

DEPARTMENT OF THE ARMY PERMIT

Permittee Lavaca Navidad River Authority

Permit No. 21113

Issuing Office Galveston District

Expiration Date 31 December 2003

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: To stabilize and protect from erosion the shorelines of Lake Texana. Proposed methods of shoreline stabilization include, alone or in combination, concrete rubble, riprap/bullrock, Tri-lock blocks, selected vegetation, and timber bulkheads. Bulkheads will only be used in recreational areas. The total length of shoreline subject to erosion is 73,800 feet. The applicant anticipates that approximately 5,000 feet of shoreline would be treated per year. The work will be conducted in accordance with the attached plans in seven sheets entitled "Palmetto Bend Project, Lake Texana".

Project Location: The project is located at Lake Texana, an impoundment of the Navidad River, near Edna, Jackson County, Texas.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends within 2 years of Corps of Engineers approval. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
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 the property associated with this permit is sold, 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 the lands concerning this General Permit are sold, the new landowner will determine if the General Permit would still be valid or will request that the Corps of Engineers cancel the permit.
6. If a conditioned water quality certification has been issued for your project, enforcement of the conditions will be the responsibility of the issuing agency. For your convenience, a copy of the certification is attached if it contains such conditions.
7. 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:

See pages 2a, 2b

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.

1. The Corps of Engineers, prior to authorization of a specific project under this General Permit, will coordinate each project with the Bureau of Reclamation and, for potential impacts to bald eagle nesting sites, with the Fish and Wildlife Service:

a. U.S. Bureau of Reclamation
ATTN: Area Manager
Ms. Elizabeth Harrison
300 East 8th Street, Room 801
Austin, Texas 78701

b. U.S. Fish and Wildlife Service
ATTN: Loretta Pressly, Biologist
TAMUCC, Campus Box 338
6300 Ocean Drive
Corpus Christi, Texas 78412

2. The Corps of Engineers will also coordinate, prior to authorization, each specific project in Lake Texana State Park with:

Lake Texana State Park
ATTN: Park Supervisor
Mr. William Granberry
P.O. Box 760
Edna, Texas, 77957

3. For any specific project under this General Permit proposing to place aquatic plants in State or public waters, the applicant will, prior to such placement, obtain a permit from:

Texas Parks and Wildlife Department
ATTN: Ismael (Smiley) Nava
Resource Protection Division
TAMUCC Natural Resource Center, Suite 2501
Corpus Christi, Texas 78412

4. Staging areas and equipment / materials storage areas and construction access sites will not be situated in wetland areas. Attempts will be made to reduce / avoid impacts to riparian or other terrestrial vegetation by siting these areas in previously cleared locations.

5. Shoreline stabilization structures are not permitted along shorelines that currently support emergent marsh vegetation. Work is only permitted along shorelines with unvegetated erosional faces.

6. Bulkheads will be placed as close as possible to the existing shoreline.

7. This General Permit does not authorize land reclamation on previously eroded shorelines.

8. Impervious shoreline stabilization structures are not permitted where they would cross, or cut off, inlets to adjacent marsh areas or otherwise interfere with the hydrology of existing adjacent wetlands.

9. Due to the presence of numerous previously recorded archaeological sites located within the proposed permit area, the applicant shall inform the Corps of Engineers and the Texas Historical Commission prior to conducting any specific work under this permit. In the event that the specific work area contains previously recorded archaeological sites, or has the potential to yield cultural deposits eligible for the National Register of Historic Places, the permit applicant shall conduct a cultural resources investigation, and coordinate the results with the Corps of Engineers and the Texas Historical Commission prior to construction activities.

Request for Authorization Under the General Permit: In order to be authorized by this General Permit, you are required to submit to the District Engineer, in writing, the following information:

- a. The number of the General Permit under which the work is to be conducted.
- b. Statement that the work will be conducted in compliance with the terms and conditions of this General Permit.
- c. Location map showing the proposed work site.
- d. Plan view and cross section of the proposed work indicating existing and proposed shorelines.
- e. A brief description of the proposed work site and the method of construction or shoreline stabilization.
- f. Estimated starting and completion dates of construction.
- g. Name, address, and telephone number of responsible party.

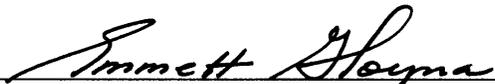
Upon receipt of this information, the District Engineer will advise the inquiring party in writing that the work is authorized under the General Permit, or will request additional information, if needed, or will advise that the proposed activity will require a separate permit.

- 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.

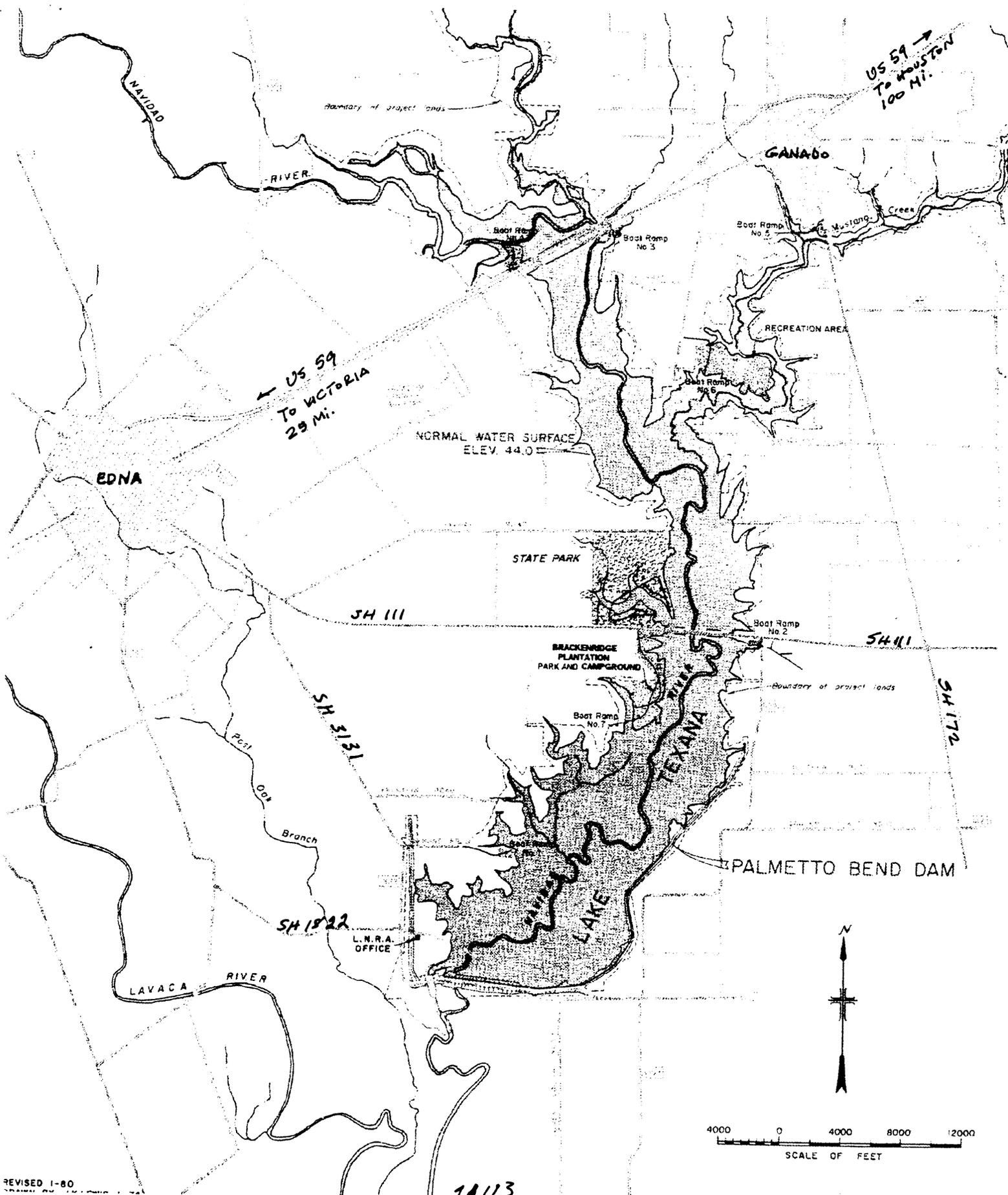
 <hr/> (PERMITTEE) <i>General Manager</i> LAVACA NAVIDAD RIVER AUTHORITY	<hr/> 11-24-98 (DATE)
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This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

 <hr/> (DISTRICT ENGINEER) FOR ROBERT W. HEINLY, LEADER SOUTH EVALUATION UNIT FOR COLONEL NICHOLAS J. BUECHLER	<hr/> 02 DEC 1998 (DATE)
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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.

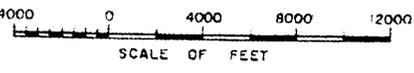
<hr/> (TRANSFEE)	<hr/> (DATE)
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US 59 →
To HOUSTON
100 Mi.

← US 59
To VICTORIA
29 Mi.

NORMAL WATER SURFACE
ELEV. 44.0



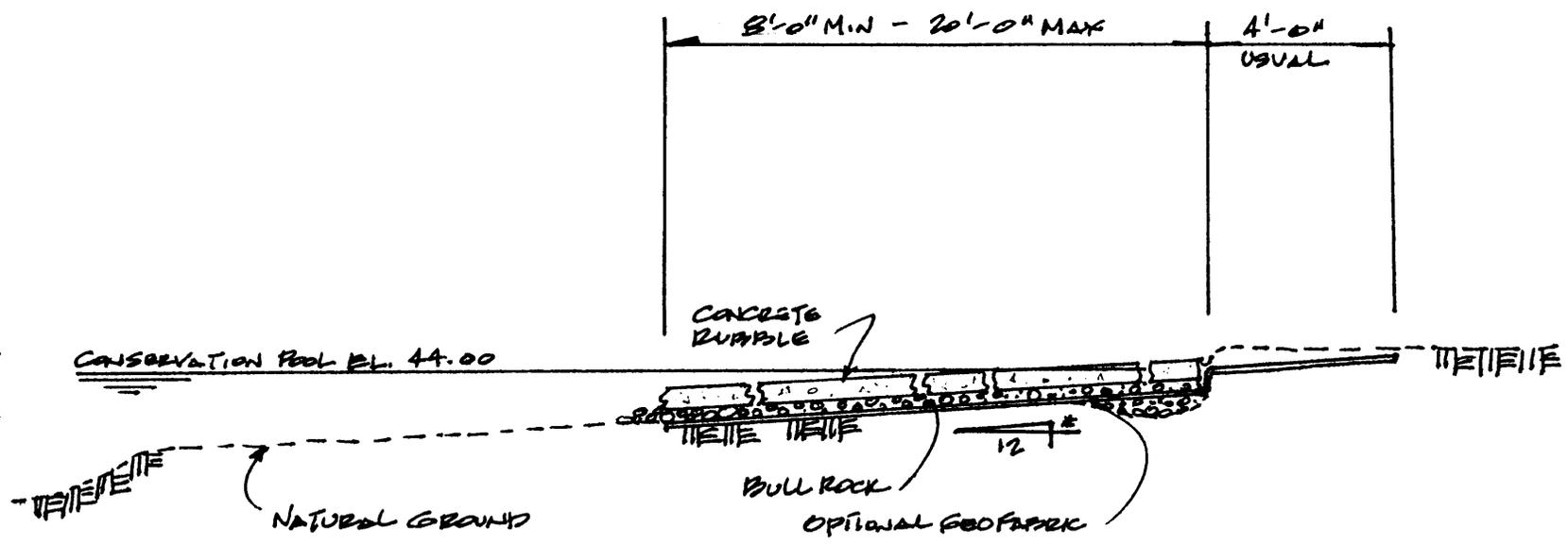
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20113
LAVACA-NAUIDAD RIVER AUTHORITY
Sheet ~~2~~ 2 OF 7

Vegetation for Shoreline Erosion Control

COMMON NAME	SCIENTIFIC NAME
Bald Cypress	Taxodium Distichum
Cat-Tail	Typha Latifolia
Saltgrass	Disichlis Spicata
Bermuda Grass	Cynodon Dactylon
Southern Wild Rice	Zizaniopise Miliacea
Alamo Switchgrass	Panicum Virgatum
Bulrush	Scirpus Californicus
Black Willow	Salix Nigra
Buttonbush	Cephalanthus Occidentalis
Maidenhead Cane	Panicum Hemitomon
Bearded Blue Stem	Andropogran Glomeratus
Common Reedgrass	Phragmites Communis
Eelgrass (Tape Grass)	Vallisneria Americana
Pickerelweed	Pontederia L.
Arrowhead (Duck Potato)	Sagittaria Latifolia

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LAVACA NAVIDAD
RIVER AUTHORITY
Sheet
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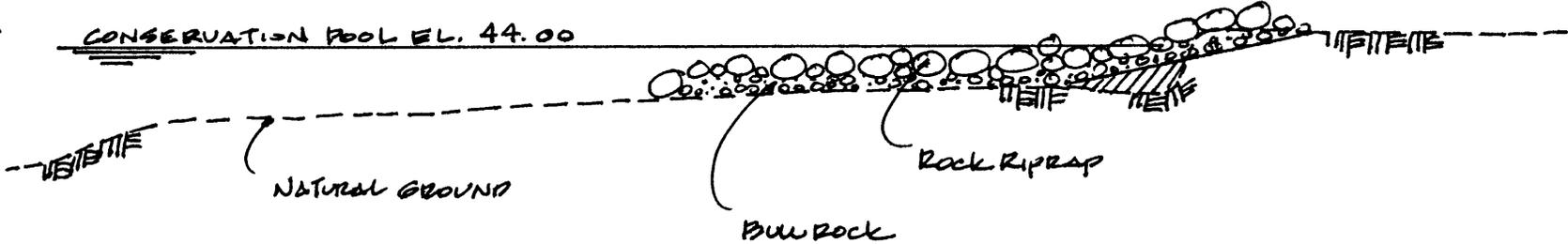


SECTION
TYPICAL INSTALLATION CONCRETE RUBBLE
SCALE 1" = 4'-0"

* 4:1 MAX
12:1 DESIRABLE

8'-0" MIN - 20'-0" MAX

CONSERVATION POOL EL. 44.00



NATURAL GROUND

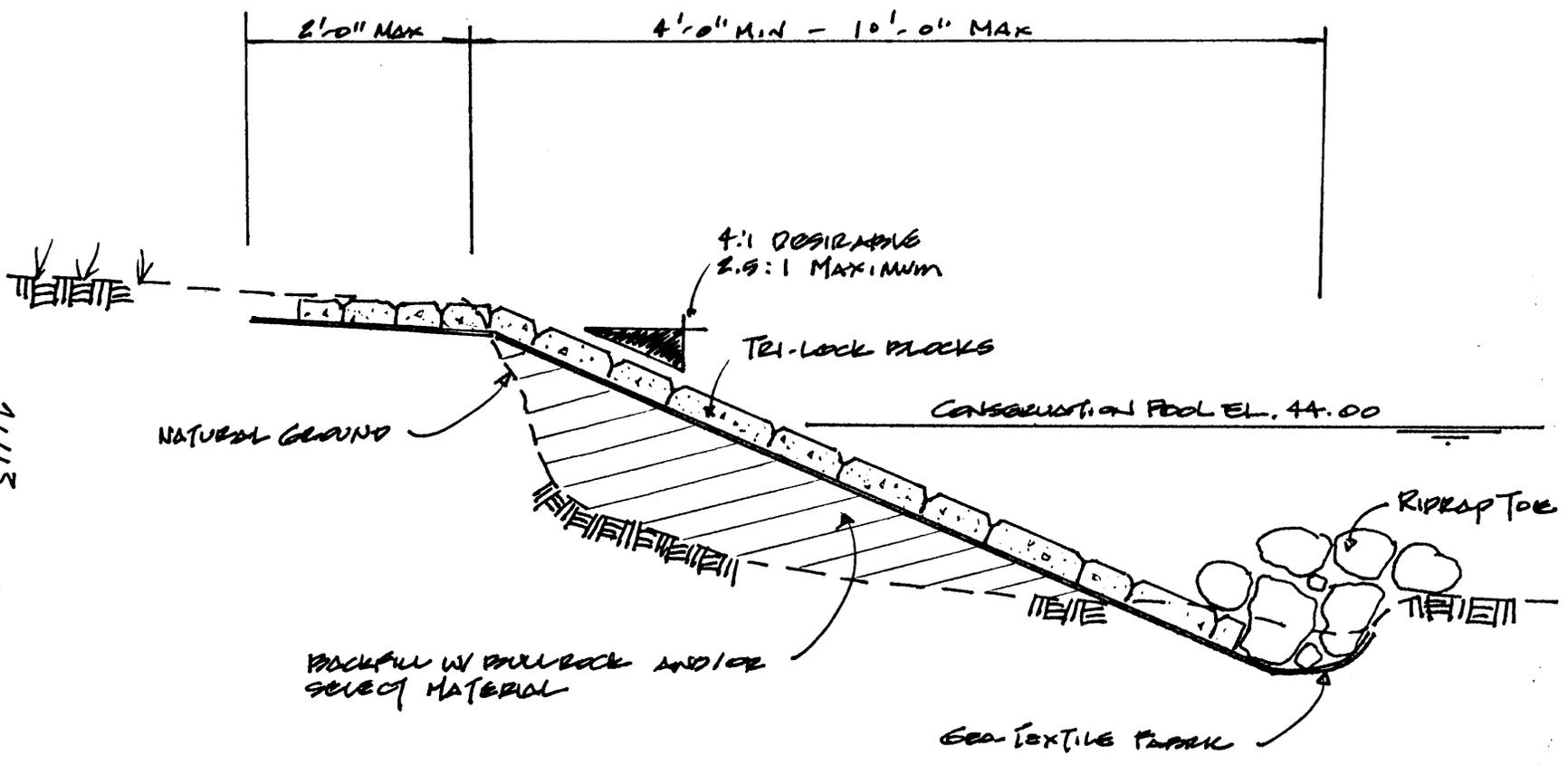
Rock Riprap

BULL ROCK

SECTION
TYPICAL INSTALLATION RIPRAP / BULL ROCK
SCALE: 1" = 4'-0"

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LAVACA-NAVIDAD RIVER AUTHORITY
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SECTION
TYPICAL INSTALLATION - TRI-LOCK BLOCKS
SCALE: 1/2" = 1'-0"

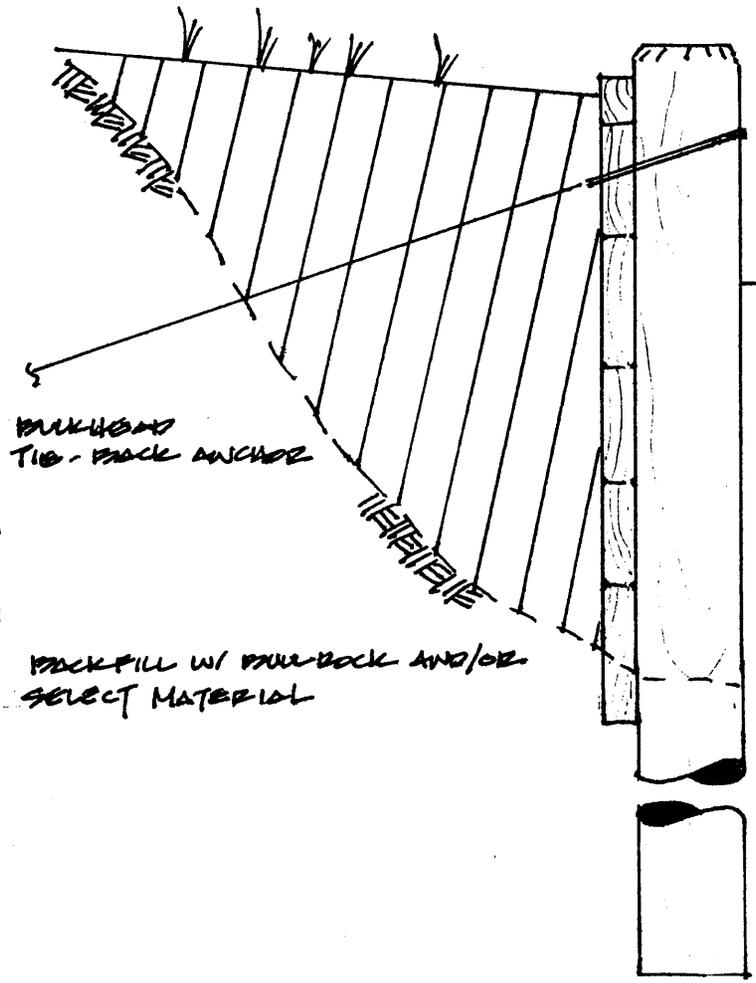
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Sheet

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LAVACA RIVER

NAVIGATIONAL
RIVER AUTHORITY



TIMBER PILE
10" MIN

TIMBER BULKHEAD
MATERIAL

CONSERVATION POOL EL. 14.00

2'-0" MIN
3'-0" MAX

NATURAL GROUND

SECTION
TYPICAL INSTALLATION - TIMBER BULKHEAD
SCALE: NTS

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Dan Pearson, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

May 12, 1998

Galveston District CESWG-CO-RE
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

ATTN: Marcel Duronslet

RE: USCOE Permit Application No. 21113

Dear Sir:

The applicant proposes to establish a General Permit which will allow shoreline stabilization for shoreline subject to erosion on Lake Texana, Jackson County, Texas. The following techniques are to be used for stabilization: concrete rubble, riprap/bullrock, tri-lock blocks, selected vegetation, rock jetties, and timber bulkheads. Jetties and bulkheads are to be used only in recreational areas. There are currently 73,800 feet of shoreline subject to erosion on the lake. The applicant anticipates that approximately 5,000 feet of shoreline will be treated per year.

In response to the Joint Public Notice dated January 29, 1998, the Texas Natural Resource Conservation Commission (TNRCC) conditionally certifies that the activity should not result in a violation of established Texas Water Quality Standards as required by Section 401 of the Federal Clean Water Act and pursuant to Title 30, Texas Administrative Code, Chapter 279 provided that the special conditions and standard provisions in Attachment 1 are followed.

Wetlands are protected by the Texas Surface Water Quality Standards, and they play a major role in maintaining water quality standards. The TNRCC supports a goal of no net loss of wetlands. When Corps personnel follow their Section 404 Guidelines in determining whether to issue a Section 404 permit, wetland impacts/losses can be avoided, minimized, or mitigated.

The TNRCC has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the Coastal Coordination Council, 31 TAC §505.30, and has determined that the action is consistent with the applicable CMP goals and policies.

The TNRCC has written special provisions that are used in all permits involving the construction of bulkheads. These provisions need to be included within this General Permit and are as follows:

1. Construction of the proposed bulkhead must be completed before any fill is placed behind the bulkhead. Any excavation behind the bulkhead must also be done after completion of the bulkhead.
2. Prior to project initiation, the project area must be isolated from Lake Texana and any adjacent wetlands by the use of best management practices (BMPs) (e.g., silt curtain, or a comparable BMP) to confine erosional solids. These BMPs must remain in place until project completion.
3. Upon completion of the project, fill material placed behind the bulkhead must be stabilized with an appropriate BMP (erosion control mats, burlap cover, etc.) to prevent the introduction of sediment to Lake Texana during wet weather conditions (erosion). The BMP must remain in place until the fill has been permanently stabilized by vegetation or some other appropriate method.
4. An appropriate amount of riprap should be placed at the toe of the bulkhead to mitigate for impacts to shallow-water habitat. This material will also provide additional stability to the bulkhead.
5. **ISOLATED BULKHEAD** For bulkheads that do not connect to adjacent bulkheads, riprap or an equivalent BMP must be placed at the ends of the bulkhead to dissipate wave energy and minimize erosion of adjacent property.

In order to prevent natural shorelines from being bulkheaded or riprapped when conditions do not warrant the construction, the TNRCC recommends the requirement that the applicant supply the justification for the need of the bulkhead or riprap (i.e., prove erosion, etc.). In addition, the TNRCC recommends that the applicant submit project specific documentation to the Corps of Engineers requesting a fifteen (15) day coordination and review period from other agencies prior to the construction of rock jetties.

No review of property rights, location of property lines, nor the distinction between public and private ownership has been made and this certification may not be used in any way with regard to questions of ownership.

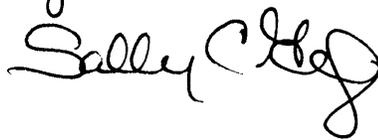
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If you require additional information or further assistance, please contact J. Andrew Sullivan,
Standards and Assessment Section, Water Quality Division (MC-150), at 512/239-4587.

Sincerely,



Dan Pearson
Executive Director

by


SCG/JAS/rrl

Attachment No. 1

cc: Mr. Patrick Brzosowski
Lavaca-Navidad River Authority
P.O. Box 429
Edna, Texas 77957-0429

Attachment 1 - Dredge and Fill Certification
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WORK DESCRIPTION: As described in the public notice dated January 29, 1998.

SPECIAL CONDITIONS:

1. Shoreline stabilization structures are not permitted along shorelines that currently support emergent marsh vegetation. Work is only permitted along unvegetated shorelines.
2. Shoreline stabilization structures are to be built no further than one foot waterward of adjacent uplands.
3. Construction of the proposed bulkhead must be completed before any fill is placed behind the bulkhead. Any excavation behind the bulkhead must also be done after completion of the bulkhead.
4. Prior to project initiation, the project area must be isolated from Lake Texana and any adjacent wetlands by the use of best management practices (BMPs) (e.g., silt curtain, or a comparable BMP) to confine erosional solids. These BMPs must remain in place until project completion.
5. Upon completion of the project, fill material placed behind the bulkhead must be stabilized with an appropriate BMP (erosion control mats, burlap cover, etc.) to prevent the introduction of sediment to Lake Texana during wet weather conditions (erosion). The BMP must remain in place until the fill has been permanently stabilized by vegetation or some other appropriate method.
6. An appropriate amount of riprap should be placed at the toe of the bulkhead to mitigate for impacts to shallow-water habitat. This material will also provide additional stability to the bulkhead.
7. **ISOLATED BULKHEAD** For bulkheads that do not connect to adjacent bulkheads, riprap or an equivalent BMP must be placed at the ends of the bulkhead to dissipate wave energy and minimize erosion of adjacent property.

GENERAL: This conditional certification, issued pursuant to the requirements of Title 30, Texas Administrative Code, Chapter 279, is restricted to the work described in the application or joint public notice and shall expire five years from the date of issuance of the Corps of Engineers (COE) permit. This certification may be extended to any minor revision of the COE permit when such change(s) would not result in an impact on water quality. The TNRCC reserves the right to require full joint public notice on a request for minor revision. The applicant is hereby placed on notice that any activity conducted pursuant to the COE permit which results in a violation of the state's surface water quality standards may result in an enforcement proceeding being initiated by the TNRCC or a successor agency.

Attachment 1 - Dredge and Fill Certification
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STANDARD PROVISIONS: These following provisions attach to any permit issued by the Corps of Engineers and shall be followed by the permittee or any employee, agent, contractor, or subcontractor of the permittee during any phase of work authorized by a Corps permit.

1. The water quality of wetlands shall be maintained in accordance with all applicable provisions of the Texas Surface Water Quality Standards including the General, Narrative, and Numerical Criteria.
2. The applicant shall not engage in any activity which will cause surface waters to be toxic to man, aquatic life, or terrestrial life.
3. Permittee shall employ measures to control spills of fuels, lubricants, or any other materials to prevent them from entering a watercourse. All spills shall be promptly reported to the TNRCC, Emergency Spill Response, at (512) 463-7727.
4. Sanitary wastes shall be retained for disposal in some legal manner. Marinas and similar operations which harbor boats equipped with marine sanitation devices shall provide state/federal permitted treatment facilities or pump out facilities for ultimate transfer to a permitted treatment facility. Additionally, marinas shall display signs in appropriate locations advising boat owners that the discharge of sewage from a marine sanitation device to waters in the state is a violation of state and federal law.
5. Materials resulting from the destruction of existing structures shall be removed from the water or areas adjacent to the water and disposed of in some legal manner.
6. A discharge shall not cause substantial and persistent changes from ambient conditions of turbidity or color. The use of silt screens or other appropriate methods is encouraged to confine suspended particulates.
7. The placement of any material in a watercourse or wetlands shall be avoided and placed there only with the approval of the Corps when no other reasonable alternative is available. If work within a wetland is unavoidable, gouging or rutting of the substrate is prohibited. Heavy equipment shall be placed on mats to protect the substrate from gouging and rutting if necessary.
8. Dredged Material Placement: Dredged sediments shall be placed in such a manner as to prevent any sediment runoff onto any adjacent property not owned by the applicant. Liquid runoff from the disposal area shall be retained on-site or shall be filtered and returned to the watercourse from which the dredged materials were removed. Except for material placement authorized by this permit, sediments from the project shall be placed in such a manner as to prevent any sediment runoff into waters in the state, including wetlands.
9. If contaminated spoil that was not anticipated or provided for in the permit application is encountered during dredging, dredging operations shall be immediately terminated and the

Attachment 1 - Dredge and Fill Certification
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TNRCC, Emergency Spill Response, shall be contacted at (512) 463-7727. Dredging activities shall not be resumed until authorized by the Commission.

10. Contaminated water, soil, or any other material shall not be allowed to enter a watercourse. Noncontaminated stormwater from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.
11. Stormwater runoff from construction activities (US EPA Category X) is governed by the requirements of the US Environmental Protection Agency. Applications to apply for a general permit are to be obtained from Region 6, US EPA at (214) 665-7185.
12. Upon completion of earthwork operations, all temporary fills shall be removed from the watercourse/wetland, and areas disturbed during construction shall be seeded, ripped, or given some other type of protection to minimize subsequent soil erosion. Any fill material shall be clean and of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters.
13. Disturbance to vegetation will be limited to only what is absolutely necessary. After construction, all disturbed areas will be revegetated to approximate the pre-disturbance native plant assemblage.
14. Where the control of weeds, insects and other undesirable species is deemed necessary by the permittee, control methods which are nontoxic to aquatic life or human health shall be employed when the activity is located in or in close proximity to water, including wetlands.
15. Concentrations of taste and odor producing substances shall not interfere with the production of potable water by reasonable water treatment methods, impart unpalatable flavor to food fish including shellfish, result in offensive odors arising from the water, or otherwise interfere with reasonable use of the water in the state.
16. Surface water shall be essentially free of floating debris and suspended solids that are conducive to producing adverse responses in aquatic organisms, putrescible sludge deposits, or sediment layers which adversely affect benthic biota or any lawful uses.
17. Surface waters shall be essentially free of settleable solids conducive to changes in flow characteristics of stream channels or the untimely filling of reservoirs, lakes, and bays.
18. The work of the applicant shall be conducted such that surface waters are maintained in an aesthetically attractive condition and foaming or frothing of a persistent nature is avoided. Surface waters shall be maintained so that oil, grease, or related residue will not produce a visible film of oil or globules of grease on the surface or coat the banks or bottoms of the watercourse.

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19. This certification shall not be deemed as fulfilling the applicant's/permittee's responsibility to obtain additional authorization/approval from other local, state, or federal regulatory agencies having special/specific authority to preserve and/or protect resources within the area where the work will occur.