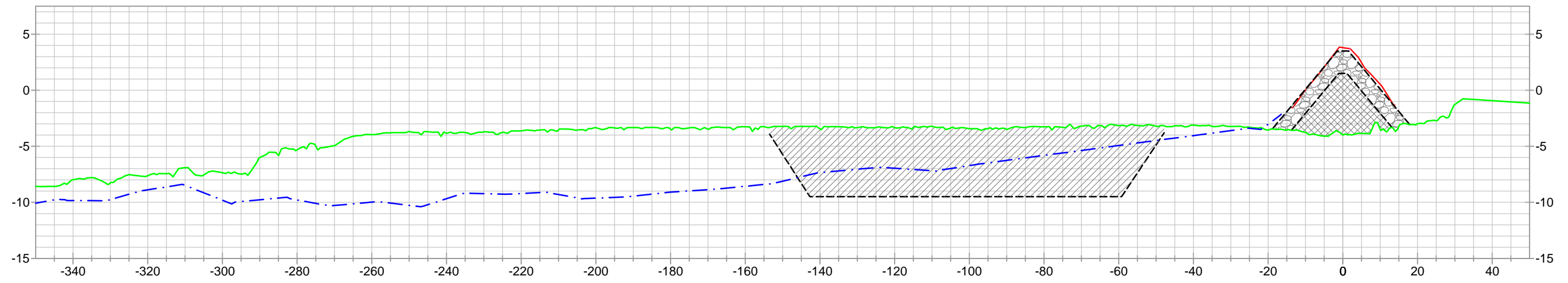
SHEET: 8 OF 22



STA. 37+50



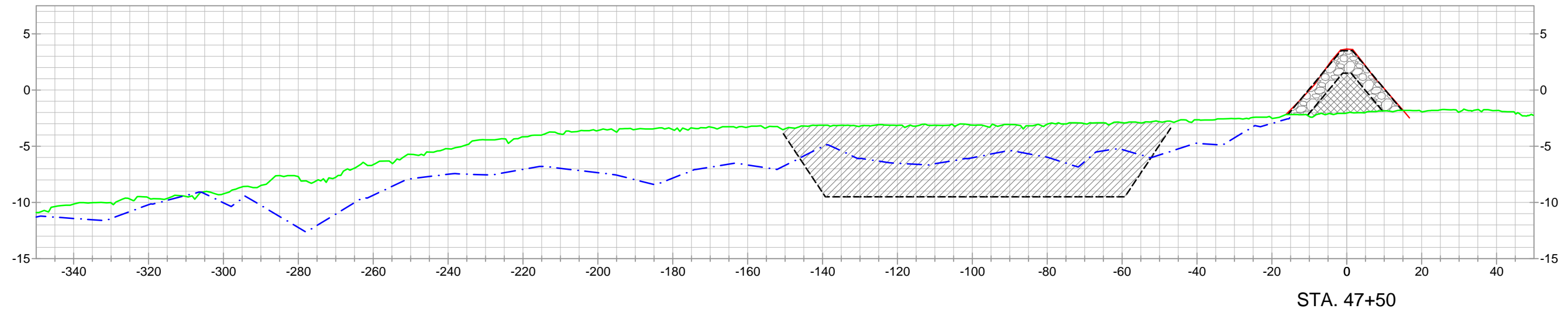
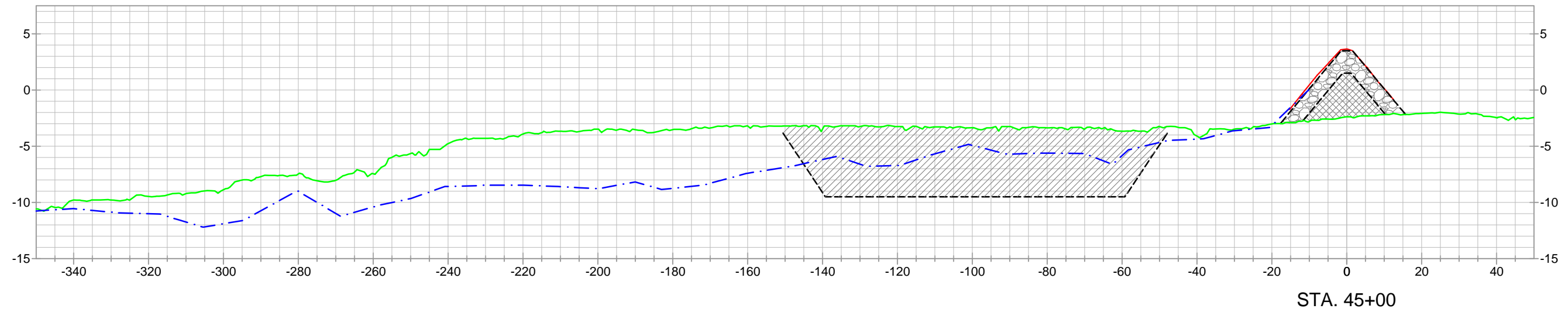
STA. 40+00



STA. 42+50

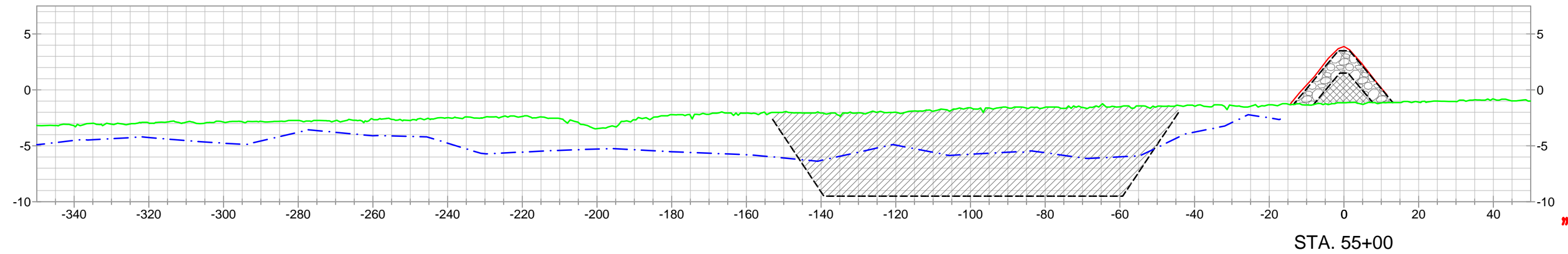
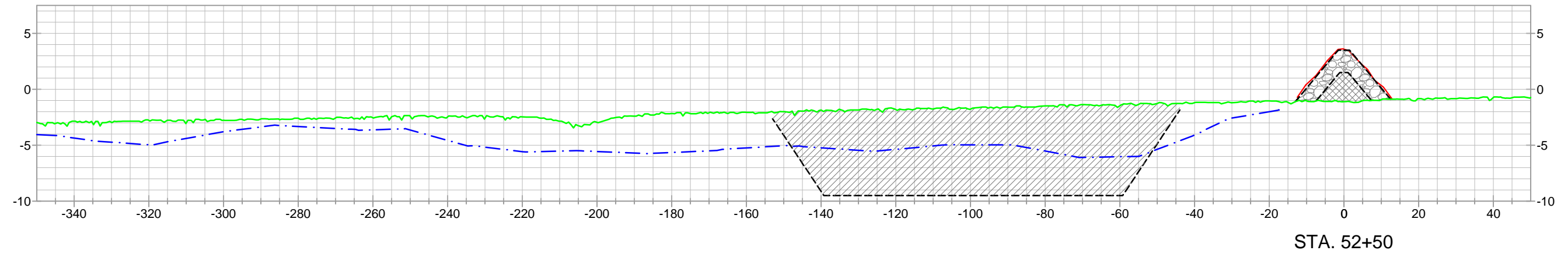
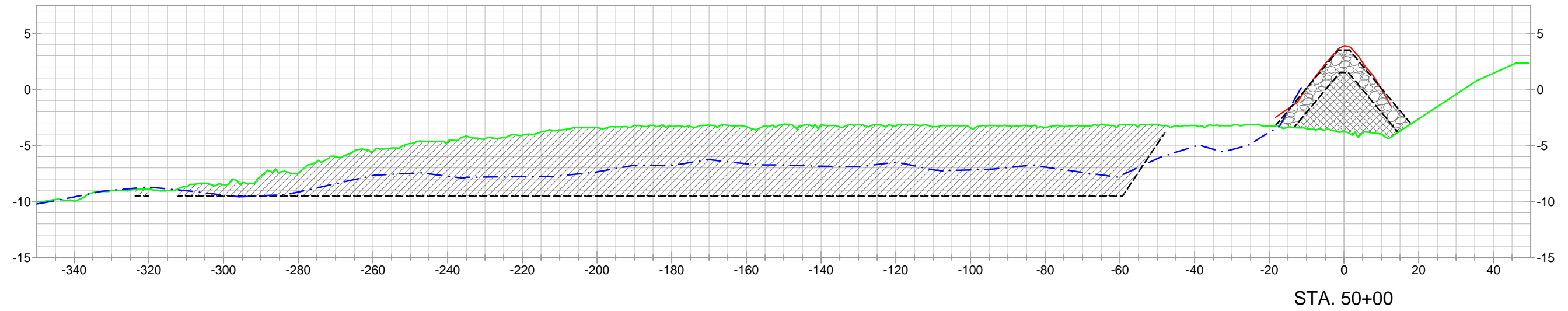
"AS-BUILT"

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	<p>HORIZONTAL SCALE</p>			
	<p>VERTICAL SCALE</p>			
	DATE: 03/26/2014	JOB# 2131032		
			FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg	SHEET: 9 OF 22



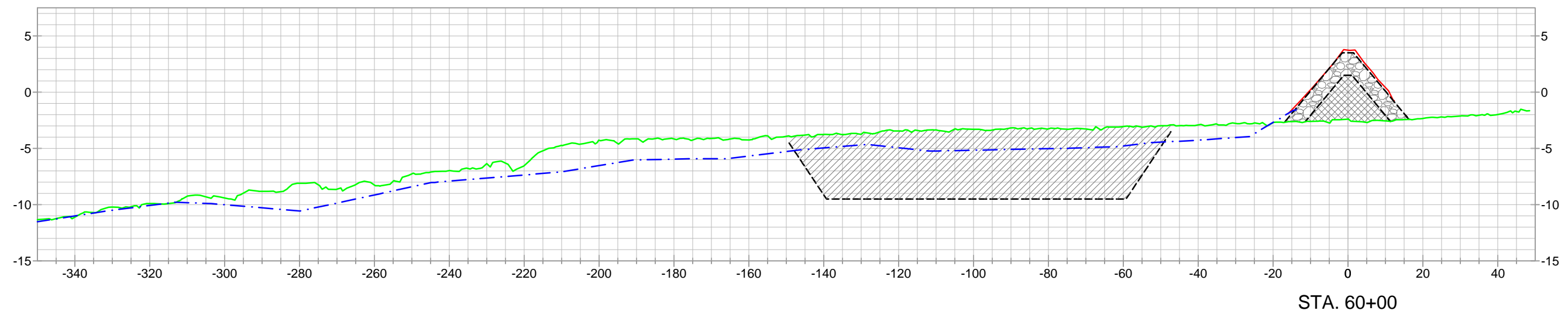
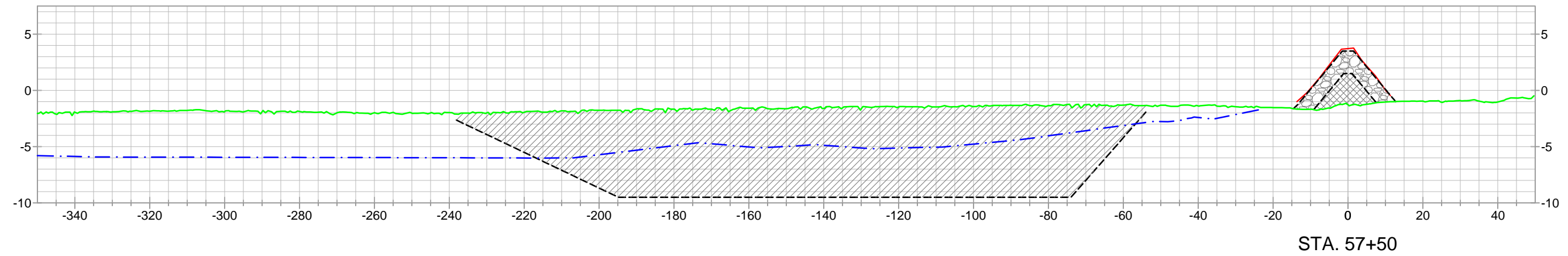
"AS-BUILT"

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	DATE: 03/26/2014	JOB# 2131032		
			SHEET: 10 OF 22	



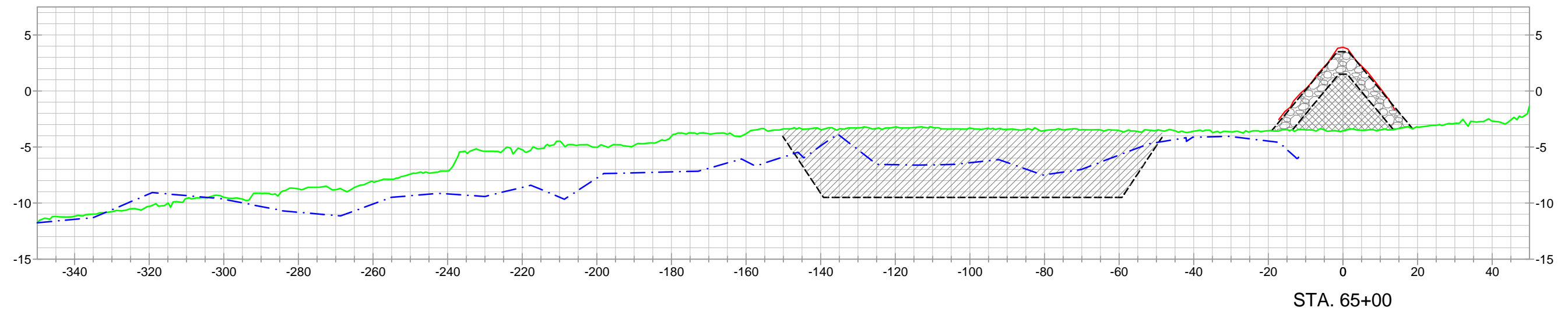
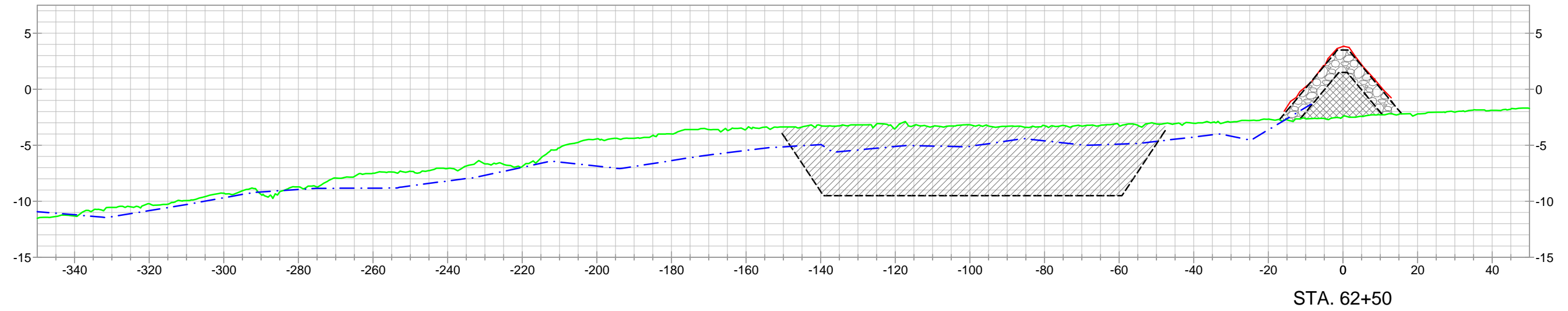
"AS-BUILT"

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	HORIZONTAL SCALE				
	VERTICAL SCALE				
	DATE: 03/26/2014	JOB# 2131032			PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583





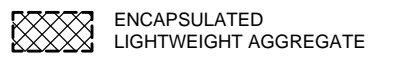



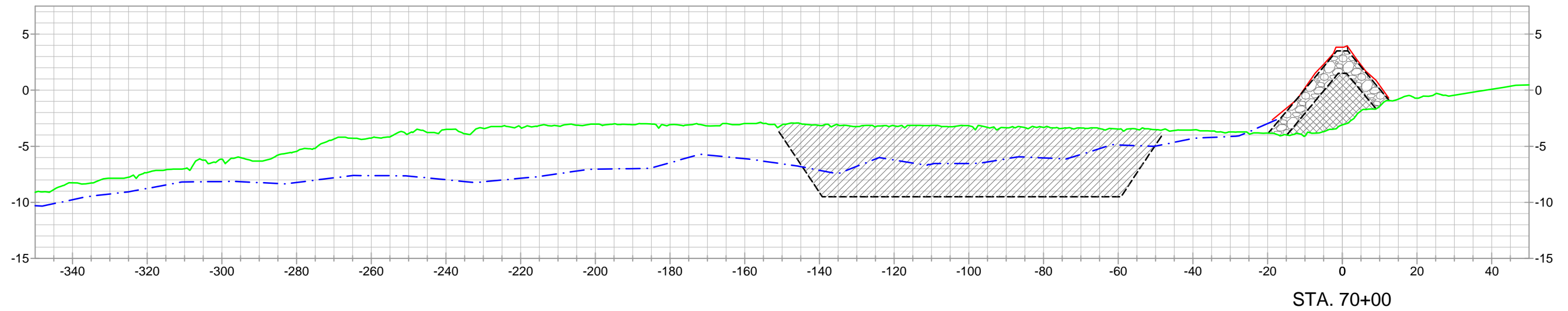
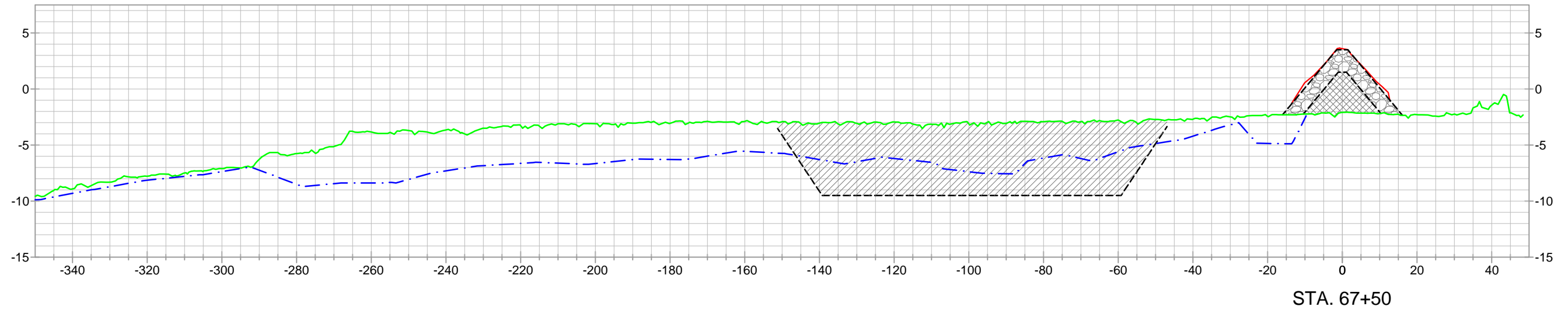
"AS-BUILT"

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	<p>DATE: 03/26/2014</p>	<p>JOB# 2131032</p>		









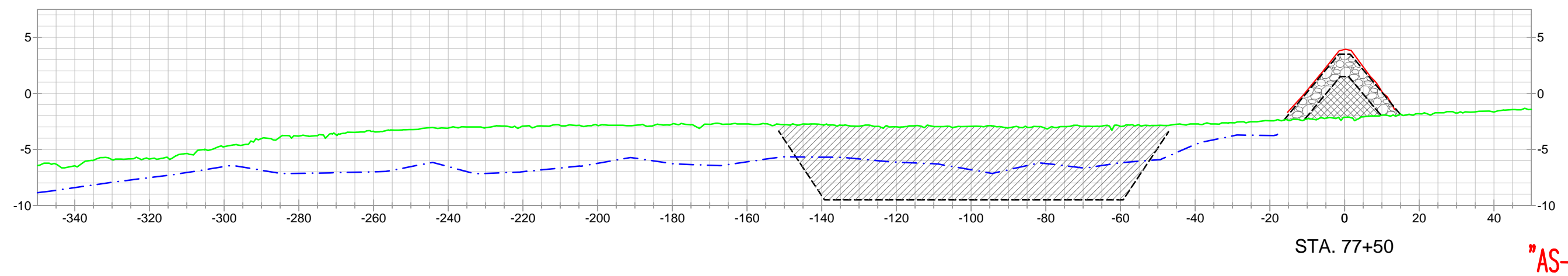
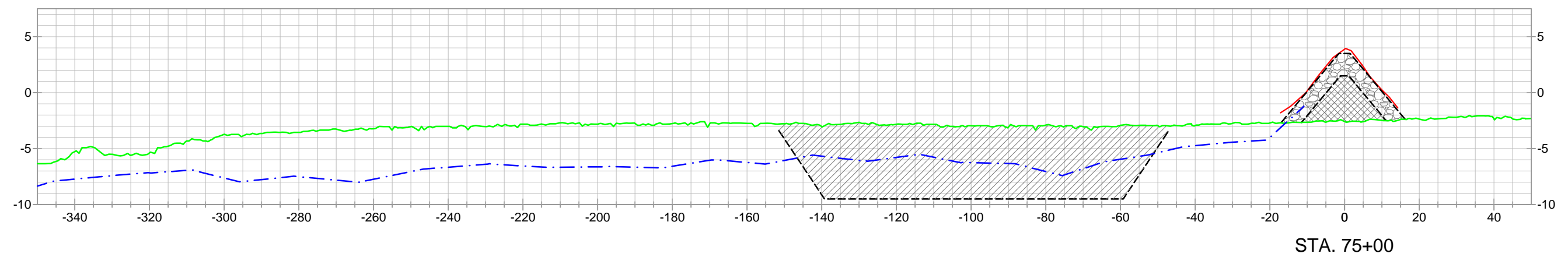
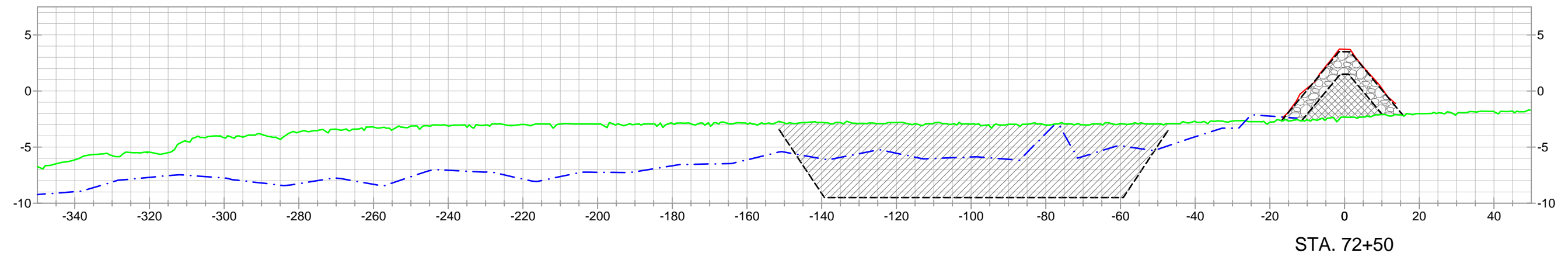
"AS-BUILT"

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	<p>DATE: 03/26/2014</p>	<p>JOB# 2131032</p>		



"AS-BUILT"

<p>LEGEND</p> <ul style="list-style-type: none">  PRE - CONSTRUCTION SURVEY  TEMPLATE  AS-BUILT RIPRAP SURVEY  FLOTATION AS-BUILT SURVEY  ENCAPSULATED LIGHTWEIGHT AGGREGATE  RIPRAP 	<p>REVISED BY:</p>	<p>DATE:</p>	<p>New Logo-Model 2.jpg</p> <p style="text-align: center; font-size: small;">Terpan Const LLC.gif</p>	<p>TE-43 GIWW BANK RESTORATION SEGMENT 4 <i>AS-BUILT SURVEY</i> STA 0+06 - 105+78 SECTION VIEWS TERREBONNE PARISH, LOUISIANA</p>
	<p>DATE: 03/26/2014</p>	<p>JOB# 2131032</p>		



"AS-BUILT"

LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

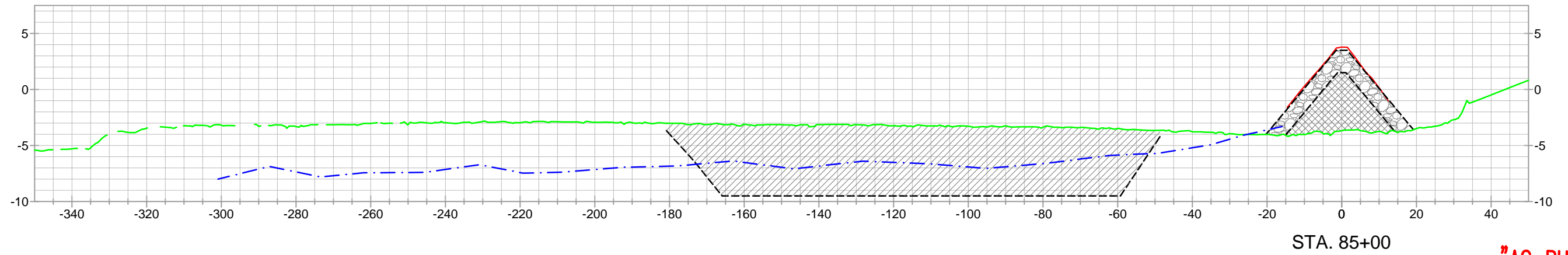
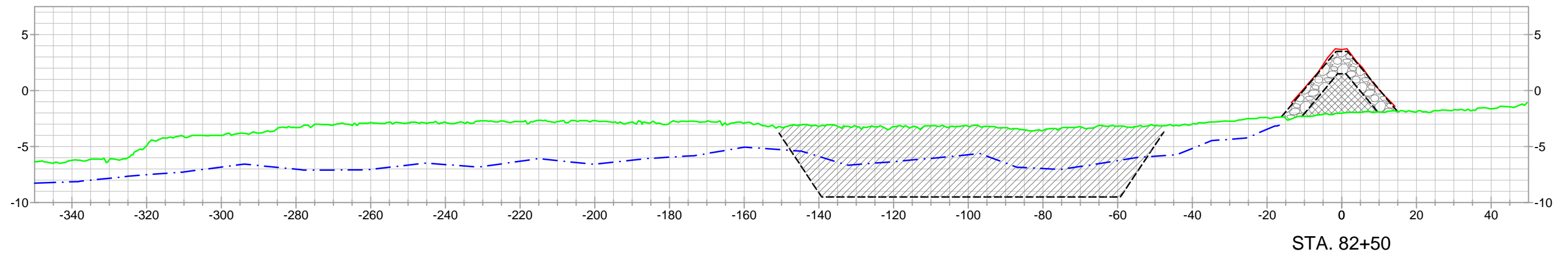
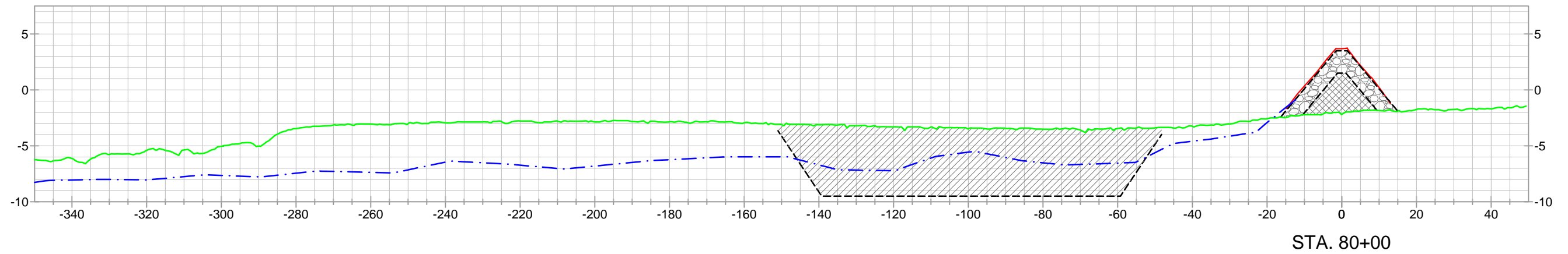
Tarpan Const LLC

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

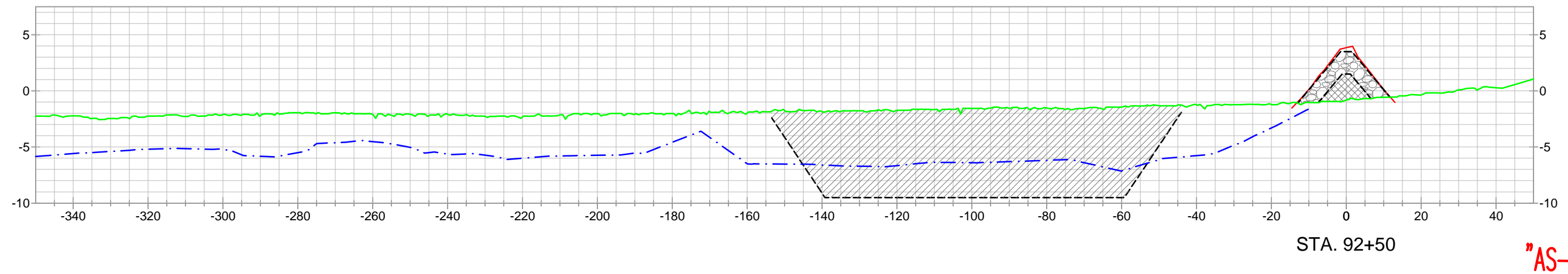
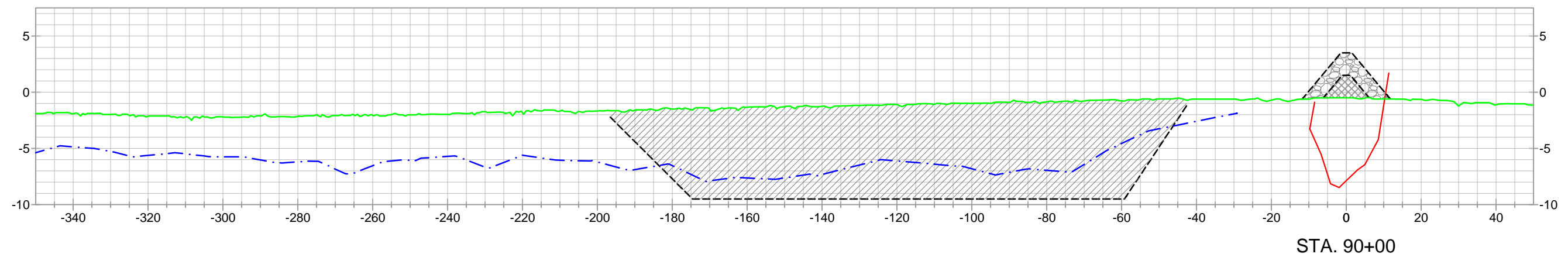
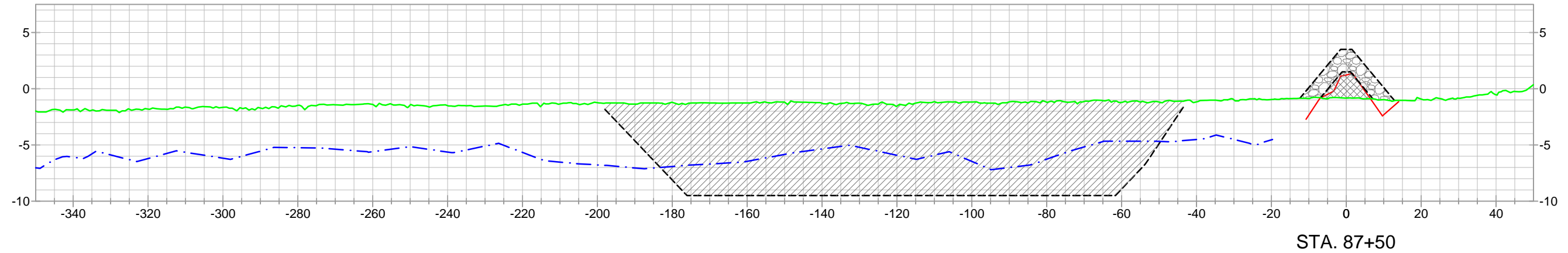
FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

SHEET: 15 OF 22



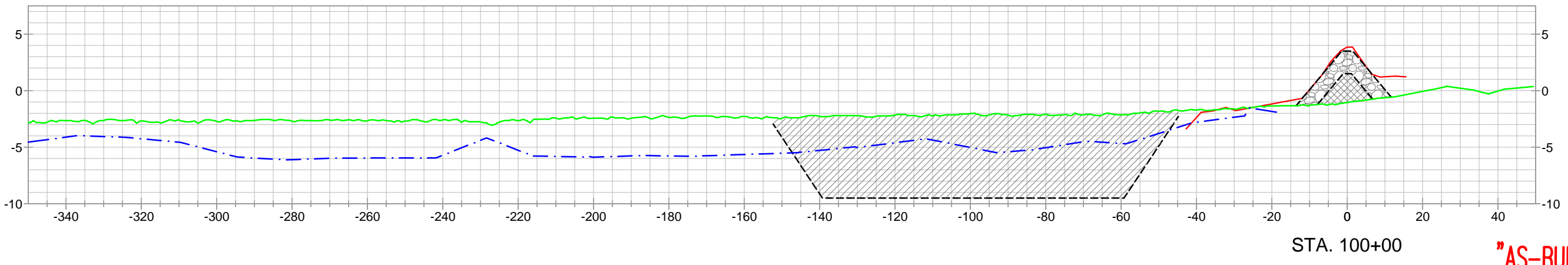
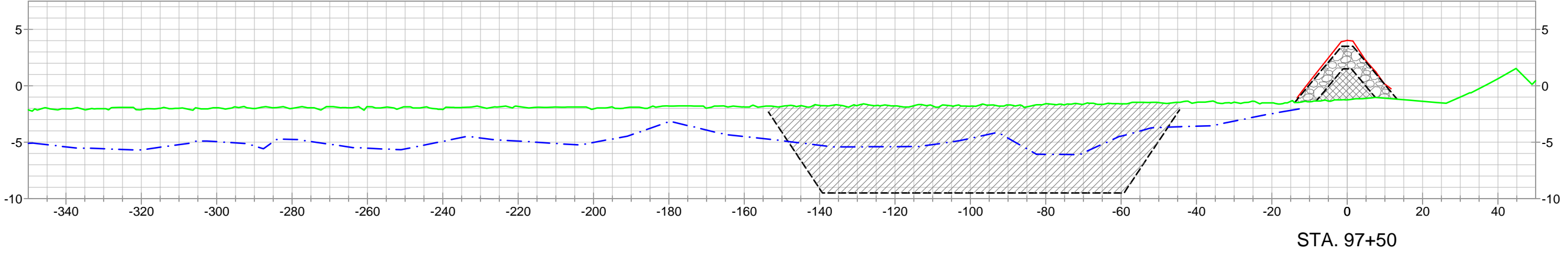
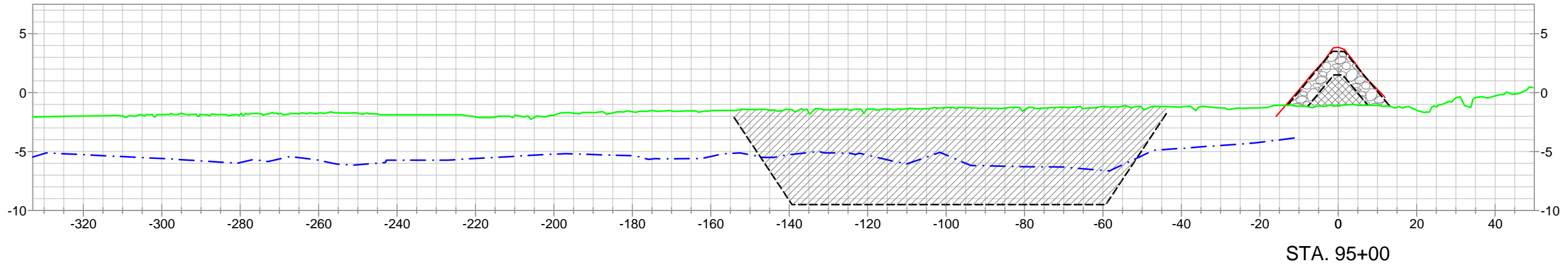
"AS-BUILT"

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	<p>HORIZONTAL SCALE</p>			
	<p>VERTICAL SCALE</p>			
	DATE: 03/26/2014	JOB# 2131032		
			FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg	SHEET: 16 OF 22



"AS-BUILT"

LEGEND	REVISED BY:	DATE:	New Logo-Model 2.jpg	TE-43 GIWW BANK RESTORATION SEGMENT 4 AS-BUILT SURVEY STA 0+06 - 105+78 SECTION VIEWS TERREBONNE PARISH, LOUISIANA
PRE - CONSTRUCTION SURVEY TEMPLATE AS-BUILT RIPRAP SURVEY FLOTATION AS-BUILT SURVEY ENCAPSULATED LIGHTWEIGHT AGGREGATE RIPRAP			Terpan Const LLC	
	HORIZONTAL SCALE			
	VERTICAL SCALE			
	DATE: 03/26/2014	JOB# 2131032	PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583	
			FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg	SHEET: 17 OF 22



LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

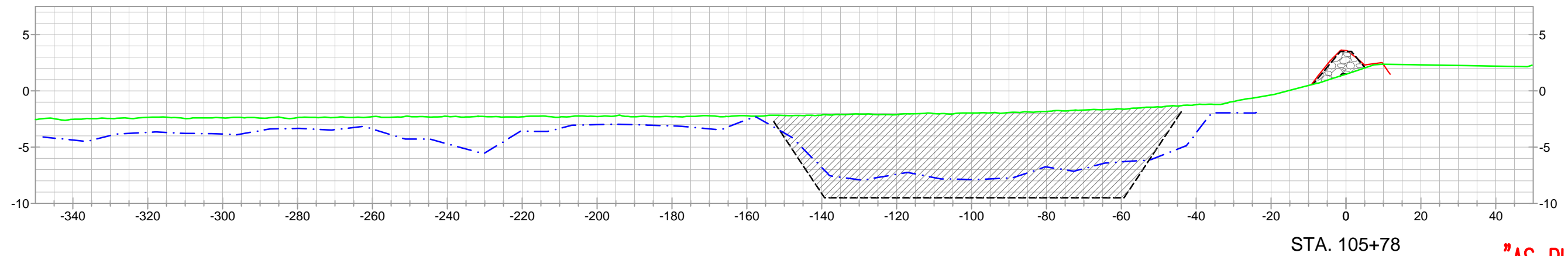
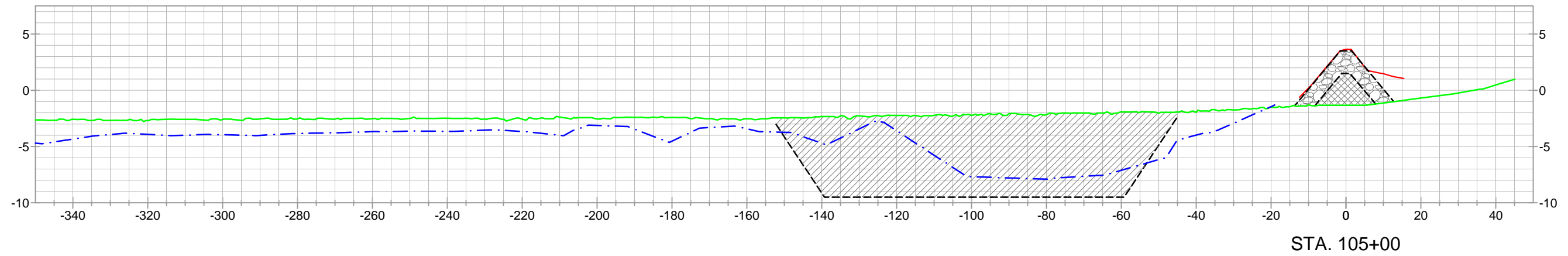
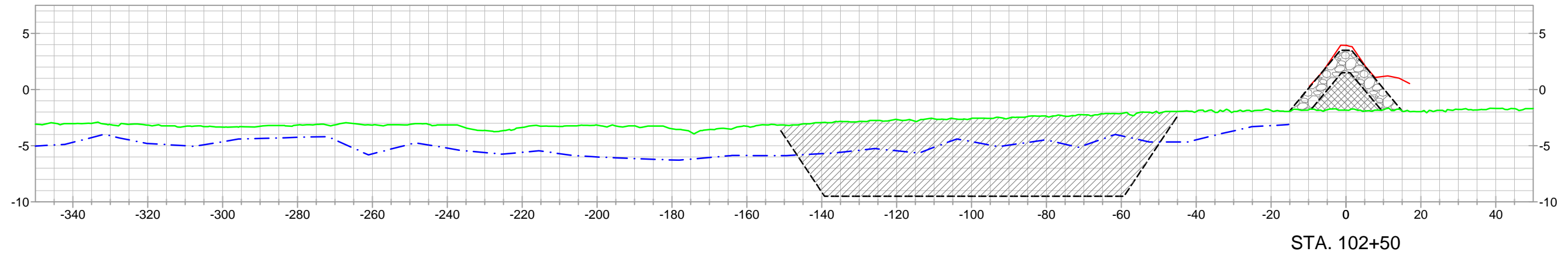
Tarpan Const LLCgif

**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

SHEET: 18 OF 22



"AS-BUILT"

LEGEND	
	PRE - CONSTRUCTION SURVEY
	TEMPLATE
	AS-BUILT RIPRAP SURVEY
	FLOTATION AS-BUILT SURVEY
	ENCAPSULATED LIGHTWEIGHT AGGREGATE
	RIPRAP

REVISED BY:	DATE:
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE: 03/26/2014	JOB# 2131032

New Logo-Model 2.jpg

Tarpan Const LLC

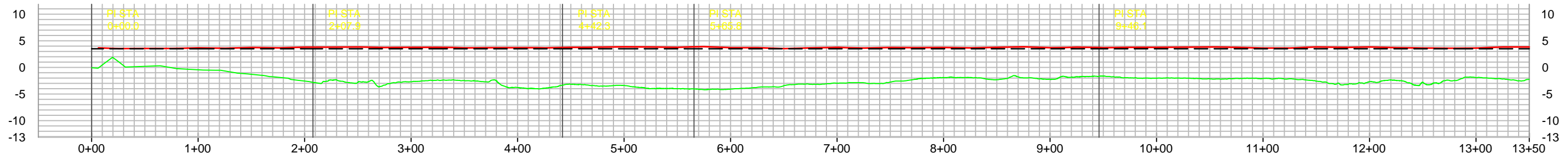
**TE-43 GIWW BANK RESTORATION
SEGMENT 4
AS-BUILT SURVEY
STA 0+06 - 105+78
SECTION VIEWS
TERREBONNE PARISH, LOUISIANA**

PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583

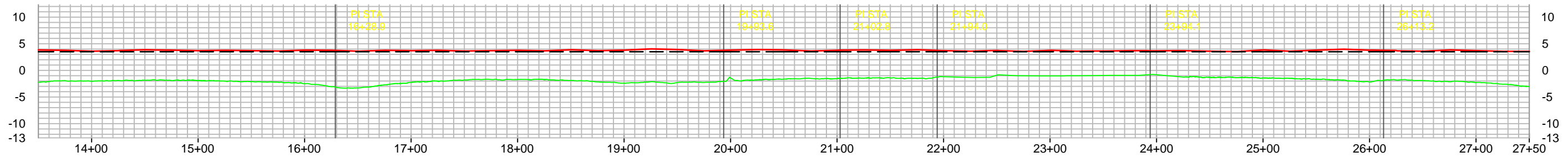
FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg

SHEET: 19 OF 22

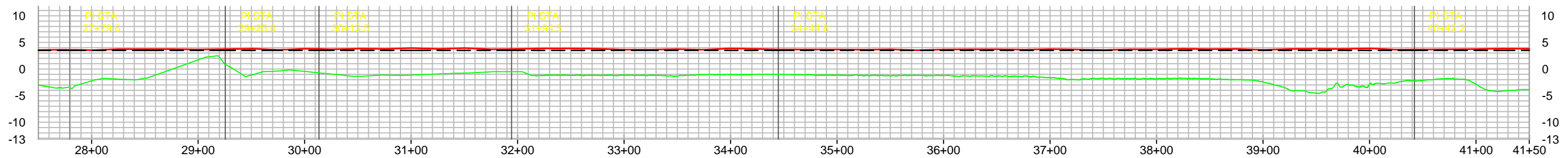
SEGMENT 4 CENTERLINE



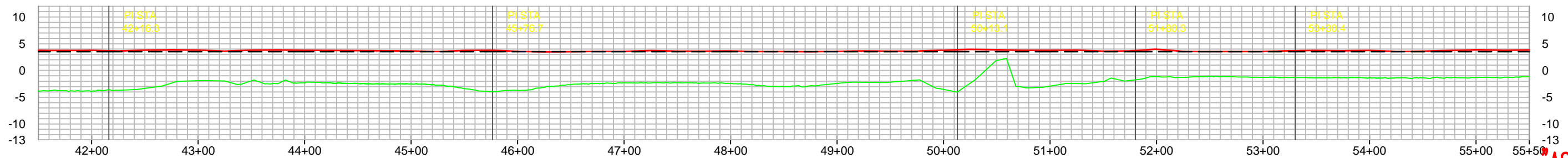
SEGMENT 4 CENTERLINE



SEGMENT 4 CENTERLINE



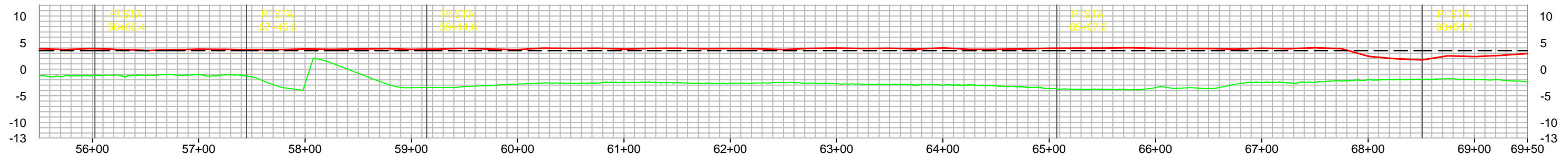
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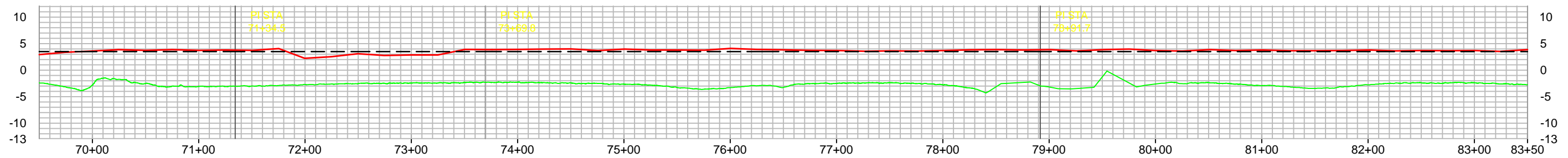
AS-BUILT

<p>LEGEND</p> <ul style="list-style-type: none"> PRE - CONSTRUCTION SURVEY TEMPLATE PI STATION AS-BUILT RIPRAP SURVEY 	<p>REVISED BY:</p>	<p>DATE:</p>	<p>New Logo-Model 2.jpg</p> <p style="text-align: center; font-size: small;">Tarpan Const LLC.gif</p>	<p>TE-43 GIWW BANK RESTORATION</p> <p>SEGMENT 4</p> <p><i>AS-BUILT SURVEY</i></p> <p>STA 0+06 - 105+78</p> <p>PROFILE VIEWS</p> <p>TERREBONNE PARISH, LOUISIANA</p>	
	<p>HORIZONTAL SCALE</p>				<p>PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583</p>
	<p>VERTICAL SCALE</p>				<p>DATE: 03/26/2014</p>
	<p>DATE: 03/26/2014</p>				<p>JOB# 2131032</p>
			<p>SHEET: 20 OF 22</p>		

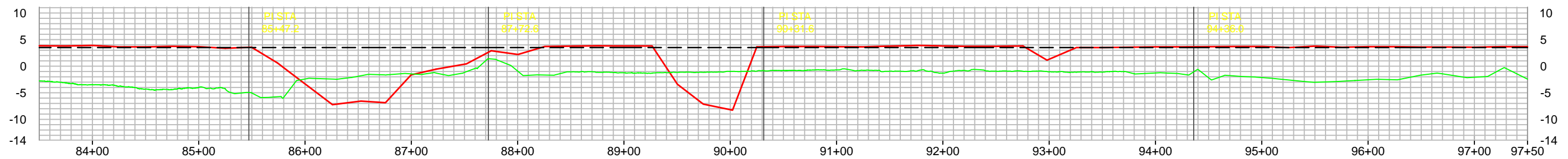
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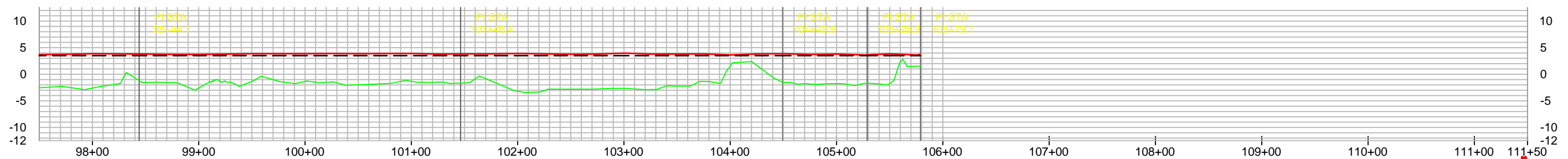
SEGMENT 4 CENTERLINE



SEGMENT 4 CENTERLINE



SEGMENT 4 CENTERLINE





"AS-BUILT"

<p>LEGEND</p> <ul style="list-style-type: none"> PRE - CONSTRUCTION SURVEY TEMPLATE PI STATION AS-BUILT RIPRAP SURVEY 	<p>REVISED BY:</p>	<p>DATE:</p>	<p>New Logo-Model 2.jpg</p> <p style="text-align: center; font-size: small;">Tarpan Const LLC</p>	<p>TE-43 GIWW BANK RESTORATION</p> <p>SEGMENT 4</p> <p><i>AS-BUILT SURVEY</i></p> <p>STA 0+06 - 105+78</p> <p>PROFILE VIEWS</p> <p>TERREBONNE PARISH, LOUISIANA</p>	
	<p>HORIZONTAL SCALE</p>				<p>PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583</p>
	<p>VERTICAL SCALE</p>				
					<p>JOB# 2131032</p>

AS-BUILT LOCATIONS FOR PERMANENT WARNING SIGNS					AS-BUILT LOCATIONS FOR PERMANENT WARNING SIGNS (ADDITIVE ALTERNATE BID NO. 1)				
NAME	NORTHING	EASTING	SIGN ELEVATION (US FT)	PILE ELEVATION (US FT)	NAME	NORTHING	EASTING	SIGN ELEVATION (US FT)	PILE ELEVATION (US FT)
PS-1	389827	3401852	9.6	10.0	PSA-1	390047	3402167	9.4	10.0
PS-2	390043	3401893	10.5	11.1	PSA-2	389745	3402562	9.4	10.0
PS-3	389900	3402391	9.7	10.2	PSA-3	389497	3402945	9.6	10.1
PS-4	389604	3402774	9.7	10.2	PSA-4	389233	3403251	9.7	10.2
PS-5	389380	3403126	9.6	10.0	PSA-5	388946	3403448	9.6	10.0
PS-6	389102	3403375	9.5	10.1	PSA-6	388729	3403790	9.7	10.1
PS-7	388795	3403576	9.5	10.1	PSA-7	388497	3404037	9.7	10.1
PS-8	388715	3403965	10.5	11.0	PSA-8	388193	3404302	9.5	10.0
PS-9	388357	3404129	9.6	10.1	PSA-9	388135	3404786	9.4	10.0
PS-10	388160	3404541	9.4	10.1	PSA-10	388192	3405178	9.6	10.1
PS-11	388251	3404994	9.5	10.0	PSA-11	388017	3405544	9.3	10.0
PS-12	388134	3405343	9.6	10.1	PSA-12	387698	3405725	9.4	9.9
PS-13	387896	3405727	9.5	10.2	PSA-13	387514	3406101	9.6	10.1
PS-14	387554	3405888	9.6	10.1	PSA-14	387540	3406478	9.5	10.0
PS-15	387643	3406264	9.6	10.2	PSA-15	387156	3407036	9.5	9.9
PS-16	387371	3406804	10.5	11.0	PSA-16	386860	3407493	9.6	10.1
PS-17	387034	3407326	9.5	10.1	PSA-17	386654	3407935	9.5	10.0
PS-18	386755	3407718	9.5	10.1	PSA-18	386409	3408316	9.5	10.1
PS-19	386539	3408119	9.5	10.1	PSA-19	386076	3408369	9.5	10.0
PS-20	386272	3408516	9.5	10.0	PSA-20	385727	3408550	9.5	10.1
PS-21	385849	3408398	9.5	10.0	PSA-21	385648	3408896	9.6	10.1
PS-22	385625	3408699	9.5	10.0	PSA-22	385560	3409378	9.6	10.1
PS-23	385675	3409097	9.4	10.0					
PS-24	385534	3409696	10.6	11.1					

"AS-BUILT"

REVISED BY:	DATE:	New Logo-Model 2.jpg	TE-43 GIWW BANK RESTORATION SEGMENT 4 AS-BUILT SURVEY STA 0+06 - 105+78 AS-BUILT WARNING SIGN POINT TABLES TERREBONNE PARISH, LOUISIANA
NO SCALE 			
DATE: 03/26/2014	JOB# 2131032	PREPARED BY: HYDROTERRA TECHNOLOGIES, LLC. - 202 JACOBS RUN, SCOTT, LA 70583	FILE: Segment 4 - As-Built Survey (0+06 - 105+78) (03-26-14).dwg
			SHEET: 22 OF 22

GENERAL NOTES:

1. THERE ARE NO KNOWN PIPELINES WITHIN THE FOOTPRINT OF THE PROJECT AREA. IT IS POSSIBLE THAT SOME PIPELINES AND/OR UTILITIES EXIST THAT HAVE NOT BEEN SHOWN. THE CONTRACTOR SHALL BE ON ALERT FOR SUCH PIPELINES OR UTILITIES, AND SHALL REPORT THEM IMMEDIATELY TO THE CONTRACTING OFFICER (CO). THE CONTRACTOR SHALL NOTIFY LOUISIANA ONE CALL (LA ONE CALL) AT 1-800-272-3020 72 HOURS PRIOR TO DIGGING OR DRIVING PILING IN ORDER TO LOCATE UTILITY LINES.
2. HOURS OF WORK SHALL BE 10 HOURS PER DAY, MONDAY THRU SATURDAY.
3. THE CONTRACTOR SHALL NOTIFY THE EIGHTH COAST GUARD DISTRICT SO THAT A NOTICE TO MARINERS MAY BE PREPARED AS REQUIRED. NOTIFICATION, WITH A COPY OF THE PERMIT APPROVAL AND DRAWINGS, SHOULD BE MAILED TO THE FOLLOWING ADDRESS WITHIN 48 HOURS OF ISSUANCE OF THE NOTICE TO PROCEED
 CDR 8TH COAST GUARD DISTRICT (DPW)
 HALE BOGGS FEDERAL BLDG.
 500 POYDRAS ST. SUITE 1230
 NEW ORLEANS, LA. 70130-3396
 E-MAIL NOTIFICATION MUST ALSO BE PROVIDED TO THE EIGHTH COAST GUARD DISTRICT, AIDS TO NAVIGATION BRANCH, MARINE INFORMATION OFFICE 7 TO 10 DAYS PRIOR TO DREDGING OR CONSTRUCTION OPERATIONS. THE MARINE INFORMATION OFFICE MAY BE REACHED BY E-MAIL AT D8MARINEINFO@D8.USCG.MIL. TELEPHONE INQUIRIES CAN BE DIRECTED TO 504-671-2327. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE NOTIFICATION TO THE CO PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
4. ALL ELEVATIONS STATED IN THE PLANS AND SPECIFICATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), GEOID99. ALL HORIZONTAL DATUM REFERENCES REFER TO NORTH AMERICAN DATUM OF 1983 (NAD83). ALL SURVEYS PERFORMED SHALL UTILIZE THESE DATUMS AND BE CONDUCTED IN STATE PLANE FEET COORDINATE SYSTEM, LOUISIANA SOUTH ZONE.
5. BENCHMARK 'TE43-SM-C' LOCATED AT NORTING 383,893.93, EASTING 3,412,721.49 SHALL BE USED FOR HORIZONTAL AND VERTICAL POSITIONING.
6. MEAN HIGH WATER (MHW) OF +2.1' AND MEAN LOW WATER (MLW) OF +1.4' HAVE BEEN DETERMINED FOR THIS PROJECT AND ARE BASED ON US GEOLOGICAL SURVEY GAUGE #07381331 ON THE GIWW AT HOUMA, LA AND STATE OF LOUISIANA COASTWIDE REFERENCE MONITORING SYSTEM (CRMS) GAUGE #5035-H01. WATER ELEVATIONS ARE SHOWN IN NAVD88, GEOID99. THE CONTRACTOR IS ADVISED THAT THE MHW AND MLW ARE AVERAGES AND DAILY TIDAL FLUCTUATIONS MAY VARY SIGNIFICANTLY FROM THESE VALUES DEPENDING ON TIDE LEVELS AND WEATHER.
7. THE CONTRACTOR IS ADVISED THAT TIDAL FLUCTUATIONS IN THIS AREA WILL VARY DUE TO WEATHER AND DAILY TIDES. HISTORICAL TIDE DATA CAN BE OBTAINED FROM THE US ARMY CORPS OF ENGINEERS OR THE US GEOLOGICAL SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES TO INSURE THAT TIDAL FLUCTUATIONS DO NOT INTERFERE WITH THE PROSECUTION OF THE CONTRACT.
8. THE CONTRACTOR SHALL REVIEW THE PLANS AND SPECIFICATIONS FOR ACCURACY AND COMPLETENESS. ANY DISCREPANCIES, ERRORS, OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER (CO) PRIOR TO THE BID DUE DATE.
9. THE CONTRACTOR SHALL CONDUCT SURVEYS OF THE PROJECT AREA PRIOR TO CONSTRUCTION. THE SURVEYS SHALL BE USED TO VERIFY THE QUANTITIES AND ALIGNMENTS DETERMINED BY NRCS. SURVEYS TAKEN SHALL BE CONDUCTED AS DETAILED IN THE SPECIFICATIONS AND INCLUDE THE CENTERLINE OF THE PLANNED DIKE ALIGNMENT AND TRANSECTS EXTENDING FROM DIKE FOOTPRINT ON THE BANK SIDE TO THE GIWW SIDE OF THE PLANNED SPOIL PLACEMENT AREAS.

10. A MAGNETOMETER SURVEY SHALL BE CONDUCTED AS DETAILED IN THE SPECIFICATIONS AT ALL LOCATIONS WHERE EXCAVATION AND PLACEMENT ACTIVITIES WILL TAKE PLACE. A MAGNETOMETER SURVEY WAS CONDUCTED IN THE PROJECT AREA IN 2003. DATA FROM THAT SURVEY IS AVAILABLE UPON REQUEST.
11. A 90 DAY WAITING PERIOD SHALL BE REQUIRED BETWEEN THE FIRST LIFT OF RIPRAP PLACED AND ANY SUBSEQUENT LIFTS.

SUMMARY OF BID QUANTITIES				
ITEM NO.	WORK	SPEC NO.	QUANTITY	UNIT
1	MOBILIZATION AND DEMOBILIZATION	8	1	JOB
2	POLLUTION CONTROL	5	1	JOB
3	CONSTRUCTION SURVEYS	7	1	JOB
4	CONTRACTOR QUALITY CONTROL	94	1	JOB
5	LIGHTWEIGHT AGGREGATE ENCAPSULATED	25	15,000 13,702.6	CY
6	EXCAVATION, ACCESS DREDGING	21	1	JOB
7	ROCK RIPRAP	61	50,000 65,951	TON
8	GEOTEXTILE	95	40,650 43,132.5	SY
9	METAL FABRICATION, SETTLEMENT PLATES	84	9	EA
10	TEMPORARY WARNING SIGNS	93	18	EA
11	PERMANENT WARNING SIGNS	93	24	EA
12	PERMANENT WARNING SIGNS (ADDITIVE ALTERNATE NO. 1)	93	22	EA

"AS-BUILT"



Date: 12/12
 Designed: D. GILLEN
 Drawn: D. WILLMORE
 Checked: J. PELTO
 Approved: M. GILFORD

GENERAL NOTES
 SEGMENT 4
 TE-43 - GIWW BANK RESTORATION
 TERREBONNE PARISH, LOUISIANA



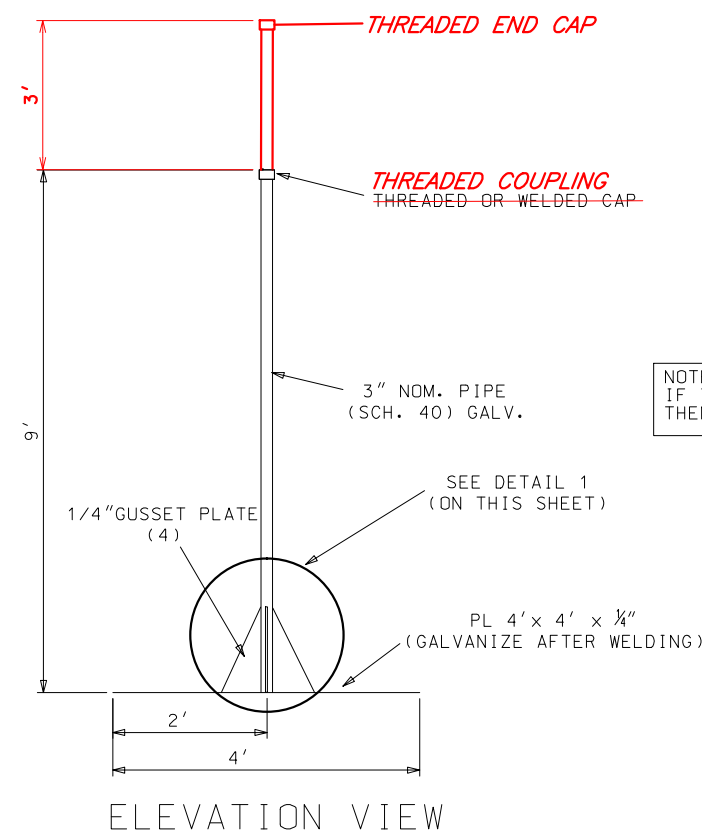
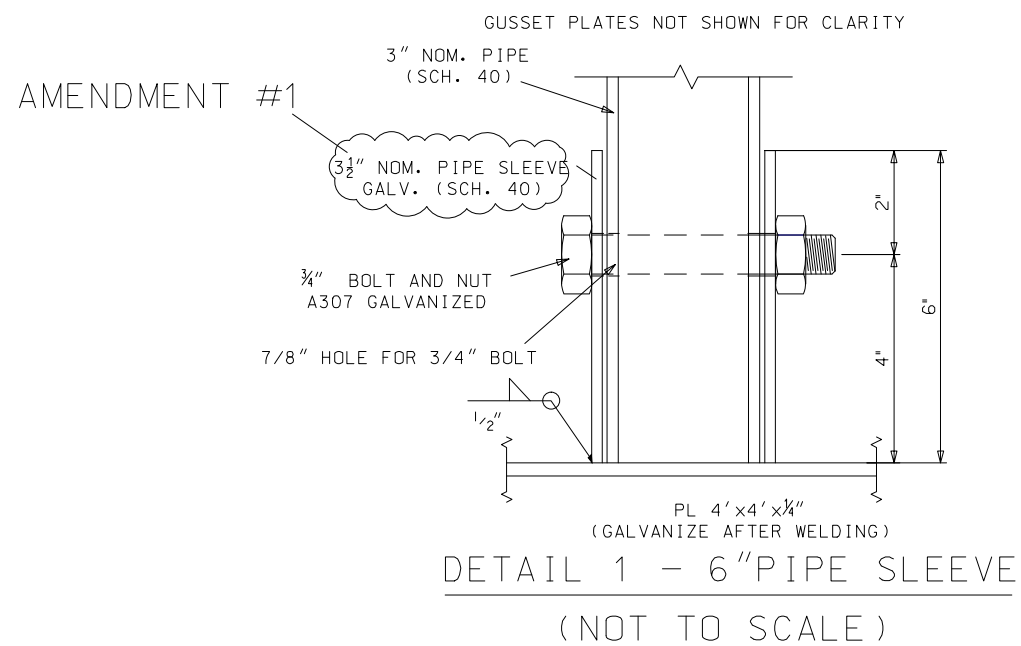
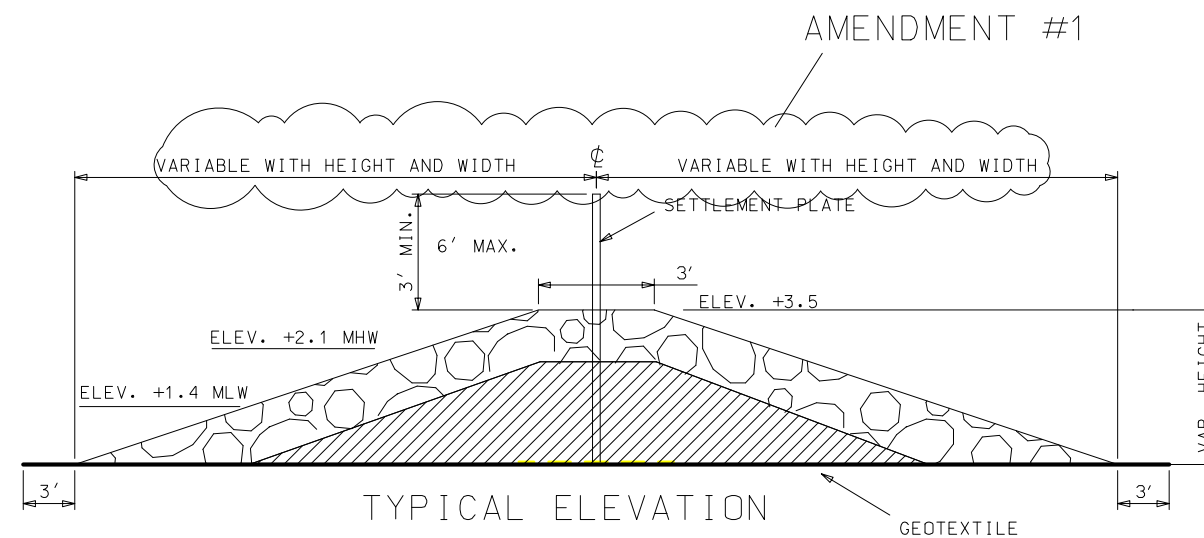
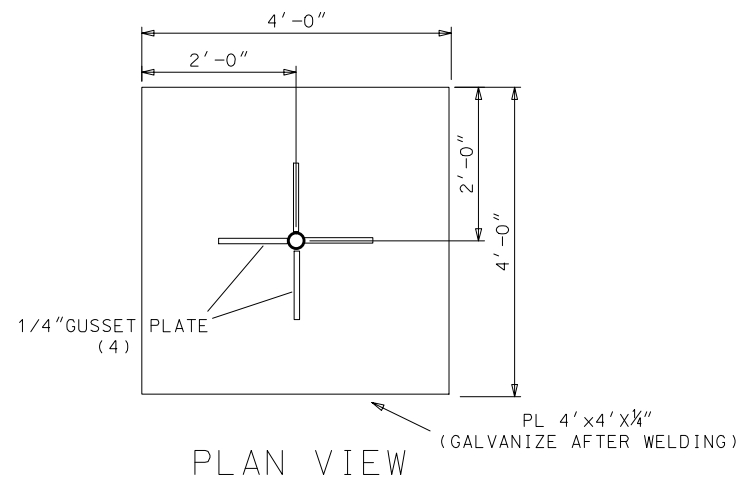
File No. LA386002.dwg

Drawing No.

NOTICE:
72 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

SP #	NORTHING	EASTING
23	390028	3402143
24	389458	3402956
25	388728	3403700
26	388129	3404620
27	387980	3405559
28	387527	3406454
29	387009	3407317
30	386504	3408128
31	385622	3408874

NOTE:
SETTLEMENT PLATE NUMBERING CORRESPONDS
TO BORE HOLE NUMBERING.



NOTE:
IF THREADED CAP IS USED ON COUPLING TO EXTEND PIPE,
THEN COLD GALVANIZE ALL THREADS AFTER INSTALLATION.

"AS-BUILT"



DATE	DESIGNED	DRAWN	CHECKED	APPROVED
12/12	D. GILLEN	D. WILMORE	J. PELTO	M. GILFORD

SETTLEMENT PLATE DETAILS
SEGMENT 4
TE-43 - GIWW BANK RESTORATION
TERREBONE PARISH, LOUISIANA

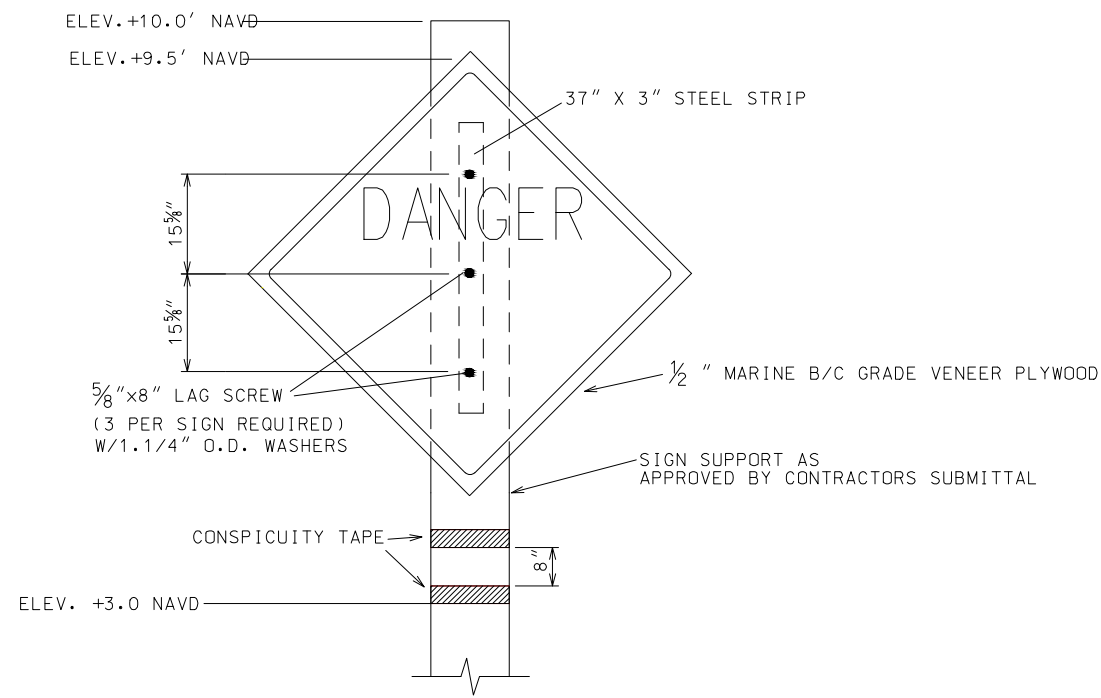


FILE NAME
LA386022A1.dgn

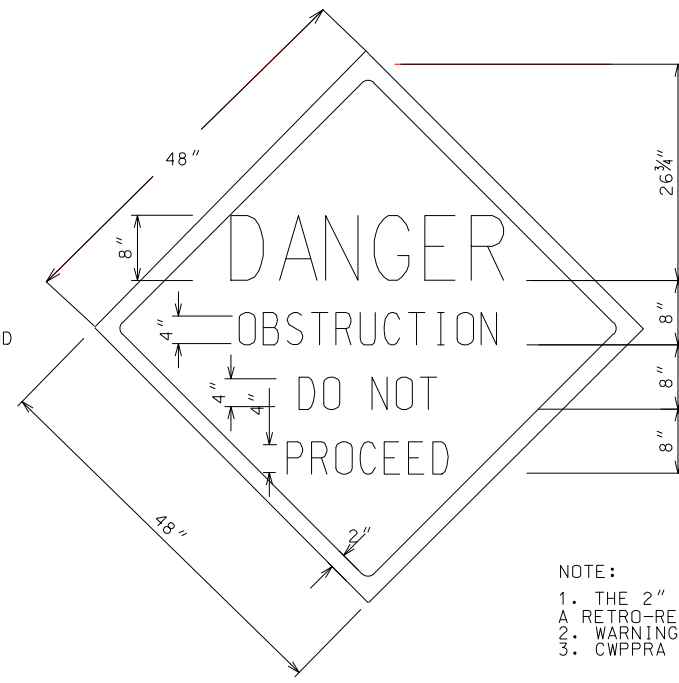
DRAWING NAME

REVISIONS			
NO.	DATE	APPROVED	TITLE
A1	2/13	D.G.	D.E.

SHEET 22A1 of 27



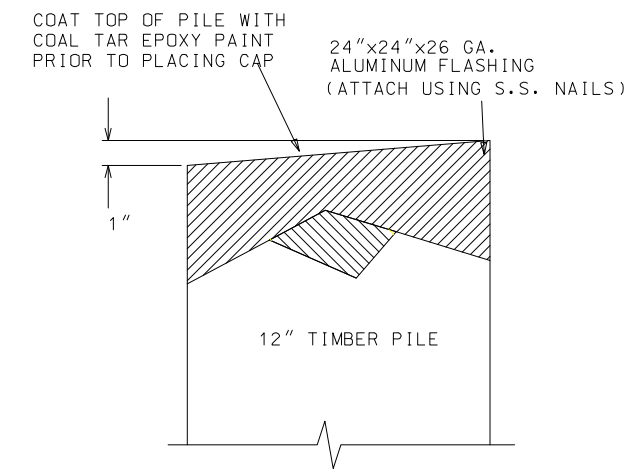
ELEVATION VIEW



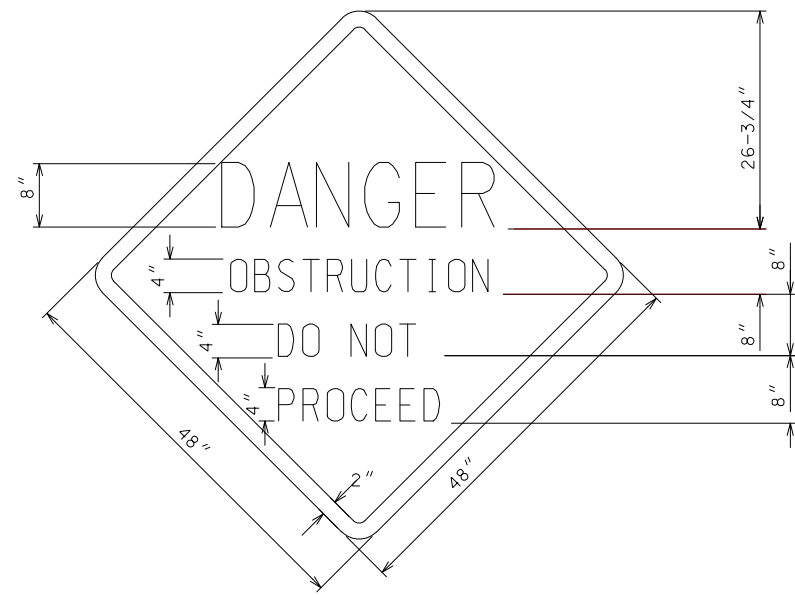
WARNING SIGN DETAILS

TEMPORARY WARNING SIGN DETAILS
TYPE 'A'

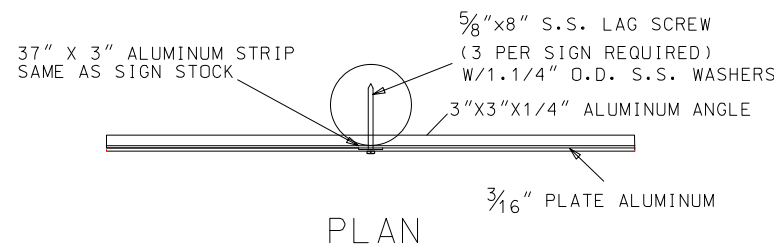
- NOTE:
1. THE 2" BORDER ON THE WARNING SIGN SHALL BE A REFLECTIVE MATERIAL OF ORANGE COLOR. THE LETTERING FIELD SHALL BE A RETRO-REFLECTIVE MATERIAL OF WHITE COLOR. THE LETTERING FOR THE WARNING SIGNS SHALL BE BLACK.
 2. WARNING SIGNS SHALL BE FACING PERPENDICULAR AND AWAY FROM THE SHORELINE AS CONCURRED IN BY THE COR.
 3. CWPRA SIGNS WILL BE FURNISHED TO THE CONTRACTOR BY NRCS.



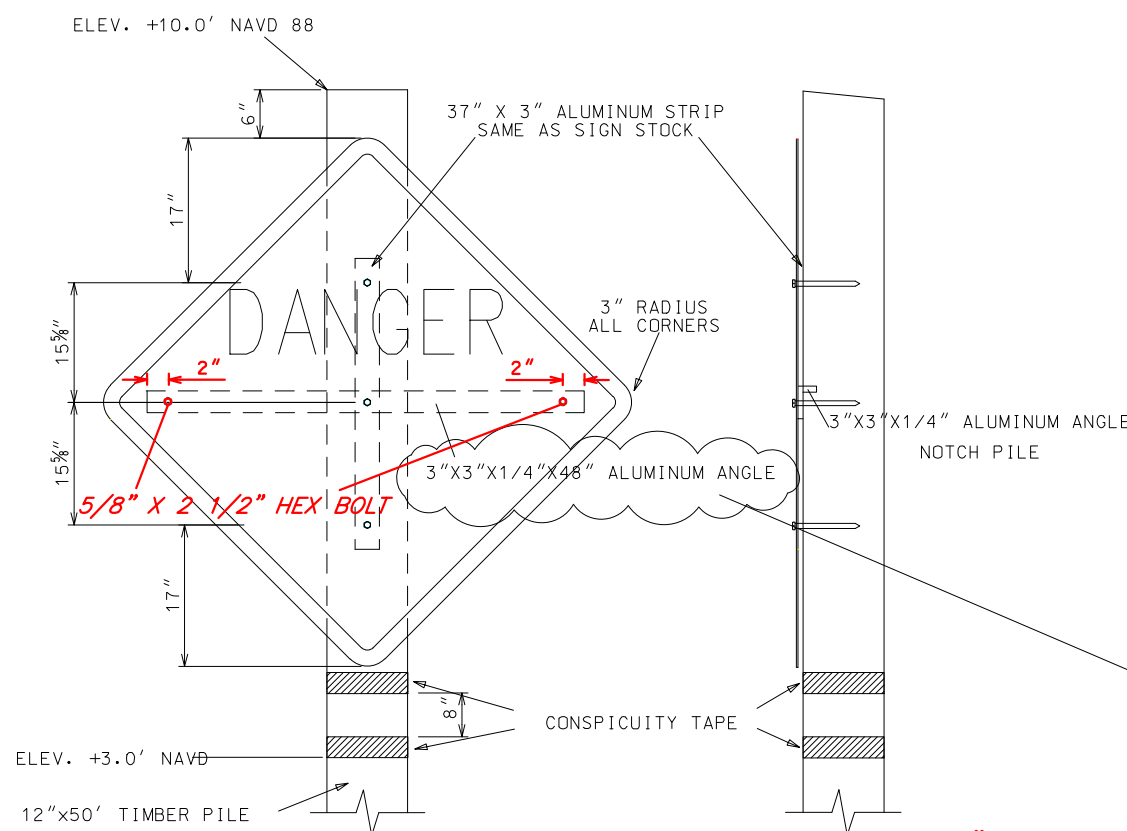
TYPICAL TIMBER PILE CAP
(NOT TO SCALE)



WARNING SIGN DETAILS



PLAN



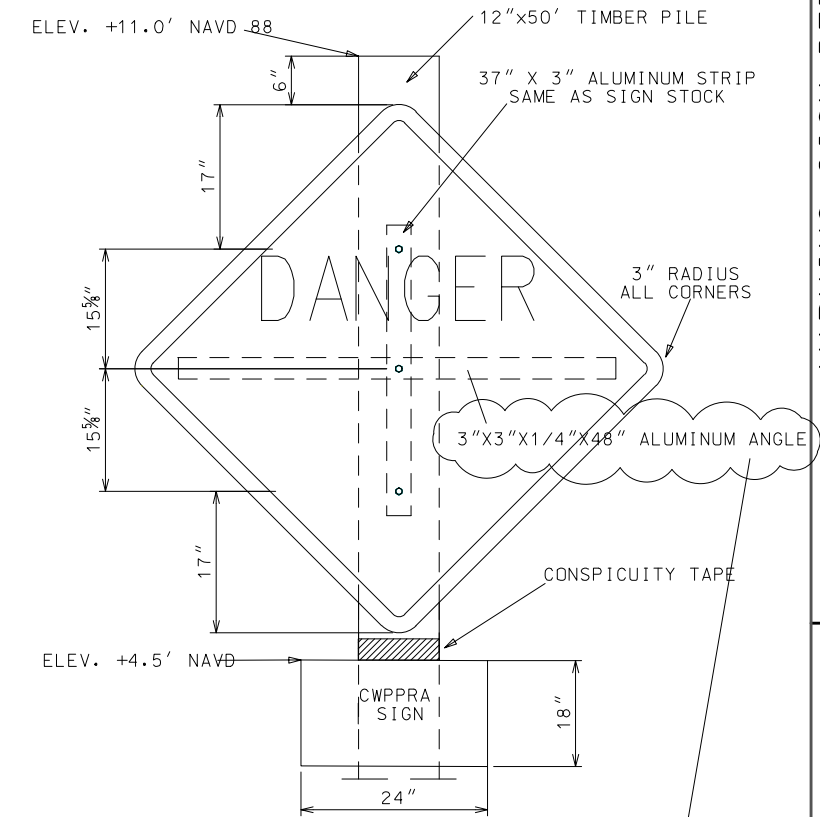
CONNECTION DETAILS

ELEVATION

SIDE

PERMANENT WARNING SIGN DETAILS
TYPE 'B'

"AS-BUILT"



PERMANENT WARNING SIGN DETAILS
TYPE 'C'

MODIFICATION #2



REVISIONS		
DATE	APPROVED	TITLE
6/02	D.G.	P.E.



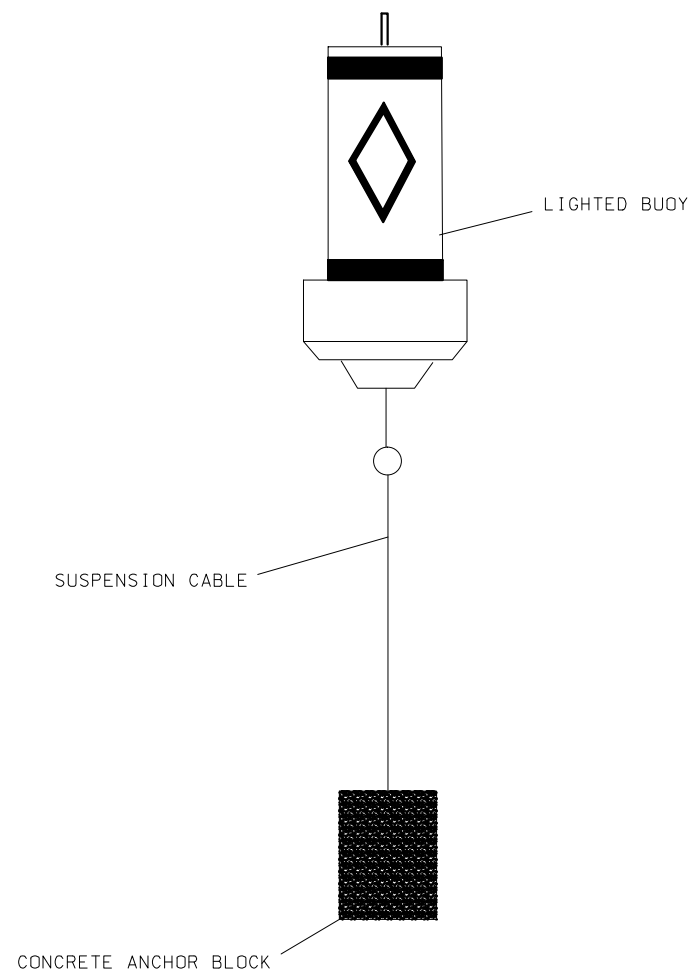
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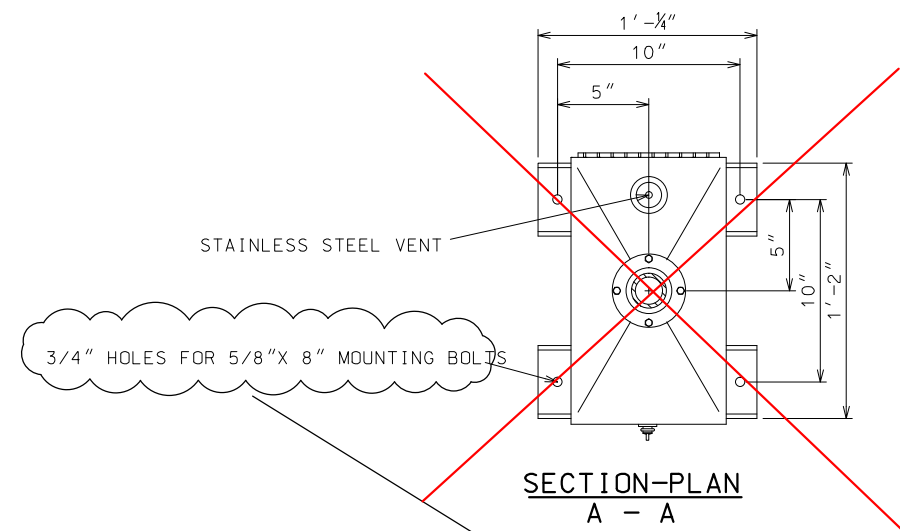
Sheet 23M2 of 27

WARNING SIGN DETAILS
SEGMENT 4
TE-43 - GIWW BANK RESTORATION
TERREBONNE PARISH, LOUISIANA

Date	Designed	Drawn	Checked	Approved
12/12	D. GILLEN	D. WILMORE	J. PELTO	M. GILFORD
12/12				
12/12				
12/12				

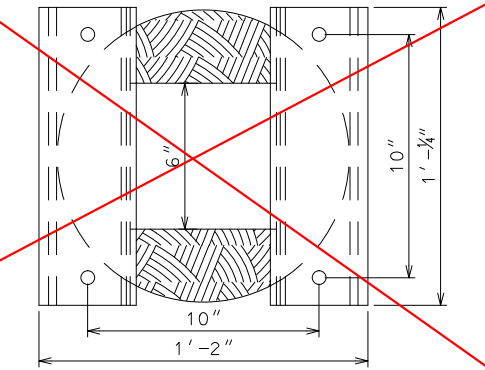


BUOY DETAILS



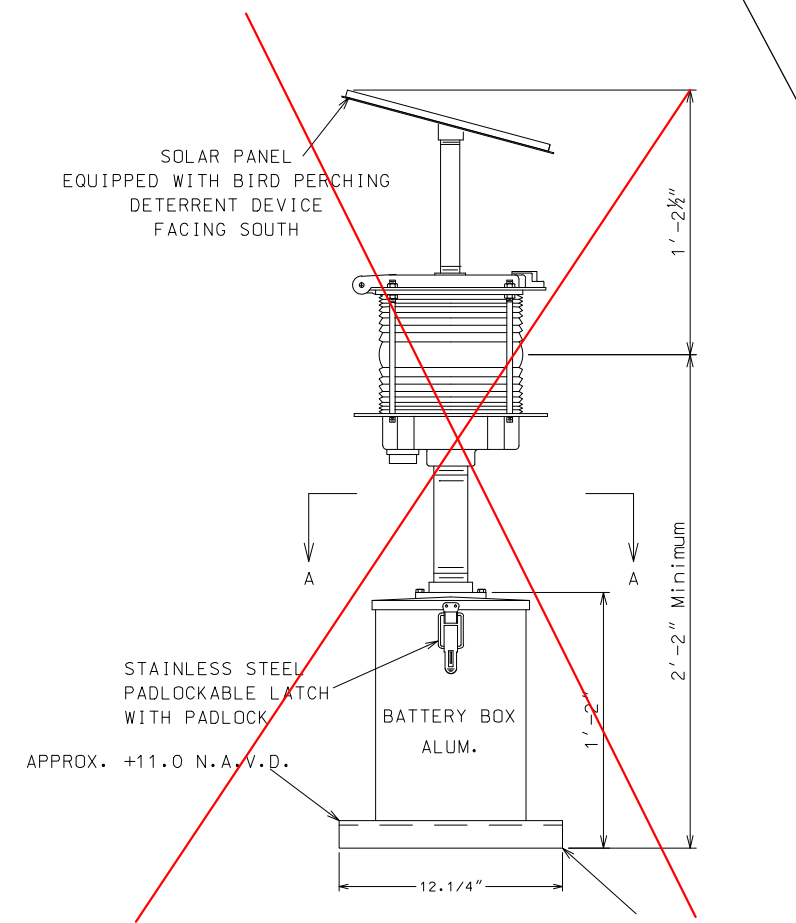
**SECTION-PLAN
A - A**

1. NOTCH ROUND TIMBER PILE FOR FLUSH ALUMINUM MOUNTING BRACKET ATTACHMENT.
2. HOLES IN ALUMINUM SHALL BE 1/8" OVERSIZE AND HOLES IN ROUND TIMBER PILE SHALL BE 1/8" OVERSIZE FOR THEIR CORRESPONDING BOLTS.

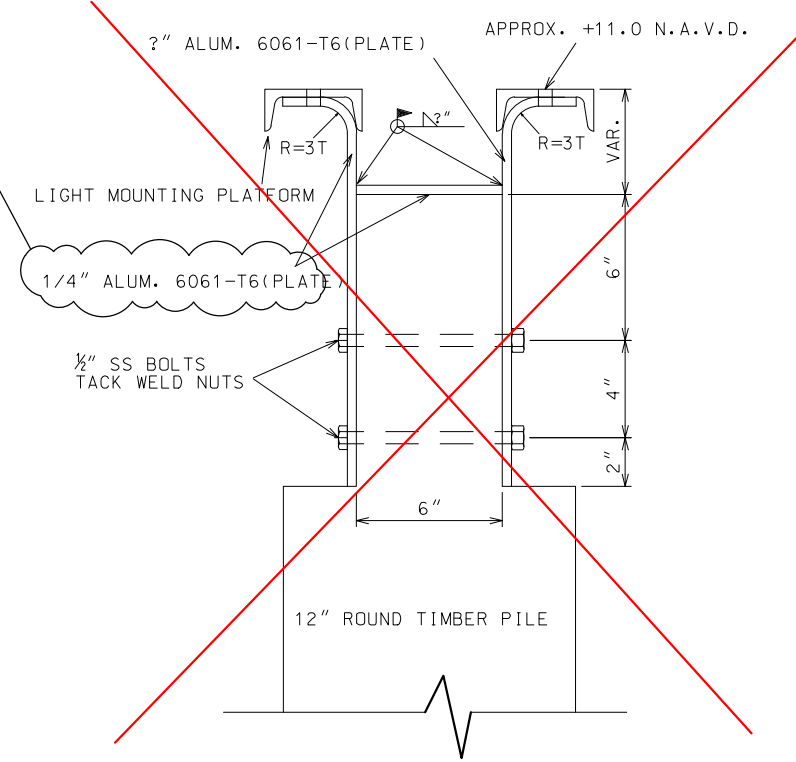


PLAN

AMENDMENT #1



**ELEVATION
2.5 SEC. DAYLIGHT
ALUM.**



**ELEVATION
MOUNTING DETAILS-2.5 SEC. DAYLIGHT
ALUM.**

"AS-BUILT"

NOTES: 1. BUOYS SHOULD BE USCG APPROVED WITH 1 NAUTICAL MILE VISIBILITY FLASHING WHITE LIGHT 0.3 SEC ON/2.2 SEC OFF.
2. BUOYS SHALL BE REMOVED AT THE COMPLETION OF CONSTRUCTION.

LIGHT DETAILS



Designed	D. GILLEN	Date	12/12
Drawn	D. WILMORE	Checked	J. PELTO
Approved	M. GILFORD		

**DETAILS - LIGHTED SIGNS & BUOYS
SEGMENT 4
TE-43 - GIWW BANK RESTORATION
TERREBONNE PARISH, LOUISIANA**



REVISIONS		
DATE	APPROVED	TITLE
2/13	D.G.	D.E.

File Name
Drawing Name
LA38624A1.DGN
Sheet 24A1 of 27

TEMPORARY WARNING SIGNS
TYPE 'A'

TS-1	N390254	E3401931
TS-2	N390257	E3401999
TS-3	N389887	E3402668
TS-4	N389259	E3403475
TS-5	N388861	E3404059
TS-6	N388616	E3404888
TS-7	N388479	E3405108
TS-8	N388172	E3405721
TS-9	N388047	E3405942
TS-10	N387786	E3406895
TS-11	N387265	E3407237
TS-12	N386749	E3408120
TS-13	N386595	E3408570
TS-14	N386506	E3408792
TS-15	N385959	E3408559
TS-16	N385800	E3409258
TS-17	N386074	E3409617
TS-18	N386029	E3409685

PERMANENT WARNING SIGNS
TYPE 'B'

PS-1	N389826	E3401853
PS-3	N389900	E3402389
PS-4	N389604	E3402773
PS-5	N389379	E3403123
PS-6	N389102	E3403375
PS-7	N388795	E3403574
PS-9	N388357	E3404128
PS-10	N388162	E3404539
PS-11	N388050	E3404997
PS-12	N388135	E3405342
PS-13	N387897	E3405724
PS-14	N387554	E3405889
PS-15	N387643	E3406262
PS-17	N387035	E3407323
PS-18	N386755	E3407714
PS-19	N386536	E3408119
PS-20*	N386271	E3408513
PS-21	N385850	E3408394
PS-22	N385627	E3408699
PS-23	N385672	E3409099

* - LIGHTED SIGNS

PERMANENT WARNING SIGNS
TYPE 'C'

PS-2*	N390043	E3401893
PS-8	N388717	E3403963
PS-16	N387371	E3406802
PS-24*	N385537	E3409694

MODIFICATION #2 CHANGE LIGHTED SIGNS

ADDITIVE ALTERNATE NO.1

PERMANENT WARNING SIGNS
TYPE 'B'

PSA-1	N390047	E3402167
PSA-2	N389743	E3402561
PSA-3	N389492	E3402945
PSA-4	N389234	E3403252
PSA-5	N388948	E3403448
PSA-6	N388724	E3403788
PSA-7	N388496	E3404035
PSA-8	N388190	E3404300
PSA-9	N388134	E3404788
PSA-10	N388194	E3405177
PSA-11	N388021	E3405537
PSA-12	N387698	E3405725
PSA-13	N387512	E3406101
PSA-14	N387541	E3406476
PSA-15	N387159	E3407037
PSA-16	N386858	E3407488
PSA-17	N386653	E3407932
PSA-18	N386410	E3408315
PSA-19	N386077	E3408370
PSA-20	N385731	E3408547
PSA-21	N385645	E3408897
PSA-22	N385557	E3409380

NOTE:
PSA-1 THROUGH PSA-22 WILL ONLY BE INSTALLED
IF ADDITIVE ALTERNATE NO.1 IS ACCEPTED

NOTE:
TEMPORARY WARNING SIGNS SHALL BE INSTALLED AT THE
LOCATIONS LISTED ABOVE OR AT LOCATIONS DIRECTED BY
THE CDR.

LIGHTED BUOYS
AMENDMENT #1

B-1	N390359	E3401956
B-2	N390326	E3402017
B-3	N388762	E3404913
B-4	N388644	E3405136
B-5	N388315	E3405741
B-6	N388190	E3405965
B-7	N386790	E3408630
B-8	N386681	E3408844
B-9	N386267	E3409618
B-10	N386248	E3409685

SEE SHEET 22 FOR
SIGN LOCATIONS

"AS-BUILT"



REVISIONS			
DATE	APPROVED	TITLE	
6/02	D.C.	P.E.	

Designed	D. GILLEN	Date	12/12
Drawn	D. WILLMORE		12/12
Checked	J. PELTD		12/12
Approved	M. GILFORD		12/12

WARNING SIGN & BUOY LOCATIONS
SEGMENT 4
TE-43 - GIWW BANK RESTORATION
TERREBONNE PARISH, LOUISIANA



File No.
A386025M2.dwg

Drawing No.

ATTACHMENT V

GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4
(TE-43)

**PROJECT PERMITS
&
PERMIT AMEMDMENTS**



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P. O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

Operations Division
Western Evaluation Section

JUL 12 2013



SUBJECT: MVN-2004-04534-WPP

Lafourche/Terrebonne Soil & Water Conservation District
204 East Bayou Road
Thibodaux, Louisiana 70301

Gentlemen:

The attached drawings dated December 14, 2004, furnished with your application dated February 28, 2013, requesting an overall increase of 1,755 linear feet of dike be added to the original permit for bank restoration located on the south bank of the Gulf Intracoastal Waterway, beginning near mile marker 60 and ending near mile marker 70, in Terrebonne Parish, Louisiana, are approved and will be included in your plans for the work authorized by the Secretary of the Army in permit dated January 18, 2006, from the District Engineer at New Orleans, Louisiana. The conditions to which the work is made subject remain in full force and effect excepting the time limit for completion, which is specifically extended to July 31, 2018. The following special conditions are added to this authorization:

1. Any alterations or modifications to the permitted plan must be submitted to the Corps for re-evaluation and authorization prior to beginning work.
2. Many local governing bodies have instituted laws and/or ordinances in order to regulate dredge and/or fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. Your project involves dredging and/or placement of fill; therefore, you must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of your proposed activities with local ordinances, regulations, or permits.
3. Permittee shall install temporary sedimentation and erosion control measures to include sediment filter fence, stabilized construction methods and entrances, hay bales, construction sequencing, etc. Permittee shall insure that the proper installation of all sediment and erosion control measures indicated above are being adequately utilized, including the installation of hay bales adjacent to the silt fence in order to reduce the sedimentation rates into waters of the US.

A copy of the first page of this permit approval letter must be conspicuously displayed at the project site. Also, you must keep a copy of this signed letter, with attached drawings, at the

ENTERED

project site until the work is completed.




BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Martin S. Mayer
Chief, Regulatory Branch
for
Richard L. Hansen
Colonel, US Army
District Commander

Enclosure

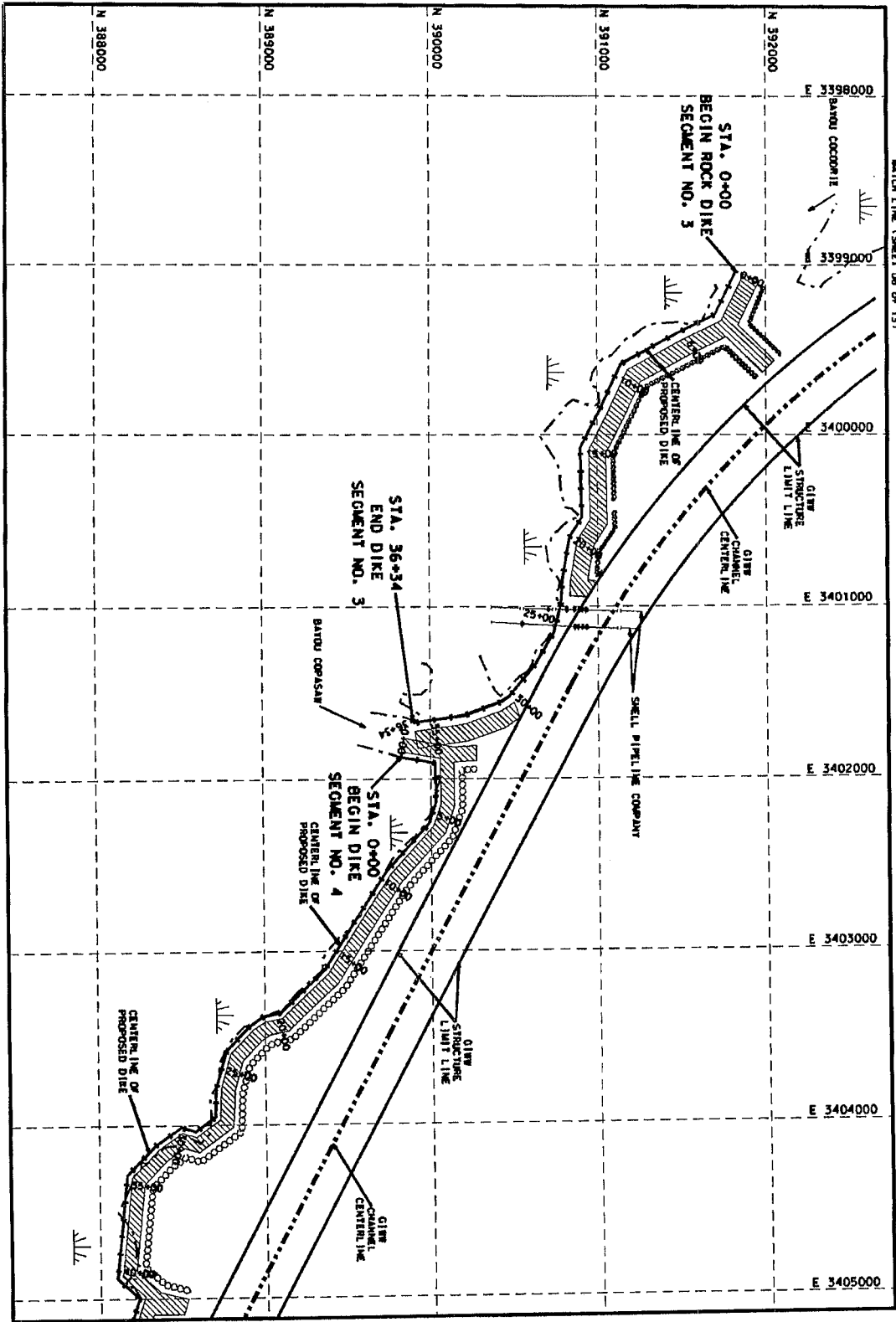
PSB
Barbara
OD-SW

MM
Mayer
OD-S

 BANK LINE
 SPOIL PLACEMENT
 ACCESS CHANNEL

300 0 300 600 900 1200
 SCALE IN FEET

**TE-43 - GIWW BANK RESTORATION
PROJECT PLAN**



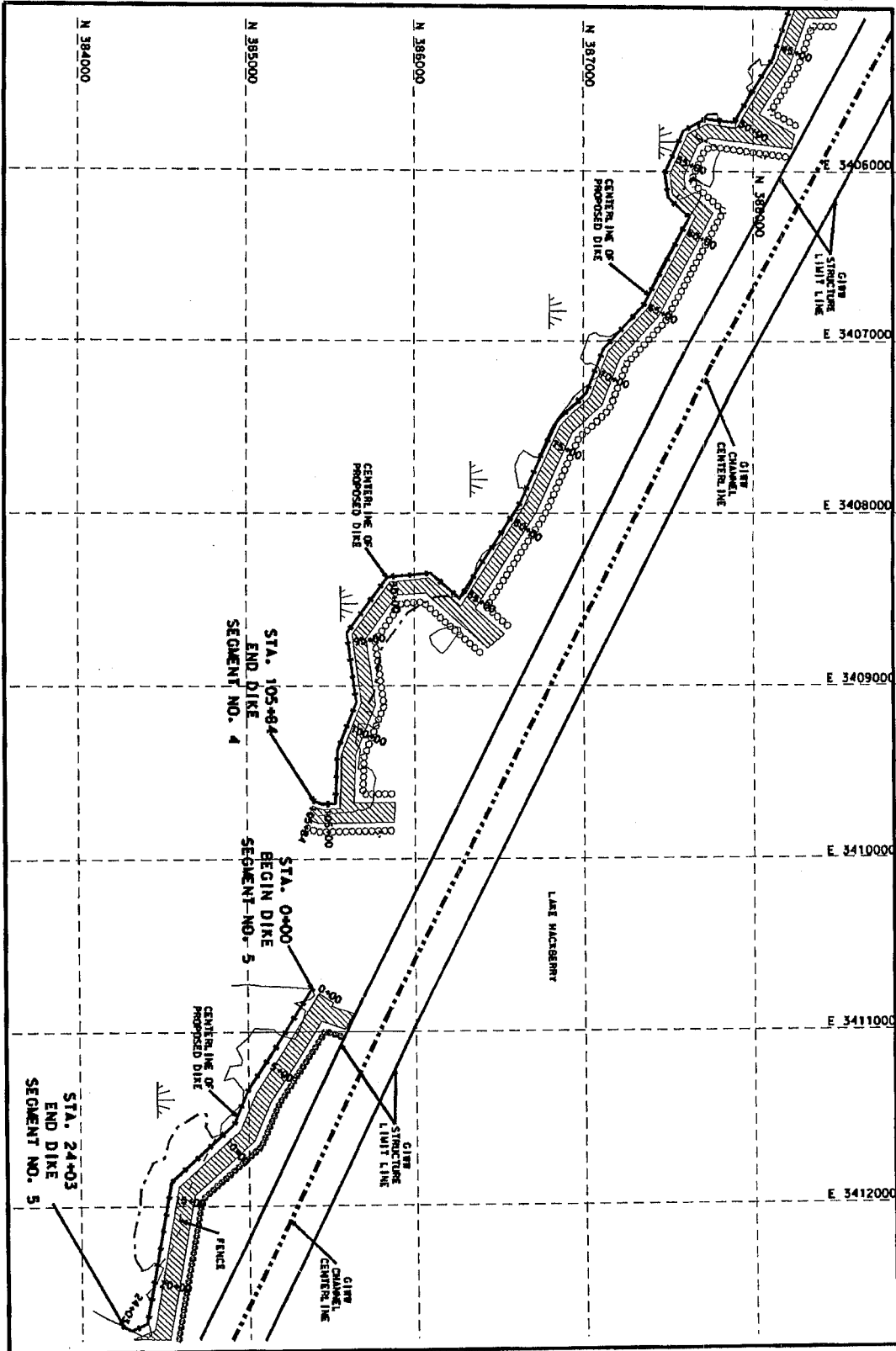
PRELIMINARY
 THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, RECONSTRUCTION, CONVEYANCE, OR SALES.

NO.	DATE	APP.	TITLE

DATE: 12-14-2004
 SHEET NO. OF 15

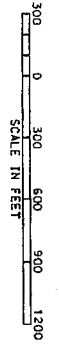
**PROJECT PLAN MAP
 GIWW CRITICAL AREA RESTORATION
 TE-43
 TERRBONNE PARISH, LOUISIANA**

Designed	Date	Approved by	Date
Drawn		Title	
Traced		Title	
Checked			



DIKE LINE
 SPOIL PLACEMENT
 ACCESS CHANNEL

TE-43 - GIWW BANK RESTORATION
PROJECT PLAN



MATCH LINE (SHEET 09 of 13)

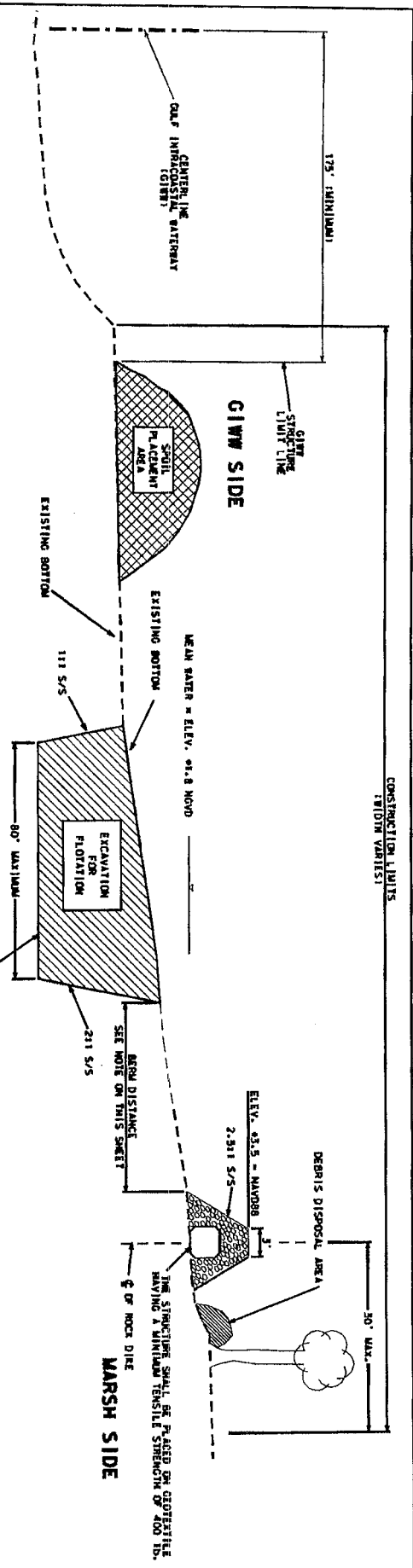
PRELIMINARY
 THIS DOCUMENT SHALL
 NOT BE USED FOR
 CONSTRUCTION, BIDDING,
 NEGOTIATION, CONVEYANCE,
 OR SALES.

NO.	DATE	BY	TITLE	Date	Date

DATE: 12-14-2004
 SHEET 08 OF 11

PROJECT PLAN MAP
GIWW CRITICAL AREA RESTORATION
TE-43
TERRBONNE PARISH, LOUISIANA

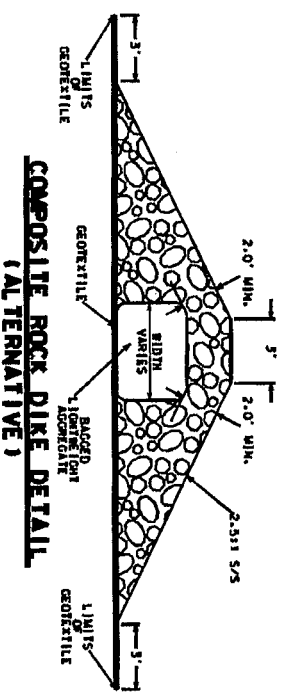
Designated _____ Drawn _____ Traced _____ Checked _____	Approved by _____ Title _____ Title _____
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COMPOSITE REACHES LIGHT WEIGHT AGGREGATE

SEGMENT	REACH	CY/CY
2	0+00 TO 11+00	0.64
2	11+00 TO 21+00	0.51
2	21+00 TO 30+50	0.56
2	30+50 TO 41+00	0.50
3	64+00 TO 78+00	0.91
3	0+00 TO 13+00	0.58
4	0+00 TO 10+64	1.42
5	16+00 TO 24+03	1.62
5	0+00 TO 4+50	0.81
5	4+50 TO 16+00	1.65
6	4+00 TO 45+00	1.65
6	43+00 TO 58+00	1.52
6	58+00 TO 68+00	1.53
6	68+00 TO 99+50	1.50
7	0+00 TO 7+00	1.47

TYPICAL SECTION - COMPOSITE ROCK DIKE
(NOT TO SCALE)



NOTE:
 1. WIDTH AND HEIGHT OF RAISED LIGHTWEIGHT AGGREGATE IS VARIABLE.
 2. ALL SOIL SHALL BE PLACED BACK INTO ACCESS CHANNEL AFTER CONSTRUCTION OF DIKE IS COMPLETE.
 3. THE MINIMUM DISTANCE SHALL BE 30' EXCEPT FOR THE FOLLOWING REACHES WHICH ARE 15' MINIMUM DISTANCE: SEGMENTS 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

COMPOSITE DIKE - TYPICAL SECTIONS
TE-43 - GIWW BANK RESTORATION
TERREBONNE PARISH
LOUISIANA

DATE: 10-29-2004
 SHEET: 11 OF 15

DESIGNED: _____ DATE: _____
 DRAWN: _____ APPROVED BY: _____
 TRACED: _____ TITLE: _____
 CHECKED: _____ TITLE: _____

NO. DATE APPR. TITLE

REVISIONS

DATE: 10-29-2004
 SHEET: 11 OF 15

THE DEPARTMENT OF AGRICULTURE - NATIONAL RESOURCE CONSERVATION SERVICE

REPLY TO
ATTENTION OF:

TE-43 GIWW Bank Permit

DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P. O. BOX 80267

NEW ORLEANS, LOUISIANA 70160-0267

To Maury
FLM
7-11-07

JAN 18 2006

Operations Division
Central Evaluation Section

SUBJECT: MVN 2004-4534 CY

Lafourche/Terrebonne Soil & Water Conservation District
204 East Bayou Road
Thibodaux, Louisiana 70301

Gentlemen:

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Central Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

Sincerely,

Handwritten signature of Martin S. Mayer in cursive.

Martin S. Mayer
Chief, Central Evaluation Section

Enclosure

DEPARTMENT OF THE ARMY PERMIT

Permittee: Lafourche/Terrebonne Soil & Water Conservation District

Permit No. MVN 2004-4534 CY

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: Dredge for access and material and construct approximately 49,725 linear feet of rock dike broken into 8 segments to implement the Gulf Intracoastal Waterway (GIWW) Bank Restoration of Critical Areas Project (CWPPRA TE-43), in accordance with drawings enclosed in fifteen sheets, dated October 29, 2004 and six revisions dated December 14, 2004, May 17, 2005, June 21, 2005, June 23, 2005, June 24, 2005 and June 27, 2005.

Project Location: On the southern bank of the Gulf Intracoastal Waterway (GIWW), beginning near mile marker 80 and ending near mile marker 70, in Terrebonne Parish, Louisiana.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **NOVEMBER 30, 2010**. 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.

Special Conditions: Pages 4 and 5.

Further Information:

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

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- 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 John W. Woodard
(PERMITTEE) CHAIRMAN

X Nov. 17, 2005
(DATE)

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

Martin S. Mayer
Martin S. Mayer, Chief Central Evaluation Section

18 January 2006
(DATE)

for Richard P. Wagenaar, District Engineer

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: MVN 2004-4534 CY

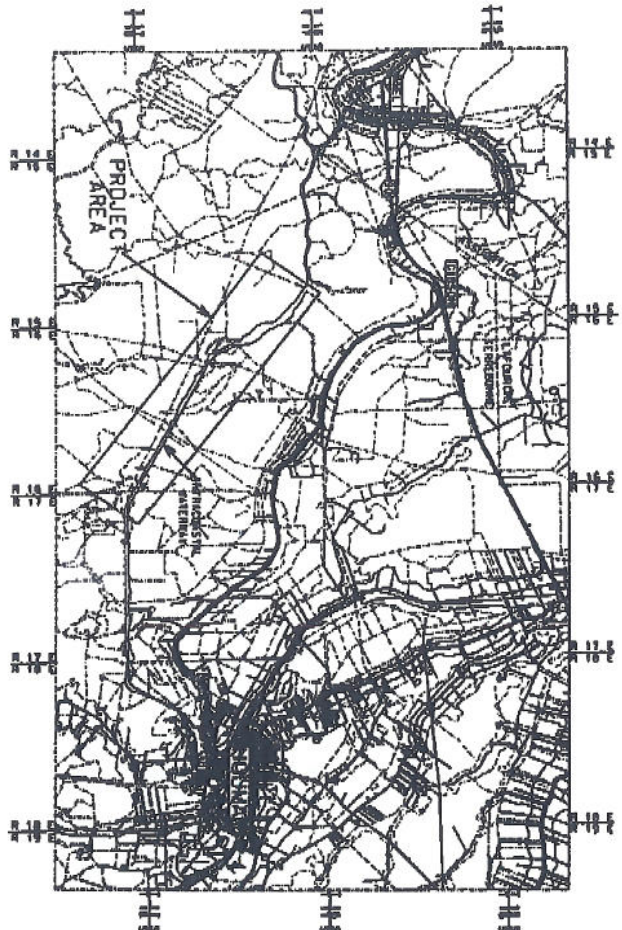
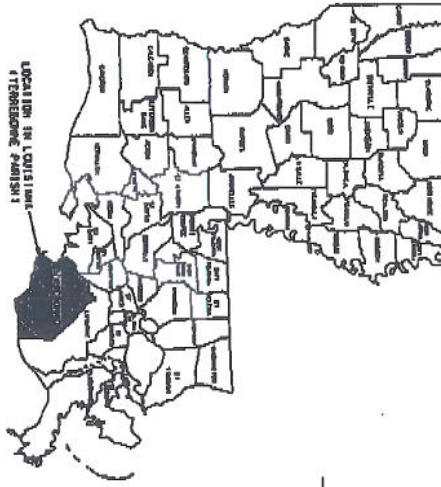
7. The permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.
8. The permittee must install and maintain, at the permittee's expense, any safety lights, signs, and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on the permittee's authorized facilities.
9. The permittee shall mark the locations of the proposed temporary spoil areas (submerged) with buoys so as not to interfere with navigation along the GIWW.
10. The permittee shall limit dredge and fill operations to areas essential to the project. If the proposed project requires any additional work not expressly permitted herein, or impacts any wetlands other than the areas indicated on the attached drawings, the permittee must apply for an amendment to this authorization prior to commencement of work.
11. 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.
12. If the proposed 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 (oan), Eighth Coast Guard District, ATTN: Marine Information Branch, 501 Magazine Street, New Orleans, Louisiana 70130-3396, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 589-6277.
13. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the permittee will contact the Chitimacha Tribe of Louisiana at Post Office Box 661, Charenton, LA 70523, and the Army Corps of Engineers, New Orleans District (CEMVN) Regulatory Branch. CEMVN will initiate the required federal, state, and Tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.

SPECIAL CONDITIONS: MVN 2004-4534 CY

14. Our Real Estate Division has indicated that your project is located in an area over which the federal government holds real estate interest. **No work may be performed under this permit until a real estate instrument is issued by our Real Estate Division.** If you require further information regarding real estate matters, call (504) 862-1295. The real estate instrument will be initiated by our Real Estate Division without further action required on your part.

15. Maintenance dredging for floatation to access structures for maintenance purposes is authorized under this permit for a period of ten (10) years from the date of permit issuance. Maintenance operations shall not exceed specifications as shown on permit drawings without prior authorization from the regulatory agencies.

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VICINITY MAP

SCALE IN FEET

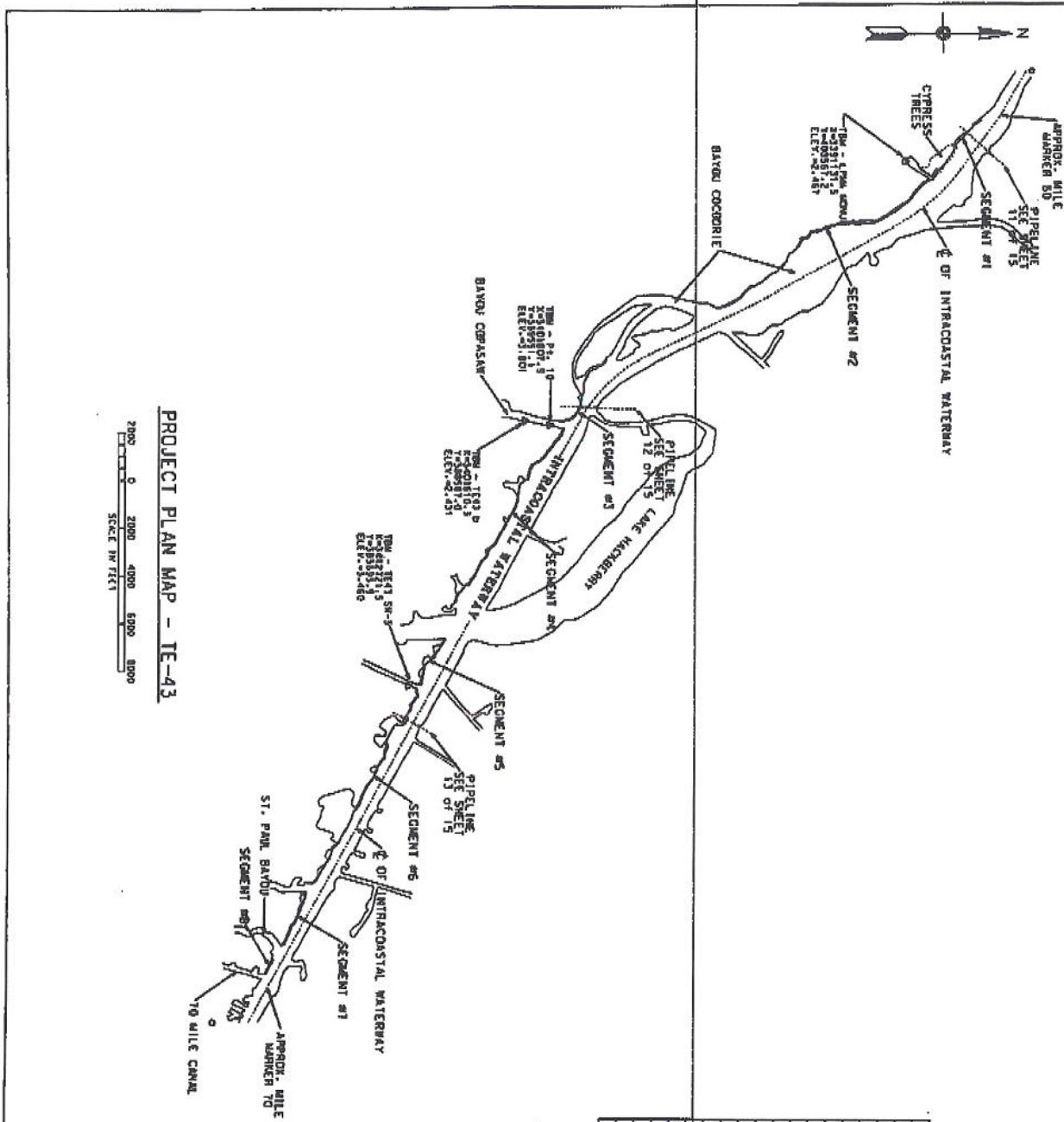
- INDEX TO DRAWINGS
- 1. COVER SHEET
 - 2. PROJECT MAP
 - 3. LAND RIGHTS MAP
 - 4. PROJECT PLAN MAP
 - 5. PROJECT PLAN MAP
 - 6. PROJECT PLAN MAP
 - 7. PROJECT PLAN MAP
 - 8. PROJECT PLAN MAP
 - 9. PROJECT PLAN MAP
 - 10. PROJECT PLAN MAP
 - 11. PIPELINE DETAIL SHEET
 - 12. PIPELINE DETAIL SHEET
 - 13. PIPELINE DETAIL SHEET
 - 14. TYPICAL SECTION
 - 15. TYPICAL SECTION

TE-43 - GIWW CRITICAL AREA BANK RESTORATION

BUILT UNDER THE
COASTAL WETLANDS
PLANNING, PROTECTION,
AND
RESTORATION ACT
PUBLIC LAW 101-646
BY THE
LOUISIANA
DEPARTMENT OF NATURAL RESOURCES
WITH THE ASSISTANCE OF THE
NATURAL RESOURCES CONSERVATION SERVICE
OF THE
UNITED STATES DEPARTMENT OF AGRICULTURE
2004

<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REVISION</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	REVISION	TITLE													<p>COVER SHEET - VICINITY MAP GIWW CRITICAL AREA RESTORATION TE-43 TERREBONNE PARISH, LOUISIANA U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE</p>	<table border="1"> <tr> <td>Designed</td> <td>.....</td> <td>Approved by</td> <td>.....</td> </tr> <tr> <td>Drawn</td> <td>.....</td> <td>Checked</td> <td>.....</td> </tr> <tr> <td>Traced</td> <td>.....</td> <td></td> <td></td> </tr> <tr> <td>Checked</td> <td>.....</td> <td></td> <td></td> </tr> </table>	Designed	Approved by	Drawn	Checked	Traced			Checked		
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PROJECT PLAN MAP - TE-43

**COMPOSITE REACHES
LIGHT WEIGHT AGGREGATE**

SEGMENT	REACH	CU/YD
2	0+00 TO 1+00	0.54
2	1+00 TO 2+00	0.51
2	2+00 TO 3+00	0.55
2	3+00 TO 4+00	0.50
2	4+00 TO 5+00	0.51
3	0+00 TO 1+00	0.53
4	1+00 TO 18+00	1.18
4	18+00 TO 33+50	1.02
4	33+50 TO 50+00	1.50
5	0+00 TO 2+00	1.52
5	2+00 TO 4+50	0.51
5	4+50 TO 10+00	1.65
5	10+00 TO 15+00	1.55
5	15+00 TO 24+00	1.52
5	24+00 TO 30+00	1.53
5	30+00 TO 39+50	1.50
5	39+50 TO 50+00	1.50
7	0+00 TO 1+00	1.17

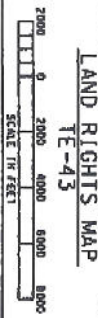
PRELIMINARY
THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, RECONSTRUCTION, CONTRACTING, OR SALES.

PROJECT LOCATION MAP GIWW CRITICAL AREA RESTORATION TE-43 TERREBONNE PARISH, LOUISIANA		Date: 12/03 Drawn: A. J. Crumpton Checked: _____	Date: 12/03 Approved by: [Signature] Title: [Title]
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE			

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- ① - CARMA HOLDINGS, L.L.C., et al
- ② - ROSEBORO KURTZ CARONAZZA, et al
- ③ - CONTINENTAL LAND & FUR CO., INC.

LAND RIGHTS MAP
TE-43



SEC. 11
SEC. 12
SEC. 13
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SEC. 100

PRELIMINARY
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RECORDATION, CONTRACT,
OR SALES.

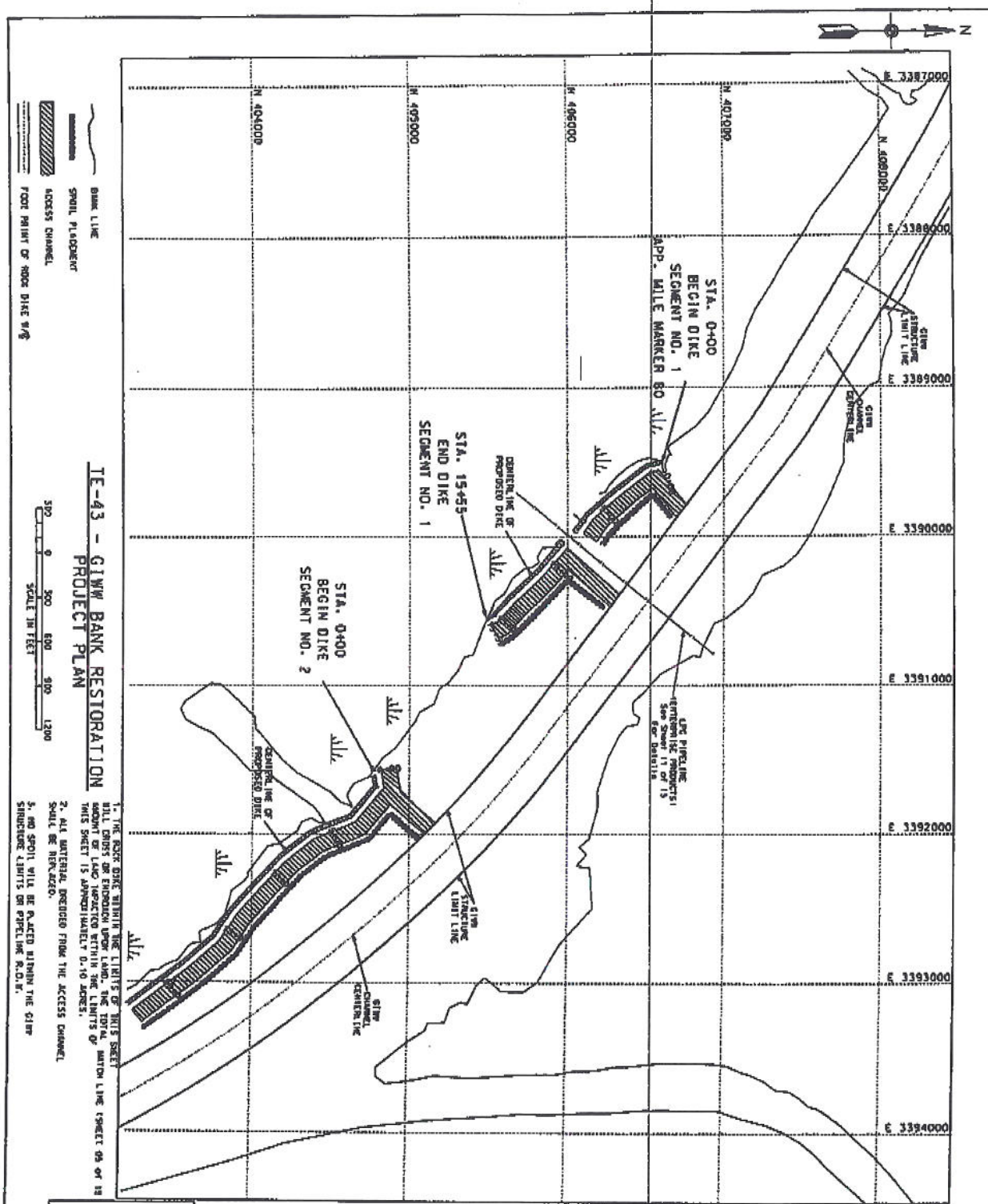
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LAND RIGHTS MAP
GIWW CRITICAL AREA RESTORATION
TE-43
TERREBORNE PARISH, LOUISIANA

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

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Checked _____		Title _____	

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**TE-43 - GIWW BANK RESTORATION
PROJECT PLAN**

1. THE ROCK DIKE WITHIN THE LIMITS OF THIS SHEET SHALL BE CONSIDERED AS A PROPOSED DIKE. THE TOTAL MATCH LINE (SHEET 08 OF 13 THIS SHEET) IS APPROXIMATELY 0.10 ACRES.
2. ALL MATERIAL DERIVED FROM THE ACCESS CHANNEL SHALL BE RECYCLED.
3. ALL SPILL WILL BE PLACED WITHIN THE GIWW STRUCTURE CHANNELS OR PARALLEL A.D.C.'S.

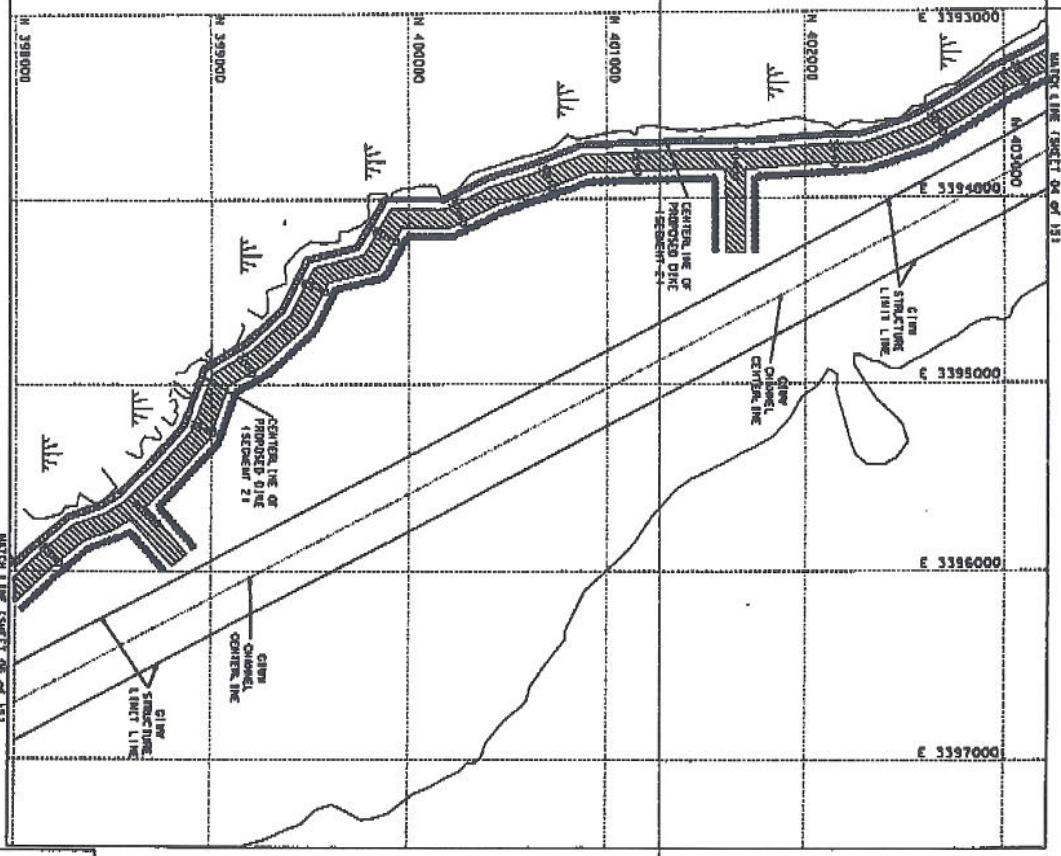
PRELIMINARY
THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, DESIGN, RECONSTRUCTION, CONTRACTING, OR SALES.

DATE: 12-14-2004 SHEET: 05 OF 13	DESIGNED	DATE	APPROVED BY	DATE
	DRAWN		TITLE	
	TRACED		FIELD	
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PROJECT PLAN MAP GIWW CRITICAL AREA RESTORATION TE-43 TERRBONNE PARISH, LOUISIANA				
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE				

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TE-43 - GIWW BANK RESTORATION
PROJECT PLAN

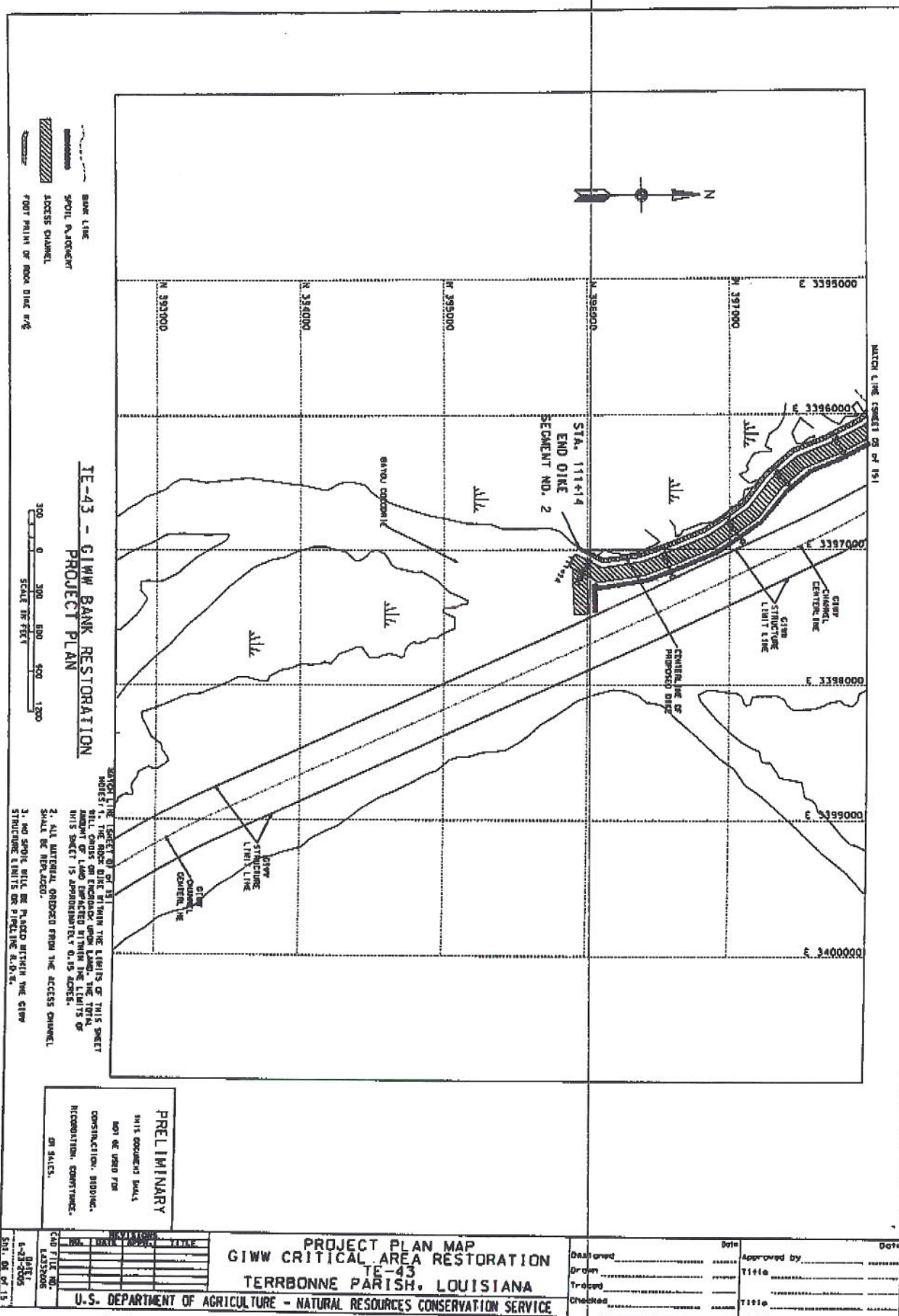


NOTES:
 1. THE ROCK DIRT WITHIN THE LIMITS OF THIS SHEET WILL CROSS OR EXPOSED UPON LAND. THE TOTAL THIS SHEET IS APPROXIMATELY 0.10 ACRES.
 2. ALL MATERIAL DRENCHED FROM THE ACCESS CHANNEL SHALL BE REPLACED.
 3. ALL SPILL SHALL BE PLACED WITHIN THE GIWW STRUCTURE LIMITS ON EXISTING ROCKS.

PRELIMINARY
 THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, RECONSTRUCTION, CONTRACTS, OR SALES.

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE PROJECT PLAN MAP GIWW CRITICAL AREA RESTORATION TE-43 TERRBONNE PARISH, LOUISIANA	Date: _____ Prepared by: _____ Drawn by: _____ Traced by: _____ Checked by: _____	Date: _____ Approved by: _____ Title: _____ Title: _____
	DR. SALES	

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TE-43 - GIWW BANK RESTORATION
PROJECT PLAN

NOT TO SCALE
 1. ALL UTILITY, ORDERED FROM THE ACCESS CHANNEL SHALL BE REPAIRED.
 2. NO SPOIL PILE OR ROAD WITHIN THE GIWW STRUCTURE LIMITS OR PROPOSED R.O.W.
 3. ALL UTILITY, ORDERED FROM THE ACCESS CHANNEL SHALL BE REPAIRED.
 4. THE RIGHT OF WAY WITHIN THE LIMITS OF THIS SHEET SHALL CROSS OR ENCLOSED UPON LAND. THE TOTAL AMOUNT OF LAND IMPACTED WITHIN THE LIMITS OF THIS SHEET IS APPROXIMATELY 0.15 ACRES.

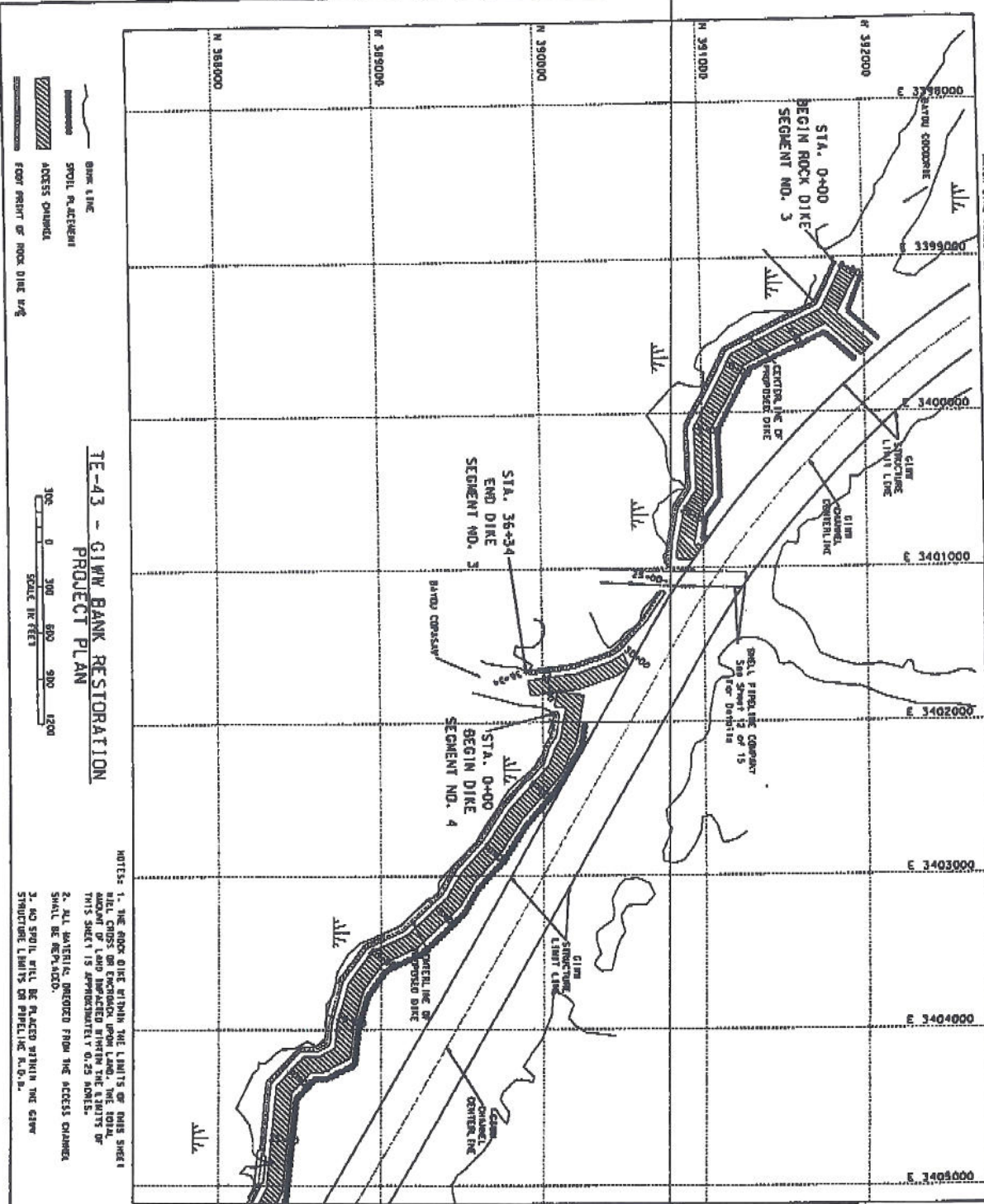
PRELIMINARY
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PROJECT PLAN MAP
GIWW CRITICAL AREA RESTORATION
TE-43
TERRBONNE PARISH, LOUISIANA

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

Designed _____	Date _____	Approved by _____	Date _____
Drawn _____	Checked _____	Title _____	Title _____
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DIKE LINE
 SPOIL PLACEMENT
 ACCESS CHANNEL
 FRONT OF ROCK DIKE 1/4"

TE-43 - GIWW BANK RESTORATION
PROJECT PLAN
 300' 0 300 600 900 1200
 SCALE IN FEET

NOTES: 1. THE ROCK DIKE WITHIN THE LIMITS OF THIS SHEET IS TO BE CONSTRUCTED TO THE AMOUNT OF LAND IMPACTED WITHIN THE LIMITS OF THIS SHEET IS APPROXIMATELY 0.25 ACRES.
 2. ALL MATERIAL DROPPED FROM THE ACCESS CHANNEL SHALL BE REPAVED.
 3. NO SPOIL SHALL BE PLACED WITHIN THE GIWW STRUCTURE LIMITS ON PIPELINE R.O.B.

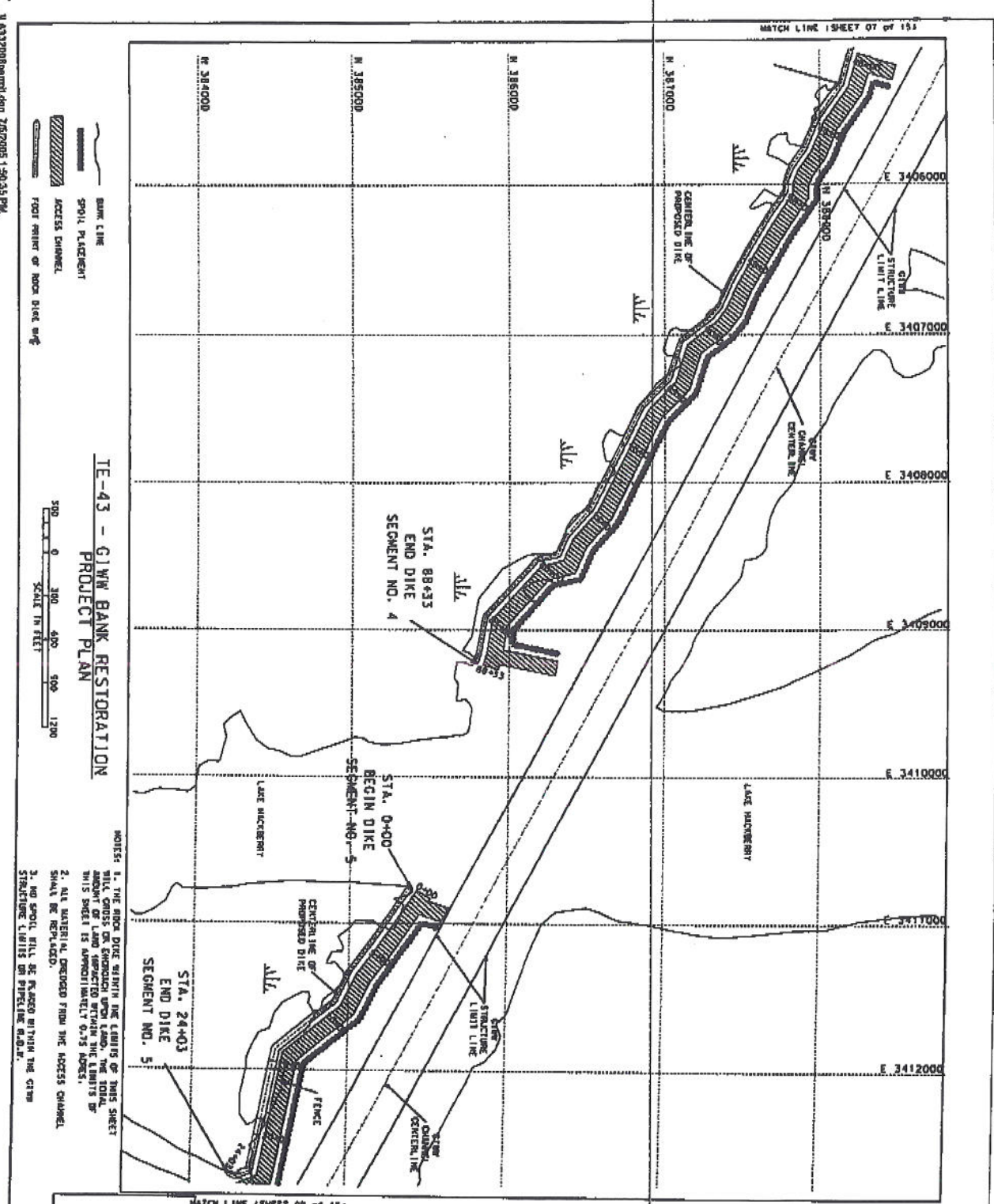
PRELIMINARY
 THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, ACQUISITION, CONTRACTING, OR SALES.

DATE	BY	REVISION

PROJECT PLAN MAP
GIWW CRITICAL AREA RESTORATION
TE-43
TERRBONNE PARISH, LOUISIANA
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

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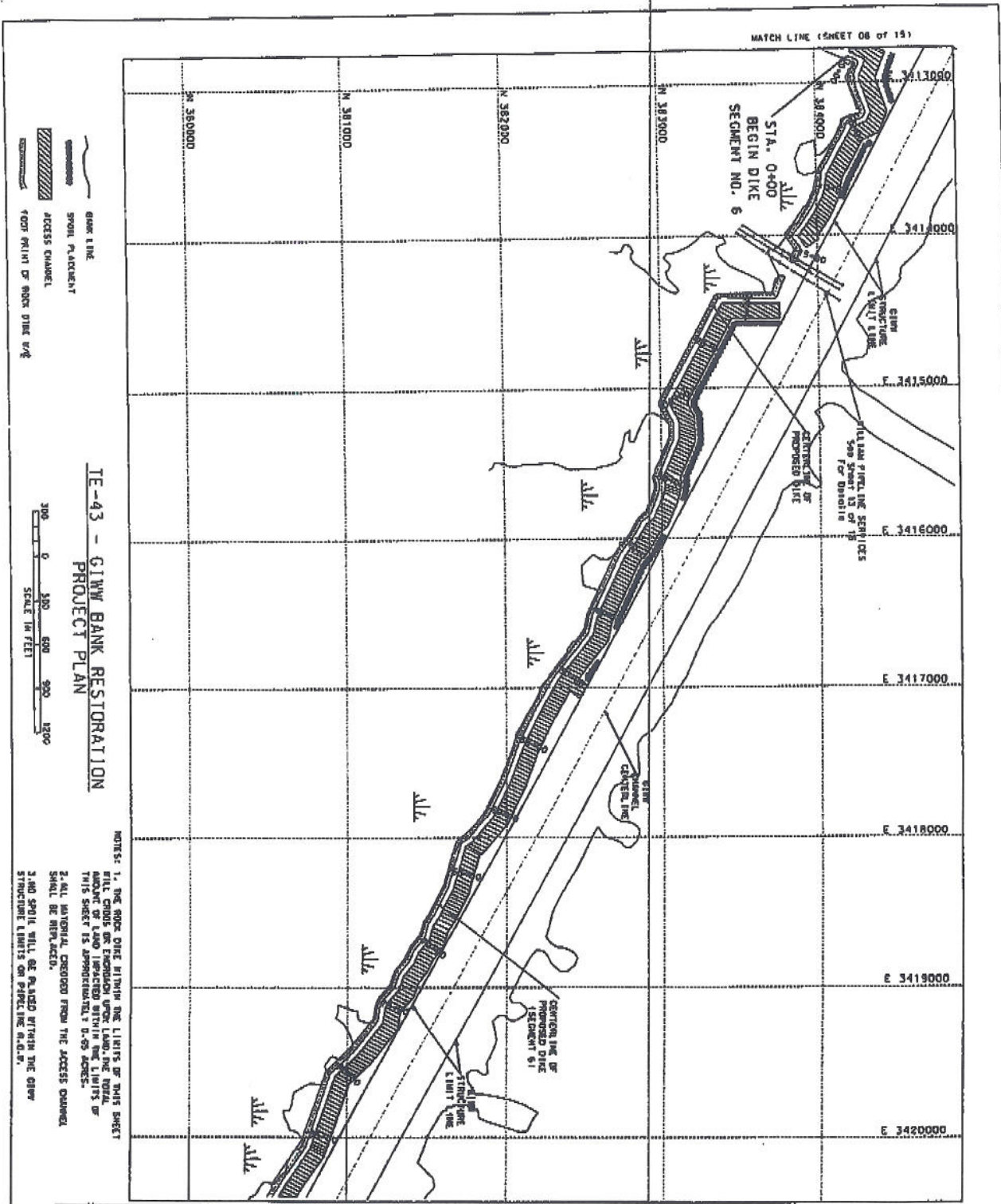
TE-43 - GIWW BANK RESTORATION
PROJECT PLAN

- NOTES:
1. THE ROCK DIKE WITHIN THE LIMITS OF THIS SHEET WILL CROSS OR CONTACT UPON LAND. THE TOTAL AMOUNT OF LAND IMPACTED WITHIN THE LIMITS OF THIS SHEET IS APPROXIMATELY 0.75 ACRES.
 2. ALL MATERIAL DERIVED FROM THE ACCESS CHANNEL SHALL BE REPLACED.
 3. NO SPOIL WILL BE PLACED WITHIN THE OTHER STRUCTURE LIMITS OR PIPELINE R.O.W.

PRELIMINARY
 THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONTRACTURE, OR SALES.

PROJECT PLAN MAP GIWW CRITICAL AREA RESTORATION TE-43 TERRBONNE PARISH, LOUISIANA		Date _____ Approved by _____ Title _____ Title _____
U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE		Designed _____ Drawn _____ Traced _____ Checked _____

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BANK LINE
 SPOIL PLACEMENT
 ACCESS CHANNEL
 FOOT PRINT OF ROCK DIKE W/C

TE-43 - GIWW BANK RESTORATION
 PROJECT PLAN

 SCALE IN FEET

NOTES: 1. THE SPOIL SHOT WITHIN THE LIMITS OF THIS SHEET SHALL BE REPLACED WITHIN THE LIMITS OF THIS SHEET OR LAND ADJACENT WITHIN THE LIMITS OF THIS SHEET IS APPROXIMATELY 0.55 ACRES.
 2. ALL MATERIAL OBTAINED FROM THE ACCESS CHANNEL SHALL BE REPLACED.
 3. AND SPOIL WILL BE RAISED WITHIN THE GIWW STRUCTURE LIMITS ON PARCEL NO. 15.

PRELIMINARY
 THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION. EROSION, RECONSTRUCTION, DOWNSLACK, OR SINKS.

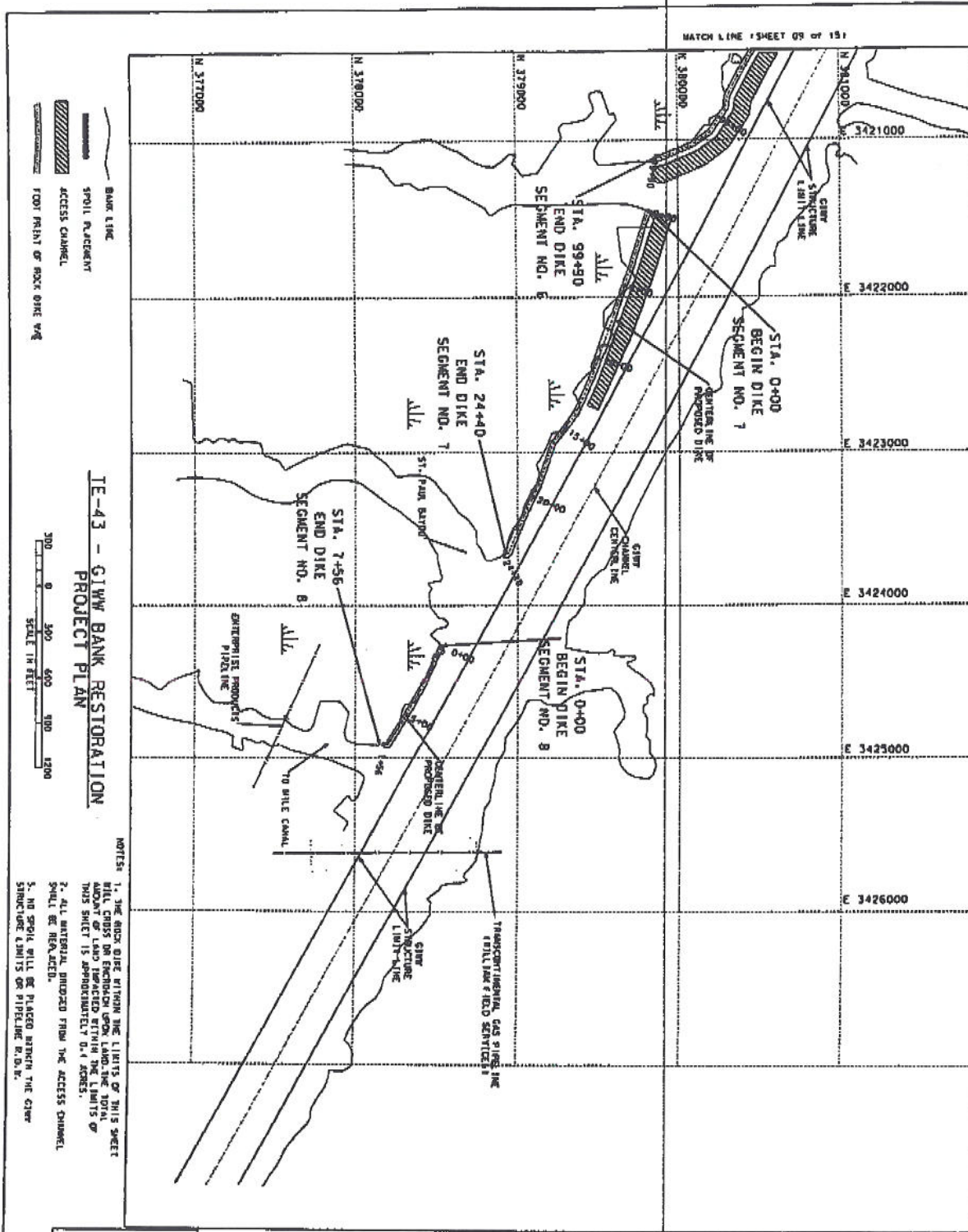
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PROJECT PLAN MAP
 GIWW CRITICAL AREA RESTORATION
 TE-43
 TERRBONNE PARISH, LOUISIANA
 U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

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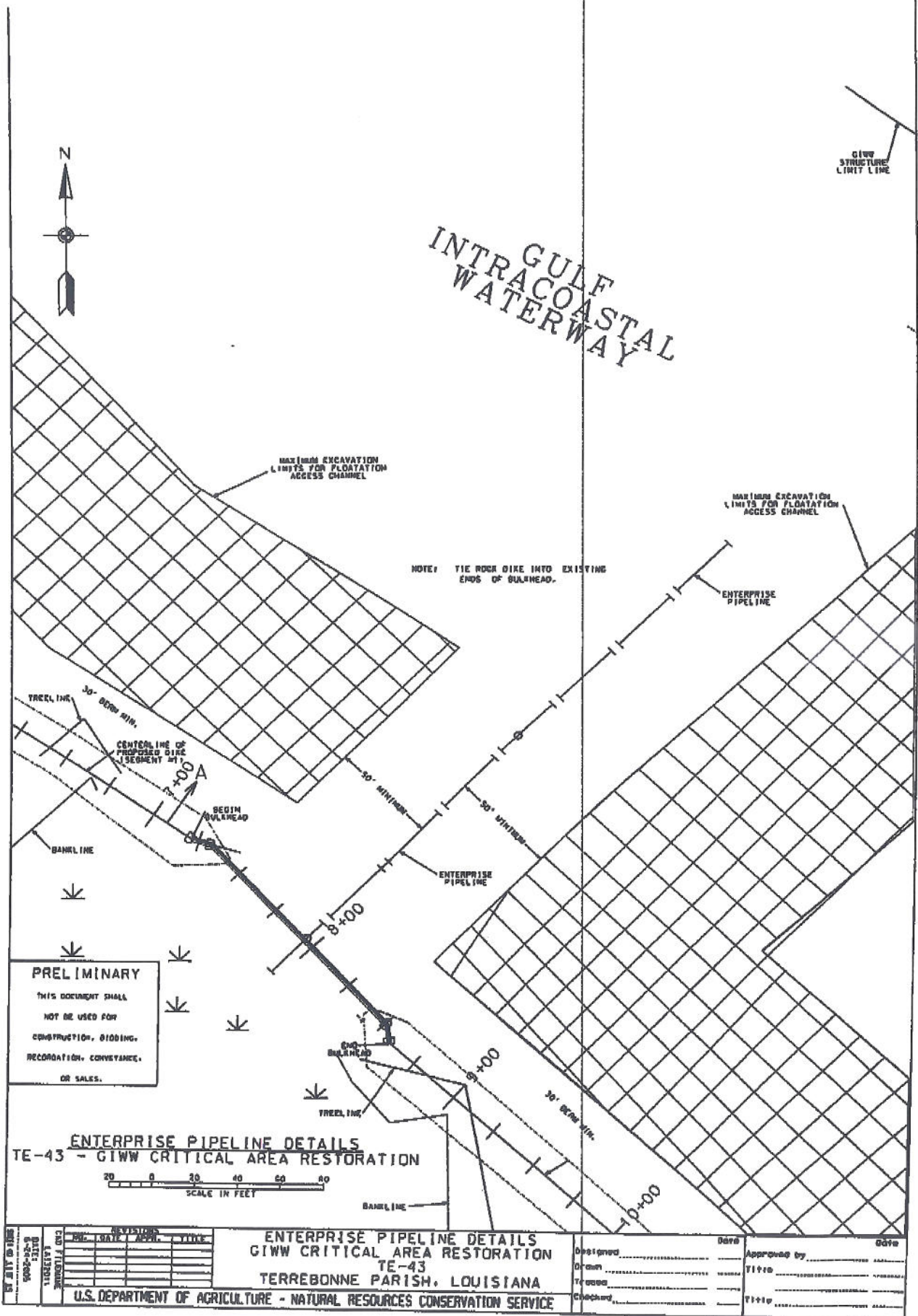


TE-43 - GIWW BANK RESTORATION PROJECT PLAN

- NOTES:
1. THE ROCK CORE WITHIN THE LIMITS OF THIS SHEET SHALL BE PLACED WITHIN THE LIMITS OF THIS SHEET. THE AMOUNT OF LAND IMPACTED BY THIS PROJECT IS APPROXIMATELY 0.4 ACRES.
 2. ALL MATERIAL BROUGHT FROM THE ACCESS CHANNEL SHALL BE RECYCLED.
 3. NO SPOIL WILL BE PLACED WITHIN THE GIWW CHANNEL LIMITS OR PIPELINE R.O.W.

PRELIMINARY
THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BRIDGES, RECONSTRUCTION, ERECTURE, OR SALES.

<p>PROJECT PLAN MAP GIWW CRITICAL AREA RESTORATION TE-43 TERRIBONE PARISH, LOUISIANA</p>		<p>Designed _____ Date _____ Drawn _____ Traced _____ Checked _____</p>	<p>Approved by _____ Date _____ Title _____ Title _____</p>
<p>U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE</p>		<p>DATE: 6-23-2005 CWD FILE NO: L1372010 SHEET: 10 OF 13</p>	



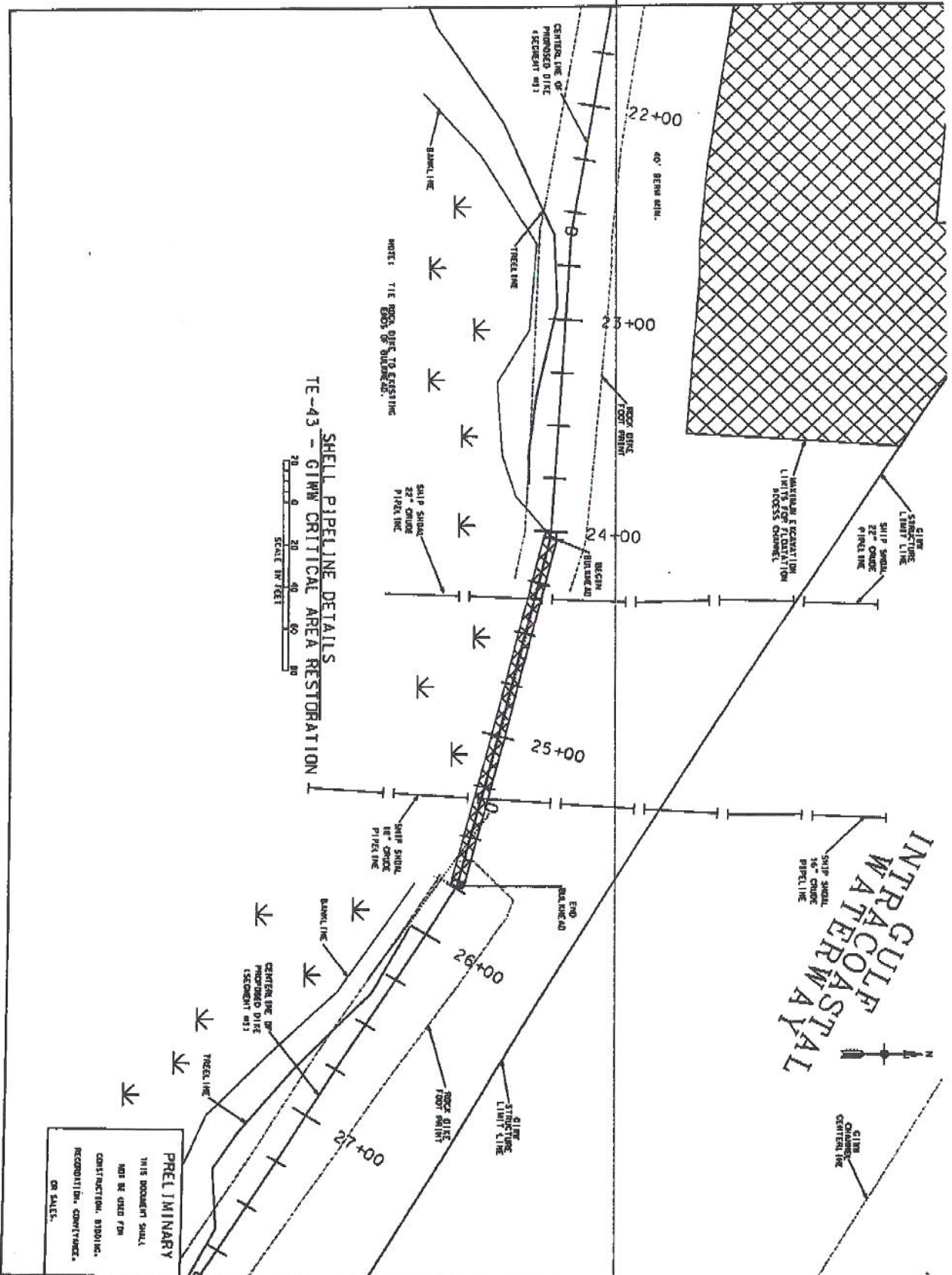
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ENTERPRISE PIPELINE DETAILS
GIWW CRITICAL AREA RESTORATION
TE-43
TERREBONNE PARISH, LOUISIANA

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

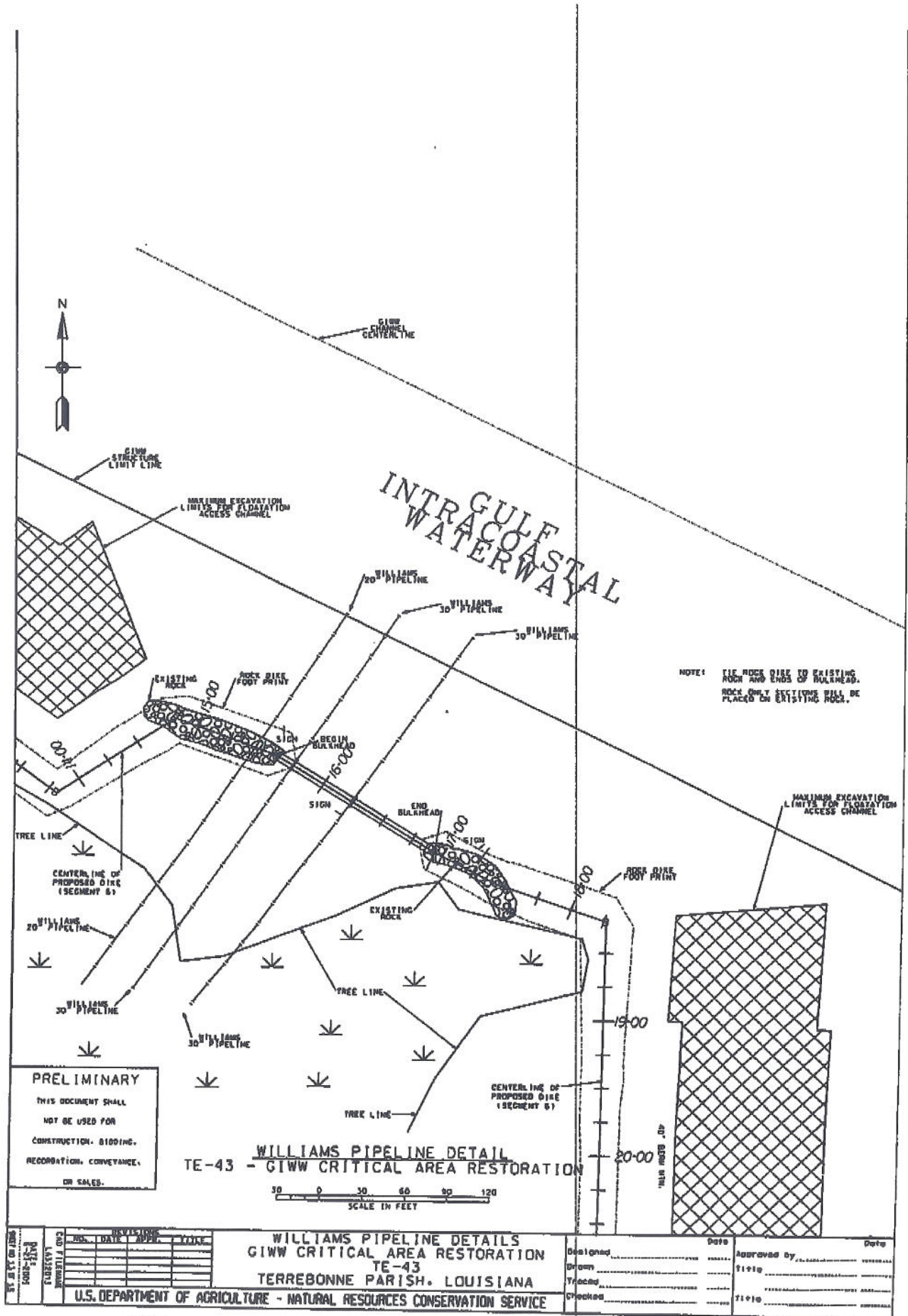
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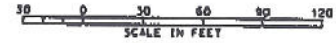
PRELIMINARY
THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, RECONSTRUCTION, CONTRACTING, OR SALES.

SHELL PIPELINE DETAILS GIWW CRITICAL AREA RESTORATION TE-43 TERREBONNE PARISH, LOUISIANA		Date _____ Approved by _____ Title _____ Date _____ Approved by _____ Title _____
REVISIONS NO. _____ DATE _____ BY _____ CHECKED _____ DATE _____ BY _____	PREPARED BY _____ DATE _____ CHECKED BY _____ DATE _____ APPROVED BY _____ DATE _____	U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE



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 RECONSTRUCTION, CONVEYANCE,
 OR SALES.

**WILLIAMS PIPELINE DETAIL
 TE-43 - GIWW CRITICAL AREA RESTORATION**



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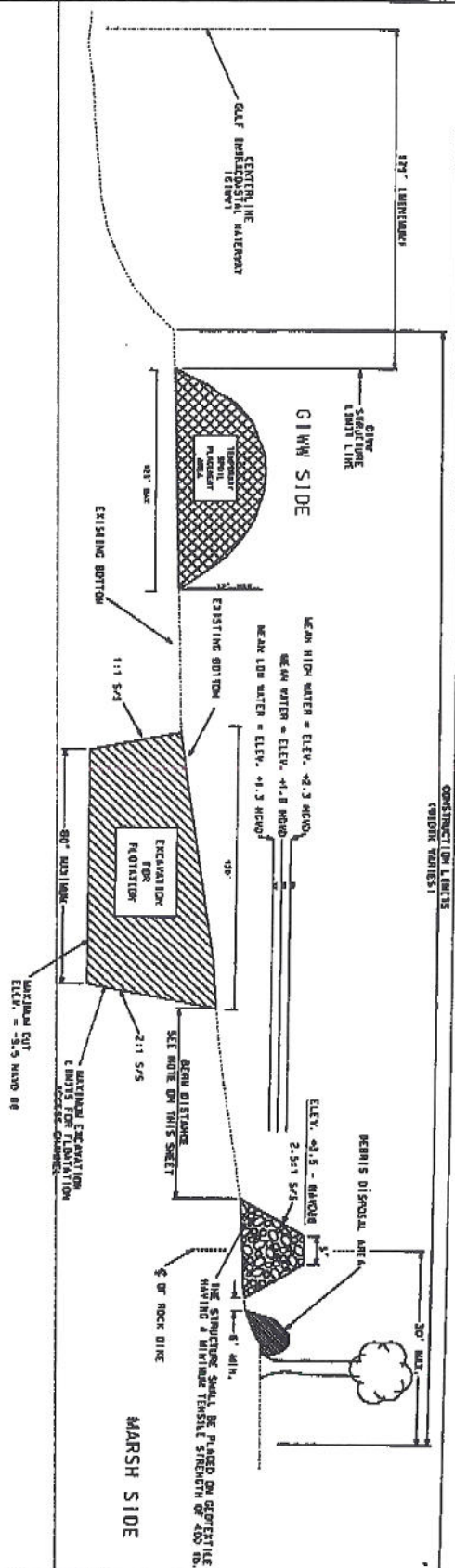
**WILLIAMS PIPELINE DETAILS
 GIWW CRITICAL AREA RESTORATION
 TE-43
 TERREBONNE PARISH, LOUISIANA**

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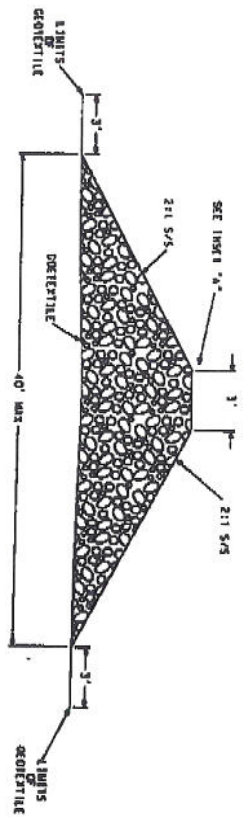
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NOTE:
 ALL SPOTS SHALL BE PLACED ONCE INTO ACCESS CHANNELS AFTER CONSTRUCTION OF ONE IS COMPLETE.
 AS REQUIRED, SPOTS SHALL BE REMOVED AND PLACED ON THE MARSH SIDE OF THE STRUCTURE.
 THE SPOT DISTANCE SHALL BE 30' EXCEPT FOR THE FOLLOWING REMOVED SPOTS WHICH SHALL BE AS SHOWN IN THE FOLLOWING SECTIONS: SECTION 8-31A, 18-00-31A-00, SECTION 8-31A, 18-00-31A-00.
 THE HEIGHT OF THE DIKE IS VARIABLE. THE DIKE IS PLACED TO FOLLOW THE 1'-0" CONTOUR. THE ACTUAL LATITUDE MAY VARY. THEREFORE THE OILE BANDS MUST BE PLACED FROM 4'-0" TO 5'-0".
 THE HEIGHT OF THE ACCESS CANAL IS ALSO VARIABLE. THIS DEPENDS ON THE TERRAIN AND HOW MUCH THE CONSTRUCTION ENGINEER TO EXCAVATE.

TYPICAL SECTION - ROCK DIKE
 (SHAIR TO SCALE)



ROCK DIKE DETAIL



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DATE	5-11-2005	DESIGNED		DATE		APPROVED BY	
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		TRACED					
		CHECKED					

ROCK DIKE - TYPICAL SECTIONS
 TE-43 - GIWW BANK RESTORATION
 TERREBONNE PARISH
 LOUISIANA

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

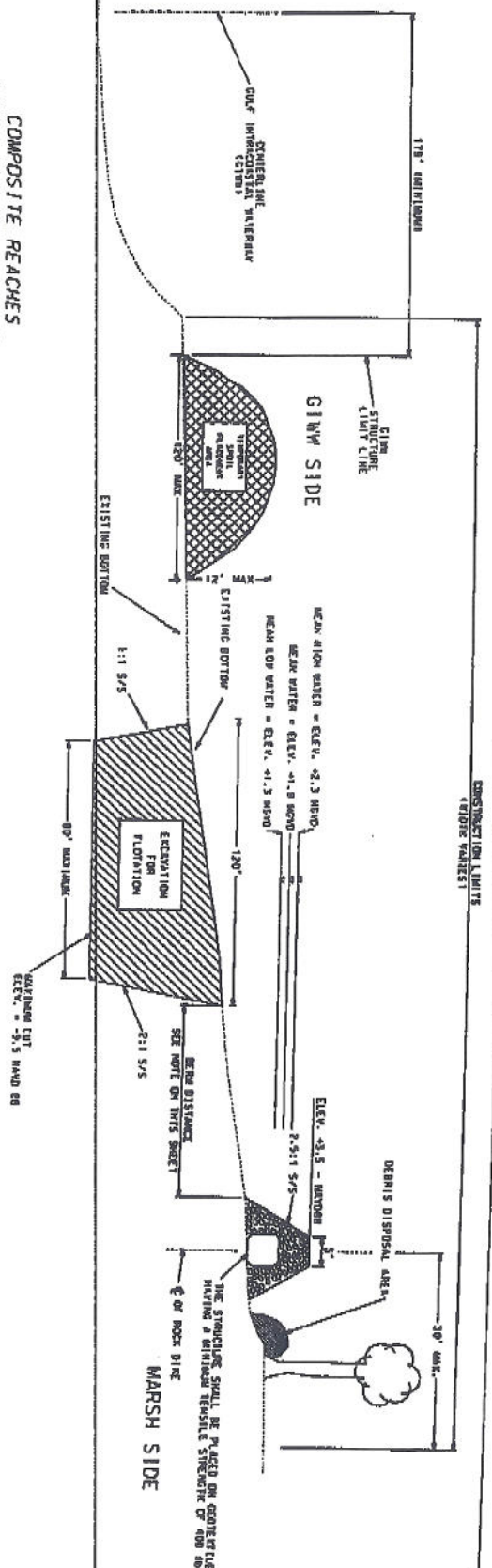
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COMPOSITE REACHES LIGHT WEIGHT AGGREGATE

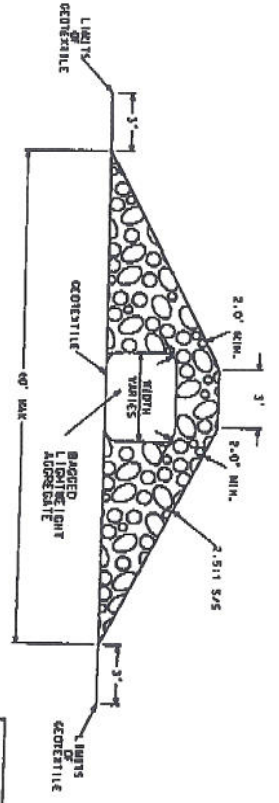
NOTE:
 WIDTH AND HEIGHT OF BATTERED LIGHTWEIGHT AGGREGATE IS VARIABLE.
 ALL SPOIL SHALL BE PLACED BACK INTO ACCESS CHANNEL AFTER CONSTRUCTION
 AS REQUIRED. TABLE SHALL BE REMOVED AND PLACED ON THE MARSH SIDE OF THE
 STRUCTURE.
 THE BATTER OF THE DIKE SHALL BE 30° EXCEPT FOR THE FOLLOWING REACHES WHICH
 SHALL BE AS NOTED IN THE TABLE.
 THE BATTER OF THE DIKE IS VARIABLE. THE GIVE IS BATTERED TO FOLLOW THE
 1:0.5' CONDITION. THE ACTUAL LAYOUT MAY VARY. THEREFORE THE GIVE SHOULD VARY
 IN THE ORDER FROM 4'-0" TO 5'-0".
 THE DEPTH OF THE ACCESS CHANNEL IS ALSO VARIABLE. THIS DEPENDS ON THE TOPOGRAPHY
 AND HOW MUCH THE CONTRACTOR CHOOSES TO EXCAVATE.

REACH	WIDTH	HEIGHT	BATTER
1	0+00 TO 11+00	0.64	0.51
2	11+00 TO 21+00	0.51	0.51
2	21+00 TO 30+50	0.58	0.58
2	30+50 TO 41+00	0.50	0.50
2	41+00 TO 75+00	0.81	0.81
3	0+00 TO 13+00	0.58	0.58
4	7+00 TO 18+00	1.11	1.11
4	21+00 TO 39+50	1.07	1.07
4	39+50 TO 50+00	1.39	1.39
4	50+00 TO 59+00	1.30	1.30
4	16+00 TO 24+00	1.42	1.42
4	0+00 TO 4+50	0.43	0.43
4	4+50 TO 16+00	1.43	1.43
5	40+00 TO 45+00	1.55	1.55
5	45+00 TO 58+00	1.52	1.52
5	58+00 TO 68+00	1.55	1.55
5	68+00 TO 99+00	1.50	1.50
T	0+00 TO 7+00	1.43	1.43

TYPICAL SECTION - COMPOSITE ROCK DIKE (NOT TO SCALE)



COMPOSITE ROCK DIKE DETAIL (ALTERNATIVE 1)



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 ACQUISITION, CONTRACTING,
 OR BIDS.

COMPOSITE DIKE - TYPICAL SECTIONS
 TE-43 - GIWW BANK RESTORATION
 TERREBONNE PARISH
 LOUISIANA

U.S. DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

DESIGNED BY _____ DATE _____
 DRAWN BY _____ DATE _____
 CHECKED BY _____ DATE _____

APPROVED BY _____ DATE _____
 TITLE _____

DATE FILED _____
 5-11-2006
 SHEET NO. 16 OF 16

ATTACHMENT VI

GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4
(TE-43)

**OPERATION, MAINTENANCE, AND REHABILITATION
BUDGET**

ATTACHMENT VI

OPERATION AND MAINTENANCE BUDGET

TE-43 GIWW BANK RESTORATION OF CRITICAL AREA – SEGMENT NO. 4

LEAD AGENCY: Natural Resource Conservation Service

PROJECT FEATURES:

- Approximately 10,579 linear feet of shoreline protection (Composite Rock Section) along CWPPRA Segment 4 and 2,262 linear feet of rock rip rap apron on both ends of Segment No.4 on the marsh side, nine (9) settlement plates, forty-six (46) timber warning signs and three (3) navigations aids lights.

OPERATION AND MAINTENANCE / REHABILITATION ASSUMPTIONS

The operation, maintenance and rehabilitation budget for the GIWW Bank Restoration of Critical Areas – Segment No.4 in Terrebonne Parish was based on the following assumptions:

Year 1 (2015) – Structural Assessment (settlement plate survey)

Year 3 (2017) - Assume a 2 ft. lift on rock rip rap dike will be required along the entire length of the structure with an estimated quantity of 9,421 tons.

Year 7 (2021) – Structural Assessment (settlement plate survey)

Year 10 (2024) – Assume a 1.0 ft. lift on the rock rip rap dike will be required along the entire length of the structure with an estimated quantity of 5,888 tons.

Year 13 (2027) – Structural Assessment (settlement plate survey)

Year 15 (2029) – Assume a 1.0 ft. lift on the rock rip rap dike will be required along the entire length of the structure with an estimated quantity of 5,888 tons.

OPERATION AND MAINTENANCE CONSIDERATIONS

(Based on 20 year project life)

A.	ANNUAL INSPECTIONS	\$ 143,834
	(1 day field trip with 5 team members including federal participant boat and report preparation)	
B.	CORPS OF ENGINEERS ADMINISTRATION	\$ 33,123

C. STRUCTURE ASSESSMENT \$ 30,895

Structure assessment of rock dike is recommended for Year 1 (2015), Year 7 (2021) and Year 13 (2027) include the Survey of all settlement plates.

Structural Assessment:	\$6,250
25% Contingency:	\$1,563
Administration (State):	\$1,092
Administration (Federal):	<u>\$ 235</u>

Total Cost: \$9,140

Year 1 (2015) - \$9,140 x 1.0120	= \$ 9,250
Year 7 (2021) - \$9,140 x 1.1208	= \$10,244
Year 13 (2027) - \$9,140 x 1.2474	= \$11,401

D. COST FOR MAINTENANCE PROJECT AT YEAR 3 (2017)

Construction:

1. Mobilization and Demobilization (\$75,000)	\$ 75,000
2. Access Dredging	\$ 50,000
3. Rock Rip-Rap (9,421 tons @ \$51.62/ton)	\$ 486,312

Construction Subtotal: \$ 611,312

Contingency (25%): \$ 152,828

Total Construction (Year 3): \$764,140

Total Construction + Inflation (1.0436) \$ 797,457

LDNR Administration: \$ 15,949
(\$15,283 x 1.0436)

NRCS Administration \$ 15,949
(\$15,283 x 1.0436)

Total Engineering & Construction Oversight: \$ 103,865

Engineering & Design: \$ 55,526

Surveying: \$ 18,000

(5 days @ 3,600/day)

Resident inspection: \$ 26,000

(400 hrs @ \$65/hour)

Total E&D/Construction Oversight: \$ 99,526

Total Construction plus Inflation (1.0436): \$ 103,865

TOTAL YEAR 3 PROJECT O&M BUDGET (2017)	\$933,220
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E. COST FOR MAINTENANCE PROJECT AT YEAR 10 (2024)

Construction:

1. Mobilization and Demobilization \$ 75,000
(\$75,000)

2. Access Dredging \$ 50,000

3. Rock Rip-Rap \$ 303,939
(5,888 tons @ \$51.62/ton)

Construction Subtotal: \$ 428,939

Contingency (25%): \$ 107,234

Total Construction (Year 10): \$536,173

Total Construction + Inflation (1.1824) \$ 633,971

- LDNR Administration: \$ 12,680
(\$10,724 x 1.1824)

NRCS Administration \$ 12,680
(\$10,724 x 1.1824)

Total Engineering & Construction Oversight: \$ 99,330

Engineering & Design: \$ 40,007

Surveying: \$ 18,000

(5 days @ 3,600/day)

Resident inspection: \$ 26,000
(400 hrs @ \$65/hour)

Total E&D/Construction Oversight: \$ 84,007

Total Construction Plus Inflation (1.1824): \$ 99,330

TOTAL YEAR 10 PROJECT O&M BUDGET (2024)	\$758,661
--	------------------

F. COST FOR MAINTENANCE PROJECT AT YEAR 15 (2029)

Construction:

1. Mobilization and Demobilization \$ 75,000
(\$75,000)

2. Access Dredging \$ 50,000

3. Rock Rip-Rap \$ 303,939
(5,888 tons @ \$51.62/ton)

Construction Subtotal: \$ 428,939

Contingency (25%): \$ 107,234

Total Construction (Year 15): \$536,173

Total Construction + Inflation (1.2927) \$ 693,111

- LDNR Administration: \$ 13,863
(\$10,724 x 1.2927)

NRCS Administration \$ 13,863
(\$10,724 x 1.2927)

Total Engineering & Construction Oversight: \$ 108,596

Engineering & Design: \$ 40,007

Surveying: \$ 18,000
(5 days @ 3,600/day)

Resident inspection: \$ 26,000
(400 hrs @ \$65/hour)

Total E&D/Construction Oversight: \$ 84,007

Total Construction Plus Inflation (1.2927): \$ 108,596

TOTAL YEAR 15 PROJECT O&M BUDGET (2029)	\$829,433
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OVERALL OPERATON, MAINTENANCE AND REHABILITATION (O&M) BUDGET - TE-43 GIWW BANK RESTORATION OF CRITICAL AREAS – SEGMENT NO.4	
O&M BUDGET:	\$2,729,166

Annual Inspections (\$1,750 state, \$750 Federal = \$2,500)

Year	Inspection Cost	Inflation	Total
Year 0 (2010)	\$6,100		\$6,100
Year 1 (2011)	\$6,100	1.0120	\$6,173
Year 2 (2012)	\$6,100	1.0262	\$6,260
Year 3 (2013)	\$6,100	1.0436	\$6,366
Year 4 (2014)	\$6,100	1.0624	\$6,481
Year 5 (2015)	\$6,100	1.0815	\$6,597
Year 6 (2016)	\$6,100	1.1010	\$6,716
Year 7 (2017)	\$6,100	1.1208	\$6,837
Year 8 (2018)	\$6,100	1.1410	\$6,960
Year 9 (2019)	\$6,100	1.1615	\$7,085
Year 10 (2020)	\$6,100	1.1824	\$7,213
Year 11 (2021)	\$6,100	1.2037	\$7,343
Year 12 (2022)	\$6,100	1.2254	\$7,475
Year 13 (2023)	\$6,100	1.2474	\$7,609
Year 14 (2024)	\$6,100	1.2699	\$7,746
Year 15 (2025)	\$6,100	1.2927	\$7,885
Year 16 (2026)	\$6,100	1.3160	\$8,028
Year 17 (2027)	\$6,100	1.3397	\$8,172
Year 18 (2028)	\$6,100	1.3638	\$8,319
Year 19 (2029)	\$6,100	1.3884	<u>\$8,469</u>
Total 20 Year Inspection Cost:			\$143,834