

**FINAL
ENVIRONMENTAL STATEMENT**

**MAINTENANCE DREDGING
GULF INTRACOASTAL
WATERWAY
TEXAS SECTION**

MAIN CHANNEL AND TRIBUTARY CHANNELS



**VOLUME 3
SUPPLEMENTS**



**PREPARED BY
U. S. ARMY CORPS OF ENGINEERS
GALVESTON DISTRICT**

OCTOBER, 1975

Reprinted January 1984

PREFACE

VOLUME III

This environmental statement has been prepared in three volumes. Volume I contains the text, tables, and letters of coordination with other agencies. Volume II, issued with the draft statement, contains figures referenced in Volume I and will not be reissued with this final environmental statement. This volume contains supplements concerning each reach of the main channel and each tributary. The supplements contain project details, a public notice, responses to the public notices, and other information required by 33 CFR 209.145.

Note: This volume reprinted January 1984. The drawings which accompany the public notices have been reduced in size and printed without color to reduce reproduction costs.

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VOLUME III
SUPPLEMENTS

PREPARED BY
U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS
13 OCTOBER 1975

(Reprinted January 1984)

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VOLUME III SUPPLEMENTS

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SUPPLEMENT NO. 1
COLORADO RIVER CHANNEL

SUPPLEMENT NO. 1

COLORADO RIVER CHANNEL

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Colorado River Channel. The existing channel originates at the GIWW and extends 15.5 miles inland, generally following the course of the Colorado River. The channel is 9 feet deep and 100 feet wide and terminates at a silting basin and a turning basin 400 feet wide and 500 feet long. A flood discharge channel extends down the Colorado River from the GIWW to the Gulf. Locks are maintained on the GIWW Channel on both sides of the river. The Colorado River lock chambers have 1,200 foot lengths, 75 foot horizontal clearances, and 15 foot depths over the sills. The channel requires maintenance dredging once a year to remove 750,000 cubic yards of sediment. Maintenance dredging is performed by hydraulic pipeline dredge with dredged materials disposed of on land disposal areas. The disposal areas for this channel are numbered 1 through 9 and are shown in the attached public notice. The next maintenance dredging of the Colorado River Channel is scheduled for November 1976. All unleveed disposal areas will be leveed prior to the next dredging if permission can be obtained from the concerned landowners. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. In 1973 over 375,000 tons of cargo were carried over the waterway. The principal commodities were basic chemicals, basic chemical products, and marine shells. The economy of the project area is heavily dependent upon continued use of low cost waterborne transportation.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located in Matagorda County, Texas. The area is in the coastal plains region of the state. The Colorado River Channel was constructed in the natural channel of the Colorado River.

3.02 A large majority of lands in the project vicinity are used for agricultural purposes, including cattle raising and rice farming. Development in the area is primarily limited to the town of Matagorda near the intersection of the Colorado River Channel and the GIWW.

3.03 The river is tidal for about 20 to 25 miles upstream from its mouth. This section of the river, which includes the entire project channel, is a river estuary in that the river empties directly into the Gulf of Mexico, rather than into an estuarine bay. As is characteristic of river estuaries, the Colorado River is subject to fluctuating salinity levels depending upon the flows of the river. As a result, the project area provides habitat at various times for both estuarine organisms and freshwater organisms. During periods of normal or low flows the project area provides feeding and nursery habitat for several species of marine fish and crustaceans including spotted seatrout, flounder, red drum, black drum, Atlantic croaker, menhaden, sheepshead, mullet, white shrimp, brown shrimp, and blue crab. During periods of above normal flows, freshwater fish such as channel catfish, yellow catfish, blue catfish, carp, gar, buffalo, sunfish, crappie, and largemouth bass occupy the project area.

3.04 The Colorado River Channel is bordered on both sides by a flood plain. That portion of the flood plain adjacent to the river is vegetated with hardwood forest intermixed with some rangeland. The forest consists mainly of ash, hackberry, pecan, and cottonwood, with some elm, willow, sycamore, and oaks. Understory vegetation is primarily smilax, greenbriars, hawthorns, wax myrtle, and French mulberry. The rangeland areas are vegetated by several species of perennial weeds and grasses.

3.05 The flood plain of the Colorado River provides valuable wildlife habitat primarily for upland-game animals. Gray squirrels and fox squirrels are present in moderate numbers in the timbered areas. The population density is estimated to be about one squirrel to 2 acres. Mourning dove and bobwhite also occur in moderate numbers. White-tailed deer are present in low to moderate numbers. Portions of the flood plain are seasonally flooded and, when flooded during the fall and winter months, provide feeding and resting habitat for wintering waterfowl. The principal species of waterfowl in the area are the pintail, mallard, green-winged teal, blue-winged teal, canvasback, redhead, Canada goose, and snow goose.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of the Colorado River Channel will have some adverse effects on the natural environment.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of the extreme fluctuations in the channel from fresh to saline conditions, benthic populations are expected to be low and their loss is considered minimal. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, possible minor resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Turbidities caused by the action of the cutterhead have some adverse effects on productivity. High turbidities reduce photosynthetic activity and, in some instances, may cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Photosynthetic activity in the channel is not a significant contributor to productivity, and, therefore, increased turbidities caused by the cutterhead should have only minimal adverse effects.

4.04 Maintenance dredging will not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile freshwater and marine species as they are able to avoid the dredge.

4.05 Fish kills along the channel as a result of resuspended pollutants are considered possible but unlikely. Past dredging is not known to have caused any fish kills; and, since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated. Industrial development along the channel is light and the only other source of pollutants would be pesticides from nearby agricultural activities. However, water and sediment samples will be taken in areas of suspected pollutants. If pollutants in the sediments are found to exceed established criteria, measures will be taken to confine the dredged material.

4.06 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. For this project, only land disposal areas will be used.

4.07 Land Disposal. Adverse environmental effects of disposal of dredged material on land include coverage of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the biotic productivity of the disposal area.

4.08 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation causes birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands

of square miles of similar habitat in the surrounding coastal zone, it is believed that such effects are insignificant.

4.09 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.10 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the continued suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. This time period is highly variable, running from two to ten years. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type as a result of continued disposal operations in this reach will be minimal because the areas to be used for disposal have been used previously, and the changes have already occurred.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice and responses.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 1 October 1974. The report was made available to all interested Federal and State agencies and all known interested parties. The only responses received were from the U.S. Fish and Wildlife Service (USF&WS) and the National Marine Fisheries Service (NMFS). Both agencies noted compliance with the recommendations contained in the USF&WS coordination report dated 7 February 1974 (Vol I, Appendix B, pp B-178 through B-184). The USF&WS was especially concerned that the cutoff bendway located between disposal areas Nos. 5 and 5A be protected. To protect this area, levees will be constructed, subject to obtaining the landowners permission.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 21 February 1975, the Environmental Protection Agency approved the dredging and dredge material disposal plan under 33 CFR 209.145 for one year, subject to the following restriction:

Dredged material disposal in disposal areas Nos. 5 and 5A shall be managed to preclude deposition of sediment in the bendway channel surrounding disposal area No. 5A.

This requirement will be complied with. Long-term approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-1

1 October 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY-COLORADO RIVER CHANNEL

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 31 October 1974. Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (GIWW) - Colorado River Channel.

PROJECT LOCATION: In the Colorado River from Matagorda, Texas to vicinity of Wadsworth, Texas.

PROJECT DESCRIPTION: The Federally maintained Colorado River Channel consists of a 9-foot deep by 100-foot wide channel that originates at the junction of the GIWW and the Colorado River and extends upstream about 15.5 miles to a turning basin. The turning basin is 9 feet deep and 400 feet wide by 500 feet long. A silting basin in the Colorado River is located immediately upstream of the turning basin. All depths are referenced to Corps of Engineers Mean Low Tide datum.

DISPOSAL AREA: There are 11 disposal areas located along the project channel (see drawing). The Port of Bay City Authority of Matagorda County, Texas, the sponsoring agency, is required to furnish the necessary rights-of-way and disposal areas for maintenance of the project.

Disposal Areas Nos. 1, 4, 5 and 5-A are not currently leveed. The next time these areas are required for dredging disposal operations, the landowners will be contacted for authority to construct back levees on their lands. Disposal Areas Nos. 2, 3, 6, 6-A, 7, 8 and 9 are confined areas utilized for pipeline dredged materials.

COMPOSITION AND QUANTITY OF MATERIALS: Materials excavated from the Colorado River Channel consist of silt, sand, and some clay. Shoaling in the project channel is a result of alluvial deposits occurring during high water periods on the Colorado River. The shoaling rate is approximately 750,000 cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain the waterway. The frequency is at least annually for restoring selected reaches of the channel. The average volume of material excavated is 500,000 cubic yards annually. The Colorado River Channel was last maintained during the period August 1973 - March 1974. The next dredging is scheduled for January 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 1 is located on the west bank of the Colorado River approximately 5 miles upstream from the beginning of the project. The area is bound by the river on the east and north and wooded areas on the south and west.

Disposal Area No. 2 is located on the east bank of the Colorado River on Selkirk Island. It is bound on the west and south by the river and on the east and north by wooded and undeveloped areas.

Disposal Area No. 3 is located on the west bank of the river and north of the West Branch of the Colorado River. The area is bound on the east by the Colorado River, on the north, west and south by wooded and undeveloped areas.

Disposal Area No. 4 is located on the east bank of the Colorado River. It is bound on the west by the river, on the north by County Road 521, on the south by a County Road, and on the east by undeveloped and wooded areas.

Disposal Area No. 5 is located on Dick Island on the east bank of the Colorado River. The area is bound on the west and north by the river, on the south by County Road 521 and on the east by a dirt road.

Disposal Area No. 5-A is located on an island created during the original construction of a cut-off in the Colorado River. The area is bound by the river and the dredged channel on the west.

Disposal Areas Nos. 6 and 6-A are located on the west bank of the Colorado River. They are bound by the river on the east and north, and undeveloped and wooded areas on the west and south.

Disposal Area No. 7 is located on the east bank of the Colorado River. It is bound by the river on the west, by the Celanese Chemical Plant on the north, and levees on the east and south.

Disposal Area No. 8 is located west of the Colorado River in the vicinity of the turning basin. It is bound by the river on the east, by an intermittent stream on the north and west, and an undeveloped and slightly vegetated area on the south.

Disposal Area No. 9 is located on the east bank of the Colorado River and south of Lake LeTulle. It is bound by the river on the west and by slightly vegetated areas on the north, south and east.

DREDGING BY OTHERS: The Port of Bay City Authority of Matagorda County performs dredging operations in the vicinity of the Federal project. The estimated annual quantity of materials dredged from non-Federal facilities is about 122,000 cubic yards. Non-Federal dredging activities are regulated through the Department of the Army permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Matagorda County
City of Matagorda City
Port of Bay City Authority of Matagorda County, Texas

ENVIRONMENTAL IMPACT STATEMENT: Continued maintenance dredging of the Colorado River Channel will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (PL 91-190). An Environmental Statement will not be prepared for the Colorado River Channel alone. However, an Environmental Statement for the Gulf Intracoastal Waterway

1 October 1974

and Tributary Channels (Texas Section) will be prepared and will include the Colorado River Channel. The statement is scheduled to be placed on file with Council on Environmental Quality in the fall of 1975 after having been coordinated with the above mentioned agencies.

The shoaling rate in the Colorado River Channel project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

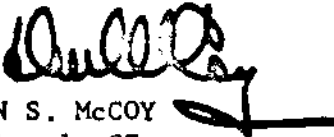
Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

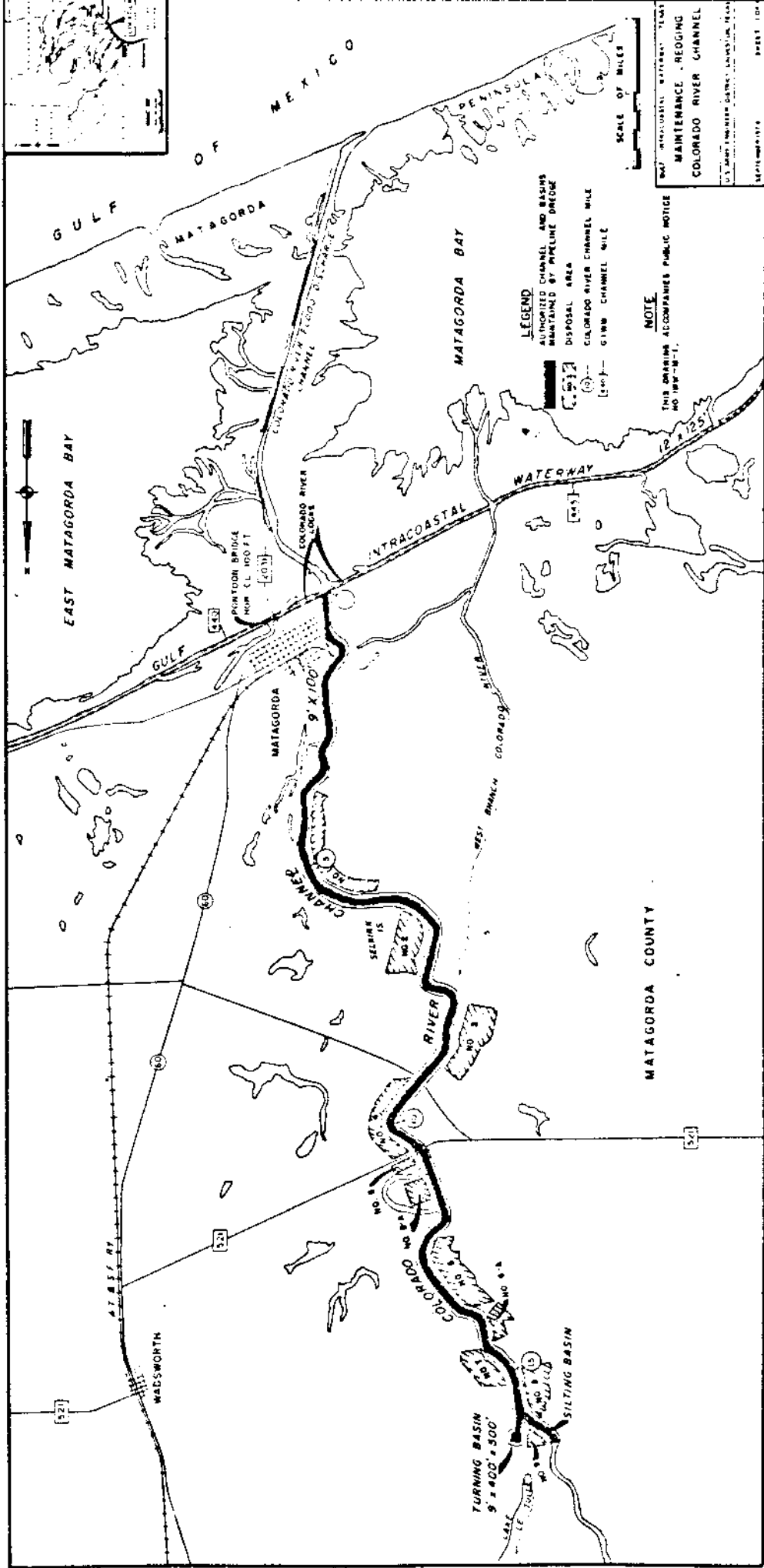
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-1 dated 1 October 1974.

1 Incl
Dwg, Sep 74


DON S. McCOY
Colonel, CE
District Engineer





IN REPLY REFER TO:

RB

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 5, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice IWW-M-1, dated October 1, 1974, regarding the maintenance dredging of the Gulf Intracoastal Waterway - Colorado River Channel.

The U. S. Fish and Wildlife Service prepared a report on this maintenance dredging project on February 7, 1974, and a supplementary report on May 15, 1974. Following the receipt of this Public Notice, we have reexamined the project site and reviewed project data on which our 1974 reports were based. Particular attention has been given to the advice in Mr. Martin W. Teague's letter of May 8, 1974, that Recommendations Nos. 1 and 3 of our February 1974 report are too restrictive in terms of land area needed for spoil disposal.

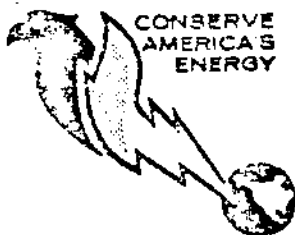
Recommendation No. 1 of our report states that:

"Spoil areas Nos. 1 and 4 be leveed on their ends and on the backsides no more than 1,000 feet from the channel centerline and all material be retained within these levees."

Mr. Teague's letter stated that the distance to the back levee would need to be 1,000 feet from the high bank of the channel rather than from the centerline. As a result of our field inspection, we find this change acceptable.

Recommendation No. 3 of our report is as follows:

"Spoil area No. 5 be leveed on its ends and on the backside no more than 1,000 feet from the channel centerline between Stations 515+00 and 534+00 and all spoil be retained within these levees."



Again, the distance from centerline was considered too restrictive. The requested change involves an increase in this distance to 1,500 feet. To this change we have no serious objection.

Our primary concern at spoil area No. 5 is the preservation of the cut-off bendway, and your office has agreed to this objective. The project map accompanying the public notice reveals that spoil area No. 5 has been divided into two segments, Nos. 5 and 5A. The bendway channel will pass between these segments. To further protect the bendway channel, our Recommendation No. 3 should be construed as applying to both spoil area segments, Nos. 5 and 5A. Containment levees should be constructed on the backsides and ends of each segment.

The other recommendations in our February 1974 report, except for Recommendation No. 4 which has been eliminated, are still applicable.

The opportunity of again commenting on this particular maintenance dredging project is appreciated.

Sincerely yours,



Regional Director

cc:

Executive Director, Texas Parks and Wildlife Dept., Austin, Texas
Regional Director, National Marine Fisheries Service, St. Petersburg,
Florida

Area Supervisor, NMFS, Environmental Assessment Div., Galveston, Texas
Regional Administrator, EPA, Region VI, Dallas, Texas
Regional Director, BOR, Albuquerque, New Mexico
Special Asst. to the Secretary, USDI, SW Region, Albuquerque, New Mexico
Field Supervisor, FWS, Div. of River Basin Studies, Galveston, Texas

SWCCO-M

9 December 1974

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference your letter dated 5 November 1974 concerning Public Notice No. IFW-M-1 on maintenance dredging of the Gulf Intracoastal Waterway-Colorado River Channel.

The primary concern in your letter is that the cut-off channel located between Disposal Areas Nos. 5 and 5A be protected. These Disposal areas will be leveled as you have recommended prior to their next use, subject to obtaining the land owners permission.

Thank you for your review and comments.

Sincerely yours,

Copy Furnished:
Field Supervisor
U. S. Fish & Wildlife
Service
Custom House, Room 327
Galveston, Texas 77550

E. D. McQUEEN
Chief, Construction-
Operations Division



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

October 30, 1974

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
Post Office Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

By Public Notice No. IWW-M-1 dated October 1, 1974, you notified the National Marine Fisheries Service (NMFS) of the Corps of Engineers' policy, practice, and procedures to be followed in connection with the deposition of dredged material in ocean waters associated with the maintenance dredging operations of the Gulf Intracoastal Waterway -- Colorado River Channel.

We have reviewed the plans presented in the public notice and find that the provisions of the Bureau of Sport Fisheries and Wildlife report dated February 7, 1974, which received NMFS concurrence, have been incorporated in your maintenance dredging plans of the Gulf Intracoastal Waterway -- Colorado River Channel. We have no changes to suggest at this time.

We appreciate the opportunity to review the plans for maintenance of this Federal project. Please provide us with copies of the project plans you send out with each invitation to bid on this project.

Sincerely,

William H. Stevenson
Regional Director

SWSOO-M

11 November 1974

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Receipt is acknowledged of your comments concerning Public Notice
No. IHW-M-1, dated 1 October 1974, pertaining to the maintenance
dredging of the Gulf Intracoastal Waterway - Colorado River Channel.
Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS TEXAS 75201

February 21, 1975

CERTIFIED MAIL RETURN RECEIPT REQUESTED: (No. 628547)

Colonel Don S. McCoy
District Engineer
Galveston District
Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your plan for maintenance dredging of "GIWW - Colorado River Channel" as covered in Public Notice No. IWW-N-1 dated October 1, 1974. We have also reviewed your January 10, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

Your dredging plan is approved for one year provided the following recommendation can be adopted:

Dredged material disposal in Disposal Areas Nos. 5 and 5A shall be managed to preclude deposition of sediment in the bendway channel surrounding Disposal Area No. 5A.

Since, as stated in your public notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,

George J. Putnicki
For Regional Administrator

SUPPLEMENT NO. 2

TRIBUTARY CHANNEL TO PORT MANSFIELD

SUPPLEMENT NO. 2

TRIBUTARY CHANNEL TO PORT MANSFIELD

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SUPPLEMENT NO. 2

TRIBUTARY CHANNEL TO PORT MANSFIELD

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Channel to Port Mansfield. The existing channel is a shallow-draft channel 9.6 miles long which extends from the Gulf of Mexico, across the lower Laguna Madre, to Port Mansfield, Texas. The federally maintained waterway includes: an entrance channel 26 feet deep by 250 feet wide that extends about 3,700 feet from the west end of the jetties into the Gulf of Mexico; an approach channel to the hopper dredge turning basin that is 26 feet deep by 100 feet wide; a hopper dredge turning basin 26 feet deep by 300 feet wide; a channel across Padre Island and Laguna Madre 14 feet deep by 100 feet wide; four connecting turnout channels to the GIWW Main Channel (the two on the east are 12 feet deep by 100 feet wide and the two on the west are 12 feet deep by 200 feet wide); an approach channel from the GIWW to the main turning basin 14 feet deep by 125 feet wide; and three turning basins (the main basin 14 feet deep by 320 feet to 350 feet wide and 1,250 feet long, a small craft basin 8 feet deep by 100 feet wide and 860 feet long, and a shrimp basin 12 feet deep by 260 feet wide and 1,450 feet long). A government-owned hopper dredge is normally used to maintain the project from deep water in the Gulf through the entrance channel to the easterly end of the approach channel. This reach is normally maintained annually by hopper dredge and the material is deposited in disposal area No. 1 in the Gulf. The average annual volume of material excavated by the hopper dredge is 130,000 cubic yards. Contract pipeline dredges are utilized to maintain that portion of the project from about 3,000 feet into the Gulf of Mexico westward to Port Mansfield. That portion extending through the jetties into the Gulf is excavated by pipeline dredge when shoaling precludes the use of a government-owned hopper dredge. The frequency of contract pipeline dredging is about every 15 months. The material is transported by pipeline and placed in disposal areas Nos. 2 through 8. The entrance channel is presently shoaled to such an extent that a hopper dredge cannot be

used. Accordingly, a pipeline dredge will be used and the materials will be used to refurbish the eroded beach just north of the north jetty. Should this disposal method be successful in nourishing the beach, it will be considered for use in the future when pipeline dredges are used to maintain the channel. The average quantity of materials removed per contract is about 580,000 cubic yards. This reach of the project was last maintained during the period March-September 1974. The four connecting curves at the GIWW and an area between the GIWW and turning basins are under contract to be dredged now. The next dredging is scheduled after January 1976. The figure in the attached public notice shows the channels and disposal areas. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Benefits of continued maintenance dredging of the channel and turning basins are derived from commercial and recreational navigation. The economy of Port Mansfield is almost entirely dependent upon waterborne access to the Gulf, the Laguna Madre, and to the main channel of the GIWW. In 1974, over 40,346 tons of cargo were carried over the waterway in more than 15,000 vessel trips. The Gulf Entrance Channel actually benefits the production of fish and crustaceans in the Laguna Madre by maintaining a migration route and a relatively stable salinity gradient.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located near Port Mansfield, Texas, in the lower Laguna Madre. Important fish and wildlife habitat occurs in the project area, which for the most part, has shallow waters. Dense growths of submerged vegetation are found throughout most of these shallow water areas.

3.02 The submerged vegetation provides high quality habitat used by many species of fish and crustaceans for feeding, breeding, and nursery. Important species of fish and crustaceans include Atlantic croaker, black drum, red drum, flounder, striped mullet, pompano, sea catfish, spotted seatrout, sheepshead, blue crab, and

shrimp. Sport fishing and commercial fishing are important to the local economy. Both receive heavy use.

3.03 Wildlife habitat in the project area consists of disposal areas, bay waters, tidal flats, and land on Padre Island and on El Sauz Island. The islands and disposal areas have populations of coyote, rabbit, mourning dove, bobwhite, waterfowl, wading birds, and shorebirds. The tidal flats and bay waters support populations of waterfowl, wading birds, and shorebirds. The shallow vegetated bay areas and tidal flats are used by waterfowl for feeding while the deeper portion of the bay is used for resting.

3.04 Important species of waterfowl in the area include Canada goose, snow goose, gadwall, American widgeon, pintail, masked duck, green-winged teal, blue-winged teal, mottled duck, redhead, canvasback, lesser scaup, bufflehead, ruddy duck, and coot.

3.05 The principal hunting in the area is for waterfowl. Hunting is moderate to heavy in the vicinity of Port Mansfield.

3.06 Many other birds use the project area for resting, feeding, and nesting. Among these are pelican, cormorant, gull, tern, heron, egret, ibis, roseate spoonbill, merganser, grebe, common snipe, plover, sandpiper, avocet, curlew, black-necked stilt, and peregrine falcon.

3.07 Florida manatee, ocelot, right whale, sperm whale, blue whale, finback whale, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, and hawksbill turtle are endangered species known historically to range in the area.

3.08 The lower portion of the Padre Island National Seashore lies adjacent to the project area.

3.09 One of three 1554 shipwrecks exists in the immediate project area. The Mansfield Cut Underwater Archeological District, listed on the National Register of Historic Places, is located north of and adjacent to the north jetty. This area is known to contain mid-16th century Spanish Colonial material including at least three shipwrecks. The wrecks

are of particular importance in that they represent the earliest verified shipwrecks discovered in this hemisphere.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of the channel will have both adverse and beneficial effects on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat. Many benefits to the natural environment have resulted from improved water circulation caused by construction of the GIWW and the Port Mansfield Channel across the lower Laguna Madre. These benefits include elimination of fish kills due to hypersalinity, increased flounder landings, increased vegetative growth both in stand and in range, and an increase in the range of juvenile brown shrimp. The perpetuation of these benefits is dependent on continued maintenance of these channels. Failure to maintain these channels would result in gradual return to near preconstruction conditions of reduced circulation, hypersalinity, and lower productivity.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basins will disturb or remove swimming and benthic organisms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy submerged vegetation, as channel depths preclude development of vegetation because of reduced sunlight penetration. Dredging usually little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number

of beneficial aspects are known, including formation of bird nesting areas where islands develop, resuspension of nutrients, and provision of public recreational areas. The effects of using dredged materials for beach nourishment will be similar to those of open water disposal.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up the food chain, resulting in fewer organisms available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy dredged material layer. Some more mobile organisms are able to work upward through the material while the sessile organisms perish.

4.08 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.09 Disposal of dredged materials in open water will cover any submerged vegetation that exists in the disposal area. In the lower Laguna Madre submerged vegetation is a major source of organic matter to the bay system. Because of its value as primary food source, dredging practices have been changed to avoid disposal in areas of submerged vegetation wherever practicable. All areas that will be used for deposition of sediments have previously been used for this purpose, and that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.10 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous disposal areas blocking or changing the normal current patterns in bay areas. The construction and continued maintenance of this project, however, has

improved water circulation and helped establish a relatively stable salinity gradient in the Laguna Madre.

4.11 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation. Along the channel there are no significant industrial complexes; leaving pesticides from nearby agricultural activities as the only possible pollutant. The Marine Protection, Research, and Sanctuaries Act of 1972 states that dredged material may be considered unpolluted if it is composed essentially of sand and/or gravel, or of any other naturally occurring sedimentary materials with particle sizes larger than silts and clays. In view of the predominance of relatively pure sands found throughout the channel over the past four years, the materials to be dredged and deposited in the Gulf disposal area are considered essentially sands and are unpolluted.

4.12 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.13 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total

area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.14 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.15 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type, as a result of disposal operations, will be minimal, as most areas to be used for disposal have been used previously, and the changes have already occurred.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the attached public notice. The additional restrictions placed on disposal operations by EPA will be complied with.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 1 October 1974, for the Channel to Port Mansfield. Three responses to the notice were received. The response from the Willacy County Navigation District was favorable. The USF&WS and NMFS reiterated the recommendations listed in the formal coordination report of 13 March 1972. All of these recommendations will be complied with.

7. COORDINATION WITH AGENCIES RESPONSIBLE FOR HISTORIC PRESERVATION. In coordinating the proposed maintenance dredging of the Channel to Port Mansfield, the Texas Historical Commission indicated that the existing channel was creating an adverse effect on what is thought to be one of three 1554 shipwrecks. The Commission stated "Wave activity, somewhat altered by the north jetty construction and the channel, appears to be displacing materials from the shipwreck", and recommended recovery as the only means of preserving the significance of the shipwreck. In commenting on the proposed disposal of dredged materials north of the north jetty as a beach nourishment activity, the Commission states there would be no adverse effects to the shipwreck or to the Mansfield Cut Underwater Archeological District. A letter (not dated) from the Advisory Council on Historic Preservation gave approval, in accordance with 36 CFR Part 800, for the proposed beach nourishment. The Advisory Council also noted that the existing project was having an adverse effect on the 1554 shipwrecks and requested the Corps of Engineers further investigate the matter. Further investigation will be accomplished.

8. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 4 February 1975, the Environmental Protection Agency approved the dredged material disposal plans under 33 CFR 209.145 for one year; subject to the following restrictions:

a. All material dredged from the channel west of GIWW connecting channels shall be placed in the fully confined Disposal Area No. 8. A control structure shall be used to minimize return of suspended solids to the Bay.

b. Openings between disposal areas shall be maintained such that, in the segment of the channel between the eastern limit of disposal area No. 4 and the western limit of disposal area No. 6, no more than 50 percent of the longitudinal section parallel to the channel is blocked.

Openings shall be maintained at sufficient depths to allow maximum possible flow between disposal areas.

c. Levees or sediment curtains shall be utilized to prevent the deposition of dredged materials in the open area between disposal areas Nos. 6 and 7.

d. Dredged material placed in disposal area No. 3 shall be fully contained. Effluent shall be returned to the ship channel through a control structure.

In a second letter (dated 9 May 1975) EPA approved plans to use dredged material to refurbish and restore portions of Padre Island beach area. In a subsequent letter dated 9 October 1975 (Vol. 1, page E-1) EPA modified recommendation b to read:

b. Opening between disposal areas shall be maintained to allow maximum circulation between the disposal areas.

All requirements will be complied with. Long term approval of dredging was deferred until a final Environmental Statement is filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-2

1 October 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY-TRIBUTARY CHANNEL TO PORT MANSFIELD

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 31 October 1974. Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Marine Protection, Research and Sanctuaries Act of 1972
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway-Tributary Channel to Port Mansfield.

PROJECT LOCATION: Near Port Mansfield, Texas in Willacy County, Texas.

PROJECT DESCRIPTION: The Federally maintained GIWW Tributary Channel to Port Mansfield is a shallow-draft channel from the Gulf of Mexico to Port Mansfield. It is about 9.6 miles long and lies in the lower Laguna Madre. The Federally maintained waterway includes: an entrance channel 26 feet deep by 250 feet wide that extends about 3,700 feet from the west end of the jetties into the Gulf of Mexico; an approach channel to the hopper dredge turning basin that is 26 feet deep by 100 feet wide; a hopper dredge turning basin 26 feet deep by 300 feet wide; a channel across Padre Island and Laguna Madre 14 feet deep by 100 feet wide; four connecting turnout channels to the GIWW Main Channel (the two on the east are 12 feet deep by 100 feet wide and the two on the west are 12 feet deep by 200 feet wide); an approach channel from the GIWW to the main

turning basin 14 feet deep by 125 feet wide; and three turning basins (the main basin 14 feet deep by 320 feet to 350 feet wide and 1,250 feet long, a small craft basin 8 feet deep by 100 feet wide and 860 feet long, and a shrimp basin 12 feet deep by 260 feet wide and 1,450 feet long). All depths are referenced to Corps of Engineers Mean Low Tide datum.

DISPOSAL AREAS: Willacy County Navigation District, the sponsoring agency, is responsible for furnishing the necessary rights-of-way and land-based disposal areas. The project utilizes eight disposal areas (see drawing).

Disposal Areas Nos. 1 and 2 are open water disposal areas in the Gulf of Mexico and are located east of the jetties. Disposal Area No. 1 is used for the disposal of materials excavated by a Government-owned hopper dredge.

Disposal Area No. 2 is an optional emergency area for use in disposal of contract pipeline dredged materials. This area would be used when critical shoaling does not permit the use of a hopper dredge.

Disposal Area No. 3 is a partially confined disposal area located north of the channel on Padre Island and partially extending into the tidal flats in Laguna Madre.

Disposal Area No. 4 is a confined disposal area located south of the Channel in Laguna Madre.

Disposal Areas Nos. 5 and 6 are partially confined disposal areas located south of the channel in Laguna Madre. Toe levees will be constructed at some future date when the emergent areas become large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

Disposal Area No. 7 is an open water disposal area located north of the channel to Port Mansfield and east of the GIWW in the vicinity of Red Fish Bay.

Disposal Area No. 8 is a confined disposal area on land located south of the Channel to Port Mansfield and southeast of Port Mansfield.

Disposal Area Nos 2 through 8 are utilized for disposal of materials excavated by contract pipeline dredges.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from the Channel to Port Mansfield consist of sands, silts, and clay. Shoaling

in the channel is a result of littoral transport and tidal action in the Gulf of Mexico. The shoaling rate of the project is approximately 885,000 cubic yards annually.

METHOD OF DREDGING: A Government-owned hopper dredge is normally used to maintain the project from deep water in the Gulf through the Entrance Channel to the easterly end of the approach channel. This reach is normally maintained annually by hopper dredge and the material is deposited in Disposal Area No. 1. The average annual volume of material excavated by the hopper dredge is 130,000 cubic yards. This reach was last maintained during August 1974 and is scheduled for dredging after 30 June 1975. Contract pipeline dredges are utilized to maintain that project from about 3,000 feet into the Gulf of Mexico westward to Port Mansfield. That portion extending through the jetties into the Gulf is excavated by pipeline dredge when depths restrict the use of a Government-owned hopper dredge. The frequency for contract pipeline dredging is about every 19 months. The material is transported by pipeline and placed in Disposal Areas Nos. 2 through 8. The average quantity of materials per contract is about 755,000 cubic yards. This reach of the project was last maintained during the period March-September 1974. The next scheduled dredging is after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 1 and 2 are located in the Gulf of Mexico at Latitudes, Longitudes 26°15'15", 97°34'15" and 26°15'50", 97°34'10" respectively. The disposal area and adjacent waters are used for sport and commercial fishing.

Disposal Area No. 3 is located north of the channel on Padre Island. The adjacent properties consist of sand dunes and mud flats.

Disposal Area No. 4 is located south of the channel in Laguna Madre. Adjacent areas are high sand and silt mounds, mud flats, and waters used for sport fishing.

Disposal Areas Nos. 5 and 6 are located south of the channel in Laguna Madre. Adjacent areas contain some high sand and silt mounds and waters used for commercial and sport fishing.

Disposal Area No. 7 is located north of the channel and is surrounded by waters used for sport and commercial fishing.

Disposal Area No. 8 is located southeast of Port Mansfield. Adjacent properties include beach cottages on the west, undeveloped area consisting of sand and mud flats on the south, and waters used for sport fishing on the north and east.

DREDGING BY OTHERS: There has been no significant dredging by the Willacy County Navigation District in the area. However, when dredging is required in the basins the work is usually contracted by the navigation district and the work is performed with the Federal contract in the area. The non-Federal dredging activities are regulated by the Department of the Army permit program.

DESIGNATION OF DISPOSAL SITES: The disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Willacy County Navigation District
Commissioners' Court of Willacy County, Texas
City of Port Mansfield, Texas

ENVIRONMENTAL IMPACT STATEMENT: Continued maintenance dredging of the Port Mansfield Channel will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). An Environmental Statement will not be prepared for the Tributary Channel to Port Mansfield alone. However, an Environmental Statement for the Gulf Intracoastal Waterway and Tributary Channels (Texas Section) will be prepared and will include the Channel to Port Mansfield. The statement is scheduled to be placed on file with Council on Environmental Quality in the fall of 1975 after having been coordinated with the above mentioned agencies.

The shoaling rates in the Port Mansfield project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

1 October 1974

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan will also be considered.

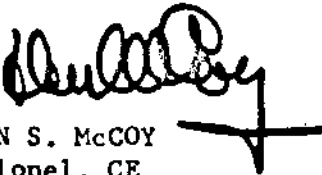
The proposed transportation of this dredged material for the purpose of dumping it in ocean waters will be evaluated to determine that the proposed dumping will not unreasonably degrade or endanger human health, welfare, or amenities of the marine environment, ecological system, or economic potentialities. In making this determination, the criteria established by the Administrator, EPA pursuant to Section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972 shall be applied. In addition, based upon an evaluation of the potential effect which the failure to utilize this ocean disposal site will have on navigation, economic and industrial development, and foreign and domestic commerce of the United States, an independent determination will also be made of the need to dump this dredged material in ocean waters, other possible methods of disposal, and appropriate locations for the dumping.

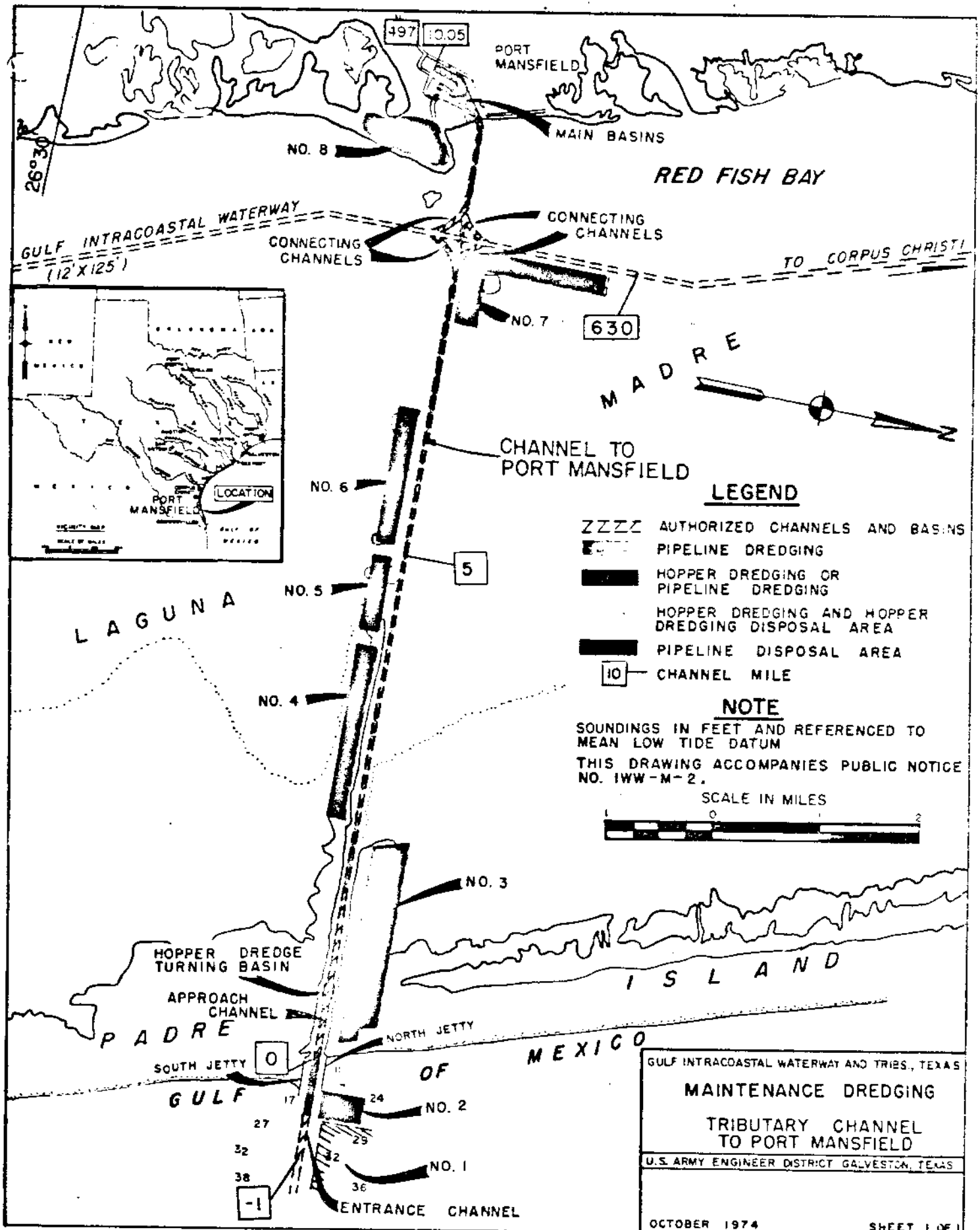
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-2 dated 1 October 1974.

1 Incl
Dwg, Oct 1974


DON S. McCOY
Colonel, CE
District Engineer





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

November 5, 1974

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
Post Office Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

By Public Notice No. IWW-M-2 dated October 1, 1974, you notified the National Marine Fisheries Service (NMFS) of the Corps of Engineers' policy, practice, and procedures to be followed in connection with the deposition of dredged material associated with the new work and maintenance dredging operations of the Gulf Intracoastal Waterway--Tributary Channel to Port Mansfield.

We have reviewed your plans for disposal of dredged material presented in the Public Notice and offer the following comments and recommendations.

The pertinent Bureau of Sport Fisheries and Wildlife (BSFW) report to your office dated March 13, 1972, which received NMFS concurrence, recommended; "A 2,000 foot opening centered at Station 24+000 be provided in the proposed spoil bank south of the waterway and between Corps of Engineers Stations 12+400 and 34+000." According to the scale on sheet 1 of 1 attached to the Public Notice, the opening between Disposal Areas 4 and 5 is only about 700 feet wide and the opening between Disposal Areas 5 and 6 is even narrower, about 600 feet wide. We recommend that the openings total at least 2,000 feet.

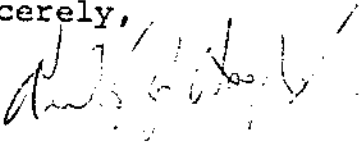
In our comments to BSFW dated March 6, 1972, (attached to their report of March 13, 1972, to you), we recommended that, "Between Stations 34+000 and 39+050 extreme care should be taken to prevent any spillage of spoil into this reach." Your present plans would allow discharge of spoil into the western end of Disposal Area 6 and the eastern end of Disposal Area 7, thus allowing spillage into the opening. Because the waters between these two areas provide important marine fishery habitat, we recommend that until these two lateral ends are leveed, all discharge points be located far enough east of the western end of Disposal Area No. 6 and west of the eastern end of Disposal Area No. 7 to preclude such spillage.

The BSWF report of March 13, 1972, also recommended that "Toe levees be constructed and subsequently refurbished prior to each maintenance dredging on Padre Island" (Disposal Area No. 3) "to prevent spoil from spilling into bay water." In the Public Notice, you state that "Disposal Area No. 3 is a partially confined disposal area . . ." We again recommend that it be totally confined.

For Disposal Areas 5 and 6, you indicated that, "Toe levees will be constructed at some future date . . ." The BSWF report recommended that, "When spoil becomes emergent at 1.5 feet above mean low tide at a distance of 1,500 feet from the centerline of the channel --- toe levees be constructed and subsequently refurbished prior to each maintenance dredging operation on the ends and backsides." Also, you indicate that Disposal Area No. 7 "is an open water disposal area . . .", even though your April, 1971, Approved Plans (File No. IWW 1175-174) state, "When material in disposal areas becomes emergent to an elevation of +1.5 (M.L.T.), along the limiting lines, levees shall be constructed to prevent material from flowing beyond such limits, or the discharge point shall be moved so that material will not flow beyond the points where the elevation is +1.5 or more . . . Point of discharge not to extend beyond limiting lines." We recommend that the April 1971 Approved Plans be followed for Disposal Areas 5, 6, and 7 as soon as possible, with their back limiting lines being placed as near to the Channel as feasible, but no further than 1,500 feet from the centerline of the Channel. In our opinion, Mean High Tide could be used in place of +1.5 M.L.T. for determining the limiting line elevation at which levees would be built.

We appreciate the opportunity to review your plans for maintenance of this Federal project. Please provide the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550, with copies of the project plans you plan to send out with each bid invitation.

Sincerely,



W William H. Stevenson
Regional Director

19 December 1974

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

This is in reply to your letter dated 5 November 1974 concerning Public Notice IHW-M-2 on maintenance dredging of the Gulf Intracoastal Waterway-Tributary Channel to Fort Mansfield.

In paragraph 3 of your letter you refer to the size of openings between Disposal Areas Nos. 4 & 5 and 5 & 6. Due to the small scale of the drawing which accompanies the public notice, some existing openings appear smaller than those which actually exist. The existing openings are located between Stations 21+300 & 22+400, and 25+900 & 26+900, respectively. The two openings total 2,100 feet, and exceed the 2,000-foot minimum width previously recommended.

Your paragraph 4 concerns protection of the opening between the westerly end of Disposal Area No. 6 (Station 34+000) and the easterly end of Disposal Area No. 7 (Station 39+050). A toe levee will be constructed along the specified back limits and ends of each area when the area becomes emergent above Mean High Water and is large enough to contain the dredged material within a perimeter levee system. Until it is feasible to build levees, adequate precautions will be taken to avoid spillage of dredged material in the opening between Stations 34+000 and 39+050.

Your paragraph 5 concerns Disposal Area No. 3. The area is now partially leveed, and toe levees will be built along the remaining unleveed portions of the specified back limit and west end during the next maintenance dredging contract in the reach, provided the area's specified limits are emergent above Mean High Water.

SWCCD-M

19 December 1974

Mr. William H. Stevenson

Your recommendation contained in paragraph 6 applies to leveeing Disposal Areas Nos. 5, 6, and 7. A toe levee will be constructed along the specified back limits and ends of each area when the area becomes emergent above Mean High Water and is large enough to contain the dredged material within a perimeter levee system.

Thank you for your review and comments.

Sincerely yours,

E. D. McGENRE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
National Marine Fisheries
Service
4700 Avenue U
Galveston, Texas 77550



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

IN REPLY REFER TO:

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 11, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

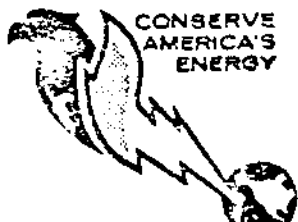
Dear Sir:

By Public Notice No. IWW-M-2, dated October 1, 1974, the U. S. Fish and Wildlife Service was notified of the Corps of Engineers' plan for spoil disposal during maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Port Mansfield, Willacy County, Texas.

We have examined the plan as shown in the Public Notice and compared it with the plan on which our report of March 13, 1972, was based and with the specifications for bids released by the Corps of Engineers in February, 1974. We are pleased to note the two openings separating Disposal Areas 4 and 5 and 5 and 6, respectively, however, it appears that these openings might be significantly less than the 2,000 feet which was recommended in our 1972 report. A minimum of 2,000 feet in openings is needed to permit water circulation and migration of fishes and crustaceans within the Laguna Madre.

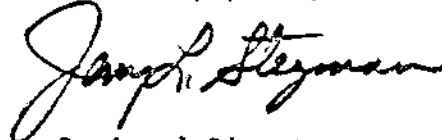
We also note that Disposal Area 3 is only partially confined. Recommendation 4 of our report requested the construction and maintenance of toe levees on Padre Island to prevent spillage into the Laguna Madre. Unconfined spoil in this area could contribute significantly to the destruction and deterioration of fish and wildlife habitat.

In addition, the proposed plans for spoil placement in Areas 6 and 7 do not provide adequate protection for the open water area between these disposal sites, an extremely important marine habitat. Therefore, we suggest that discharge points in these two areas be located far enough from the western end of Disposal Area 6 (34+000) and the eastern end of Disposal Area 7 (39+050) to prevent spillage into this opening. The use of confinement levees will become necessary in future dredging operations.



The opportunity to comment on this notice for maintenance dredging of the Channel to Port Mansfield is appreciated.

Sincerely yours,



Acting Regional Director

cc:

Executive Director, Texas Parks and Wildlife Dept., Austin, Texas
Regional Director, National Marine Fisheries Service, St. Petersburg,
Florida

Area Supervisor, NMFS, Environmental Assessment Div., Galveston, Texas
Regional Administrator, EPA, Reg. VI, Dallas, Texas
Regional Director, Bureau of Outdoor Recreation, Albuquerque, New Mexico
Regional Director, National Park Service, Santa Fe, New Mexico
Superintendent, Padre Island National Seashore, Corpus Christi, Texas
Special Asst. to the Secretary, USDI, SW Reg., Albuquerque, New Mexico
Field Supervisor, FWS, Div. of River Basin Studies, Fort Worth, Texas

19 December 1974

Mr. W. G. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference Mr. Jerry Stegman's letter dated 11 November 1974 concerning Public Notice No. ISW-N-2 on maintenance dredging of the Gulf Intracoastal Waterway-Tributary Channel to Fort Mansfield.

The second paragraph of your letter addresses the size of openings between Disposal Areas Nos. 4 & 5 and 5 & 6. Due to the small scale of the drawing which accompanies the public notice, some openings appear smaller than those which actually exist. The existing openings are located between Stations 21+300 & 22+400, and 25+500 & 26+900, respectively. The two openings total 2,100 feet and exceed the 2,000-foot minimum width previously requested.

The third paragraph of your letter concerns Disposal Area No. 3. The area is now partially leveed, and toe levees will be built along the remaining unleveed portions of the specified back limit and west end during the next maintenance dredging contract in the reach, provided the areas specified limits are emergent above Mean High Water.

The fourth paragraph of your letter concerns protection of the opening between the westerly end of Disposal Area No. 6 (Station 34+000) and the easterly end of Disposal Area No. 7 (Station 39+050). A toe levee will be constructed along the specified back limits and ends of each area when they are emergent above Mean High Water and is large enough to

SWCCO-M

19 December 1974

Mr. W. D. Nelson, Jr.

contain the dredged material within a perimeter levee system. Until it is feasible to build levees, adequate precautions will be taken to avoid spillage of dredged material in the opening between Stations 34+000 and 39+050.

Thank you for your review and comments.

Sincerely yours,

E. D. McTERRY
Chief, Construction-
Operations Division

Copy furnished:
Field Supervisor
U. S. Fish and Wildlife
Service
Custom House, Room 327
Galveston, Texas 77550

FRANK P. BELL III, Chairman
ROBERT W. ST. JOHN, Secretary
D. M. POLLARD, JR., Member
CHARLES R. JOHNSON, Port Director
EUSTY McCHARLEN, Executive Secretary
EMARIE BILLINGSLEA, District Treasurer
C. JOHNSON, Assistant Port Director
ROBINSON, JR., Attorney

Port Director - 610-2202
Residence - 609-2225
Exec. Secretary - 610-2207
Dist. Treasurer - 610-2205
Attorney - 659-2225
Harbormaster - Port Mansfield 644-2202
Assistant Port Director -
Port Mansfield 644-2201

Port of Mansfield

OPERATING UNDER THE AUTHORITY OF
WILLACY COUNTY NAVIGATION DISTRICT
112 STATE 7TH STREET
PATXONVILLE, TEXAS 75350

October 8, 1974

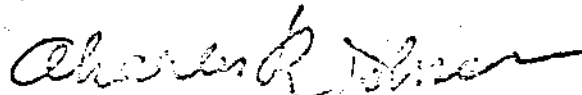
Don S. McCoy
Colonel, CE
District Engineer
Department of the Army
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

Regarding PUBLIC NOTICE NO. IMW-M-2, dated October 1974, this is the same area in which we have been spoiling for many years. We have seen no damages from this area from spoiling as far as fish life is concerned, or in any other regards. We see no need of any change according to the map submitted with the notice.

Sincerely yours,

WILLACY COUNTY NAVIGATION DISTRICT
OPERATING PORT MANSFIELD



CHARLES R. JOHNSON, PORT DIRECTOR

CRJ:rm

SWGCO-M

21 October 1974

Mr. Charles R. Johnson
Port Director
Willacy County Navigation District
Operating Port Mansfield
152 South 7th Street
Raymondville, Texas 78580

Dear Mr. Johnson:

Receipt is acknowledged of your comments concerning Public Notice No. IWW-M-2, dated 1 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway-Tributary Channel to Port Mansfield. Thank you for your review and comments of the project.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

February 4, 1975

CERTIFIED MAIL RETURN RECEIPT REQUESTED - (No. 628546)

Colonel Don S. McCoy
District Engineer
Galveston District
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your plan for maintenance dredging of GIWW Tributary Channel to Port Mansfield as covered in Public Notice No. IWV-M-2 dated October 1, 1974. We have also reviewed your January 6, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

The proposed ocean disposal areas are not included in the Administrator's list of proposed designated disposal areas published in the May 16, 1973, Federal Register. However, the Secretary of the Army, pursuant to his authority under Section 103 (b) of Public Law 92-532, has made an independent determination that this is an appropriate location and that the Corps of Engineers will continue to use this area. I recognize that the Secretary has such authority for site determinations, and I am also aware that a request for approval of Disposal Areas Nos. 1 and 2 and other disposal areas in your District, has been forwarded to the Office of the Chief of Engineers for submittal to the Administrator. Therefore, I do not object to the use of these proposed sites for disposal of non-polluted dredged material.

Your dredging plan is approved for one year provided the following recommendations can be adopted:

1. All material dredged from the channel west of GIWW connecting channels shall be placed in the fully confined Disposal Area No. 8. A control structure shall be used to minimize return of suspended solids to the Bay.
2. Openings between spoil disposal areas shall be maintained such that, in the segment of the channel between the eastern limit

of Disposal Area No. 4 and the western limit of Disposal Area No. 6, no more than 50% of the longitudinal section parallel to the channel is blocked. Openings shall be maintained at sufficient depths to allow maximum possible flow between spoil areas.

3. Levees or sediment curtains shall be utilized to prevent the deposition of dredged material in the open area between Disposal Areas Nos. 6 and 7.
4. Dredged material placed in Disposal Area No. 3 shall be fully contained. Effluent shall be returned to the ship channel through a control structure.

Since, as stated in your public notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,


Regional Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (819005)

Colonel Don S. McCoy
District Engineer
Galveston Engineer
Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your plan to use dredged material to refurbish and restore portions of the Padre Island beach area. We have also reviewed your Supplemental Statement of Findings (Maintenance Dredging, Gulf Intracoastal Waterway-Tributary Channel to Port Mansfield) dated April 18, 1975, in accordance with 33 CFR 209.145.

Your dredged material disposal plan is approved.

Sincerely yours,

[Handwritten signature]
Regional Administrator

SUPPLEMENT NO. 3

GALVESTON BAY TO MATAGORDA BAY

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SUPPLEMENT NO. 3

GALVESTON BAY TO MATAGORDA BAY

SUPPLEMENT NO. 3

GALVESTON BAY TO MATAGORDA BAY

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intra-coastal Waterway (GIWW) main channel section between Galveston Bay and Matagorda Bay. The existing main channel is maintained to a depth of 12 feet and a width of 125 feet. It extends southwesterly from the Texas City Channel via an alternate route in Galveston Bay across the northerly tip of Pelican Island to join a GIWW route from Galveston Channel. The waterway continues southwesterly and intersects with the Offatts Bayou Channel. Turning in a westerly direction, the waterway crosses West Bay, passing north of North Deer Island, to the northwest shoreline of West Bay. A land cut skirts the shoreline of West Galveston Bay to Chocolate Bay. The waterway crosses Chocolate Bay, Oyster Lake, Alligator Slough, and Bastrop Bayou and continues on a southward land cut touching Christmas and Drum Bays, continues through marsh areas to Oyster Creek, and intersects Freeport Harbor Channel. It then follows a land cut route to the Brazos River Diversion Channel and the Brazos River floodgates, crosses Jones Lake and the San Bernard River, skirts the north shore of Cedar Lakes, crossing Cowtrap Bayou, Cedar Lake Bayou, Caney Creek, continues along the north shoreline of East Matagorda Bay to Matagorda, Texas, and crosses the Colorado River and adjoining locks. The main channel continues through a land cut in a southwestward direction crossing Culver Cut, Mad Island Slough, and Oyster Lake and enters into open water on the north shore of Matagorda Bay near Palacios Point. The project also includes a barge mooring basin at the northerly tip of Pelican Island 75 feet wide and 3,000 feet long, a barge mooring basin 110 feet wide and 2,300 feet long in the vicinity of Chocolate Bayou and a barge mooring basin 65 feet wide and 5,000 feet long at Palacios Point. The reach of the GIWW from Galveston Bay to Matagorda Bay utilizes seventy-three disposal areas. The disposal areas are numbered sequentially from the Port Arthur area to Port Isabel. The disposal areas in this section of the waterway are numbered 44 through 116 and are shown on Figures 2 through 19 of the attached public notice. A brief description of these

disposal areas is included in the public notice. These disposal areas are used to contain materials dredged by hydraulic pipeline dredges. The frequency of dredging for various reaches is shown in Table 1 of the public notice. The average quantity of materials dredged per contract is about 2 million cubic yards. The average shoaling rate of this entire section is about 5 million cubic yards per year. The next maintenance dredging within the Galveston Bay to Matagorda Bay reach is scheduled for after June 1976. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. The recorded tonnage handled by ports and moved on the GIWW between Galveston Bay and Corpus Christi Bay was approximately 23,311,000 tons in 1974 and included such commodities as crude petroleum, gasoline, other petroleum products, chemicals, marine shells, minerals, and iron and steel products. The GIWW has grown consistently and has contributed substantially to the regional and national economy. A recent study by Texas A&M University has placed the value of the channel to the State of Texas at a total of more than \$19 billion per year.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located in the Texas region classified as the Coastal Prairies. This reach of the GIWW extends from Galveston Bay to Matagorda Bay and traverses high quality fish and wildlife habitat. It crosses tidal marshes, tidal streams, and low lying uplands. Located in the project area are the Brazoria National Wildlife Refuge, the San Bernard National Wildlife Refuge, and North Deer Island in West Bay which is administered by the National Audubon Society.

3.02 With the exception of portions of Galveston Bay and Matagorda Bay, which have depths generally ranging

from 5 to 12 feet below the mean low tide, the bay areas in the vicinity of the project area have shallow waters with depths less than 4 feet below mean low tide. Most of the shallow water areas contain submerged aquatic vegetation. The bays, tidal marshes, and streams provide high quality habitat used by many species of fish and crustaceans as feeding, breeding, and nursery habitat. The tidal marshes and submerged vegetation also provide important organic material to the bays. Numerous tidal streams and bayous, which intersect the project channel, are important as migratory routes for fish and crustaceans moving to and from upper reaches of the bays, tidal lakes, and marshes.

3.03 Important species of fish and crustaceans using the project area include spotted seatrout, sand seatrout, red drum, black drum, Atlantic croaker, anchovy, sheepshead, menhaden, sea catfish, spot, flounder, striped mullet, brown shrimp, white shrimp, and blue crab. Oysters are found throughout the bays. Sport fishing is intense throughout the project area while commercial fishing is important in Galveston Bay, West Bay, and Matagorda Bay and light elsewhere in the project area.

3.04 Wildlife habitat consists of the bays, tidal marshes, tidal streams, low-lying uplands, and the disposal islands. The bays, tidal marshes, and tidal streams provide feeding, resting, and nesting habitat for many species of waterfowl and other birds, while the tidal marshes and streams also provide important habitat for the American alligator, mink, nutria, and muskrat. The low-lying uplands and the disposal islands provide habitat for mourning dove, raccoon, opossum, rabbit, skunk, coyote, and red wolf. Hunting is light for mourning dove and rabbit and is expected to remain so in the future. Trapping is moderate to light for raccoon, nutria, and muskrat.

3.05 Important species of waterfowl in the project area include the Canada goose, white-fronted goose, snow goose, pintail, shoveler, gadwall, American widgeon, blue-winged teal, green-winged teal, mottled duck, fulvous tree duck, redhead, canvasback, lesser scaup, ring-necked duck,

ruddy duck, and coot. Most of the waterfowl use is by migrants during the winter months. The mottled duck is a resident species while the fulvous tree duck is found primarily during the summer and early fall months. Waterfowl hunting is very important.

3.06 Many other birds use the project area for nesting, feeding, resting, and cover. Among these are pelican, grebe, merganser, cormorant, heron, egret, bittern, ibis, roseate spoonbill, rail, gallinule, gull, tern, plover, sandpiper, common snipe, and peregrine falcon. The American alligator, red wolf, brown pelican, and peregrine falcon are endangered species likely to occur in the project area.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants found in some sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottom. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from

developing. Dredging usually has little effect on motile marine species, as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible, localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, possible resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, creation of suitable substrate for oysters, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Photosynthetic activity along this reach of the GIWW is not a significant contributor to bay productivity, and, therefore, turbidities resulting from open water disposal should have only minimal adverse effects.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy silt layer. Some of the more mobile organisms are able to work upward through the silt while the sessile organisms perish.

4.08 Oyster reefs can be severely affected by siltation, depending on their height above the surrounding level bottom. Low profile reefs in the path of a mud flow can be covered, resulting in loss of any existing oysters. In some cases, the material is not removed by wave action and the reefs become permanently buried. Higher reefs

generally will not be covered by dredged material. In this reach of the channel, numerous oyster reefs exist along the backside of disposal areas and in adjacent bay areas. As recommended by the USF&WS and NMFS, surveys of selected disposal areas will be made to determine the presence of oyster reefs and marsh vegetation within six months prior to beginning any dredging. From these surveys, adjustments in disposal areas will be made on a case by case basis to permit maximum feasible mitigation of adverse effects on oysters and marsh vegetation.

4.09 Swimming animals are the least severely affected by dredging. Because of their motility, they are able to leave an affected area.

4.10 Disposal of dredged materials in open water will cover any vegetation that exists in the disposal area. In this reach all areas that will be used for deposition of sediments have previously been used for this purpose. Therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated, and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.11 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous disposal areas blocking or changing the normal current patterns in bay areas. Past dredging in this reach is not known to have caused any significant adverse effects on circulation.

4.12 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as

impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.13 Sediment samples taken along this reach of the channel in May 1972 were found to exceed EPA criteria of 1/11/71 at some locations for total Kjeldahl nitrogen, volatile solids, oil and grease, mercury, lead, and zinc (Table 13, Volume 1, page 1). Fish kills along this reach, as a result of resuspended pollutants, are considered possible but unlikely. Past dredging is not known to have caused any fish kills; and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.14 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.15 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.16 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.17 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. For this channel reach, changes in vegetation type will be minimal, since the areas to be used for disposal have been used previously, and the changes have already occurred.

4.18 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands as primary food source areas, dredging practices have been changed to avoid disposal in marsh areas wherever practicable. As recommended by the USF&WS and NMFS, surveys of selected disposal sites will be made to determine the presence of oyster reefs and marsh vegetation within six months prior to beginning any dredging. From these surveys, adjustments in disposal areas will be made on a case by case basis to permit maximum feasible mitigation of adverse effects on oysters and marsh vegetation.

4.19 Out of 79,600 acres of marsh adjacent to this reach of the GIWW, approximately 1,930 acres, or 2.4 percent, may be affected by future disposal operations. The 79,600 acres of marsh adjacent to the GIWW does not include marsh areas surrounding the major bays and river inlets. The estimate was prepared by Corps of Engineers personnel from the most recent coast charts available. It has not been practicable to make surveys of each area to determine the exact extent of marsh land within the disposal area limits. The estimates are therefore based primarily on

vegetation cover shown on the coast charts. It is considered that much of the acreage included as marsh to be covered has been covered by past dredging and is no longer marsh. It is believed that reduction of marsh areas caused by dredging of this reach will be minimal.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice, with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. Eight responses to the public notice have been received. Favorable responses were received from the Matagorda County Navigation District and the Port of Houston Authority. Other responses included letters from Transcontinental Gas Pipe Line Corporation and Blue Dolphin Pipe Line Company giving information on the locations of pipelines not shown on the disposal area drawings, and the Department of the Interior indicated the location of two reference marks near disposal area No. 102. The Galveston Regional Group, Sierra Club, responded with a single letter commenting on 5 public notices. The Sierra Club indicated that the notices did not give sufficient recognition to the importance of both natural and previously disturbed habitat and to living organisms in the project areas. The letter also made suggestions for alternatives to be considered and pollutant monitoring programs. All such considerations are routinely made in other project documents, including environmental statements and assessments. Responses from the USF&WS and NMFS reiterated recommendations made during the formal coordination of this reach. In addition, the USF&WS and NMFS recommended that disposal areas Nos. 60, 61, 63, 76, 79, 102, 104, 105, 106, and 111 be examined for the presence of oysters and marsh vegetation

within 6 months prior to dredging, and that contract plans designate discharge point locations for minimizing adverse effects. Selective surveys of these resources will be made by staff biologists as necessary, and all practicable mitigation efforts will be accomplished. However, predesignation of specific pipeline discharge points is not practicable from a contractual standpoint. The intent of this recommendation will be met by adjustment of disposal areas on a case by case basis.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 24 March 1975, the Environmental Protection Agency approved the dredging and dredged material disposal plan (under 33 CFR 209.145) for one year, subject to the following restrictions:

a. Dredged material shall not be placed in the following areas:

Disposal Area No. 60

Disposal Area No. 63 between Station 77+000 and 84+300

Disposal Area No. 75 between Stations 165+000 and 169+000

Disposal Area No. 79

Disposal Area No. 91 west of Station 267+000

Disposal Areas Nos. 93, 94, and 95

Disposal Area No. 96 between Stations 295+400 and 298+000, 302+000 and 310+000

Disposal Area No. 101 between Station 343+800 and 347+000

Disposal Area No. 102 between Stations 354+000 and 370+000

Disposal Area No. 104 between Stations 383+500 and 397+000

b. No dredged material shall be placed or allowed to spill into Cedar Lakes or Cow Trap Lakes (Bayou) at anytime.

c. The backside and ends of each open water disposal area shall be leveed as soon as possible. The back levees shall not be more than 2,000 feet from the centerline of the channel in Galveston Bay and not more than 1,500 feet from the centerline of the channel in West Bay, Chocolate Bay, and Matagorda Bay.

d. The following disposal areas shall be reduced to 50 percent of the area defined in current disposal plans: area Nos. 63, 76, 102, 104, 105, 106, and 111.

e. Disposal areas shall be selected to minimize destruction of valuable fish and wildlife habitat.

f. Effluent from all fully confined disposal areas shall be discharged through control structures into the Gulf Intracoastal Waterway

In a letter dated 9 October 1975 (Volume I, page E-1), EPA modified these restrictions by deleting recommendation d. The remaining recommendations will be complied with as follows:

a. Disposal areas Nos. 60, 79, and 91 will not be used.

b. The local sponsor will be requested to obtain disposal area easement on the north side of the waterway for disposal areas Nos. 63 (between Stations 77+000 and 84+300), 93 and 96 (between Stations 295+400 and 298+000, 302+000 and 310+000) 101 (between Stations 343+800 and 347+000), 102 (between Stations 354+000 and 370+000), and 104 (between Stations 383+500 and 397+000).

c. Disposal areas No. 75 (between Stations 165+000 and 169+000) 94 and 95 will be moved to the north side of the waterway provided a permit can be obtained from the Department of Interior allowing disposal in the San Bernard and Brazoria National Wildlife refuges.

Long-term approval of the dredging plans was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1228
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-N-3
MAINTENANCE DREDGING

8 October 1974

GULF INTRACOASTAL WATERWAY (MAIN CHANNEL) - GALVESTON BAY TO MATAGORDA BAY

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 7 November 1974. Laws under which the proposed dredging is to be reviewed:

- Federal Water Pollution Control Act
- Coastal Zone Management Act of 1972
- National Environmental Policy Act of 1969
- Fish and Wildlife Act of 1956
- Migratory Marine Game-Fish Act
- Fish and Wildlife Coordination Act
- Endangered Species Act of 1973
- National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel) - Galveston Bay to Matagorda Bay.

PROJECT LOCATION: Near the Cities of Galveston, Freeport, and Matagorda in Galveston, Brazoria, and Matagorda Counties, Texas, respectively.

PROJECT DESCRIPTION: This portion of the Federally maintained 125 feet wide Gulf Intracoastal Waterway (GIWW) reaches from the vicinity of the Houston Ship Channel and the Texas City Channel in Galveston Bay to Matagorda Bay. It extends southwesterly from the Texas City Channel via an alternate route in Galveston Bay across the northerly tip of Pelican Island to join a GIWW route from Galveston Channel. The waterway continues southwesterly and intersects with the Offatts Bayou Channel. Continuing, the waterway crosses West Bay north of North Deer Island to the northwest shoreline of West Bay. A land cut skirts the shoreline of West Galveston Bay to Chocolate Bay. The waterway crosses Chocolate Bay, Oyster Lake, Alligator Slough and Bastrop Bayou and continues on a southward land cut touching Christmas and Drum Bays, continues through marsh

areas to Oyster Creek, and intersects Freeport Harbor Channel. It then follows a land cut route to the Brazos River Diversion Channel and the Brazos River floodgates, crosses Jones Lake and the San Bernard River, skirts the north shore of Cedar Lakes, crossing Cowtrap Bayou, Cedar Lake Bayou, Caney Creek, continues along the north shoreline of East Matagorda Bay to Matagorda, Texas, and crosses the Colorado River and adjoining locks. The main channel continues through a land cut in a southwestward direction crossing Culver Cut, Mad Island Slough, and Oyster Lake and enters into open water on the north shore of Matagorda Bay near Palacios Point. The project also includes a barge mooring basin 75 feet wide and 3,000 feet long at Pelican Island; a channel connecting Galveston Channel with the GIWW main channel; a barge mooring basin 110 feet wide and 2,300 feet long in the vicinity of Chocolate Bayou; and a barge mooring basin 65 feet wide and 5,000 feet long at Palacios Point. The main channels, basins and connecting channel are maintained to a depth of 12 feet below mean low tide (Corps of Engineers datum).

DISPOSAL AREAS: The reach of the GIWW from Galveston Bay to Matagorda Bay utilizes seventy-three disposal areas. The disposal areas are numbered sequentially from the Port Arthur area to Port Isabel. The numbered areas in this section of the waterway are 44 through 116 and are used extensively for disposal operations by contract pipeline dredges. The attached Table I summarizes the usual dredging reach and the areas normally utilized.

Disposal Areas Nos. 45, 61-63, 66, 75-76, 80-82, 85, 91-92, 98, 100-106, and 110-112 are partially confined disposal areas located on adjacent banks of the waterway (see Drawing Sheets 2, 4-6, 8, 11 and 13-19). Many of these partially confined areas are located on land and bound on one or more sides by water. Dredge materials will be uniformly deposited along the areas and levees will be constructed at some future date when the emergent areas become large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

Disposal Areas Nos. 46-60, 67-69 and 113-116 are open water areas located in Galveston, Chocolate and Matagorda Bays (see Drawing Sheets 2-4, 6 and 19). Dredged materials will be deposited uniformly along the areas and toe levees will be constructed at some future date when the emergent areas become large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

Disposal Areas Nos. 44, 64-65, 70-74, 77-78, 83-84, 86-90, 99 and 107-109 are confined areas located on adjacent banks to the waterway (see Drawing Sheets 2, 5-11, 13, 17 and 18).

Disposal Areas Nos. 79 and 93-97 are not presently confined areas and are located on adjacent banks of the waterway (see Drawing Sheets 8 and 10-12). Levees will be constructed at some future date when the areas become large enough and perimeter levees will not erode away.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from the waterway consist of sands, silts, and clay. Shoaling in the waterway is a result of alluvial deposits occurring during high water periods and tidal actions in the bayous and bays. The shoaling rate of this section of the waterway is approximately 5 million cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain the waterway. The frequencies for various reaches are shown in Table I. The material is transported by pipeline and placed in Disposal Areas Nos. 44-116. The average quantity of materials dredged per contract is about 2 million cubic yards. One reach of the waterway, North Deer Island to Bastrop Bayou, is currently being maintained. The next scheduled maintenance work will be after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 44 is located southeast of the waterway on Pelican Island. The area is surrounded by Galveston Bay on the west, north and east, and an industrial area and Seawolf Park on the south. The bay area is used for sport and commercial fishing.

Disposal Area No. 45 is located northwest of the waterway. The area is surrounded by waters of the Galveston Bay which are used for sport and commercial fishing.

Disposal Areas Nos. 46-60 are located in Galveston and West Bays at Latitudes, Longitudes 29°19'55", 94°50'10"; 29°20'00", 94°50'50"; 29°19'30", 94°51'20"; 29°19'00", 94°52'10"; 29°18'20", 94°50'25"; 29°18'40", 94°51'25"; 29°18'10", 94°53'15"; 29°17'25", 94°53'12"; 29°17'05", 94°53'30"; 29°16'50", 94°54'15"; 29°17'05", 94°54'50"; 29°17'30", 94°55'50"; 29°17'25", 94°56'40"; 29°16'50", 94°57'15"; and 29°16'45", 94°57'55" respectively. The disposal areas and adjacent waters are used for sport and commercial fishing.

Disposal Areas Nos. 61-63 are located southeast of the waterway and are bound by marsh areas and West Bay. The bay waters in the vicinity of the areas are used for sport and commercial fishing.

Disposal Areas Nos. 64-66 are located northwest of the waterway and are bound by marsh and low-lying areas.

Disposal Areas Nos. 67-69 are located in Chocolate Bay at Latitudes,

Longitudes 29°10'05", 95°07'40"; 29°09'40", 95°08'20"; and 29°09'05", 95°08'30" respectively. The disposal areas and adjacent waters are used for sport and commercial fishing.

Disposal Areas Nos. 70-79 are located on the northwest and east banks of the waterway. The surrounding areas are undeveloped and marsh areas.

Disposal Areas Nos. 80-82 are located northwest of the waterway and are surrounded by recreational and boating facilities.

Disposal Area No. 83 is located southeast of the waterway and is bound by a small boat marina used for commercial and recreational vessels on the west, by an undeveloped grassy area on the east, by the waterway on the north and by Quintana Beach Road on the south.

Disposal Area No. 84 is located north of the waterway and is bound by undeveloped and grazing areas on the east and north and FM 495 on the west.

Disposal Areas Nos. 85-91 are located southeast of the waterway and are bound by sand dunes, grazing lands, marsh, and undeveloped areas.

Disposal Area No. 92 is located northeast of the waterway and is bound by a County Road, undeveloped and recreational areas on the north, a County Road on the east, the waterway on the south and a lake on the west.

Disposal Areas Nos. 93-96 are located south and southeasterly from the waterway. The areas are bound by Cedar Lakes, marsh, and undeveloped areas.

Disposal Area No. 97 is located southeast of the waterway. It is bound by weekend houses used for recreational purposes on the north and by sand dunes and grass areas on the south, east and west.

Disposal Area No. 98 is located southeast from the waterway. Adjacent areas are sand dunes, undeveloped areas, and a private slip.

Disposal Area No. 99 is located north of the waterway and is bound by weekend cottage areas surrounded by Caney Creek on the west and north and GIWW on the south.

Disposal Area No. 100 is located south of the waterway and is bound by grass and low-lying areas.

Disposal Areas Nos. 101-106 are located south of the waterway and are bound by the Matagorda Bay on the south, GIWW on the north, and on the east and west by grass, marsh and undeveloped areas.

Disposal Area No. 107 is located southeast of the waterway and City of Matagorda, Texas. The area is bound on the north by GIWW, on the west by the Colorado River, on the east by Farm Road 2031, and on the south by undeveloped low-lying areas.

Disposal Areas Nos. 108-110 are located southeast of the waterway and are bound by marsh, grazing land, and undeveloped areas.

Disposal Areas Nos. 111-112 are located southeast of the waterway and are bound by Matagorda Bay on the south, GIWW on the north, and by grazing lands, marsh and grass areas on the east and west.

Disposal Areas Nos. 113-116 are located in Matagorda Bay at Latitudes, Longitudes 28°34'55", 96°11'45"; 28°34'20", 96°12'10"; 28°33'45", 96°12'40"; and 28°33'15", 96°13'00" respectively. The disposal areas and adjacent waters are used for sport and commercial fishing.

DREDGING BY OTHERS: The Bridge Harbor Marina, Houston Oil and Mineral Corporation and Gulf Oil Corporation are principal organizations recently performing dredging operations in the vicinity of the Federal project. The estimated quantity of materials dredged during the last 12 months is 100,000 cubic yards. Non-Federal dredging activities are regulated by Department of the Army Permit Program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. Coordination of disposal areas is being performed on a reach-by-reach basis since coordination of the overall disposal plan is incomplete.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Galveston County
Commissioners' Court of Brazoria County
Commissioners' Court of Matagorda County
Galveston County Navigation District No. 1
Brazos River Harbor Navigation District of Brazoria County
Matagorda County Navigation District No. 1

City of Galveston
City of Freeport
City of Matagorda

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of the Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A separate Environmental Statement will not be prepared for this reach of the GIWW. An Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) is being prepared and the final is scheduled to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies and others.

The shoaling rates in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-3

8 October 1974

with specific reference to Public Notice No. IWW-M-3 dated 8 October 1974.



DON S. McCOY
Colonel, CE
District Engineer

- 2 Incl
1. Table 1
2. Dwg, Oct 74

TABLE I

8 October 1974

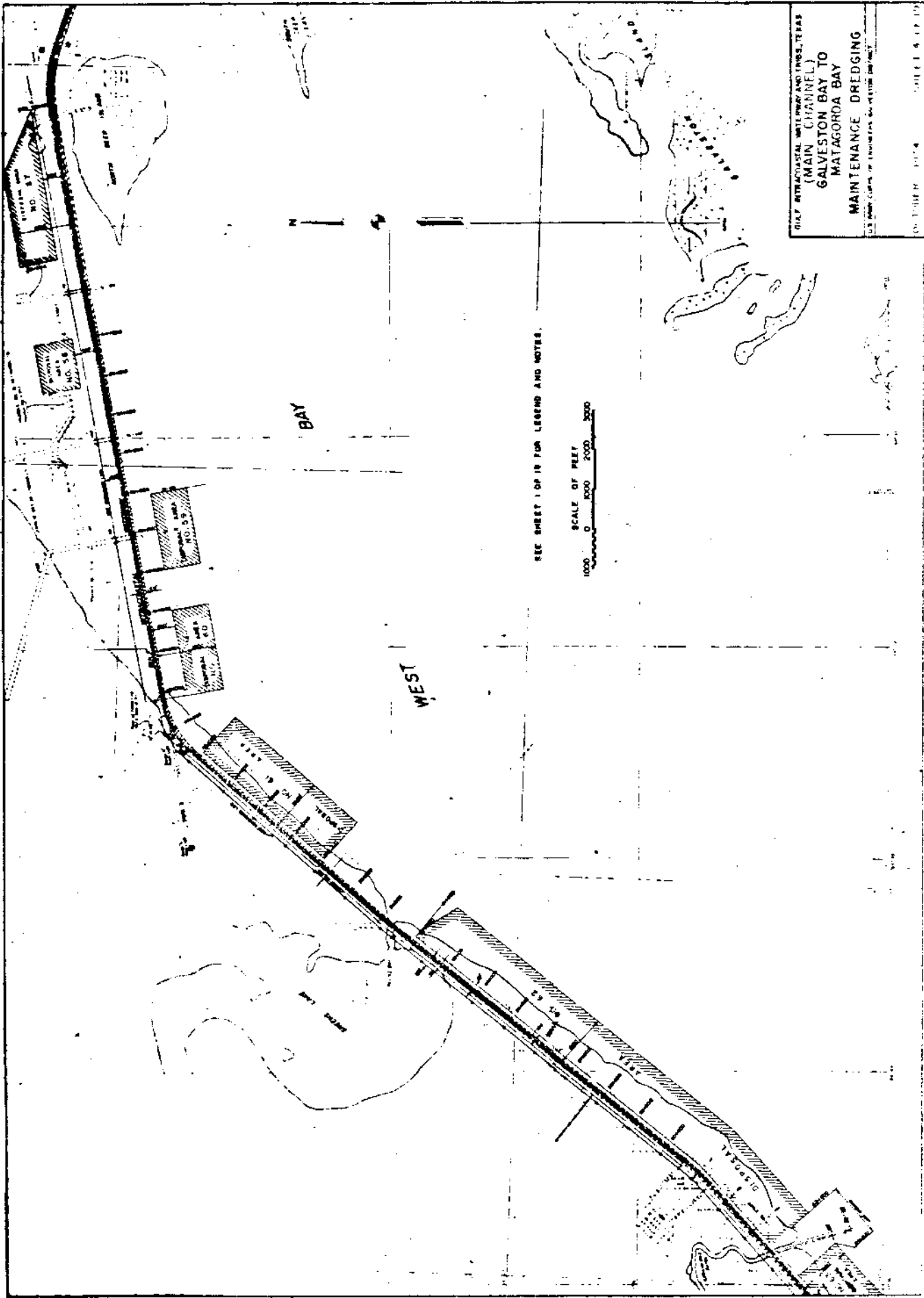
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL)
GALVESTON BAY TO MATAGORDA BAY REACHES

Section of Main Channel	Depth Below Mean Low Tide (Feet)	Bottom Width (Feet)	Length of Channel (Feet)	Dredging Frequency (Monthly)	Annual Shoaling (Cubic Yards)	Disposal Area		Type of Disposal Area
						Numbers Normally Used	Disposal Area	
Texas City Channel Junction to North Deer Island	12	125	48,706	24	500,000	44*	45	Confined
GIWW Route via Galveston Channel	12	125	15,200	24	(1)	46 - 49, 52, 53*	54* - 56	Partially Confined
						50 and 51		Open Water
North Deer Island through Chocolate Bay	12	125	90,830	24	750,000	57 - 60, 67*, 68*-69	61 - 63, 66	Open Water
Chocolate Bay to Freeport Harbor	12	125	94,600	60(2)	750,000	64 - 65	79	Partially Confined
								Confined
Freeport Harbor to Cedar Lakes	12	125	56,400	24	1,000,000	83*-84*, 86-90*	85, 91*-92*	Confined
Cedar Lakes to Colorado River	12	125	185,000	24	1,000,000	93 - 96	99, 107	Partially Confined
								Not Confined
Colorado River to Matagorda Bay	12	125	99,000	24	1,000,000	98, 100 - 106	96 - 97	Confined
								Partially Confined
						108 - 109	110 - 112	Confined
						113 - 116		Partially Confined
								Open Water

(1) Included in Annual Shoaling Quantity for Texas City Channel Junction to North Deer Island.

(2) Selected reaches.

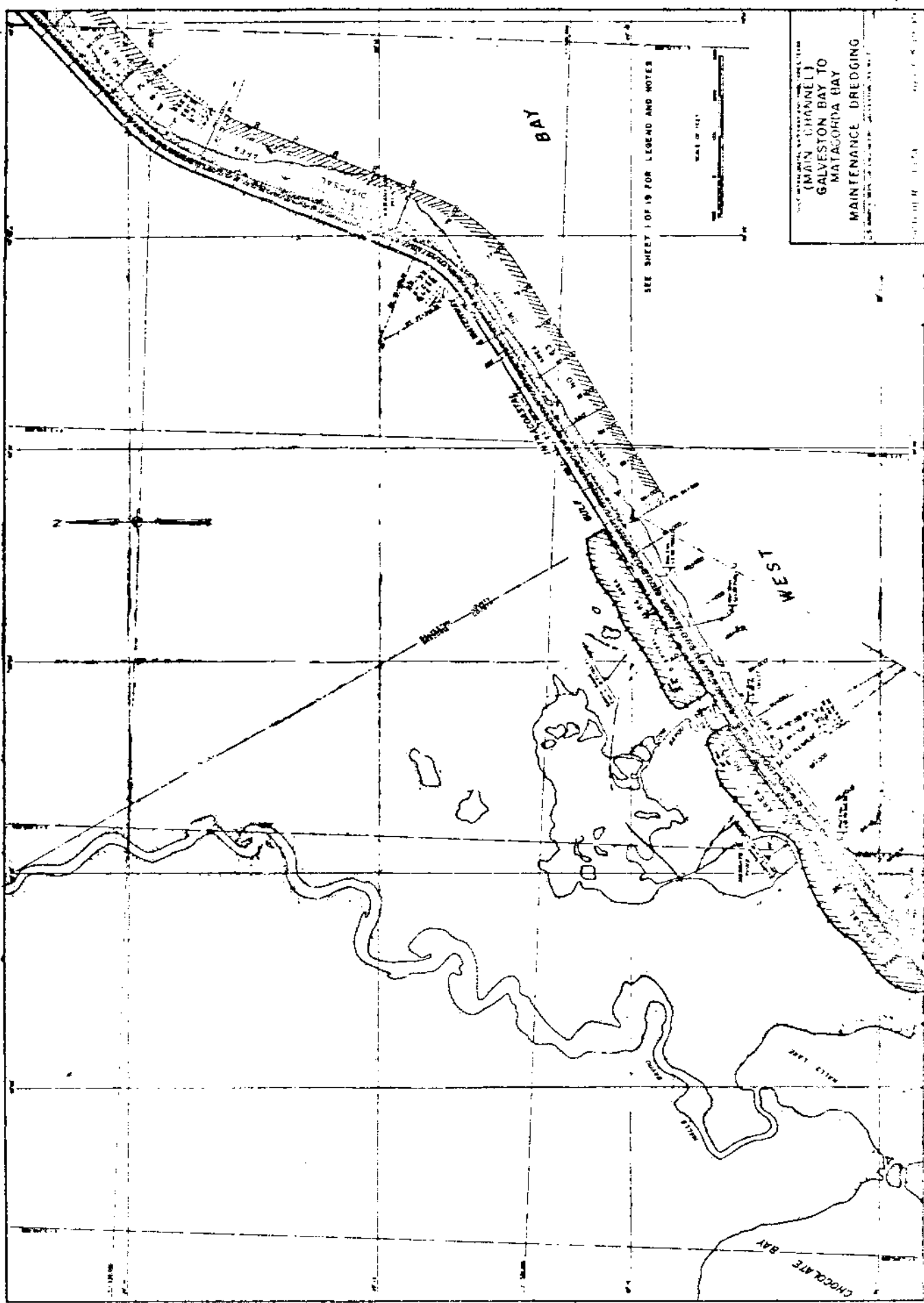
* Disposal area also used on another Federally maintained project.



SEE SHEET 1 OF 19 FOR LEGEND AND NOTES.

SCALE OF FEET
 0 1000 2000 3000

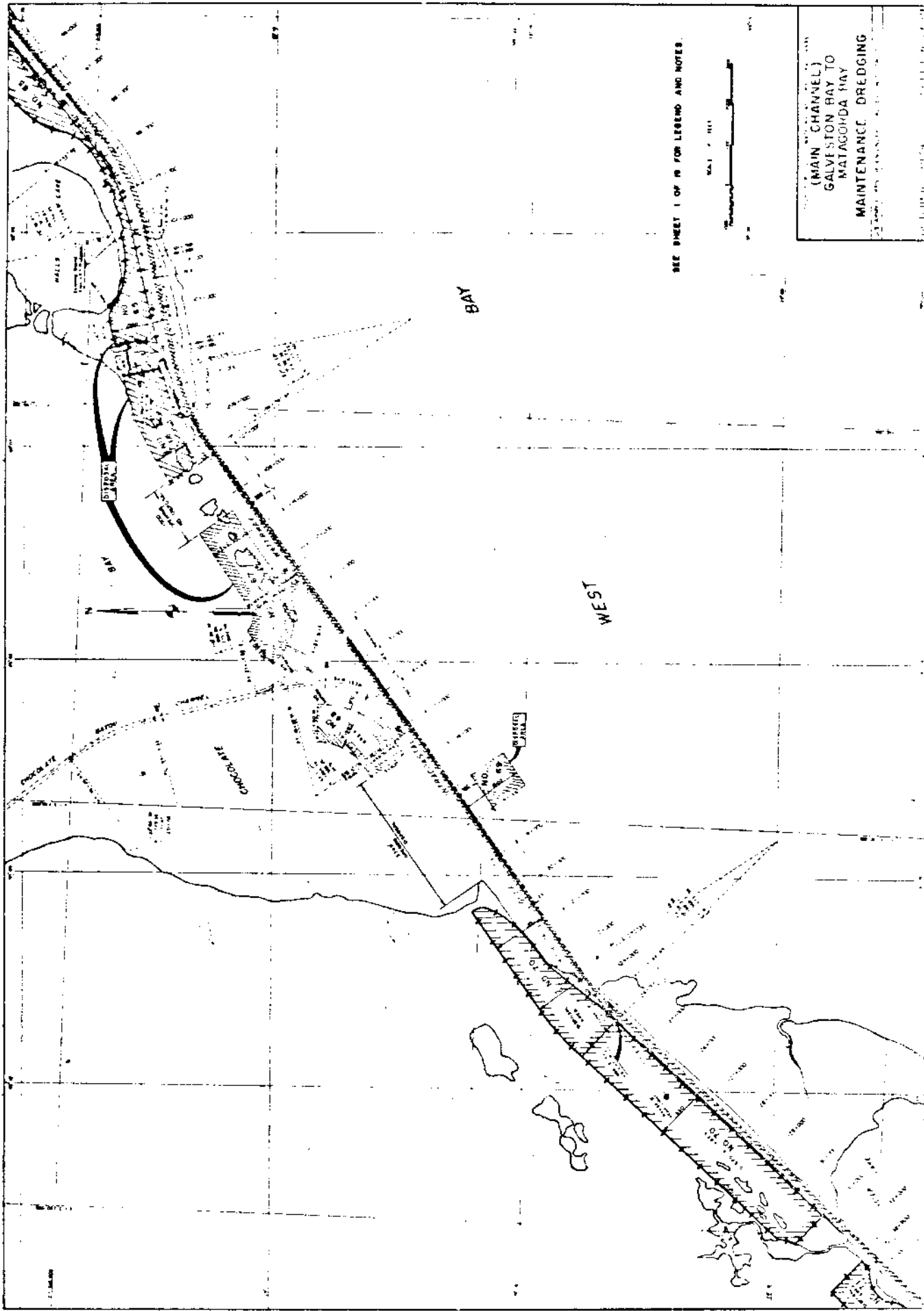
DAIRY METEOROLOGICAL WATERWAY AND TUNNELS, TEXAS
 (MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, Galveston District



SEE SHEET 1 OF 19 FOR LEGEND AND NOTES

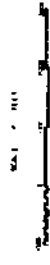


(MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORHA BAY
 MAINTENANCE DREDGING



(MAIN CHANNEL)
GALVESTON BAY TO
MATAGORDA BAY
MAINTENANCE DREDGING

SEE SHEET 1 OF 16 FOR LEGEND AND NOTES.



WEST

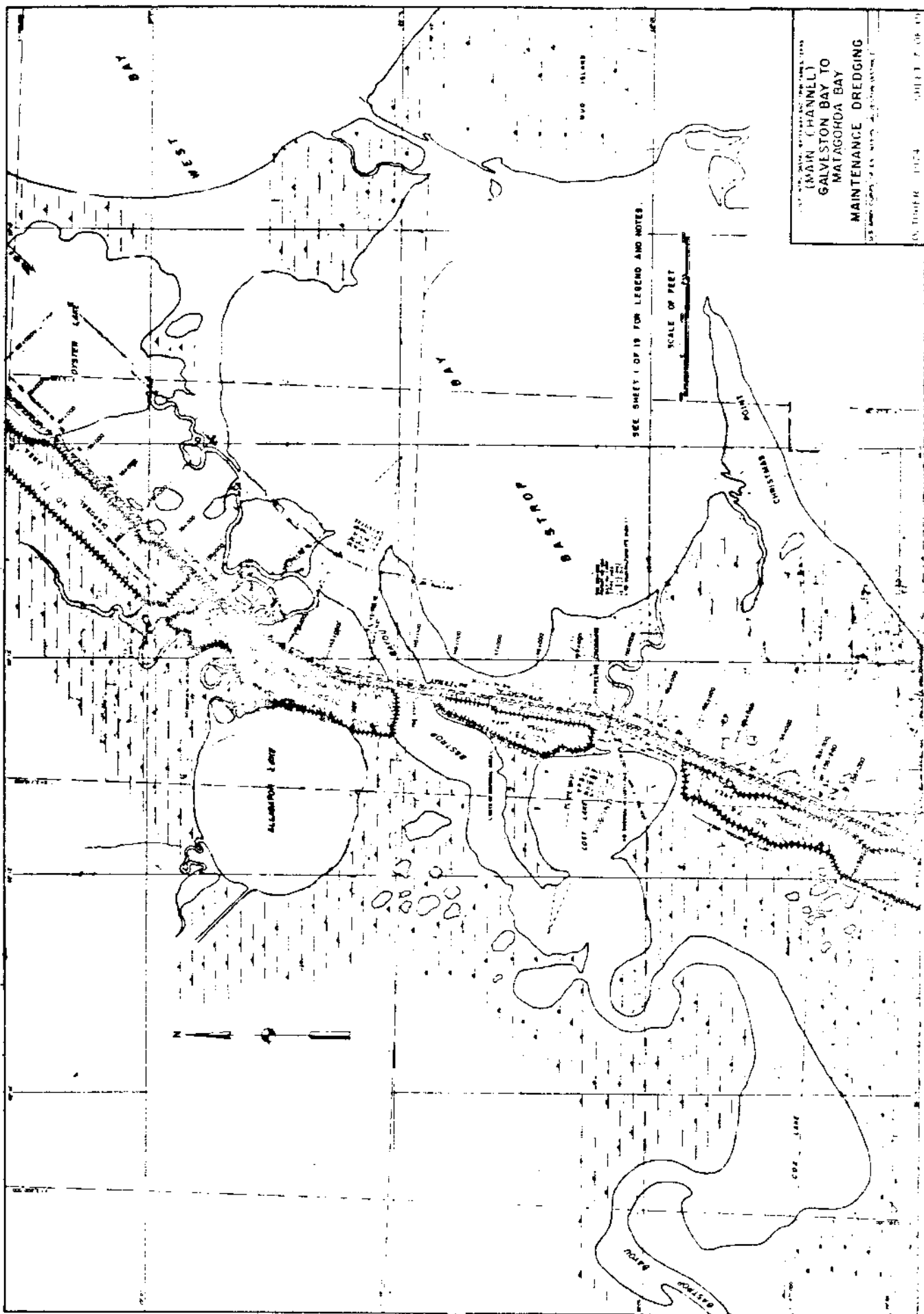
BAY

DREDGED AREA

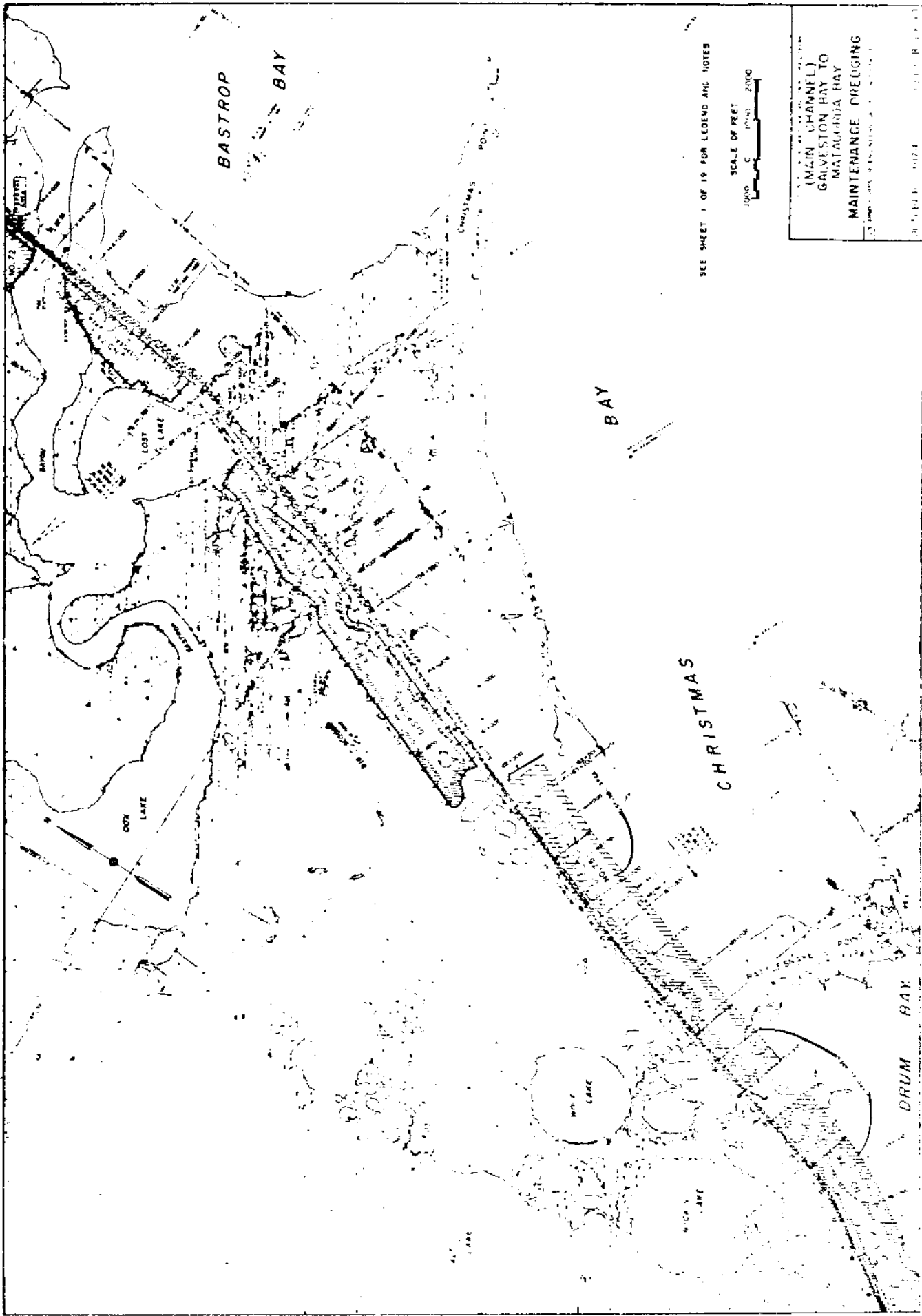
WALLS

CONCRETE

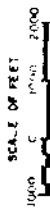
DREDGED CHANNEL



U.S. NAVY HYDROGRAPHIC SURVEY OFFICE, WASHINGTON, D.C.
 (MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING
 U.S. NAVY HYDROGRAPHIC SURVEY OFFICE, WASHINGTON, D.C.
 SHEET 7 OF 19

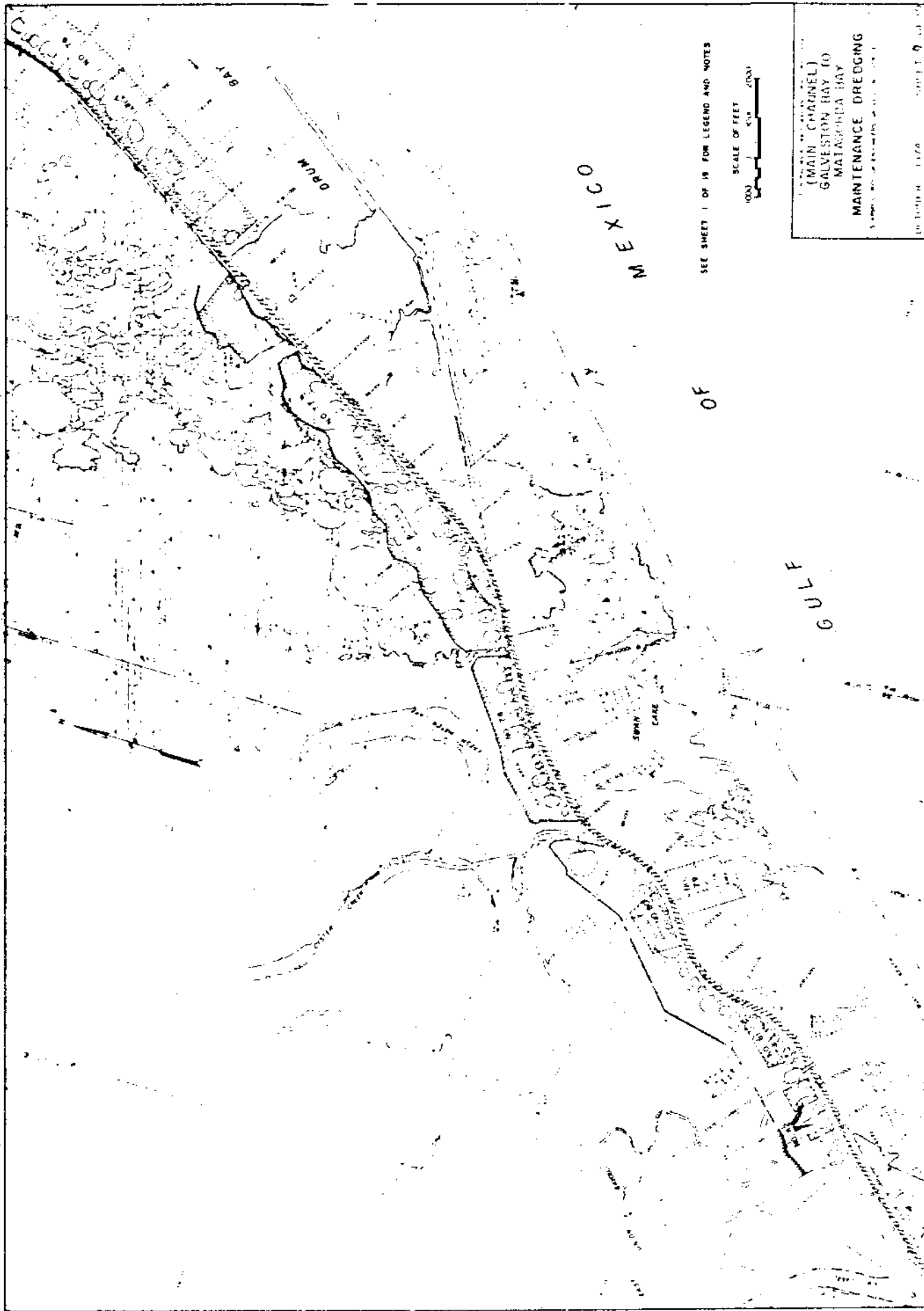


SEE SHEET 1 OF 19 FOR LEGEND AND NOTES

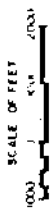


(MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING

NO. 72

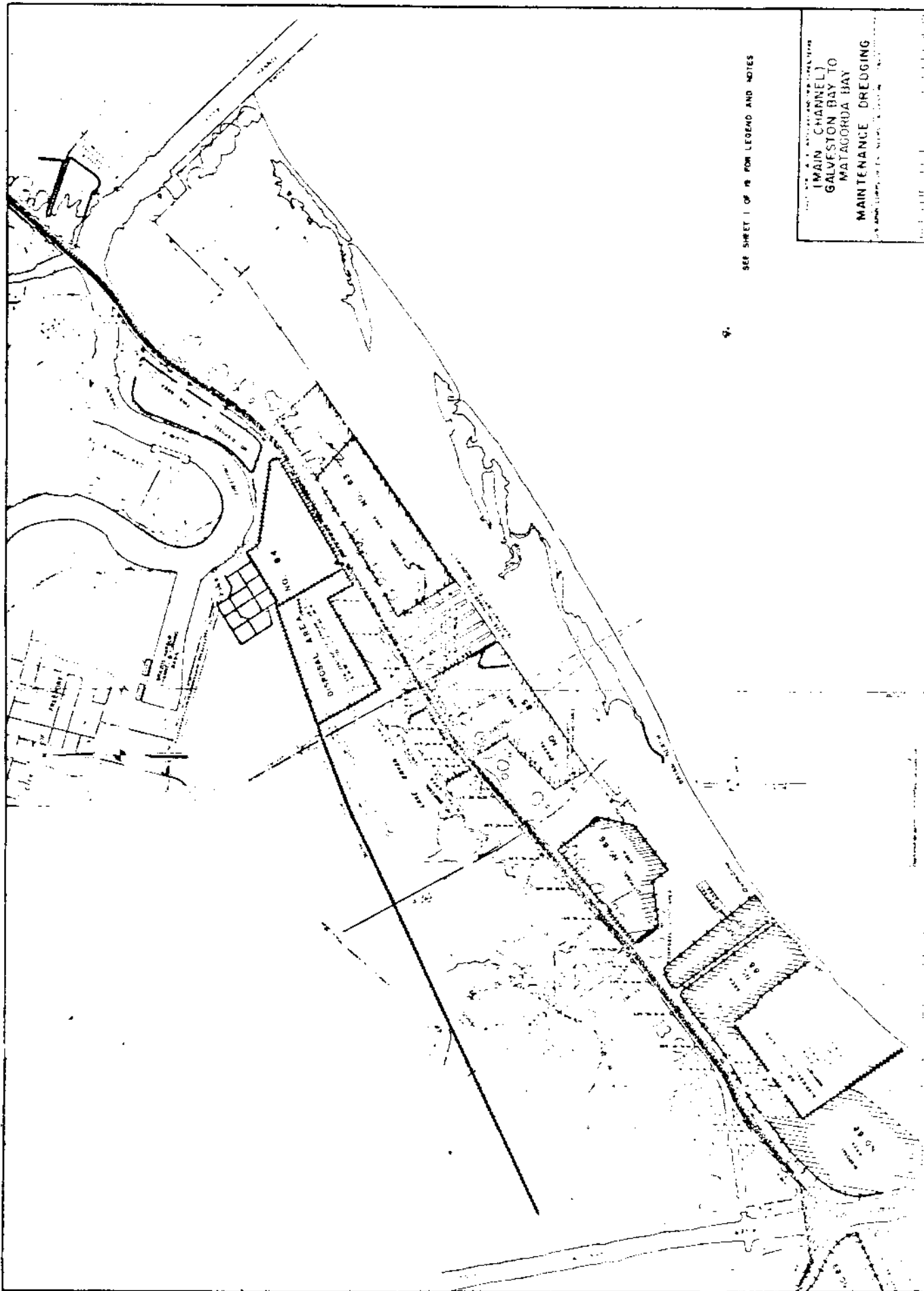


SEE SHEET 1 OF 19 FOR LEGEND AND NOTES



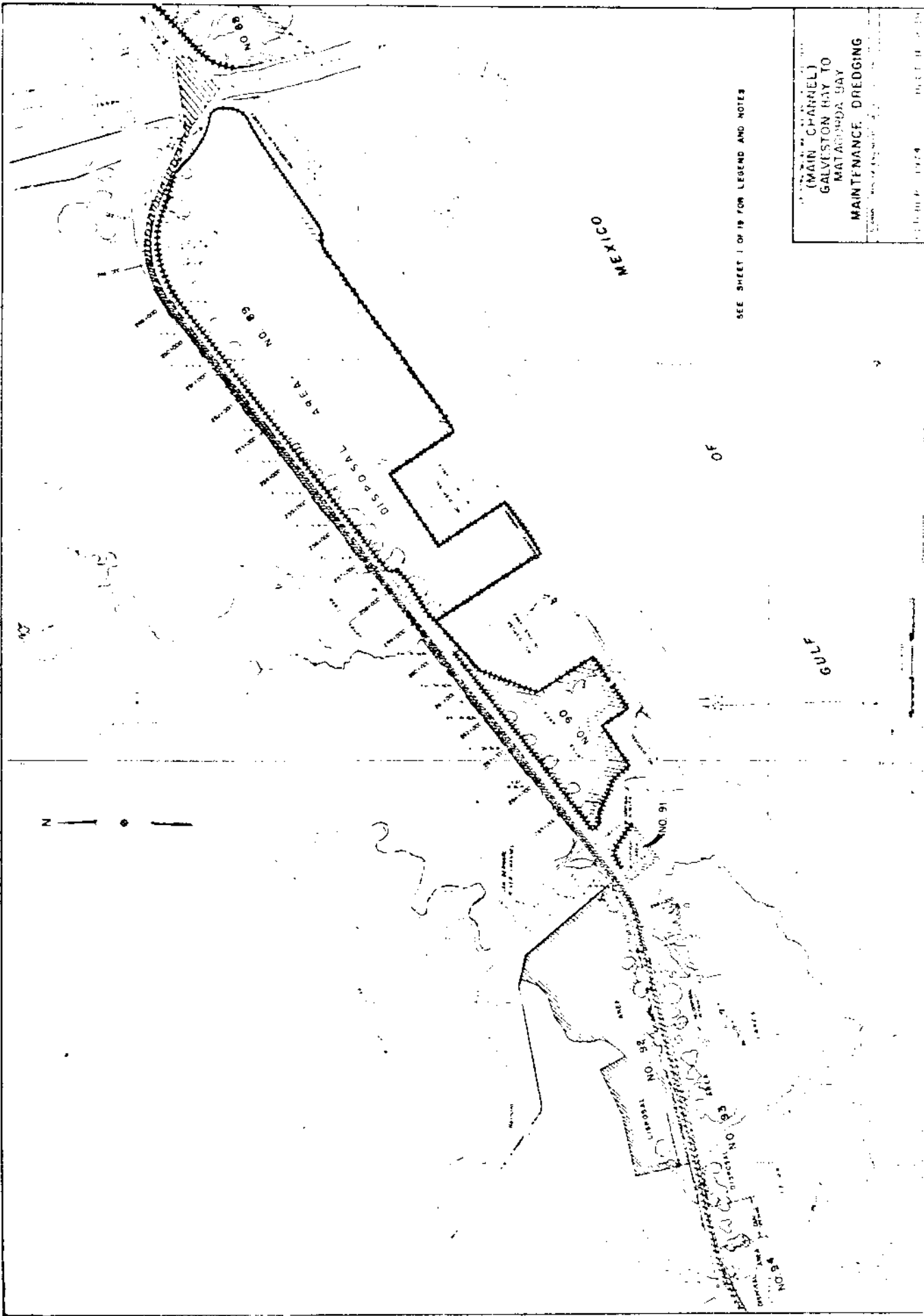
(MAIN CHANNEL)
GALVESTON BAY TO
MATAGORDA BAY
MAINTENANCE DREDGING

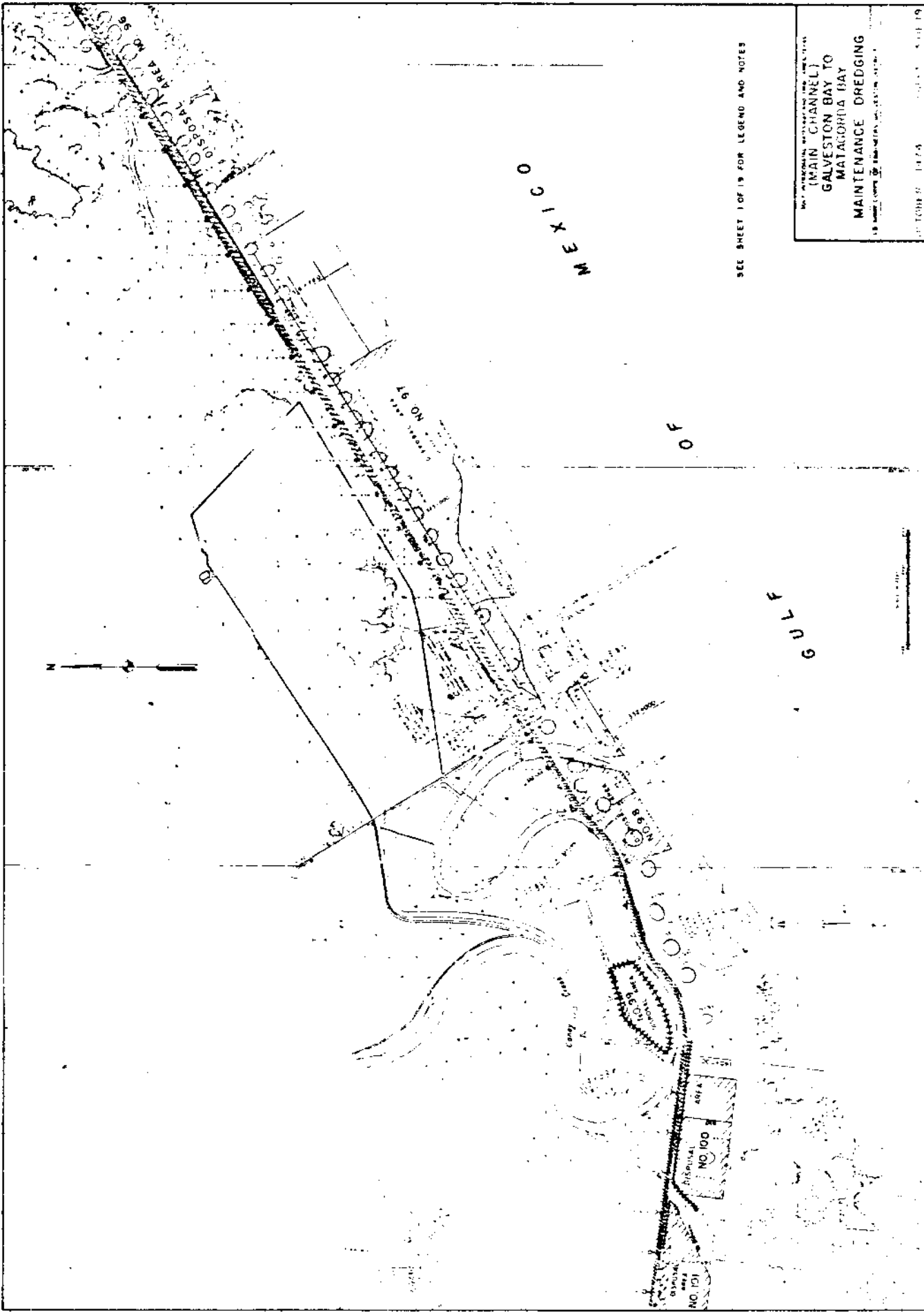
NO. 11414 N. 1172A SHEET 9 OF 19



SEE SHEET 1 OF 18 FOR LEGEND AND NOTES

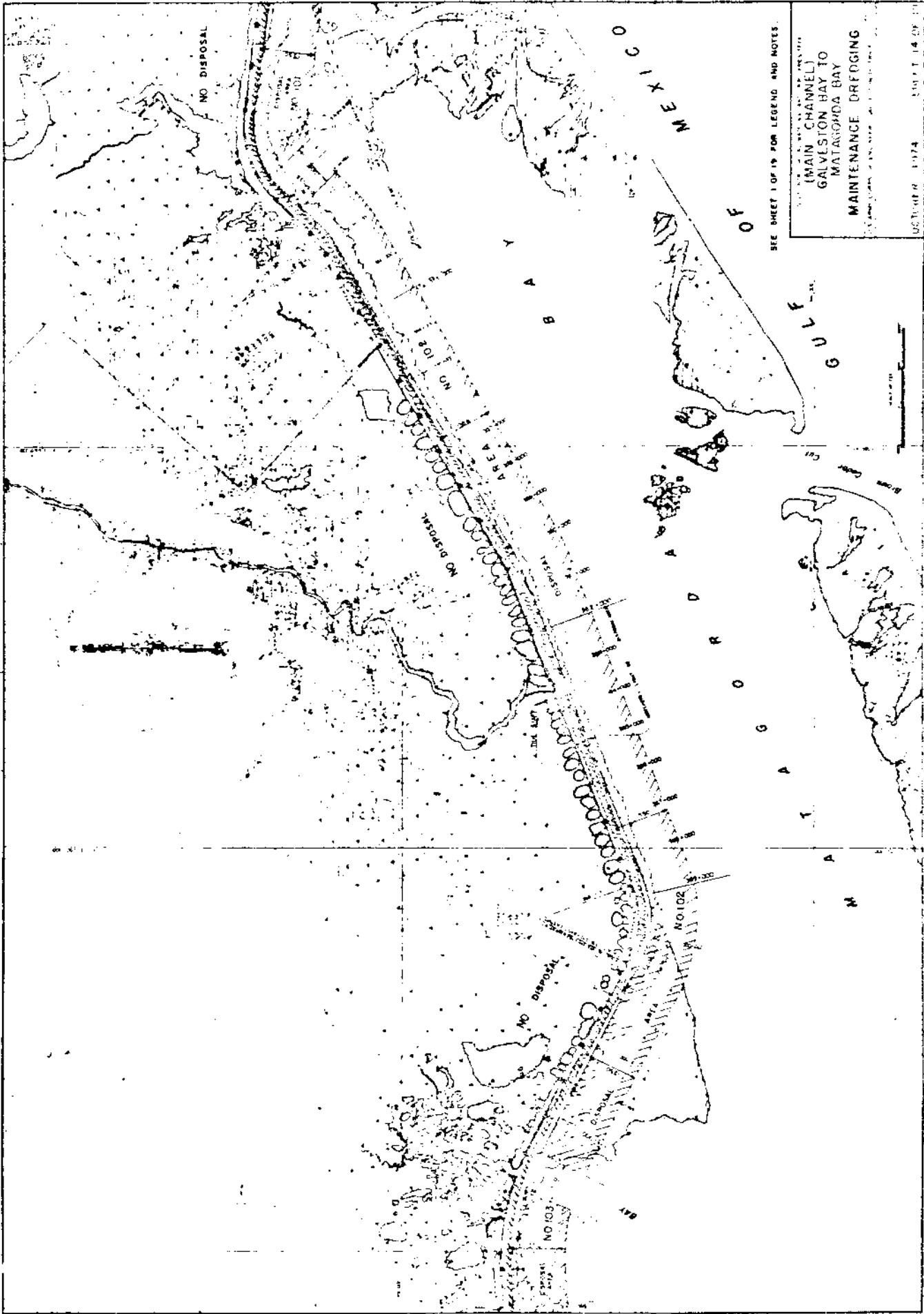
MAIN CHANNEL
GALVESTON BAY TO
MATAORDA BAY
MAINTENANCE DREDGING





SEE SHEET 1 OF 19 FOR LEGEND AND NOTES

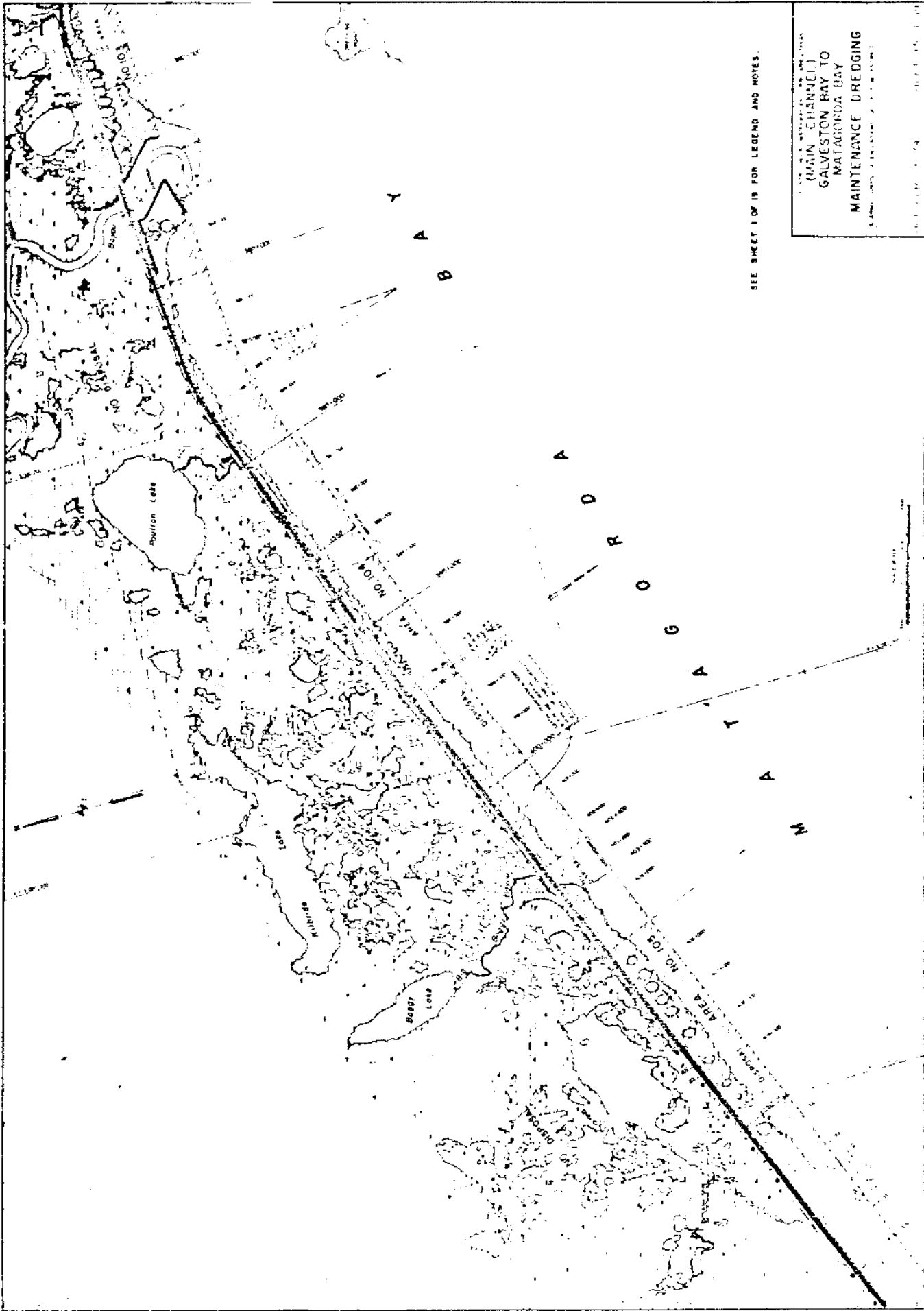
PROJECT INFORMATION SHEET
 (MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, Galveston District
 PROJECT NO. 1475
 SHEET NO. 19



SEE SHEET 1 OF 19 FOR LEGEND AND NOTES.
 (MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING

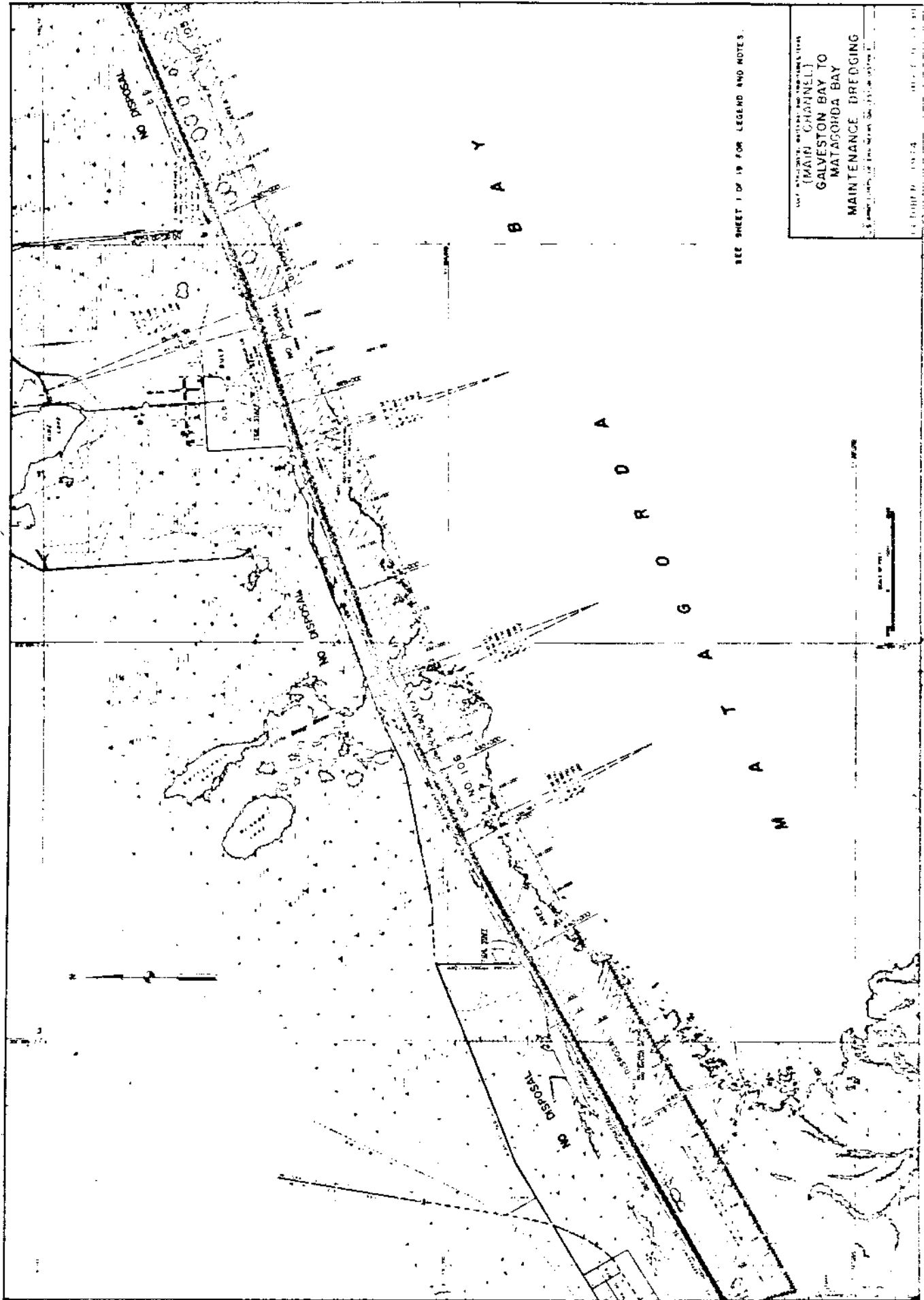
U.S. NAVY 1974 SHEET 14 OF 19

54



SEE SHEET 119 FOR LEGEND AND NOTES.

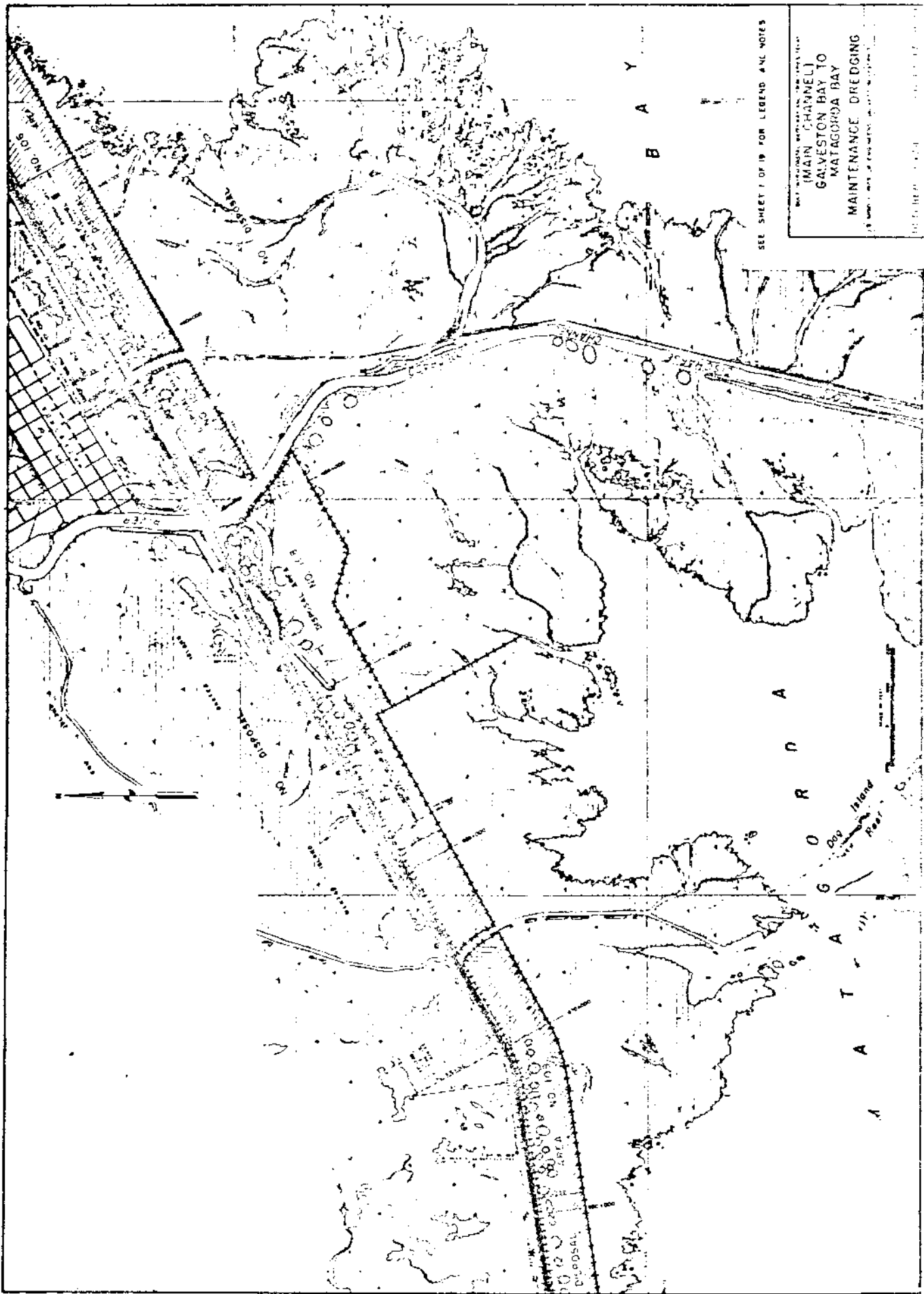
(MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING



SEE SHEET 1 OF 19 FOR LEGEND AND NOTES.

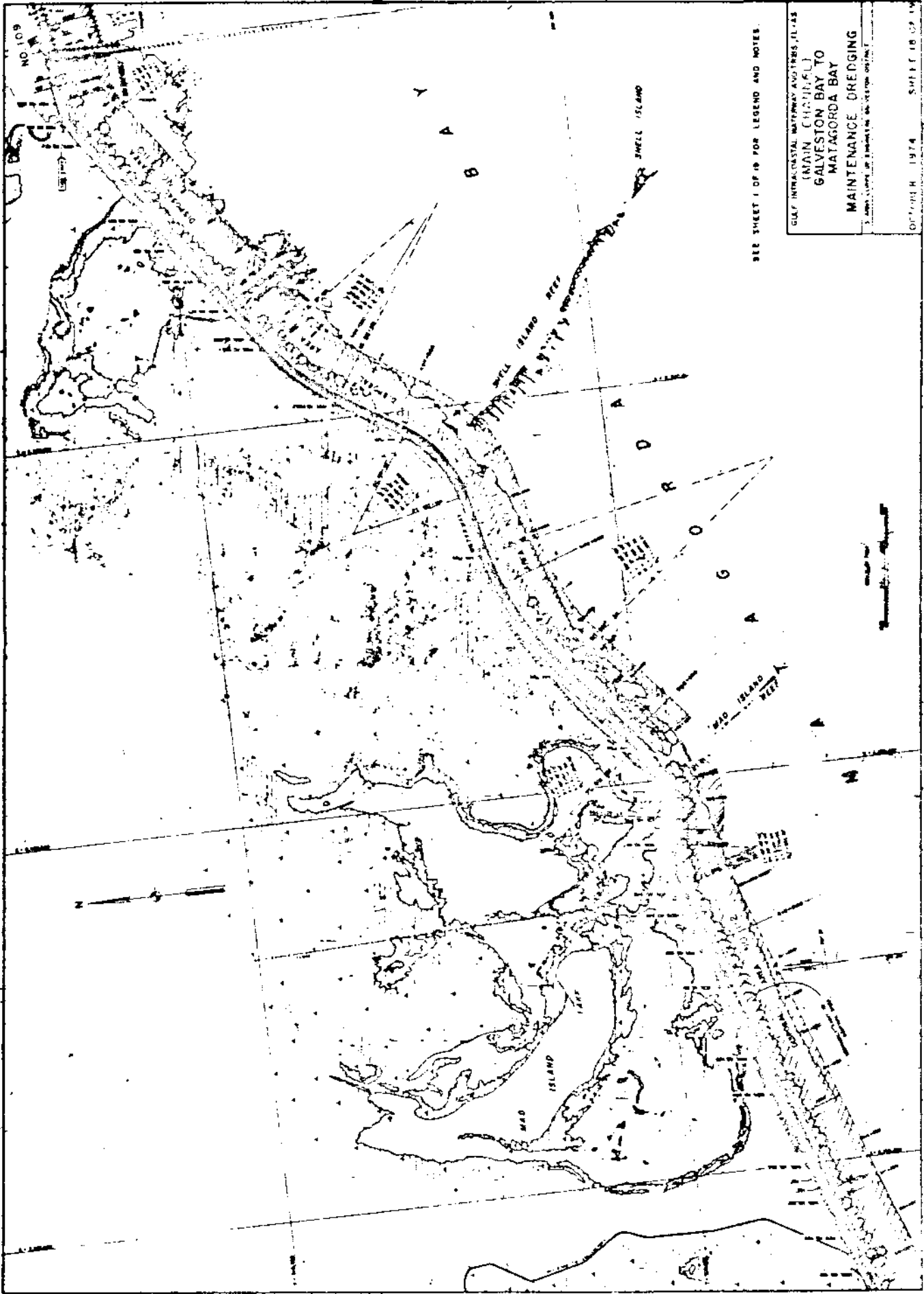
UNIT STATES COAST AND GEODETIC SURVEY
 (MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING

NO. 1100 1974



SEE SHEET OF 19 FOR LEGEND AND NOTES

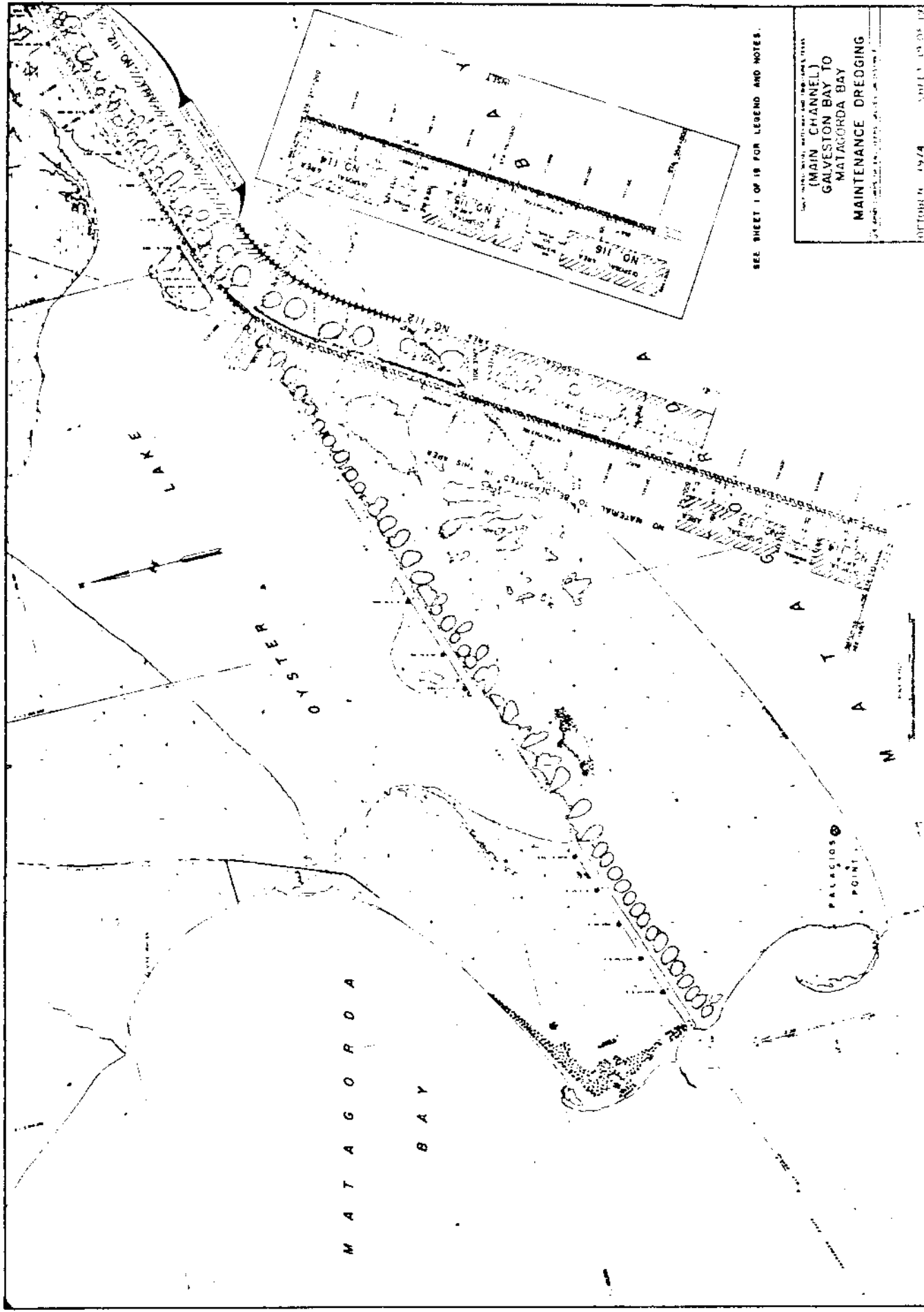
(MAIN CHANNEL)
 GALVESTON BAY TO
 MATAGORDA BAY
 MAINTENANCE DREDGING



NO. 109

SEE SHEET I OF 18 FOR LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY AND OTHERS, TEXAS
(MAIN CHANNEL)
GALVESTON BAY TO
MATAGORDA BAY
MAINTENANCE DREDGING
Scale: 1:50,000



SEE SHEET 1 OF 18 FOR LEGEND AND NOTES.

(MAIN CHANNEL)
 GALVESTON BAY TO
 MATA GORDA BAY
 MAINTENANCE DREDGING

OCTOBER 1974

SCALE 1/8" = 100'

MATA GORDA
 BAY

LAKES

OYSTER

PALACIOS
 POINT

SILICON

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 12, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice No. IWW-M-3, dated October 8, 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway from Galveston Bay to Matagorda Bay.

The U. S. Fish and Wildlife Service transmitted a report on this maintenance dredging project to the Corps of Engineers on April 13, 1972. A review of the information presented in the public notice reveals that a number of spoil areas which our report recommended not be used are still being considered for use. By letters dated March 27, 1973, and April 19, 1973, Mr. Weldon M. Gamel of your Construction-Operations Division informed us that the easements for the recommended alternate spoil disposal sites between Stations 383+500 and 397+000 and also between Stations 77+000 and 84+300 were unobtainable. However, we have not been apprised as to why other recommended alternate disposal sites have not been accepted. The following spoil area segments listed in Recommendation No. 3 of our report are still included in the plan even though we recommended against their use:

The reach between Stations 165+000 and 169+000 (part of Area No. 75)

The reach between Stations 267+000 and 294+700 (Areas Nos. 93, 94, and 95)

The reach between Stations 302+000 and 310+000 (part of Area No. 96)

The reach between Stations 343+800 and 347+000 (part of Area No. 101)



The reach between Stations 354+000 and 370+500 (part of Area No. 102)

Alternate spoil disposal sites located north of the waterway, which were recommended for use in lieu of the aforementioned disposal segments included:

For Area No. 75, the reach between Stations 165+000 and 169+000

For Area No. 93, the use of Area No. 92; for Area No. 94, the reaches between Stations 277+500 and 278+000, and between Stations 278+800 and 284+800; and for Area No. 95, the reach between Stations 285+570 and 294+500

For Area No. 96, the reach between Stations 320+000 and 310+000

For Area No. 101, the reach between Stations 343+800 and 347+000

For Area No. 102, the reach between Stations 354+000 and 370+500

A recent (October 29, 1974) aerial survey of the Gulf Intracoastal Waterway from Galveston Bay to Matagorda Bay was conducted by personnel of our Galveston field office. Extremely valuable fish and wildlife habitat was observed adjacent to and, in some cases, within the confines of Disposal Areas Nos. 60, 61, 63, 76, 79, 102, 104, 105, 106, and 111. Inasmuch as there are no feasible alternate disposal sites for these areas, it is requested that the Corps of Engineers notify the U. S. Fish and Wildlife Service, the Texas Parks and Wildlife Department, and the National Marine Fisheries Service, prior to commencement of work in these disposal areas. Representatives of one or more of these agencies then will be available for on-site assistance in selecting points of discharge so that spoil material will be released in least damaging locations.

Appreciation is extended for the opportunity to comment on this public notice.

Sincerely yours,



Deputy Regional Director

cc:

Executive Director, Texas Parks and Wild. Dept., Austin, Tex.
 Regional Director, Nat'l Mar. Fish. Serv., St. Petersburg, Fla.
 Area Supervisor, NMFS, Envr. Assmt. Div., Galveston, Tex.
 Regional Director, BOR, Albuquerque, N. Mex.
 Regional Administrator, EPA, Reg. VI, Dallas, Tex.
 Special Asst. to the Secretary, USDI, SW Reg., Albuquerque, N. Mex.
 Field Supervisor, FWS, Div. of River Basin Studies, Galveston, Tex.

6 February 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1305
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference Mr. Jerry Stegman's letter dated 12 November 1974 concerning Public Notice No. IHW-N-3 on maintenance dredging of the Gulf Intra-coastal Waterway from Galveston Bay to Matagorda Bay.

Paragraph 2 of the letter refers to reaches of channel from Stations 385+500 to 397+000 and 77+000 to 84+300. As mentioned in your letter, these areas have been unobtainable. However, we will resume our attempts to obtain easements for these reaches.

We have reviewed the five reaches of channel where you express concern about the location of disposal areas, and feel we can comply with your comments as follows:

Reach 1 (Stations 165+000 to 169+000)- As this area is located in the Brazoria National Wildlife Refuge, a letter permit will be necessary from the Department of the Interior that is acceptable to our Real Estate Division for this area for a width of not less than 1,500 feet from the centerline of the channel. We will relocate that portion of Disposal Area No. 75 from the south side to the north side of the channel during our next dredging contract along this reach, provided a suitable permit is obtained.

Reach 2 (Stations 267+250 to 284+700)- In reviewing this reach with our Real Estate Division it was determined that we do not have a current easement for that portion of Disposal Area No. 92 between Stations 272+500 and 276+500. We will request that an easement be obtained for the area. If we are successful, we will substitute that portion of Disposal Area No. 92 to replace Disposal Area No. 93. The remainder of this reach is within the San Bernard National Wildlife Refuge. Additionally, after we have been furnished a letter permit by the Department of the Interior that is acceptable to our Real Estate Division for these

6 February 1975

Mr. W. G. Nelson, Jr.

areas for a width of not less than 1,500 feet from the centerline of the channel, we will relocate Disposal Areas Nos. 94 and 95 from the south side to the north side of the channel.

Reach 3 (Stations 302+000 to 310+000)- For Disposal Area No. 96, we will move the area from the south side to the north side of the channel, using an area 1,500 feet wide, the next time we dredge along this reach.

Reach 4 (Stations 343+000 to 347+000)- We have been unable to obtain an easement for use of the north side of the channel as a disposal area. However, we will continue our attempts to acquire an easement for the area. When we are successful in obtaining an easement 1,500 feet wide, we will move Disposal Area No. 101 from the south side to the north side of the channel.

Reach 5 (Stations 354+000 to 370+500)- We have been unable to obtain an easement for use of the north side of the channel as a disposal area. However, we will continue our attempts to acquire an easement for the area. When we are successful in obtaining an easement 1,500 feet wide, we will move Disposal Area No. 102 from the south side to the north side of the channel.

Finally, you have requested that we notify your agency, along with the Texas Parks and Wildlife Department, and the National Marine Fisheries Service prior to commencement of work in the vicinity of Disposal Areas Nos. 60, 61, 63, 76, 79, 102, 104, 105, 106, and 111. The agencies referenced have been on our mailing list for several years and presently receive plans and specifications for each dredging job as advertised. Our records also indicate that most of the field offices and some main offices of the agencies you mention have been furnished our tentative dredging schedules for several years. Additionally, advance notices have been furnished prior to mailing plans and specifications. We have initiated plans to make surveys of the referenced disposal areas, as determined necessary by our staff biologist. Based on their findings, we will make adjustments to our disposal plans on a case by case basis. However, we cannot concur in your suggestion that discharge points be predesignated for each contract. Predesignation of discharge points is not feasible from a contractual standpoint and is not consistent with your prior recommendations.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Field Supervisor
U. S. Fish & Wildlife
Service
Custom House, Room 327
Galveston, Texas 77550

E. D. McGINNIE
Chief, Construction-
Operations Division

9 October 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Department of the Interior
Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference is made to your letter dated 12 November 1974 concerning Public Notice IWM-M-3 and your letters dated 21 February 1975 and 23 May 1975 concerning Public Notice IWM-M-13, all regarding maintenance dredging of the main channel of the Gulf Intracoastal Waterway. Copies of your letters and our replies thereto are attached for your ready reference.

Copies of the Department of Commerce, National Marine Fisheries Service letters dated 18 November 1974 and 7 March 1975 with copies of our replies are also attached for your information. All of the correspondence contains recommendations and/or comments relating to the elimination of disposal areas or portions of disposal areas along the GIM, between Galveston and Corpus Christi Bay.

This letter pertains to those areas where property adjoining the GIM is under the control of the Department of the Interior, Fish and Wildlife Service. Your agency along with the National Marine Fisheries Service recommended that portions of disposal areas 75, 94, 95 and 96 be eliminated and that an acceptable alternative would be to place and confine the dredged material within levees on the north side of the channel. It is assumed you are agreeable to making the alternative areas available for our use. Since confining the material within levees establishes a finite useful life for a disposal area, it is necessary for us to seek permits for the entire portion of the area to be relocated. Therefore, it is requested that you issue permits per your recommendations for a strip of land adjacent to our existing north right-of-way line and extending 1350 feet from the channel centerline between Stations 165+000 and 169+000, Stations 277+500 and 278+000, Stations 278+800 and 284+000, Stations 285+750 and 294+500, and Stations 302+000 and 310+000.

SNGCO-M

9 October 1975

Mr. W. O. Nelson, Jr.

In addition to the above, the Fish and Wildlife Service and the National Marine Fisheries Service recommended that disposal area 128 be eliminated and that areas 127 and 129 be confined within levees. This recommendation was made prior to the last maintenance dredging of this reach of the channel. In accordance with the recommendation, area 128 was not used and areas 127 and 129 were leveed, resulting in depletion of practically all available capacities between Stations 775+500 and 804+000.

In order for us to continue to comply with the intent of the recommendations, replacement disposal areas are required. We have reviewed our long-term requirements in this area and for the reach of channel between Stations 775+000 and 804+000 a minimum of 300 acres are required. It is not necessary that the acreage be in one tract. It would be preferable if four areas about equally spaced along the channel and no more than 1,000 feet from the channel could be made available. However, each area should have a minimum size of 50 acres.

Please review this matter and advise me as to your intentions concerning the permits. If you know of other alternatives, we would be interested in discussing them. If you have any questions or need additional information, please call J. D. Bissell, AC 713-763-1211, Ext. 315.

Sincerely yours,

5 Incl

1. USEFWS ltr, 12 Nov 74
w/reply 6 Feb 75
2. USEFWS ltr, 21 Feb 75
w/reply 25 Apr 75
3. USEFWS ltr, 23 May 75
4. NMFS ltr, 18 Nov 74
w/reply 18 Feb 75
5. NMFS ltr, 7 Mar 75
w/reply 25 Jun 75

DON S. McCOY
Colonel, Corps of Engineers
District Engineer



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

November 18, 1974

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
Post Office Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

By Public Notice No. IWW-M-3 dated October 8, 1974, you notified the National Marine Fisheries Service (NMFS) of the Corps of Engineers' policy, practice, and procedures to be followed in connection with the disposal of dredged material associated with the maintenance dredging operations of the Gulf Intracoastal Waterway (Main Channel) - Galveston Bay to Matagorda Bay.

The Bureau of Sport Fisheries and Wildlife (BSFW) by letter to your office dated April 13, 1972, commented on plans depicting the proposed plans for spoil disposal during maintenance dredging of this segment of the Gulf Intracoastal Waterway. The NMFS assisted in the preparation of the recommendations and concurred in the report as indicated by our letter dated September 22, 1971, to the BSFW Regional Director which concurred in a draft of that report.

Subsequent to participating in the preparation of the BSFW report, we have become aware of several oyster beds that had developed and become commercially productive by the spring of 1974 within spoil disposal areas in west Galveston Bay along this waterway between North Deer Island and Greens Bayou. Some of these oyster beds were reported to be located approximately between Corps of Engineers Stations 41+500 and 44+200 and also between Stations 50+000 and 50+500. Both areas have become productive, apparently due to increased fresh water inflows from Highland and Greens Bayous during the last two years. Lower salinity waters tend to control the incidence of disease and parasites in the oysters. Your proposed Disposal Area No. 60 lies completely within the first area, whereas Disposal Area No. 61 has been located so as to avoid both areas.

The location of productive oyster beds along this waterway and open bay disposal sites are subject to change from year to year. The amount of productive tidal marsh developing on the backsides of these emergent open bay disposal areas is also subject to change from year to year.

For the reasons discussed above and in the BSWF letter of April 13, 1972, the NMFS makes fourteen recommendations concerning the disposal of dredged material along this waterway. Recommendations 3 through 14 are similar to recommendations we previously concurred in but are resubmitted because you have not fully incorporated them into the plans as presented in this public notice.

The NMFS recommends that:

(1) Disposal Area No. 60 not be used until such time as the NMFS determines that it no longer supports commercially productive oyster beds. Spoil intended for this area could be placed in Disposal Areas 59 and 61.

(2) Within six months prior to any maintenance dredging, the open bay disposal areas be examined for presence of oyster beds and tidal marsh. From this survey, pipeline discharge points should be designated so as to cause the least amount of impact to oysters and areas of tidal marsh as feasible.

(3) That portion of Disposal Area No. 63 lying between Stations 77+000 and 84+300 be eliminated. An acceptable alternative would be to place and confine spoil on the north side of the channel between Stations 77+000 and 84+300, with the backside of the disposal area being no further than 1,350 feet from the centerline of the channel.

(4) That portion of Disposal Area No. 75 lying between Stations 165+000 and 169+000 be eliminated. An acceptable alternative would be to place and confine the spoil on the north side of the channel between Stations 165+000 and 169+000, with the backside of the disposal area being no further than 1,350 feet from the centerline of the channel.

(5) That portion of Disposal Area No. 91 which lies west of Station 267+000 and all of Disposal Areas 93, 94, and 95 be eliminated so that no spoil material would be placed in Cedar Lakes on the south side of the channel between Stations 267+000 and 294+400. Dredged material intended for these spoil areas could be placed on the north side of the channel in Disposal Area No. 92 and three separate previously-used disposal areas located between Stations 277+500 and 278+000; 278+800 and 284+000; and 285+750 and 294+500. These new disposal areas should be confined with the backside of each disposal area being no further than 1,000 feet from the centerline of the channel. Spoil material should not be allowed to spill into Cow Trap Lakes (Bayou) at anytime.

(6) That portion of Disposal Area No. 96 lying between Stations 302+000 and 310+000 be eliminated. An acceptable alternative would be to place and confine the spoil on the north side of the channel in a previously used disposal area between Stations 302+000 and 310+000, with the backside of the disposal area being no further than 1,000 feet from the centerline of the channel.

(7) That portion of Disposal Area No. 101 lying between Stations 343+800 and 347+000 be eliminated. An acceptable alternative would be to place and confine the spoil on the north side of the channel between Stations 343+800 and 347+000, with the backside of the disposal area being no further than 1,350 feet from the centerline of the channel.

(8) That portion of Disposal Area No. 102 lying between Stations 354+000 and 370+000 be eliminated. An acceptable alternative would be to place and confine the spoil in two separate previously used disposal areas located on the north side of the channel between Stations 354+000 and 363+400 and Stations 363+800 and 370+500, with the backsides of the disposal areas being no further than 1,000 feet from the centerline of the channel.

(9) That portion of Disposal Area No. 104 lying between Stations 383+500 and 397+000 be eliminated. An acceptable alternative would be to place and confine the spoil in two separate disposal areas located on the north side of the channel between Stations 383+500 and 389+000, and 391+000 and 397+000, with the backsides of these disposal areas being no further than 1,000 feet from the centerline of the channel.

(10) Unconfined disposal areas should be confined as soon as, and with the backside levees as near to the channel, as feasible. However, no spoil should be discharged or allowed to become emergent at a distance any further than 2,000 feet from the centerline of the channel in Galveston Bay and 1,500 feet from the channel centerline in the open waters of West Bay, Chocolate Bay, and Matagorda Bay. Spoil placed in unconfined disposal areas should be discharged slightly over the crests of the existing spoil banks, with the points of discharge being moved laterally and frequently to permit the uniform build-up of spoil materials. Each emergent bank should have a backside shoreline equally distant from the waterway.

(11) Prior to each maintenance dredging operation, all existing confinement levees be refurbished.

(12) Drainage of confined areas be controlled by weirs located so that the disposal effluent will drain directly into the Gulf Intracoastal Waterway.

(13) Daily surveillance of the disposal of dredged materials be conducted so that accidental spillage of spoil materials outside of confined areas will be extremely unlikely, and of short duration should it occur.

(14) Prior to issuance of contracts for maintenance dredging, the Corps of Engineers should submit the specific plans to the Federal and state fish and wildlife agencies, including the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550, for review. This submission should include the proposed discharge points and the results of the oyster bed-tidal marsh survey.

Thank you for the opportunity to review and comment on the maintenance plans of this authorized Federal project.

Sincerely,

William H. Stevenson
Regional Director

18 February 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries
Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference your letter dated 18 November 1974 concerning Public Notice No. LW-M 3 on maintenance dredging of the Gulf Intracoastal Waterway, Galveston Bay to Matagorda Bay.

We have reviewed your recommendations and feel we can comply as follows:

Recommendation No. 1 - We will review the use of Disposal Area No. 60 the next time dredging occurs along this reach of the GIW. At that time, we will determine whether the area should be used.

Recommendation No. 2 - We have initiated plans to make surveys as you have suggested and as determined necessary by our staff biologists. Based on their findings, we will make adjustments to our disposal plans on a case by case basis. However, we cannot concur in your suggestion that discharge points be predesignated for each contract. Predesignation of discharge points is not feasible from a contractual standpoint and is not consistent with previous U. S. Fish and Wildlife Service recommendations and your Recommendation No. 10.

Recommendation No. 3 - We have been unable to obtain easements for use of the north side of the channel between Stations 77+000 and 84+300 as a disposal area. We will continue actions to acquire an easement, and when we are successful in obtaining an easement 1,500 feet wide from the centerline of the channel, we will move that portion of Disposal Area No. 63 between Stations 77+000 and 84+300 from the south side to the north side of the channel.

Recommendation No. 4 - Since Disposal Area No. 75 is located in the Brazoria National Wildlife Refuge, a letter permit will be necessary from the Department of the Interior that is acceptable to our Real Estate Division

S&GCO-M

18 February 1975

Mr. William H. Stevenson

for this area with a width of not less than 1,500 feet from the centerline of the channel. We will relocate that portion of Disposal Area No. 75 between Stations 165+000 and 169+000 from the south side to the north side of the channel during our next dredging contract along this reach, provided a suitable permit is obtained.

Recommendation No. 5 - Pursuant to a Bureau of Sport Fisheries and Wildlife report dated 13 April 1972, page 8, item 14, your description of this reach should be corrected to read 267+250 to 294+400 rather than 267+000 to 294+400. In reviewing the reach with our Real Estate Division it was determined that we do not have a current easement for that portion of Disposal Area No. 92 between Stations 272+500 and 274+500. We will initiate the necessary action to obtain an easement for the area. If we are successful, we will substitute that portion of Disposal Area No. 92 to replace Disposal Area No. 93. The remainder of this reach is within the San Bernard National Refuge. Upon receipt of a letter permit from the Department of the Interior that is acceptable to our Real Estate Division for these areas for a width of not less than 1,500 feet from the centerline of channel, we will relocate Disposal Areas Nos. 94 and 95 from the south side to the north side of the channel.

Recommendation No. 6 - We will move Disposal Area No. 96, between Stations 302+000 and 310+000, from the south side to the north side of the channel, using an area 1,500 feet wide, the next time we dredge along this reach.

Recommendation No. 7 - We have been unable to obtain use of the north side of the channel, between Stations 343+300 and 347+000, as a disposal area. However, should our continuing efforts to acquire an easement 1,500 feet wide for the area be successful, we will move Disposal Area No. 101 from the south side to the north side of the channel.

Recommendation No. 8 - We have been unable to obtain easements for use of the north side of the channel between Stations 354+000 and 370+000 as a disposal area. We will continue actions to acquire an easement, and when we are successful in obtaining an easement 1,500 feet wide from the centerline of the channel, we will move that portion of Disposal Area No. 102 between Stations 354+000 and 370+000 from the south side to the north side of the channel.

Recommendation No. 9 - We have been unable to obtain easements for use of the north side of the channel between Stations 383+500 and 397+000 as a disposal area. We will continue actions to acquire an easement, and when we are successful in obtaining an easement 1,500 feet wide from the centerline of the channel, we will move that portion of Disposal Area No. 104 between Stations 383+500 and 397+000 from the south side to the north side of the channel.

SUGCO-M
Mr. William H. Stevenson

18 February 1975

Recommendation No. 10 - Dredge material will be deposited over existing crests within the limits of the disposal areas. Toe levees will be constructed along the specified back limits and ends when the areas become emergent above Mean High Water and are large enough to contain the dredged material within a perimeter levee system.

Recommendation No. 11 - Levees will be refurbished, as necessary, prior to each maintenance dredging contract.

Recommendation No. 12 - Where it is economically feasible, disposal effluent from confined areas will be directed back into the Gulf Intra-coastal Waterway.

Recommendation No. 13 - Our contract specifications require the contractor to exercise precautions to lessen the possibility of levee breaks and accidental spillages.

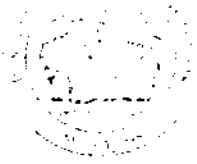
Recommendation No. 14 - As stated in our response to your Recommendation No. 2, above, we have initiated plans for our staff biologists to make surveys for the presence of oyster beds and tidal marsh. As has been our policy in the past, we will continue to furnish you plans and specifications for your review during the advertising period for each contract reach.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Area Supervisor
NREPS, Galveston, Texas 77550

E. D. McGENEE
Chief, Construction-
Operations Division



United States Department of the Interior

GEOLOGICAL SURVEY
Water Resources Division
2320 La Branch Street, Room 1112
Houston, Texas 77004

December 3, 1974

District Engineer
Galveston District, Corps of Engineers
ATTN: SWECO-M
P. O. Box 1229
Galveston, Texas 77550

RE: Public Notice No. IWW-M-3

Dear Sir,

We are maintaining a tide gage at sea level datum in East Matagorda Bay. Two reference marks for that datum are located in disposal area No. 102.

Please notify us when the dredge will be using that disposal area so we may take action to preserve our reference marks. We would like to flag a small area around each reference mark. Is it possible for the pipe line crews to work around such an area?

DH/brm

Sincerely,

A handwritten signature in cursive script that reads "Robert E. Smith".

Robert E. Smith, P.E.
Chief, Houston Subdistrict, WRD

23 December 1974

Mr. Robert E. Smith, P. E.
Chief, Houston Subdistrict, WRD
United States Department of the Interior
Geological Survey
2320 La Branch Street, Room 1112
Houston, Texas 77004

Dear Mr. Smith:

Receipt is acknowledged of your comments concerning Public Notice No. TM-M-3, dated 8 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - Galveston Bay to Matagorda Bay.

Your concern for marking and protecting your tide gage reference marks is appreciated. Confirming the telephonic conversation between Mr. Peterson of this office and Mr. Hall of your office on 18 December 1974, the two reference marks are located between Gulf Intracoastal Waterway Stations 367+000 and 369+000 in Disposal Area No. 102. Prior to the next scheduled maintenance of that reach of channel, we will make arrangements with your office for assistance in locating the exact positions of the reference marks in order that we may provide protection from discharge material and pipeline equipment.

Thank you for your review and comments.

Sincerely yours,

E. D. McSHANE
Chief, Construction-
Operations Division

**MATAGORDA COUNTY
NAVIGATION DISTRICT**

**NUMBER ONE
POST OFFICE BOX 830
PASADENA, TEXAS 77465**

October 14, 1974

Department of the Army
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Re: Public Notice No. IWW-M-3 Maintenance Dredging Gulf
Intracoastal Waterway (Main Channel)-Galveston Bay to
Matagorda Bay

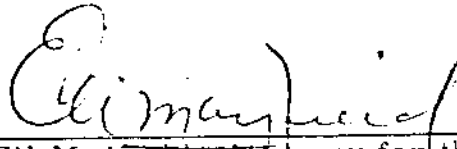
Gentlemen:

Please be advised that Matagorda County Navigation District No. 1 considers the continuation of maintenance dredging in the Gulf Intracoastal Waterway is essential to the economic well being of the Texas Gulf Coast and especially the Texas Mid-Coast area. This governmental agency insist that the continue maintenance dredging of the project is parmout to many esthetic views and/ objections.

Matagorda County Navigation District No. 1 respectfully acknowledges receipt of the Public Notice dated October 8, 1974, concerning this maintenance dredging and we also appreciate that such activities are being and have been coordinate with the planning and thoughts of this local governmental agencies.

Yours very truly,

BY:


Eli Mayfield, Attorney for the
District

ENR600-N

23 October 1974

Mr. Eli Mayfield
Attorney for the District
Matagorda County Navigation District No. 1
P. O. Box 880
Palacios, Texas 77465

Dear Mr. Mayfield:

Receipt is acknowledged of your comments concerning Public Notice No. ENR-14-3, dated 3 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway-Galveston Bay to Matagorda Bay.

Thank you for your review and endorsement of the project.

Sincerely yours,

E. D. McHEE
Chief Construction-
Operations Division

BLUE DOLPHIN PIPE LINE COMPANY

One Shell Square
P.O. Box 60124
New Orleans, La. 70160

TELEPHONE AREA CODE 504
588-6161

OCT 24 1974

District Engineer
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Attention SWGO-M

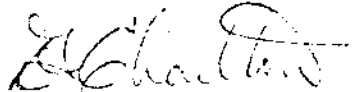
Sirs:

Reference your Public Notice No. IKW-M-3 dated 8 October 1974.

Our 20" pipeline crossing of the Gulf Intracoastal Waterway does not appear on the drawings attached to the referenced notice (sheet 9 of 19). The pipeline was installed in 1965 under Corps of Engineer permit number 6588. Please include the location of this crossing in your information to the dredging contractor.

Should you require additional information please contact me at (504) 588-7125.

Sincerely,



D. F. Charlton
Chief Engineer

SW000-M

7 November 1974

Mr. D. F. Charlton
Chief Engineer
Blue Dolphin Pipe Line Company
One Shell Square
P. O. Box 60124
New Orleans, Louisiana 70160

Dear Mr. Charlton:

Receipt is acknowledged of your comments concerning Public Notice No. IWS-M-3, dated 8 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway - Galveston Bay to Matagorda Bay. The location of your 20' pipeline located at USED Station 198+820 will be shown on future advertised drawings. Thank you for your review and comment.

Sincerely yours,

E. D. McGUIRE
Chief, Construction-
Operations Division

TRANSCONTINENTAL GAS PIPE LINE CORPORATION

3100 TRAVIS STREET
P. O. BOX 1396
HOUSTON, TEXAS 77001

Reply to: P. O. Box 10286
Corpus Christi, TX 78410

October 16, 1974

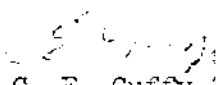
Department of the Army
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Attention: District Engineer

Subject: Public Notice No. LW-M-3
Maintenance Dredging Gulf Intracoastal Waterway
Galveston Bay to Matagorda Bay

Reference is made to subject Public Notice, Transcontinental Gas Pipe Line has a 30" natural gas pipeline located at USED Station 415+649.18, which is not shown on drawing, Sheet 16 of 19. This was installed under Permit No. 8552, dated 9 April 1971.

Yours very truly,


C. E. Guffy
Division I Supt.

CEG:ms

cc: G. E. Proper
H. W. Ingram

SWCCO-11

23 October 1974

Mr. C. E. Guffy
Division I Superintendent
Transcontinental Gas Pipe Line Corporation
P. O. Box 10206
Corpus Christi, Texas 78410

Dear Mr. Guffy:

Receipt is acknowledged of your comments concerning Public Notice No. H.W-M-3, dated 8 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway-Galveston Bay to Matagorda Bay. The location of your 30" natural gas pipeline located at USED Station 415+649.18 will be shown on the future advertised drawings.

Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division

F. Hermann Rudenberg, Ph.D.
3327 Avenue Q 1/2
Galveston, Texas 77550

District Engineer:
Galveston District, Corps of Engineers
ATTN:SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

October 28, 1974

Dear Sir:

I have received Public Notices regarding maintenance dredging of waterways in the vicinity of Galveston numbered:

HSC-M-1 dated September 27, 1974
✓ IWW-M-3 October 8, 1974
GALV-M-1 October 17, 1974
IWW-M-8 October 22, 1974
GALV-M-2 October 23, 1974

In all of these, disposal in "open water areas" is included. In none of these is toxicological assay, or even chemical analysis, of dredged material considered. Yet, in all (except GALV-M-2), the need to not await an environmental statement is mentioned because of the economic importance of prompt maintenance dredging necessitated by a considerable shoaling rate.

While the economic need is recognized by us, there is another economic need that is not indicated by the Corps in the Public Notices. This is the need to preserve water areas and salt marshes, and the like, as areas vital to the survival of the marine food chain. The sum-total of all this dredging and disposal, with attendant turbidity and dispersion, plus all the other dredging and disposal by industrial firms referred to in these Notices, represents a rather overwhelming challenge to the maintenance of marine organisms each of which has a part in the food chain, as already made evident by the urgent need to redredge promptly, additional redredging will again be necessary in a couple of years and increasing motorized traffic will wear away unleveled areas increasingly sooner. There is therefore a rather excessive portion of our bay, estuary, and marshland area that will not only be unproductive but serve as the burying ground for any organism that happens to be there during spoil deposition.

In the modern view recognition of the economic importance of our bays, estuaries, and marshland for portions of the life cycle of species such as shrimp, which are of direct economic importance to man, and for other organisms that are of indirect importance to man since they are part of the food chain, is a part of wise planning.

A need for elevation of highways in the coastal flood plain has already been detected. Soil for this elevation, or for grade raising in areas having subsidence, might well originate from dredging of channels, unless structurally not prudent. The economics of using dredged spoil should be studied with inclusion

of all ramifications of this use of spoil, rather than its use in open water where dredging may be required later. These economic considerations also include the value to residents of improved storm evacuation routes and the value of the marine organisms that are not destroyed because the spoil is deposited elsewhere.

✓ I have received a detailed reply by Mr. E. D. McGehee, Chief, Construction-Operations Division, Galveston District, Corps of Engineers concerning my comments pertaining to the Galveston Harbor 40-foot project (GALV-NW-1). I appreciate his detailed comments very much. Possibly it is worth indicating that perhaps we have detected a need for new technology, technology satisfactory to the Environmental Protection Agency and others, which should be part of the instrumentation on each dredge. In this direction perhaps the Technology Utilization program of NASA, with which I was associated for 6 years, might be approachable by the Corps of Engineers so as to find a cost-effective means to monitor dredged materials for potentially toxic contents.

Certainly, as pertains the present 5 Public Notices for maintenance dredging, the chemical search for potentially toxic materials should be carried out in likely areas such as the Houston Ship Channel, Galveston Harbor Entrance, Inland Water Way by Chocolate Bay, by Freeport (Dow), etc, etc.

Finally, these Notices do not seem to give any worth to existing spoil banks. I would guess that, since the last dredging, they have acquired some vegetation, shallow water organisms, and even wildlife possibly. Thus, just because these spoil areas have been used before should not prejudice one to say that they should be used again, or that they do not have any ecological value today.

We, the members of the Executive Committee of the Galveston Regional Group of the Sierra Club are opposed to the deposition of dredged spoil in open water areas and in marshland. We recognize that alternatives are not always available, but we feel that the knowledge that we have today, and did not have some years ago, clearly indicates that alternatives should be vigorously looked for.

Thank you for your consideration.

Sincerely yours,

F. Hermann Rudenberg
F. Hermann Rudenberg
Conservation Chairman,
Galveston Regional Group,
Sierra Club

18 November 1974

Dr. F. Hermann Rudenburg
Sierra Club
3327 Avenida Q
Galveston, Texas 77550

Dear Dr. Rudenburg:

Receipt is acknowledged of your comments concerning the Public Notices:

HSC-M-1 dated 27 September 1974
HSM-M-3 dated 8 October 1974
GALV-M-1 dated 17 October 1974
HSH-M-8 dated 22 October 1974
GALV-M-2 dated 23 October 1974

Your concern is appreciated, and the following explanations are made to the questions you have raised.

A public notice is distributed to all interested State and Federal agencies and known interested persons to make them aware of the proposed project in order that they can assist in developing facts and recommendations concerning the projects. The public notices are statements of the proposals and are not intended to include the details that are in the environmental statements such as description of tests to be conducted or evaluations of alternative disposal areas. All projects described in the above mentioned public notices, except for the Houston Ship Channel, have draft environmental statements that are being coordinated with interested State and Federal agencies and conservation organizations. The drafts have also been filed with the Council on Environmental Quality (CEQ). Houston Ship Channel is scheduled to have a draft statement filed with CEQ by 17 January 1975. These statements include detailed descriptions of chemical tests conducted and analyses of samples taken. They consider the relationship of the proposed action to land use plans; the probable impact of the proposed action on the environment; any adverse environmental effects which cannot be avoided should the proposed action be implemented; and alternatives to the proposed action. Copies of draft environmental statements are available to you upon request.

SI0000-11

18 November 1974

Dr. F. Hermann Rudenburg
Sierra Club

With regard to your concern for toxic materials, the dredged materials from the Houston Ship Channel and some other areas contain such materials. Sediment samples from all projects are analyzed and the results considered and reported in the Environmental Statements. The sediment tests include measurement of the following: total solids, volatile solids, chemical oxygen demand, total Kjeldahl nitrogen, oil-grease, mercury, lead, zinc, arsenic, cadmium, chromium, copper and nickel. The results of these tests are considered in the evaluation of their impact on the environment.

The Corps of Engineers has a comprehensive research program in progress that will address other points raised in your letter. This research program was authorized by Public Law 91-611 and is well underway. There is included a copy of the first annual report of Dredged Material Research Program for your information.

Thank you for your review and comments on the public notices.

Sincerely yours,

Incl
As stated

J. D. BISSELL
Acting Chief, Construction-
Operations Division

PORT OF HOUSTON AUTHORITY

EXECUTIVE OFFICES, 1519 CAPITOL AVENUE • P. O. Box 2592 • HOUSTON, TEXAS 77001
TELEPHONE: (713) 225-0671



RICHARD P. LEACH
GENERAL MANAGER —
ADMINISTRATION

November 14, 1974

Colonel Don S. McCoy
District Engineer
Galveston District, Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Re: Public Notices Nos. IWW-M-3 and IWW-M-8, 8 and 22 October 1974.

Dear Colonel McCoy:

This is to advise that the Port of Houston Authority is strongly in favor of continued and uninterrupted maintenance dredging of those portions of the Gulf Intracoastal Waterway covered by the subject public notices.

Barge traffic is an important part of the commerce moving through the Port of Houston. Any reduction in the depth of the Gulf Intracoastal Waterway would adversely impact this commerce, with a comparable adverse effect on the economy of Houston and Harris County.

The alternatives to moving goods by barge over the Gulf Intracoastal Waterway are more costly and would increase the cost of living to the vast majority of the people of Texas and the United States. This is surely not in the public interest, most particularly at this time. The economic well being of the citizens of this area should preclude the possibility of any cessation or interruption of maintenance dredging of the Gulf Intracoastal Waterway.

Yours very truly,

A handwritten signature in cursive script, appearing to read "R. Leach".

General Manager -
Administration

RPL:hh

SUGCO-M

19 November 1974

Mr. Richard P. Leach
General Manager - Administration
Port of Houston Authority
P. O. Box 2562
Houston, Texas 77001

Dear Mr. Leach:

Receipt is acknowledged of your comments concerning Public Notice Nos. HMI-M-3 and HMI-M-8, dated 8 and 22 October 1974, pertaining to the maintenance dredging of portions of the Gulf Intracoastal Waterway. Thank you for your review and comment.

Sincerely yours,

J. D. BISSELL
Acting Chief, Construction-
Operations Division

ENVIRONMENTAL PROTECTION AGENCY

REGION VI

1600 PATTERSON SUITE 1100
DALLAS, TEXAS 75201

March 24, 1975

OFFICE OF THE
REGIONAL ADMINISTRATOR

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (787161)

Colonel Don S. McCoy
District Engineer
U. S. Army Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your project "Gulf Intracoastal Waterway (Main Channel) - Galveston Bay to Matagorda Bay" as covered in Public Notice No. IWW-M-3 dated October 3, 1974. We have also reviewed your March 4, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Dredged material shall not be placed in the following areas:

Disposal Area No. 60

Disposal Area No. 63 between stations 77+000 and 84+300

Disposal Area No. 75 between stations 165+000 and 169+00

Disposal Area No. 79

Disposal Area No. 91 west of station 267+000

Disposal Areas Nos. 93, 94 and 95

Disposal Area No. 96 between stations 295+400 and 298+000;
302+000 and 310+000

Disposal Area No. 101 between stations 343+800 and 347+000

Disposal Area No. 102 between stations 354+000 and 370+000

Disposal Area No. 104 between stations 383+500 and 397+000

2. No dredged material shall be placed or allowed to spill into Cedar Lakes or Cow Trap Lakes (Bayou) at anytime.

3. The backside and ends of each open water disposal area shall be leveed as soon as possible. The back levees shall not be more than 2000 feet from the centerline of the channel in Galveston Bay and not more than 1500 feet from the centerline of the channel in West Bay, Chocolate Bay and Matagorda Bay.

4. The following Disposal Areas shall be reduced to 50% of the area defined in your current disposal plan: Areas Nos. 63, 76, 102, 104, 105, 106 and 111.

Disposal Areas shall be selected to minimize destruction of valuable fish and wildlife habitat.

5. Effluent from all fully confined disposal areas shall be discharged through control structures into the Gulf Intracoastal Waterway.

Since, as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,


for Regional Administrator

SUPPLEMENT NO. 4

PORT ISABEL TO MUD FLATS

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SUPPLEMENT NO. 4

PORT ISABEL TO MUD FLATS

SUPPLEMENT NO. 4

PORT ISABEL TO MUD FLATS

1. PROPOSED ACTION.

1.01 The proposed Federal action is continued periodic maintenance dredging of the main channel of the Gulf Intracoastal Waterway (GIWW) from Port Isabel to Mud Flats. The channel originates at the Brazos Island Harbor project, Port Isabel turning basin. It proceeds around the south side of Port Isabel past the entrance of the Port Isabel Side Channels and into the Laguna Madre, thence northward past the entrance to the Port Isabel Small Boat Harbor. The channel continues northerly through the Laguna Madre, intersecting the Tributary Channel to Harlingen via Arroyo Colorado and then the GIWW tributary to Port Mansfield in Redfish Bay, and passes through the land cut area known as the Mud Flats to the vicinity of Banderia Point. The main channel reach from Port Isabel to Mud Flats is 61 miles long and is maintained to a depth of 12 feet and a bottom width of 125 feet.

1.02 The Port Isabel Side Channel and the Port Isabel Small Boat Harbor are also included in this GIWW reach. The Port Isabel Small Boat Harbor entrance channel, located on the north side of Port Isabel, is 7 feet deep, 75 feet wide, and 1.4 miles long. The harbor channel, 6 feet deep, 50 feet wide and 0.3 miles long, links the entrance channel to the multi-channeled boat basin. The Port Isabel Side Channels are 12 feet deep, 125 feet wide, and 1.2 miles long loop around the south and west sides of Port Isabel, connecting with the main GIWW channel on the south side of Port Isabel.

1.03 Maintenance dredging will be performed by hydraulic pipeline dredge with dredged material deposited in open water and land disposal areas. The disposal areas for this reach of the channel are numbered 208 through 241 and are shown on Figures 2 through 4 of the attached public notice. The channel requires maintenance dredging in selected reaches at intervals of from 15 months to 5 years. The annual shoaling rate for the entire reach is approximately 1,215,000 cubic yards. Nine areas within this

reach are being dredged under two contracts at this time. The next scheduled maintenance dredging of this reach of the GIWW is scheduled to commence after June 1977. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance of this reach of the GIWW are derived almost entirely from commercial navigation. In 1974 over 2,700,000 tons of cargo were transported over this reach of the waterway. The principal commodities were crude petroleum and petroleum products, basic chemicals and associated products, iron and steel products, raw minerals, and agricultural products. The economy of the project area is heavily dependent upon continued use of low cost waterborne transportation. An important secondary benefit of continued maintenance dredging of the project waterway is improved marine productivity in the Laguna Madre. The project channel improves water circulation in the Laguna Madre, thereby stabilizing the salinity gradient. This improved salinity gradient has stimulated marine productivity by eliminating periodic fish kills which occurred in the past and by enhancing the growth of marine vegetation in areas which were bare of vegetation prior to the original dredging of this portion of the GIWW. Continuation of the environmental benefits is dependent upon continued maintenance dredging of the project channel.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located in Cameron, Willacy, and Kenedy Counties, Texas. The project channel bisects the Laguna Madre, a shallow coastal lagoon lying between Padre Island and the mainland on the southern coast of Texas. Prior to completion of the GIWW through the Laguna Madre in 1949, the area was characterized by poor water circulation and frequent hypersalinity. These conditions often resulted in massive fish kills. Completion of the original dredging relieved this situation by improving water circulation and stabilizing the salinity gradient.

3.02 Important fish and wildlife habitat occurs in central and lower Laguna Madre. Dense growths of submerged vegetation are found throughout most of the shallow water areas. The submerged vegetation provides high quality habitat used by many species of fish and crustaceans as feeding, breeding, and nursery habitat. Important species of fish and crustaceans using the area include Atlantic croaker, black drum, red drum, flounder, striped mullet, pompano, sea catfish, spotted seatrout, sheepshead, blue crab, and shrimp.

3.03 Sport fishing is heavy in the lower Laguna Madre in the vicinity of Port Mansfield and Port Isabel. Elsewhere sport fishing is moderate to light. About 275,000 man-days of sport fishing annually occur in central and lower Laguna Madre.

3.04 Commercial fishing is important to the economy of the lower Laguna Madre area. During 1973 about 1,384,400 pounds of finfish, valued at \$344,126, were taken by commercial fishermen from central and lower Laguna Madre. For the same period about 30.2 million pounds of shrimp, valued at \$51 million, were taken by commercial fishermen in the Gulf of Mexico in areas adjacent to and just south of central and lower Laguna Madre. Most of these shrimp were nurtured in the shallow waters of central and lower Laguna Madre.

3.05 Wildlife habitat in the project area consists of disposal islands, bay waters, and tidal flats. The disposal islands have populations of coyote, rabbit, bobwhite, mourning dove, waterfowl, wading birds, and shorebirds. The tidal flats and bay water support populations of waterfowl, wading birds, and shorebirds. The shallow vegetated bay areas and tidal flats are used by waterfowl for feeding while the deeper portions of the bay are used for resting.

3.06 Important species of waterfowl in the area include Canada goose, snow goose, gadwall, American widgeon, pintail, green-winged teal, blue-winged teal, mottled duck, redhead, canvasback, lesser scaup, bufflehead, ruddy duck, and coot.

3.07 The principal hunting in the area is for waterfowl. Hunting is moderate to heavy in the vicinity of Port Mansfield and Port Isabel and light to moderate in other areas of central and lower Laguna Madre.

3.08 Many other birds use the project area for nesting, feeding, and resting. Among these are pelican, cormorant, gull, tern, heron, egret, ibis, roseate spoonbill, merganser, grebe, common snipe, plover, sandpiper, avocet, curlew, black-necked stilt, and peregrine falcon.

3.09 Florida manatee, ocelot, right whale, sperm whale, blue whale, finback whale, southern bald eagle, brown pelican, Eskimo curlew, arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle are endangered species known historically to occur in the project vicinity.

3.10 Located in the project area are the Laguna Atascosa National Wildlife Refuge and two areas administered by the National Audubon Society, Green Island and Medio and Primero Islands of the Three Islands.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have both beneficial and adverse effects on the natural environment. The significance of adverse effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat. Many benefits to the natural environment have resulted from improved water circulation caused by construction of the GIWW and the Port Mansfield Channel across the lower Laguna Madre. These benefits include elimination of fish kills due to hypersalinity, increased flounder landings, increased vegetative growth both in stand and in range, and an increase in the range of juvenile brown shrimp. The perpetuation of these benefits is dependent on continued maintenance of these channels. Failure to maintain these channels would result in gradual return to near preconstruction conditions of reduced circulation, hypersalinity, and lower productivity.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basins will disturb or remove swimming and benthic organisms. However, because of the instability of the sediments and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy submerged vegetation, as channel depths preclude development of vegetation because of reduced sunlight penetration. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some adverse effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and, in some cases, may cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up the food chain, resulting in fewer organisms

available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy dredged material layer. Some more mobile organisms are able to work upward through the material while the sessile organisms perish. All disposal areas that will be used for deposition of sediments have previously been used for this purpose. Therefore, all bottom organisms that will be buried by dredged material have become established since the previous disposal. It can be assumed that past development will be repeated and the area will again repopulate.

4.08 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.09 Disposal of dredged materials in open water will cover any submerged vegetation that exists in the disposal area. In the lower Laguna Madre, submerged vegetation is a major source of organic matter to the bay system. Because of its value as a primary food source, dredging practices have been changed to avoid disposal in areas of submerged vegetation areas wherever practicable. All areas that will be used for deposition of sediments have previously been used for this purpose, and, therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation. As recommended by the NMFS, surveys of disposal areas to determine the presence of submerged seagrasses and tidal marsh will be made prior to dredging. From these surveys, adjustments in disposal areas will be made on a case by case basis to permit maximum feasible mitigation of adverse effects.

4.10 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous

disposal areas blocking or changing the normal current patterns in bay areas. However, construction and continued maintenance of this reach has improved water circulation and helped stabilize the salinity gradient in the lower Laguna Madre.

4.11 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.12 Virtually no industrial development occurs along this reach of the GIWW. However, there are some outside sources of pollutants. In the Tributary Channel to Harlingen, high freshwater flow periods carry pesticides, sewage effluents, treated and untreated cannery and food processing wastes, and other pollutants from upstream sources into the Laguna Madre. Also, some additional pollutants may enter the Laguna from the Brownsville Ship Channel. Fish kills along this reach as a result of resuspended pollutants are considered unlikely. Past dredging is not known to have caused any fish kills; and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.13 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.14 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed,

particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.15 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.16 The primary long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of biotic productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type as a result of disposal operations in this reach will be minimal, since the areas to be used for disposal have been used previously, and the changes have already occurred.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation as well as the effects on the natural environment of the project area. The "no action" alternative has been considered as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging

and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 15 October 1974. The notice has been made available to all interested Federal and State agencies and all known interested parties. Two responses received from the USF&WS and NMFS reiterated recommendations contained in the USF&WS coordination report. All of these recommendations have been accepted. The NMFS also recommended that disposal areas be examined for the presence and density of submerged seagrasses and tidal marsh. From these surveys, pipeline discharge point locations should be designated. The suggested surveys will be made. However, predesignation of discharge points is not feasible on a contractual basis. The purpose of this recommendation will be met by adjusting disposal areas on a case by case basis to permit maximum feasible mitigation of adverse effects.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 20 March 1975, the Environmental Protection Agency (EPA) approved the dredging and dredged material disposal plan under 33 CFR 209.145 for one year, subject to the following restrictions:

a. Openings between dredged material disposal areas shall be maintained such that, in any two mile segment of the channel, no more than 50 percent of the longitudinal section parallel to the channel is restricted by sediment. Openings shall be maintained at sufficient depths to allow maximum possible flow between dredged material disposal areas.

b. The backside and ends of open water disposal areas Nos. 211-220 shall be leveed as soon as possible. The back levees shall not be more than 1,500 feet from the centerline of the channel, and the dredged material shall not be discharged or allowed to become emerged further than 1,500 feet from the channel centerline. Except for disposal area No. 226, the limiting distance for all other open water disposal areas shall be 1,200 feet from the channel centerline.

c. The backside of disposal area No. 226 must be leveed prior to any further use.

In a second letter dated 3 April 1975, EPA approved a minor change in the disposal plan. By letter dated 9 October 1975 (Vol. 1, Page E-1) EPA modified these restrictions by deleting recommendation a. All requirements have been or will be complied with. Long-term approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-4

15 October 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL)-PORT ISABEL TO MUD FLATS

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 14 November 1974.

Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel)-Port Isabel to Mud Flats.

PROJECT LOCATION: Near the cities of Port Isabel and Port Mansfield and along the Mud Flats in Cameron, Willacy, and Kenedy Counties, Texas, respectively.

PROJECT DESCRIPTION: This portion of the Federally maintained Gulf Intracoastal Waterway (GIWW) reaches from the city of Port Isabel in extreme South Texas to the Mud Flats near the mid-eastern coastline of Kenedy County, Texas. The channel extends northerly from Port Isabel through Laguna Madre, passes east of the Laguna Atascosa National Wildlife Refuge and intersects the GIWW Tributary Channel to Harlingen near the mouth of the Arroyo Colorado. The GIWW continues northerly in Laguna Madre intersecting the Channel to Port Mansfield in Red Fish Bay and passes through the land cut area known as the Mud Flats to the vicinity of Banderia Point. This GIWW reach is about 61 miles long and is maintained

to project dimensions of 12 feet deep by 125 feet wide. Two side channels and the Port Isabel Small Boat Harbor are included with this GIWW reach. The two side channels are also 12 feet deep and include a main channel varying from 60 to 233 feet wide by 1 mile long and a connecting channel 125 feet wide by 0.2 mile long. The Small Boat Harbor includes three sections; an entrance channel 7 feet deep by 75 feet wide and 1.4 miles long; a harbor channel 6 feet deep by 50-foot wide and 0.3 mile long; and a boat basin 6 feet deep by 72 to 501 feet wide and 0.2 mile long. All depths are measured below Mean Low Tide (Corps of Engineers datum).

DISPOSAL AREA: The portion of the GIWW from Port Isabel to the Mud Flats utilizes 34 disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 208 through 241.

Disposal Areas Nos. 208 - 210 are unconfined areas located in sand and mud flats. Levees will be constructed as needed in these areas upon their next use.

Disposal Areas Nos. 211 - 224, 227 - 237, and 239 are open water areas located in the Laguna Madre. Dredged materials will be deposited uniformly along these areas and toe levees will be constructed at some future date when the emergent areas become large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

Disposal Areas Nos. 225 and 226 are partially confined areas located near the junction of the GIWW with the Tributary Channel to Harlingen.

Disposal Areas Nos. 238 and 241 are confined areas located in the vicinity of Port Isabel.

Disposal Area No. 240 is a partially confined area located on and adjacent to Long Island in the vicinity of Port Isabel.

The attached Table I summarizes the usual contract dredging reach and the disposal areas utilized.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from this reach of the waterway consist of sands, silts, and clays. Shoaling in the channel is the result of alluvial deposits occurring during high water periods and wind driven tidal actions in the Laguna Madre. The shoaling rate for this reach of the project is approximately 1.2 million cubic yards annually.

METHOD OF DREDGING: The shoal materials will be excavated and transported by contract pipeline dredge equipment. The frequencies for dredging selected

sections of the Port Isabel to Mud Flats reach are listed on Table I. The excavated material is transported by pipeline and placed in Disposal Areas Nos. 208 - 241. The quantity of materials per contract is about 1.2 million cubic yards. Portions of this reach were last maintained during the period November 1973 - March 1974. The next scheduled dredging in the reach is after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 208 - 210 are located in the vicinity of Mesquite Rineon in the Mud Flats at Latitudes, Longitudes 26° 56' 05", 97° 27' 35"; 26° 51' 05", 97° 27' 40"; and 26° 49' 00", 97° 28' 00", respectively. The areas are surrounded by normally emergent sand and mud flats.

Disposal Areas Nos. 211 through 237 and 239 are located in the Laguna Madre at Latitudes, Longitudes 26° 47' 40", 97° 28' 00"; 26° 46' 30", 97° 27' 40"; 26° 44' 45", 97° 27' 10"; 26° 43' 15", 97° 26' 45"; 26° 41' 35", 97° 26' 15"; 26° 40' 00", 97° 25' 40"; 26° 38' 20", 97° 25' 05"; 26° 36' 50", 97° 24' 40"; 26° 35' 30", 97° 24' 15"; 26° 34' 20", 97° 24' 15"; 26° 31' 05", 97° 23' 55"; 26° 27' 50", 97° 22' 35"; 26° 26' 05", 97° 23' 45"; 26° 24' 10", 97° 20' 50"; 26° 23' 05", 97° 20' 25"; 26° 21' 55", 97° 19' 55"; 26° 21' 50", 97° 19' 15"; 26° 19' 30", 97° 18' 50"; 26° 17' 35", 97° 17' 25"; 26° 16' 20", 97° 17' 25"; 26° 14' 45", 97° 16' 50"; 26° 13' 20", 97° 16' 20"; 26° 11' 15", 97° 15' 35"; 26° 09' 00", 97° 14' 30"; 26° 07' 15", 97° 13' 30"; 26° 06' 00", 97° 12' 50"; 26° 05' 20", 97° 12' 55"; and 26° 05' 30", 97° 12' 10", respectively. The disposal areas and adjacent waters are used for sport and commercial fishing.

Disposal Area No. 238 is located along the shoreline on the north side of Port Isabel. This confined disposal area is bounded by the shallow waters of Laguna Madre on the north, tidal flats on the west, the Port Isabel Small Boat Harbor entrance channel on the east, and the City of Port Isabel on the south.

Disposal Area No. 240 is located on and adjacent to Long Island, north of Park Road 100. The area is bound by the waters of the Laguna Madre on the north and east, and Park Road 100 on the south and west.

Disposal Area No. 241 is located south of Port Isabel and on the west bank of the Port Isabel Channel and Turning Basin. The area is bound on the west by Vadia Ancha, on the east by the Port Isabel Channel and Turning Basin, on the south by Brownsville Ship Channel, and on the north by a tank farm.

DREDGING BY OTHERS: Oil companies are the principal organizations performing non-Federal dredging in the reach of the GIWW from Port Isabel to the Mud Flats. Most of their dredging is for maintenance of oil well channels connected with the GIWW. The estimated quantity of materials dredged annually by these companies is about 30,000 to 50,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites under the GIWW project has been previously coordinated with EPA, except for the Disposal Area No. 241 which was only coordinated with the Brazos Island Harbor project. This area is also used for the Port Isabel side channels which were not previously coordinated.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Cameron County
Commissioners' Court of Willacy County
Commissioners' Court of Kenedy County
Port Isabel-San Benito Navigation District
Brownsville Navigation District
Willacy County Navigation District
City of Port Isabel
City of Brownsville
City of Harlingen
City of Raymondville

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A separate Environmental Statement will not be prepared for this reach of the GIWW. An Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) is being prepared and is scheduled to be placed on file with Council on Environmental Quality about mid-1975, having been coordinated with the above mentioned agencies.

The shoaling rates in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be

15 October 1974

submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-4 dated 15 October 1974.

- 2 Incl
1. Table
2. Dwg, Oct 74

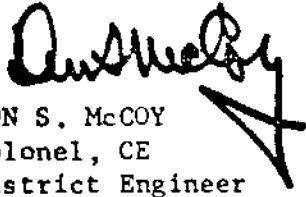
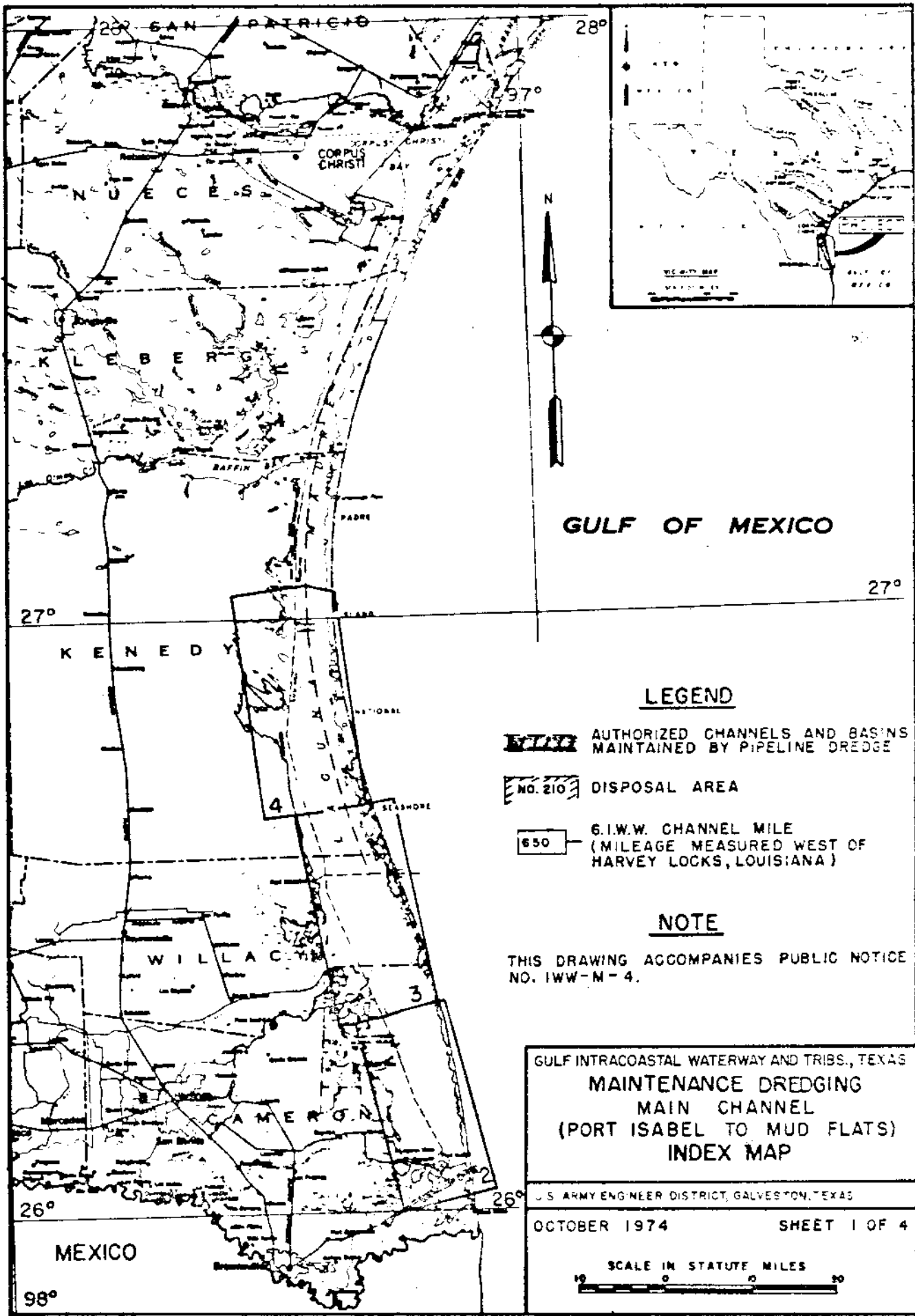

DON S. McCOY
Colonel, CE
District Engineer

TABLE I
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL)
PORT ISABEL TO MUD FLATS

Section of Main Channel	Depth Below		Bottom Width (Feet)	Length of Channel (Miles)	Dredging Frequency (Months)	Annual Shoaling (Cubic Yards)	Disposal Areas Normally Used	Type of Disposal Area
	Mean Low Tide (Feet)	Mean High Tide (Feet)						
Mud Flats to Channel to Port Mansfield	12		125	23.2	15	540,000	208 - 210 211 - 219, 220*	Unconfined Open Water
Channel to Port Mansfield to Arroyo Colorado	12		125	14.6	20	245,000	221 - 224, 227* 225, 226*	Open Water Partially Confined
Arroyo Colorado to Port Isabel	12		125	22.6	18	390,000	227*, 228-236, 239 240 241*	Open Water Partially Confined Confined
Port Isabel Side Channels and Small Boat Harbor					60	38,000		
Port Isabel Side Channels Main Channel	12		233-60	1.0			240 241*	Partially Confined Confined
South Leg	12		125	0.2			241*	Confined
Small Boat Harbor Entrance Channel	7		75	1.4				
Harbor Channel	6		50	0.3			236 - 237, 239 238	Open Water Confined
Boat Basin	6		72-501	0.2			238	Confined
							238	Confined

*Disposal area also used on other Federally maintained projects.



28° SAN PATRICIO 28°

NUECES

CORPUS CHRISTI BAY

KLEBERG

KENNEDY

WILLACY

CAMERON

27°

27°

26°


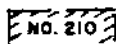

26°

98°



GULF OF MEXICO

LEGEND

-  AUTHORIZED CHANNELS AND BASINS MAINTAINED BY PIPELINE DREDGE
-  NO. 210 DISPOSAL AREA
-  650 G.I.W.W. CHANNEL MILE (MILEAGE MEASURED WEST OF HARVEY LOCKS, LOUISIANA)

NOTE

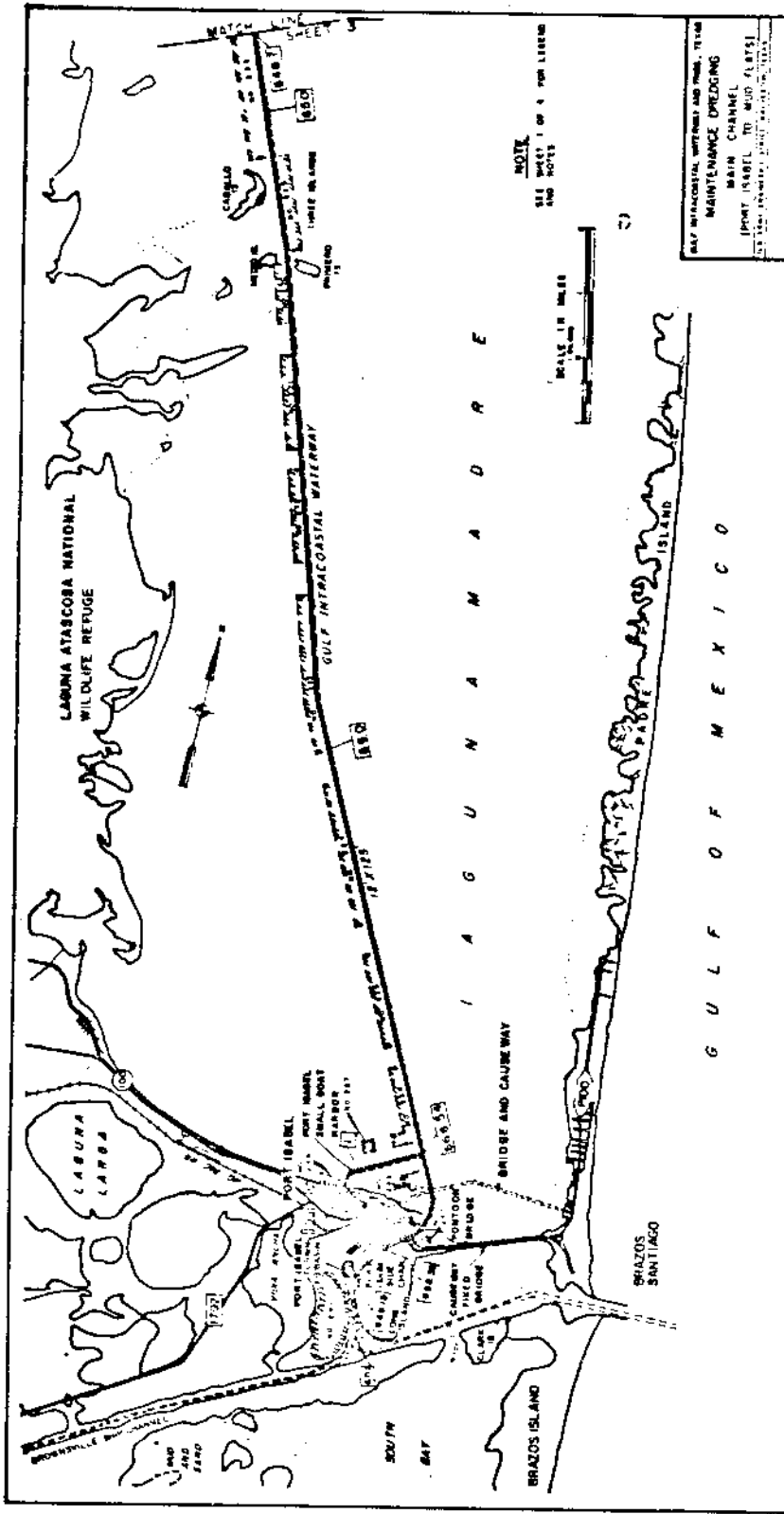
THIS DRAWING ACCOMPANIES PUBLIC NOTICE NO. IWW-M-4.

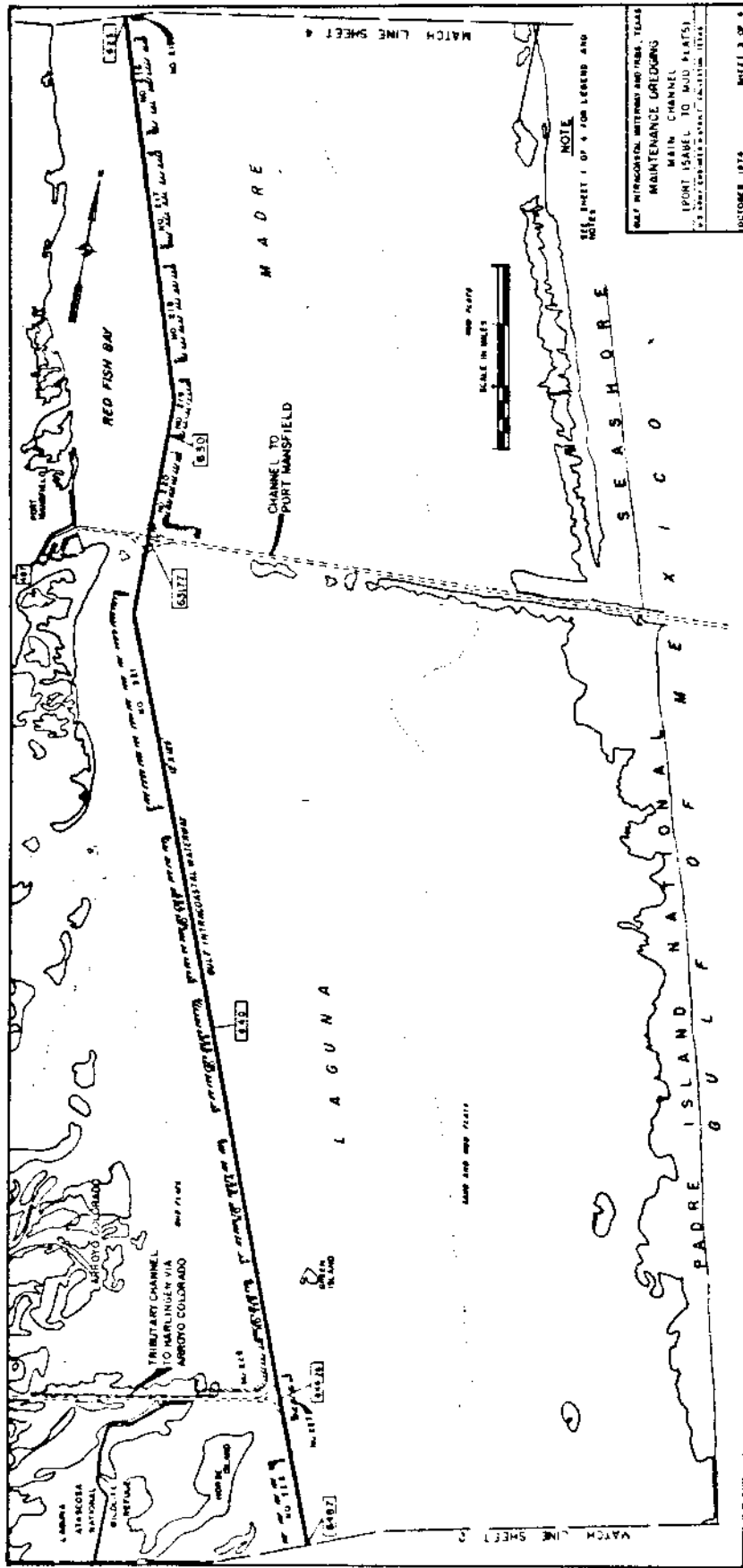
GULF INTRACOASTAL WATERWAY AND TRIGGS, TEXAS
 MAINTENANCE DREDGING
 MAIN CHANNEL
 (PORT ISABEL TO MUD FLATS)
 INDEX MAP

U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS

OCTOBER 1974 SHEET 1 OF 4







OCTOBER 1974 SHEET 3 OF 4

NOTE:
SEE SHEET 1 OF 4 FOR LEGEND AND
MAINTENANCE ORIGIN

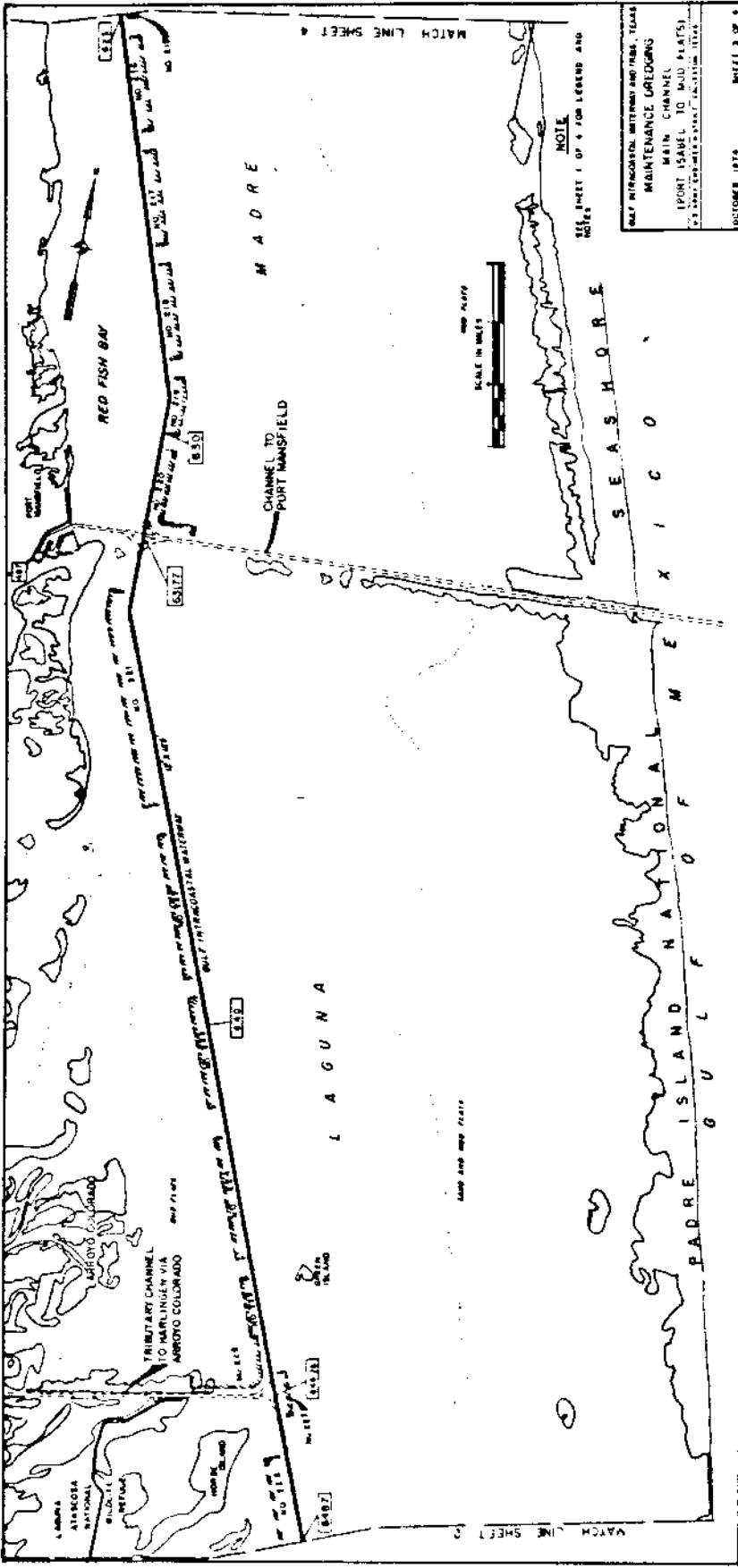
MAINTENANCE ORIGIN
MAIN CANAL
PORT HAZEL TO MAID PLATS
U.S. NAVY HYDROGRAPHIC SURVEILLATION DIVISION

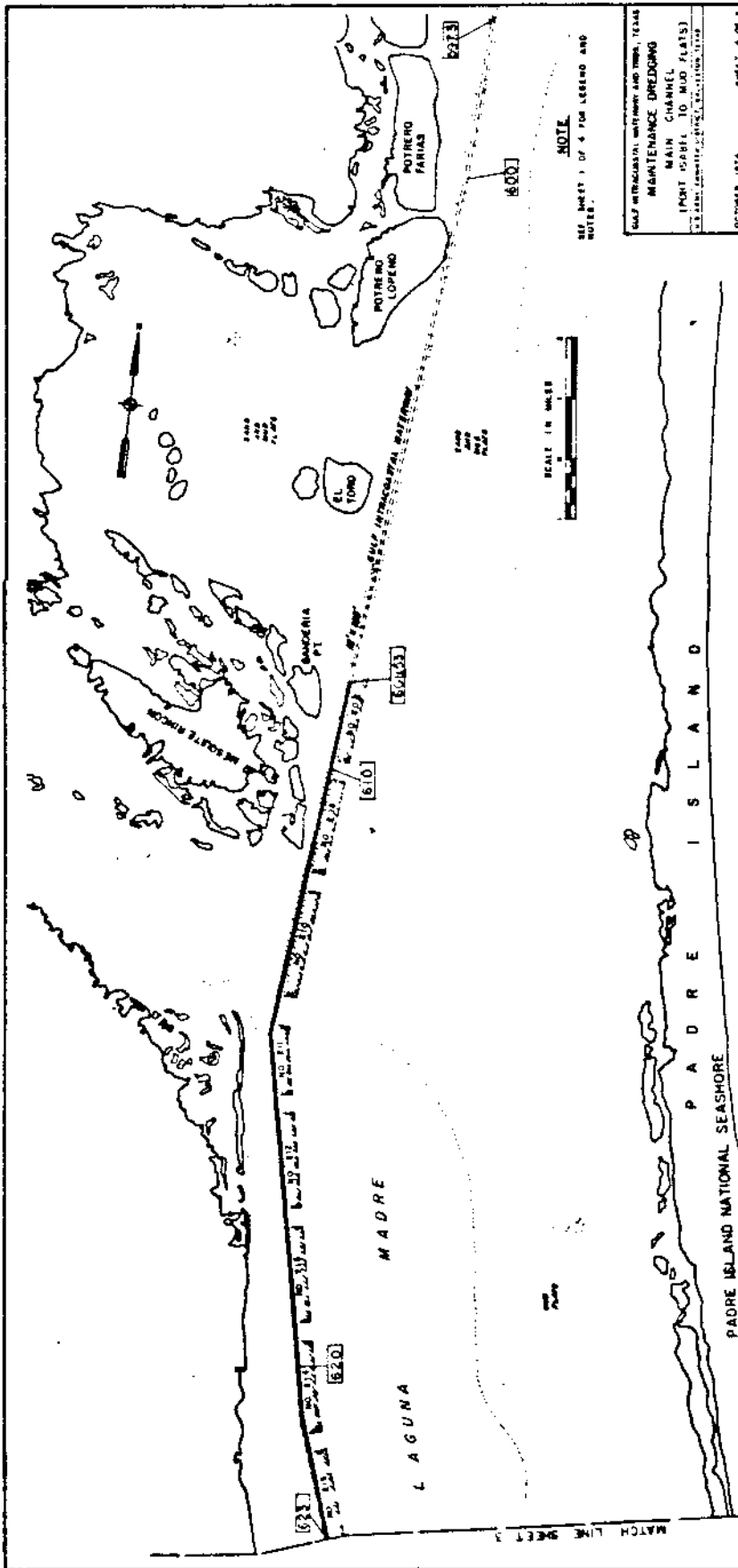


SCALE IN FEET

WATCH LINE SHEET 2

WATCH LINE SHEET 4





NOTE
SEE SHEET 3 OF 4 FOR LEGEND AND
NOTES.

GULF OF MEXICO, MATHIAS AND THOMAS ISLANDS
 MAINTENANCE DREDGING
 MAIN CHANNEL
 (PORT SYMBOL TO 1000 FATHOMS)
 U.S. NAVY HYDROGRAPHIC SURVEY, 1954-1955, 1959

OCTOBER 1974 SHEET 4 OF 4



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 1, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
Post Office Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to Public Notice No. IWW-M-4, dated October 15, 1974, on Maintenance Dredging, Gulf Intracoastal Waterway (Main Channel) - Port Isabel to Mud Flats, Texas.

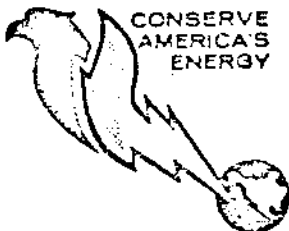
The locations of the designated spoil areas appear to be the same as those coordinated with and agreed to by the Texas Parks and Wildlife Department and the Fish and Wildlife Service and as described in our July 13, 1971, report on spoil disposal in connection with maintenance dredging of the Gulf Intracoastal Waterway, Port Isabel to Mud Flats.

On August 30, 1974, the 1971 report was revised to include a recommendation that the designated spoil area west of the waterway and north of the Channel to Harlingen be eliminated. This recommendation also has been included in our draft report on maintenance dredging of the Channel to Harlingen, dated March 12, 1974. In this report we have requested that the spoil which would have been placed on the north side of the Channel to Harlingen be placed instead on the south side of the channel to provide a source of material for dike construction on the Laguna Atascosa National Wildlife Refuge. This request is still being considered in your office.

The opportunity to again comment on the plan for maintenance dredging of the Gulf Intracoastal Waterway between Port Isabel and Mud Flats is appreciated.

Sincerely yours,

Regional Director



134

Save Energy and You Serve America!

23 December 1974

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference your letter dated 1 November 1974 concerning Public Notice No. ISM-M-4 on maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - Port Isabel to Mid Flats, Texas.

The primary concern of your letter is Disposal Area No. 226. A recent survey of this area indicated that a levee can now be built along the backside, on emergent land above Mean High Water, 2,000 feet from the centerline of the channel. Therefore, we plan to levee this area in conjunction with our next maintenance dredging contract in the area. Water from the area will be discharged into the Arroyo Colorado or the GIM.

Your letter also refers to a draft report on maintenance dredging on the Channel to Harlingen, dated 12 March 1974. Our response to this report will be forwarded in a separate letter pertaining specifically to your Channel to Harlingen report.

Thank you for your review and comments.

Sincerely yours,

E. D. MCGHEE
Chief, Construction-
Operations Division

Copy furnished:
Field Supervisor
U. S. Fish and Wildlife Service
Customs House, Room 327
Galveston, Texas 77550



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

December 2, 1974

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
Post Office Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-4 dated October 15, 1974, wherein the Corps of Engineers proposes plans for the deposition of spoil from maintenance dredging operations of the Gulf Intracoastal Waterway (Main Channel) - Port Isabel to Mud Flats.

We suggest that the following six recommendations be incorporated into the work plans. Please be advised that most of these same recommendations were made to you in a Bureau of Sport Fisheries and Wildlife letter of July 13, 1971, and revised in a Fish and Wildlife Service letter of August 30, 1974, which were prepared with the assistance of the NMFS:

(1) Unconfined disposal areas should be confined as soon as possible, with the backside levees constructed as near the channel as feasible. However, in the waterway reach from Port Isabel to the Channel to Port Mansfield, no spoil be discharged or allowed to become emergent at a distance any further than 1,200 feet from the centerline of the channel. Above that reach, 1,500 feet from the centerline of the channel should be maximum. All backside levees should also be built within these distances. Spoil placed in unconfined disposal areas should be discharged slightly over the crests of the existing spoil banks, with the points of discharge being moved laterally to permit uniform distribution of spoil materials. Each emergent bank should have a backside shoreline equally distant from the waterway.

(2) Disposal Area No. 226 should no longer be used, because the area provides high quality nursery habitat for many estuarine-dependent species.

(3) Until the eastern end of Disposal Area No. 220 is leveed along the Tributary Channel to Port Mansfield, all discharge points should be located far enough west of the eastern

end of the disposal area to preclude spillage into the open water. Waters of the eastern end of this disposal area provide important marine fishery habitat.

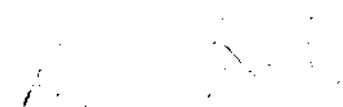
(4) Any spoil material extending beyond 2,000 feet from the channel centerline, behind Disposal Area Nos. 221 and 228, that exceeds a sedimentation layer of 3 inches or more, should be called to the attention of NMFS and Texas Parks and Wildlife Department. It should be removed if it was determined, following an on-site inspection, that the spoil was improperly deposited and would impede water circulation and fish passage.

(5) Within six months prior to any maintenance dredging, all disposal areas should be surveyed for location and density of submerged seagrasses and tidal marsh. From this survey, pipeline discharge point locations should be specifically designated to preclude unnecessary damage to submerged seagrasses and tidal marsh.

(6) Prior to issuance of contracts for maintenance dredging, detailed plans and specifications should be submitted to Federal and State fish and wildlife agencies, including the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550, for review. This submission should include the proposed discharge points and the results of the submerged grass - tidal marsh survey.

Thank you for the opportunity to review the plans for maintenance of this Federal project.

Sincerely,


William H. Stevenson
Regional Director

5 February 1975

Mr. William E. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference your letter dated 2 December 1974 concerning Public Notice No. DW-M-4 on maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - Port Isabel to Mud Flats.

We have reviewed your recommendations and feel we can comply as follows:

Item No. 1 - Dredge material will be deposited over existing crests within the limits of the disposal areas. Toe levees will be constructed along the specified back limits and ends when the areas become emergent above Mean High Water and are large enough to contain the dredged material within a perimeter levee system.

Item No. 2 - A recent survey of Disposal Area No. 226, a copy of which was provided on 7 January 1975, indicates that a levee can be constructed along the backside of this area at 2,000 feet from the centerline of the channel. We have been advised by U. S. Fish and Wildlife Service's letter dated 29 January 1975 that this plan is acceptable to them. Therefore, we plan to levee the area in conjunction with our next contract along this reach.

Item No. 3 - Necessary precautions will be taken to prevent spillage of dredge material outside the easterly limit of Disposal Area No. 220 which borders the Channel to Port Mansfield.

Item No. 4 - No material will be placed more than 1,200 feet from the centerline of the channel, therefore, we do not foresee a problem of material extending beyond 2,000 feet from the centerline of the channel. Should any material be unintentionally placed beyond 2,000 feet, we will notify you and the Texas Parks and Wildlife Department.

SWCCO-M

3 February 1975

Mr. William H. Stevenson

Item Nos. 5 and 6 - Your suggested recommendations Nos. 5 and 6 address surveys of submerged seagrasses and tidal marshes and the designation of specific discharge points prior to each dredging contract. We have initiated plans to make surveys as you have suggested and as determined necessary by our staff biologist. Based on their findings, we will make adjustments to our disposal plans on a case by case basis. However, we cannot concur in your suggestion that discharge points be predesignated for each contract. Predesignation of discharge points is not feasible from a contractual standpoint and is not consistent with your referenced recommendations of 13 July 1971 and 30 August 1974. As has been our policy in the past, we will continue to furnish you plans and specifications for your review during the advertising period for each contract reach.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Area Supervisor
National Marine Fisheries
Services
Water Resources Division
4700 Avenue U
Galveston, Texas 77550

E. D. McGENESE
Chief, Construction-
Operations Division

ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

OFFICE OF THE
REGIONAL ADMINISTRATOR

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (787914)

Colonel Don S. McCoy
District Engineer
U.S. Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your project, "Gulf Intracoastal Waterway (Main Channel) - Port Isabel to Mud Flats" as covered in Public Notice No. IWW-M-4 dated October 15, 1974. We have also reviewed your February 20, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Openings between dredged material disposal areas shall be maintained such that, in any two mile segment of the channel, no more than 50% of the longitudinal section parallel to the channel is restricted by sediment. Openings shall be maintained at sufficient depths to allow maximum possible flow between dredged material disposal areas.

2. The backside and ends of each open water disposal area (Nos. 211-220) shall be leveed as soon as possible. The back levees shall not be more than 1500 feet from the centerline of the channel and the dredged material shall not be discharged or allowed to become emerged further than 1500 feet from the channel centerline. Except for Disposal Area No. 226, the limiting distance for all other open water disposal areas shall be 1200 feet from the channel centerline.

3. The backside of Disposal Area No. 226 must be leveed prior to any further use. This area may be leveed at 2000 feet from the centerline of the channel to Harlingen but no more than 1200 feet from the GIWW channel.

Since, as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,

George J. Petrucci
for Regional Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS TEXAS 75201

April 3, 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (788917)

Colonel Don S. McCoy
District Engineer
U. S. Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have reviewed additional data you supplied concerning Disposal Area No. 226 as described in Public Notice No. IWW-M-4 (Gulf Intracoastal Waterway, Main Channel, Port Isabel to Mud Flats).

Construction of a levee 2,000 feet from the centerline of the GIWW channel as shown on drawing sheet five, file number IWW-1175-190 dated January, 1975, is acceptable.

Sincerely yours,

George D. Putmichi
for Regional Administrator

SUPPLEMENT NO. 5

TRIBUTARY CHANNEL TO
HARLINGEN VIA ARROYO COLORADO

SUPPLEMENT NO. 5

TRIBURARY CHANNEL TO
HARLINGEN VIA ARROYO COLORADO

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SUPPLEMENT NO. 5

TRIBUTARY CHANNEL TO HARLINGEN VIA ARROYO COLORADO

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intra-coastal Waterway (GIWW) - Tributary Channel to Harlingen via Arroyo Colorado. The channel is maintained to a depth of 12 feet and a width of 125 feet for a distance of 25.8 miles and extends from its junction with the GIWW upstream through the Arroyo Colorado to its completed upstream limit between the cities of Rio Hondo and Harlingen. A barge mooring basin 12 feet deep by 75 feet wide and 2,300 feet long, located near the channel's junction with the GIWW, and a turning basin 12 feet deep by 400 feet wide and 500 feet long, near the upstream end of the completed project, are also maintained. There are 23 disposal areas utilized for the Tributary Channel to Harlingen. All of the areas except No. 1 are considered to be land disposal areas. The areas are used for disposal by contract pipeline dredge. The required frequency of dredging for selected reaches of this channel is about every 12 months. The quantity of material removed per contract is about 500,000 cubic yards which is also the average annual shoaling rate. The material is transported by pipeline and placed in disposal areas Nos. 1-23 as shown on Figure 1 of the attached public notice. Portions of Arroyo Colorado are under contract to be dredged at the present time. Future maintenance dredging is currently scheduled to begin after 30 June 1977. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel and turning basin are derived from commercial and recreational navigation. The cities of Rio Hondo and Harlingen are dependent on the channel for navigational access to the Laguna Madre and the main channel of the GIWW. In 1974, about 584 thousand tons of cargo were carried over the waterway. The principal

commodities include gasoline, sand, gravel, crushed rock, nitrogenous chemical fertilizers, crude petroleum, and other petroleum products. The economy of the project area is highly dependent upon continued use of low cost waterborne transportation.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located in the lower Rio Grande Valley subregion of the coastal prairies of Texas. The Tributary Channel to Harlingen was constructed for the most part in the natural channel of the Arroyo Colorado. The upper reach of the channel traverses low lying, gently rolling, coastal plains of the Rio Grande delta, and the lower reach crosses semi-arid, sparsely vegetated prairie lands and tidal mud flats and extends into the Laguna Madre to intersect the GIWW main channel.

3.02 Deltaic soils are level, high in fertility, and readily cultivated where natural or artificial drainage is available. As a result, most natural brushy vegetation and woodlands of the delta have been cleared for the cultivation of cotton, grain sorghum, vegetables, citrus trees, improved pasture grasses, and ornamental shrubs and trees.

3.03 The Channel to Harlingen provides one of the few brackish water tributaries to the lower Laguna Madre. Tidal influences on the channel vary widely with the amount of fresh water flowing to the bay. During major floods, the channel may be entirely fresh. Virtually all other estuarine habitat in the project area is found on the Laguna Atascosa National Wildlife Refuge which borders the Laguna Madre both north and south of the Arroyo-Colorado Cutoff. Several large tidal flats, separated from each other by low brushy ridges, flank the channel in the refuge area. These flats periodically provide estuarine habitat when flooded by high wind-blown tides. One tidal flat on the south side of the channel contains the lower Cayo Atascosa. The Cayo Atascosa once flowed north through the entire length of the refuge, but has since been diked to impound the freshwater Laguna Atascosa and Laguna Del Cayo (Lakes). Only the lower 2.5 miles of the Cayo Atascosa are now open to the channel.

3.04 The channel and associated estuarine habitat are attractive to estuarine-dependent fauna except when high freshwater flows carry poor quality water to the Gulf. During these periods the channel carries heavy loads of pesticide-laden return flows, sewage effluents, treated and untreated cannery and food processing wastes, and many other pollutants from upstream sources. Sport fishing for spotted seatrout, red drum, black drum, and flounder, is popular along the south bank of the channel at Arroyo City. Two recreational areas have been created on the south bank of the channel within the refuge. Flooded tidal flats and the lower Cayo Atascosa are particularly valuable as nursery habitat for juvenile menhaden, red drum, brown and white shrimps, and blue crab. The shallow, relatively secluded waters in these areas provide shelter and an abundant supply of food.

3.05 Wildlife habitat in the project area consists of disposal areas, bay waters, and tidal flats. The disposal areas and higher ground have populations of coyote, rabbit, bobwhite, mourning dove, waterfowl, wading birds, and shorebirds. The tidal flats and bay waters support populations of waterfowl, wading birds, and shorebirds. The shallow vegetated bay areas and tidal flats are used by waterfowl for feeding while the deeper portions of the bay area are used for resting.

3.06 Important species of waterfowl in the area include Canada goose, snow goose, gadwall, American widgeon, pintail, green-winged teal, blue-winged teal, mottled duck, redhead, canvasback, lesser scaup, bufflehead, ruddy duck, and coot.

3.07 The principal hunting in the area is for waterfowl. Hunting is moderate to heavy in the vicinity of Port Mansfield and Port Isabel and light to moderate in other areas of central and lower Laguna Madre.

3.08 Many other birds use the project area for nesting, feeding, and resting. Among these are pelican, cormorant, gull, tern, heron, egret, ibis, roseate spoonbill, merganser, grebe, common snipe, plover, sandpiper, avocet, curlew, black-necked stilt, and peregrine falcon.

3.09 The Laguna Atascosa National Wildlife Refuge was created primarily to provide wintering and nursery habitat for migrating waterfowl. The refuge is the southernmost link in the chain of Central Flyway refuges in the continental United States. The refuge derives most of its value from the large impoundments which provide drinking water and resting habitat for birds driven from the Laguna Madre by man or strong wind.

3.10 Florida manatee, ocelot, right whale, sperm whale, blue whale, finback whale, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle are endangered species known historically to occur in the project vicinity.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants found in the sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, possible resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation, as channel depths preclude development of vegetation because of reduced sunlight penetration. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along the channel include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, possible resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up the food chain, resulting in fewer organisms available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy dredged material layer. Some more mobile organisms are able to work upward through the material while the sessile organisms perish.

4.09 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.10 Disposal of dredged materials in open water will cover any submerged vegetation that exists in the disposal area. In the lower Laguna Madre, submerged vegetation is

a major source of organic matter to the bay system. All areas that will be used for deposition of sediments have previously been used for this purpose and, therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.11 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.12 Fish kills along this reach as a result of resuspended pollutants are considered possible but unlikely. Past dredging is not known to have caused any fish kills, and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.13 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation, loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles, temporary reduction of air quality in the immediate vicinity, and long-term partial suppression of the productivity of the disposal area.

4.14 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year.

Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.15 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.16 The only significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of the area. Changes in vegetation types as a result of disposal of dredged material in this channel will be minimal, as the areas to be used for disposal have been used previously, and the changes have already occurred.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 21 October 1974. The notice has been made available to all interested Federal and State agencies and all known interested parties. Six responses to the public notice have been received. One response, from the Willacy County Navigation District, was favorable; and responses from the USF&WS and NMFS recommended several revisions to the plan of disposal. Revised disposal plans have now been accepted by these agencies. Responses were also received from the Town of Rio Hondo and the Arroyo Boat and Ski Club requesting public hearings in regard to future disposal of dredged materials in disposal areas 21 and 9, respectively. Subsequently, the request by the Arroyo Boat and Ski Club was withdrawn following assurance that previous requests for modification of disposal operations will be accommodated. Also, dredging in this reach of the channel is not anticipated in the near future. The Town of Rio Hondo requested a public hearing in order to protest continued use of disposal area No. 21. This disposal area will not be used unless the objections raised by the Town of Rio Hondo are resolved. The National Audubon Society agreed with recommendations of NMFS.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 17 April 1975, EPA approved the dredging and dredged material disposal plan under 33 CFR 209.145 for one year, subject to the following restrictions:

a. The backside and ends of open water disposal area No. 1 shall be leveed as soon as possible. The back levee shall not be more than 1,200 feet from the centerline of the channel, and the dredged material shall not be discharged or allowed to become emerged further than 1,200 feet from the channel centerline.

b. The backside of disposal area No. 2 must be leveed prior to any further use. This area may be leveed as previously described in EPA correspondence concerning public notice No. 1W-M-4.

c. The backside and ends of disposal areas Nos. 3, 4, 5, and 6 shall be leveed as soon as possible. The back levee for areas 3 and 4 shall not be more than 2,000 feet from the centerline of the channel, and the dredged material shall not be discharged further than 2,000 feet from the channel centerline.

d. Disposal area No. 21 shall not be used for dredged material disposal.

By letter dated 9 October 1975 (Vol. I, Page E-1) EPA modified these recommendations by deleting recommendation c. All requirements will be complied with. Long term approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-N

PUBLIC NOTICE NO. IWW-N-5

21 October 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY - TRIBUTARY CHANNEL TO HARLINGEN
VIA ARROYO COLORADO

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 20 November 1974.

Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway - Tributary Channel to Harlingen via Arroyo Colorado.

PROJECT LOCATION: In the Arroyo Colorado near the Cities of Rio Hondo and Harlingen in Cameron and Willacy Counties, Texas.

PROJECT DESCRIPTION: The Channel to Harlingen is a Federally maintained channel 12 feet deep by 125 feet wide, and 25.8 miles long. The channel reaches from its junction with the GIWW upstream through the Arroyo Colorado to its completed upstream limit between the cities of Rio Hondo and Harlingen. A barge mooring basin 12 feet deep by 75 feet wide, and 2,300 feet long, located near the channel's junction with the GIWW, and a turning basin 12 feet deep by

400 feet wide, and 500 feet long, near the upstream end of the completed project, are also maintained. All depths are referenced to Corps of Engineers Mean Low Tide Datum.

DISPOSAL AREA: There are 23 disposal areas utilized by the Tributary Channel to Harlingen (see drawing). All the areas are used for disposal by contract pipeline dredge. The Arroyo Colorado Navigation District of Cameron and Willacy Counties, Texas furnishes the necessary rights-of-way and disposal areas for maintenance of the project.

Disposal Area No. 1 is an open water disposal area located on the east side of the GIWW at its junction with the Channel to Harlingen.

Disposal Area No. 2 is a partially confined area located immediately north of the Channel to Harlingen and west of GIWW (Main Channel).

Disposal Areas Nos. 3 - 6 are unleveed areas located within the tidal flats along the Arroyo Colorado Cutoff Channel. Dredged material is deposited over the crest of previous deposits in each of these areas.

Disposal Areas Nos. 7 - 23 are all confined disposal areas located along the Arroyo Colorado. In each of these areas the dredge water is returned to the channel through controlled spillways, outfall canals and ditches.

COMPOSITION AND QUANTITY OF MATERIALS: Excavated materials consist of fine grained sands, silts, and some clay. Shoaling in the project area is a result of alluvial deposits occurring during high water periods on the Arroyo Colorado. The shoaling rate for this channel is approximately 500,000 cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are used to maintain this waterway. The dredging frequency for selected reaches of this channel is about every 12 months. The quantity of material per contract is about 500,000 cubic yards. Portions of the project were last maintained during the period January - March 1974. Future maintenance dredging for the channel is currently scheduled after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 1 is located east of the GIWW (Main Channel) near its junction with the Arroyo Colorado Cutoff Channel. The area and surrounding waters are used for sport and commercial fishing.

Disposal Area No. 2 is located near the junction of the GIWW (Main Channel) and the Arroyo Colorado Cutoff Channel. Surrounding areas include the Cutoff Channel to the south, the GIWW (Main Channel) to the east, and the inundated and mud flat areas of Laguna Madre to the west and north.

Disposal Areas Nos. 3 and 4 are located north of the Arroyo Colorado Cutoff Channel. They are bound by the channel on the south and mud flats on the other sides.

Disposal Area No. 5 is located south of the Cutoff Channel. It is bound by the channel on the north, Callo Atascoso on the south and east, and low lying sand and mud areas on the west.

Disposal Area No. 6 is located north of the Cutoff Channel and is bound by the channel on the south. The Arroyo Colorado is located on the west side of the area and low lying sand and mud flat areas adjoin the north and east sides of the area.

Disposal Area No. 7 is located north of the Arroyo Colorado. It is bound by the Arroyo Colorado on the south, east, and west, and by scrub covered grazing lands on the north.

Disposal Area No. 8 is located on the north side of the Arroyo Colorado and is bound by the channel on the south and east. The north and west sides adjoin scrub covered grazing lands.

Disposal Area No. 9 is located south of the Arroyo Colorado and is bound by a cut-off channel on the north and the natural channel on the east and west. Scrub covered grazing lands lie to the south.

Disposal Area No. 10 is located west of the Arroyo Colorado. It is bound on the east by undeveloped scrub covered land, and on the north, south, and west by cultivated lands.

Disposal Area No. 11 is located west of the channel and is bound by the channel on the east. Cultivated areas lie to the north, west and south.

Disposal Area No. 12 is located north of the channel and is bound by the channel on the south. Cultivated areas lie to the north, east and west.

Disposal Area No. 13 is located north of the channel and is bound by the channel on the south and east. Cultivated areas lie to the north and west.

Disposal Area No. 14 is located south of the channel and is bound by the channel on the north and east. The area has cultivated lands to the west and low-lying areas to the south.

Disposal Area No. 15 is located north of the channel and is bound by the channel on the south. Cultivated areas lie to the west and north. The area is bound on the east by a drainage ditch.

Disposal Area No. 16 is located on the west side of the channel and is bound by the channel on the east. A Boy Scouts Camp lies to the south, cultivated lands to the west, and a low-lying drainage area to the immediate north.

Disposal Area No. 17 is located west of the channel. It is bound by a Boy Scouts Camp on the north and east, and cultivated lands on the west and south.

Disposal Area No. 18 is located west of the channel and is bound by the channel on the east. A low-lying drainage area lies to the north and west, and cultivated land to the south.

Disposal Area No. 19 is located west of the channel and is bound by the channel on the east. It is bound by cultivated lands on the remaining sides.

Disposal Area No. 20 is located west of the channel, opposite the City of Rio Hondo. The area is bound by the channel on the east, a drainage ditch area on the south, and cultivated lands on the north and east.

Disposal Area No. 21 is located to the east of the project channel and bound by a man-made reservoir on the remaining sides.

Disposal Area No. 22 is located to the west of the channel and bound by the channel on the east. An irrigation canal lies to the south, cultivated land to the west, and a drainage area to the north.

Disposal Area No. 23 is located east of the channel and bound by the channel on the west. The area is bound by cultivated lands on the remaining sides.

DREDGING BY OTHERS: The Arroyo Colorado Navigation District, Arroyo Boat and Ski Club, San Benito Drainage District, and Rio-Tex Shipping of Rio Hondo are the principal organizations performing dredging operations in the vicinity of the Tributary Channel to Harlingen. The dredged material is generally placed in confined disposal areas used in maintaining the Federal project. The estimated quantity of material removed by non-Federal dredging is approximately 20,500 cubic yards annually. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Arroyo Colorado Navigation District of Cameron and Willacy Counties
Commissioners' Court of Cameron County
Commissioners' Court of Willacy County
City of Rio Hondo
City of Harlingen
City of San Benito

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of Tributary Channel to Harlingen will significantly benefit the economic and social well-being

21 October 1974

of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). An Environmental Statement will not be prepared for this tributary channel; however, an Environmental Statement for the GIWW - Texas Section including tributary channels is being prepared and is expected to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies.

The shoaling rates in the Channel to Harlingen project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

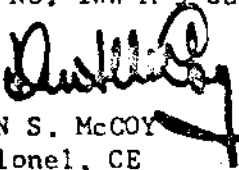
Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan will also be considered.

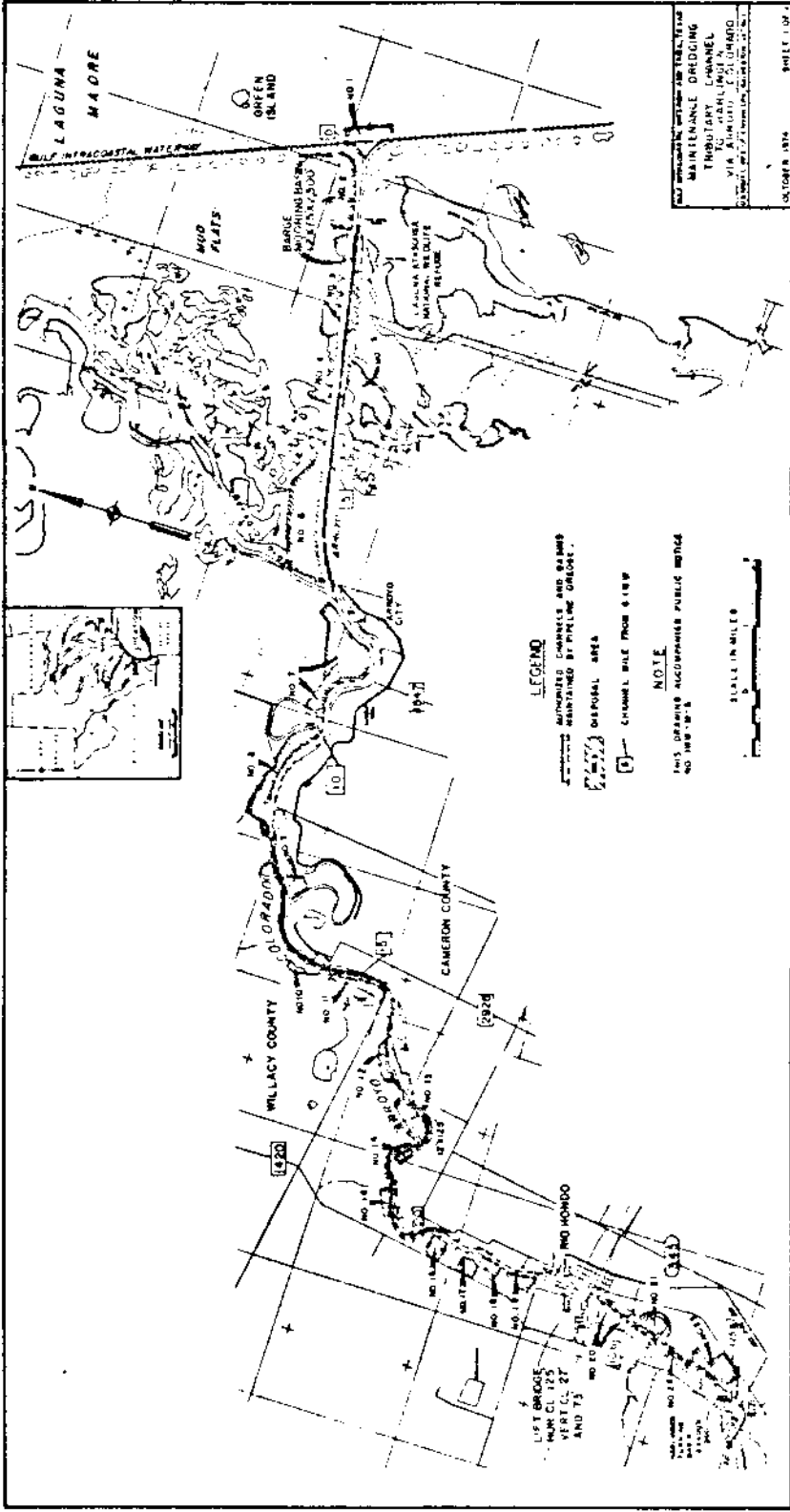
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging in this channel are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-5 dated 21 October 1974.


DON S. McCOY
Colonel, CE
District Engineer

1 Incl
Drawing, dtd Oct 1974





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

January 14, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-5 dated October 21, 1974, wherein the Corps of Engineers requested comments on spoil disposal plans associated with maintenance dredging operations of the Gulf Intracoastal Waterway--Tributary Channel to Harlingen via Arroyo Colorado.

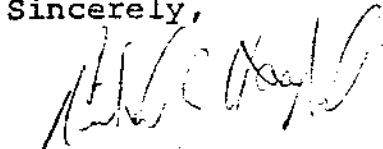
The spoil disposal areas proposed for the Arroyo Colorado Cutoff do not conform either to those proposed in a Bureau of Sport Fisheries and Wildlife draft report on this project dated March 12, 1974, which received NMFS concurrence by our letter dated May 7, 1974, to the Bureau of Sport Fisheries and Wildlife Regional Director, or to those proposed in the Fish and Wildlife Service (FWS) reply letter to you of August 27, 1974. Specifically, the latter letter recommended that Disposal Area No. 1 (No. 2 in Public Notice No. IWW-M-5) be eliminated. Also, in our December 2, 1974, reply to Public Notice No. IWW-M-4 dated October 15, 1974, concerning Maintenance Dredging, Gulf Intracoastal Waterway (Main Channel)--Port Isabel to Mud Flats, we recommended that Disposal Area No. 226 be eliminated. This is the same as Disposal Area No. 2 in this Public Notice (No. IWW-M-5).

The NMFS, therefore, again recommends that this disposal area, No. 2, be eliminated. We further recommend that the locations of other disposal areas proposed along the Arroyo Colorado Cutoff not be established until the coordination under the Fish and Wildlife Coordination Act is completed between your office and the Federal and State fish and wildlife agencies, as proposed in the FWS letter of August 27, 1974.

2

The opportunity to comment on the proposed maintenance of this authorized Federal project is appreciated. Prior to each dredging contract, please submit the specific plans to the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550.

Sincerely,



William H. Stevenson
Regional Director

12 February 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference your letter dated 14 January 1975 concerning Public Notice No. IWW-M-5 on maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Harlingen via Arroyo Colorado.

The primary concern of your letter is the disposal areas along the Arroyo Colorado Cutoff. Specifically, you recommend Disposal Area No. 2 be eliminated and the other areas along the cutoff not be established until the coordination under the Fish and Wildlife Coordination Act is completed between our agency and the Federal and State fish and wildlife agencies.

A recent survey of Disposal Area No. 2, a copy of which was furnished you on 7 January 1975, indicates that a levee can now be built along the backside of this area at 2,000 feet from the centerline of the channel. The U. S. Fish and Wildlife Service advised, by letter dated 29 January 1975, that this plan is now acceptable to them. Accordingly, we propose to levee the area in conjunction with our next contract along this reach. The remaining disposal areas along the Arroyo Colorado Cutoff Channel have been previously agreed to as indicated in the U. S. Fish and Wildlife Service letter dated 27 August 1974.

Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
NMFS, Galveston, Tx



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 18, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

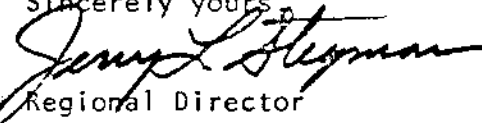
Dear Sir:

By Public Notice No. 1WW-M-5, dated October 21, 1974, the United States Fish and Wildlife Service was notified of the policy, practice, and procedures to be followed by the Corps of Engineers in connection with spoil disposal during maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Harlingen, Willacy, and Cameron Counties, Texas.

We note that the spoil disposal areas indicated in this notice do not conform to our recommendations which were supplied to you in draft form on March 12, 1974, and subsequently modified by letter of August 27, 1974. These recommendations are still applicable and should be considered in the final selection of spoil disposal sites.

A meeting of your staff and representatives of the U. S. Fish and Wildlife Service, National Marine Fisheries Service, and the Texas Parks and Wildlife Department should be initiated in the near future to coordinate the final selection of these sites. Once this issue is resolved, we anticipate the release of our fish and wildlife report in final form.

Sincerely yours,


Deputy Regional Director

cc:

Executive Director, Texas Parks and Wildlife Dept., Austin, Texas
Area Supervisor, NMFS, Environmental Assessment Div., Galveston, Texas
Field Supervisor, FWS, Div. of River Basin Studies, Fort Worth, Texas



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Save Energy and You Serve America!

SWCCO-M

12 February 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference Mr. Jerry Stegman's letter dated 13 November 1974 concerning Public Notice No. IWS-4-5 on maintenance dredging of the Gulf Intra-coastal Waterway - Tributary Channel to Harlingen.

The primary concern of the letter was that we had not conformed to your recommendations relating to disposal areas as stated in your 12 March 1974 draft report and modified by a letter dated 27 August 1974. Subsequent to your draft report and letter of modification, a revised disposal plan was agreed upon and confirmed by another letter from Mr. Jerry Stegman dated 29 January 1975.

Thank you for your review and comments.

Sincerely yours,

E. D. McGUIRE
Chief, Construction-
Operations Division

Copy furnished:
Field Supervisor
USFWS, Galveston, Texas

SOUTHWESTERN REGIONAL OFFICE
John L. Franson, Representative
Louisiana
New Mexico
Texas
(Mexico)



NATIONAL AUDUBON SOCIETY

2507 ROGGE LANE, AUSTIN, TEXAS 78723 — PHONE (512) 928-2047

June 30, 1975

Colonel Don S. McCoy
District Engineer
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Re: PUBLIC NOTICE NO. IWW-M-5, MAINTENANCE DREDGING OF THE GULF
INTRACOASTAL WATERWAY TRIBUTARY CHANNEL TO HARLINGEN, TEXAS

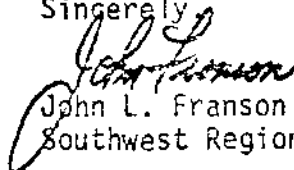
Dear Colonel McCoy:

In regard to the above mentioned project, we have reviewed various correspondence including that of the National Marine Fisheries Service and the Environmental Protection Agency and we have inquired from various members familiar with the area.

Our reservations in regard to the project are adequately expressed in the correspondence that your office has received from the National Marine Fisheries Service dated January 14, 1975 and from the Environmental Protection Agency dated April 17, 1975.

Please register our support of these documents which reflect our reservations in any future documentations.

Sincerely,


John L. Franson
Southwest Regional Representative

cc: Council on Environmental Quality
Environmental Protection Agency, Dallas
U.S. Department of the Interior
National Marine Fisheries Service, NOAA
U.S. Fish and Wildlife Service, Albuquerque
Texas Parks and Wildlife Department
Texas General Land Office
National Audubon Society
Frontera Audubon Society 163

SWGCO-M

29 August 1975

Mr. John L. Franson
Southwest Regional Representative
National Audubon Society
2507 Rogge Lane
Austin, Texas 78723

Dear Mr. Franson:

This is in reply to your letter dated 30 June 1975 concerning Public Notice No. IW-M-5 on maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Harlingen, Texas.

We have completed our review of the 17 April 1975 Environmental Protection Agency letter and 14 January 1975 National Marine Fisheries Service letter referenced in your letter. On 12 February 1975, the Corps issued its response to the National Marine Fisheries Service, stating our intentions to comply with their recommendations where possible, based on what is considered in the best overall public interest.

Your letter has been placed in our permanent records file for the GIW - Tributary Channel to Harlingen public notice, and it will be given full consideration in any future documentations.

Thank you for your review and comments.

Sincerely yours,

E. D. McGERRE
Chief, Construction-
Operations Division

TOWN OF RIO HONDO

Box 396

RIO HONDO, TEXAS 78583

To: District Engineer
Galvestan District, Corps of Engineers
ATTN. SWG30 - H
Galvestan, Texas 77550

From: W.H. Moore
City Manager
Box 396
Rio Hondo, Texas 78583

Subject: Public Notice IWM-M-5

Dear Sir:

The City of Rio Hondo requests a public hearing on the proposed dredging of the Arroyo Colorado in the Rio Hondo Area.

From the statements in your Public Notice No. IWM-M-5 dated October 21, 1974, one of the areas designated for the pumping of spoilage is area No. 21 which is adjacent to the City reservoir and this would be considered a danger to the health factor of said reservoir.

It is also the City's policy to not allow spoilage to be placed inside of the Towns City limits or inside of the Rio Hondo extraterritorial jurisdiction.

Your attention and consideration of this matter will be most appreciated.

Sincerely,



W. H. Moore
City Manager

27 December 1974

Mr. W. H. Moore
City Manager
City of Rio Hondo
Box 396
Rio Hondo, Texas 78583

Dear Mr. Moore:

This is in response of your letter requesting a public hearing on the proposed maintenance dredging of the Tributary Channel to Harlingen Via Arroyo Colorado as described in our Public Notice No. IWW-M-5. In telephonic discussion on 21 November 1974 between you and Mr. Alejandro Garcia, it was agreed to meet informally to discuss your concerns for the project. The meeting was held at Rio Hondo on 26 November 1974. Attendees included Mayor Juanita Brodecky, Councilman James T. Hertzog, Messrs. W. H. Moore, Alejandro Garcia, Abelardo Guerrero, George Rocha, Paul Hambricht and Major Milton Howell.

During the meeting several issues were discussed. The main issue concerned the possibility of retaining levees breaching if Disposal Area No. 21 is used and the ensuing danger of dredge materials contaminating the City's reservoir. You pointed out that although the reservoir is not presently being used, tests are being conducted and a new water plant is scheduled to be constructed at the reservoir site in the near future. You also outlined the City's plan to develop the island into a permanent park.

We stressed that Disposal Area No. 21 still has disposal capacity and is needed for the long range maintenance program for the reach of channel in the vicinity of Rio Hondo. It was also pointed out we do not plan to dredge this reach until 1978-1980 unless emergency shoaling occurs. In this eventuality our plans are to continue using Disposal Area No. 20, across the river, until its capacity is totally depleted. Therefore, we do not foresee a need for Disposal Area No. 21 prior to the late 1980's unless some emergency condition develops.

We also noted that in addition to Disposal Area No. 21, Disposal Areas Nos. 19 and 20 are within the extraterritorial jurisdiction of Rio Hondo as reflected on the marked city map you provided us. Although your letter made primary reference to Disposal Area No. 21, we expressed concern that you may choose, at a later date,

27 January 1975

During the meeting you explained that the use of Disposal Area No. 21 is not desirable because it would prevent the river from being a natural barrier for the City's sewage treatment plant. Disposal Areas 19 and 20 are on the south side of the river, and you stated that the City would exercise its policy of opposing disposal of dredge materials in these areas.

During the meeting you explained that the Corps of Engineers does not have authority under the existing project to expend Federal funds to acquire new disposal areas. The Arroyo Colorado Navigation District of Cameron and Willacy Counties is the local sponsor for the project and the agency responsible for furnishing all necessary disposal areas required for continued maintenance of this project. Therefore, I recommended that you contact the Navigation District and attempt to negotiate an acceptable release of the island as a disposal area. If you are successful it will remove Disposal Area No. 21 from future disposal considerations and resolve the issue before us.

After considerable discussion you advised that the City would consider withdrawal of its request for a public hearing provided the Corps assured you that the withdrawal action would not waive the City's objection to the use of Disposal Area No. 21 until the matter is resolved. I have evaluated your concern about our use of this disposal area and I hereby assure you that the Corps of Engineers will not use the area without prior coordination with the City of Rio Hondo and a mutual plan of disposal is agreed upon.

If you wish to continue your request for a public hearing, I will require that specifics be set forth in writing describing the interests affected and the manner in which they will be affected by the proposed disposal of dredge materials. Upon receipt of your information, I will make a determination whether a public hearing is required. If a public hearing is to be held, I will issue a 30-day public notice scheduling the hearing, describing the subject matter of the hearing and issues to be considered. Unless I hear from you by 21 January 1975, I will assume that we have resolved our differences and that you no longer desire a public hearing.

I appreciate your willingness to informally discuss this matter. If we can be of further assistance, please contact us.

Sincerely yours,

DON B. MOON
Colonel, CE
District Engineer

Copy furnished:
Mr. Robert L. Sawyer
Port Director
Arroyo Colorado Navigation
District of Cameron & Willacy
County
297 Metz Building
Harlingen, Texas

TOWN OF RIO HONDO

Box 396

RIO HONDO, TEXAS 78583

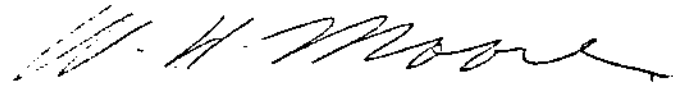
To: Don S. McClay
Colonel, C E

From: W.H. Moore
City Manager
Rio Hondo, Texas

Subject: --Public Nature --IWH-N-5

- 1) In reply to your letter dated 27 December, 1974; the City funds that in paragraph six (6) you state that after Discussion the City would consider withdrawal of its Public hearing application provided the Corps of Engineers assured the City it would not wave its objection of Rio Hondo to use of Area No. 21.
- 2) This, However, is not the case as discussed at the meeting of the 26th of November, 1974, the City of Rio Hondo would withdraw its present request only if it were guaranteed an opportunity for a public hearing at the time spoil area No. 21 is used.

Sincerely,



W.H. Moore,
City Manager

FRANK F. BELL, III, Chairman
ROBERT T. ST. JOHN, Secretary
D. M. POLLARD, JR., Member
CHARLES R. JOHNSON, Port Director
RUBY McCHAREN, Executive Secretary
MARIE BILLINGSLEA, District Treasurer
TOM M. JOHNSON, Assistant Port Director
ROGER ROBINSON, JR., Attorney

TELEPHONE: 941-2201
Port Director - 941-2202
Residence - 689-2210
Exec. Secretary - 941-2207
Dist. Treasurer - 689-2237
Attorney - 689-2326
Harbormaster - Port Mansfield 941-2207
Assistant Port Director -
Port Mansfield 941-2201

Port of Mansfield

OPERATING UNDER THE AUTHORITY OF
WILLACY COUNTY NAVIGATION DISTRICT
152 South 7th Street
RAYMONDVILLE, TEXAS 75550

October 29, 1974

Don S. McCoy, Colonel, CE
District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

In reference to PUBLIC NOTICE NO. IWW-M-5 MAINTENANCE DREDGING GULF INTRACOASTAL WATER WAY - TRIBUTARY CHANNEL TO HARLINGEN VIA ARROYO COLORADO. We see no objection to this proposal and would like to endorse it.

Sincerely yours,

PORT OF MANSFIELD


CHARLES R. JOHNSON, PORT DIRECTOR

CRJ:rm

5 November 1974

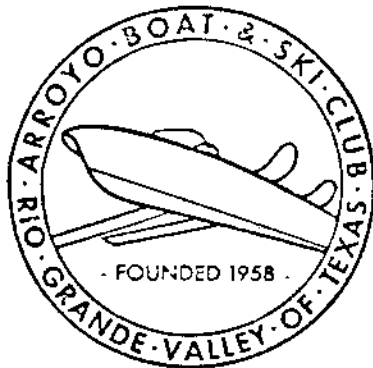
Mr. Charles E. Johnson
Port Director
Port of Mansfield
Willacy County Navigation District
152 South 7th Street
Raymondville, Texas 78580

Dear Mr. Johnson:

Receipt is acknowledged of your comments concerning Public Notice No. DW-M-5, dated 21 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Mariingen via Arroyo Colorado. Thank you for your review and indorsement of the project.

Sincerely yours,

E. D. McGENRE
Chief, Construction-
Operations Division



Post Office Box 902
HARLINGEN, TEXAS 78550

November 7, 1974

Department of the Army
District Engineer
Galveston District, Corps of Engineers
Attn: SW800-M
P.O. Box 1229
Galveston, Texas 77550

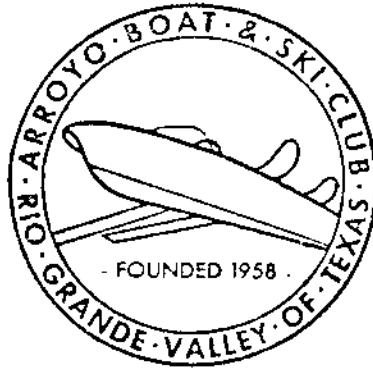
Re: Public Notice IWW-M-5
Dated 21 Oct. 1974 (& Map Attached)

Gentlemen:

Since the Arroyo Boat & Ski club maintains and furnishes anchorage and docking facilities for their members on the east bank of the east channel adjacent to disposal area # 9 and since we could be directly affected by improper disposal of dredged material, we respectfully request a public hearing to express our views and provide information to be considered before dredging operations are done in this vicinity.

Our Club was formed in April 1958 to encourage boating and water sports, to promote safety and the science of seamanship & navigation, and to provide and maintain a suitable club house & anchorage for the recreation and use of the membership.

In order to fulfill this purpose and to use our boats, it is our concern that no disposal material be allowed to slip into this channel. We would think it advisable and request soundings be made before any dredging is started near this



Post Office Box 902
HARLINGEN, TEXAS 78550

channel.

Also it would be imperative to direct all disposal to the West side of the island at the # 9 disposal site as per our agreement with the District Engineer dated 23 Sep't. 1970. (copy inclosed)

If your office has a file on the problems that came up on the Aug. 1968 dredging of the Arroyo in the vicinity of our club this would reflect the importance of the situation.

Please acknowledge at your earliest convenience.

Sincerely yours,

Richard H. Dunbar
Richard H. Dunbar
Commodore

Address:

Arroyo Boat & Ski Club
P.O. Box 902
Harlingen, Tx. 78550

Richard H. Dunbar
P.O. Box 614
Harlingen, Tx. 78550

15 November 1974

Mr. Richard H. Dunbar
P. O. Box 614
Harlingen, Texas 78550

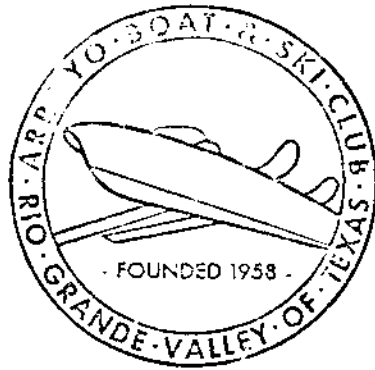
Dear Mr. Dunbar:

Receipt is acknowledged of your comments concerning Public Notice No. IHW-M-5, dated 21 October 1974, pertaining to the maintenance dredging of the Tributary Channel to Harlingen via Arroyo Colorado. In reference to our last dredging in the project channel reach near Disposal Area No. 9 and confirming our subsequent agreement, we plan to relocate the spillway in our next contract to permit the effluent water to empty into the upstream side of the oxbow. Additionally and pursuant to our usual practice we plan to perform before and after dredging surveys in your channel facility to determine the extent, if any, of shoaling which might occur as the result of our dredge disposal operations in the area. We currently do not anticipate any dredging requirements in the project channel in the near future near your club. We will be pleased to meet with you informally to discuss the merits of our proposed dredging operations should you deem further discussions necessary.

Thank you for your review and comments.

Sincerely yours,

E. D. McGUIRE
Chief, Construction-
Operations Division



Post Office Box 902
HARLINGEN, TEXAS 78550

November 26, 1974

Department of the Army,
District Engineers,
Galveston District, Corps of Engineers,
Attention: SWGCO-M
P. O. Box 1229,
Galveston, Texas 77550.

Gentlemen:

This organization has received and considered the provisions of your letter dated 15 November 1974, outlining the method of performing any future dredging operation at or adjacent to and using disposal area # 9.

These provisions, including the relocation of the spillway as declared in your agreement dated 23 September 1970, is accepted as adequate measures to insure proper disposal and protection for the facilities serving the Arroyo Boat & Ski Club.

Therefore, we hereby withdraw our request for a public hearing concerning our subject interest as stated in our letter dated 7 November 1974.

Sincerely yours,

Dick Dunbar,
Commodore.

DD:lp

SWECO-11

5 December 1974

Commodore Dick Dunbar
Arroyo Boat & Ski Club
P. O. Box 902
Harlingen, Texas 73550

Dear Commodore Dunbar:

Receipt is acknowledged of your withdrawal for a public hearing concerning Public Notice No. IHW-M-5, dated 21 October 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway (Tributary Channel) - Channel to Harlingen. Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

APR 17 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (789526)

Colonel Don S. McCoy
District Engineer
U. S. Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your project, "Gulf Intracoastal Waterway - Tributary Channel to Harlingen via Arroyo Colorado" as covered in Public Notice No. IWV-M-5 dated October 21, 1974. We have also reviewed your March 14, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

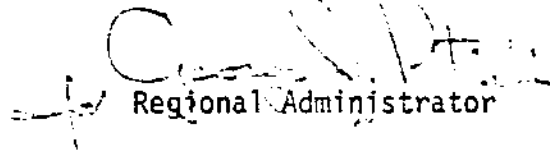
Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. The backside and ends of open water disposal area No. 1 shall be leveed as soon as possible. The back levee shall not be more than 1,200 feet from the centerline of the channel and the dredged material shall not be discharged or allowed to become emerged further than 1,200 feet from the channel centerline.
2. The backside of Disposal Area No. 2 must be leveed prior to any further use. This area may be leveed as previously described in our correspondence concerning your Public Notice No. IWV-M-4.
3. The backside and ends of disposal areas Nos. 3, 4, 5, and 6 shall be leveed as soon as possible. The back levee for areas 3 and 4 shall not be more than 2,000 feet from the centerline of the channel and the dredged material shall not be discharged further than 2,000 feet from the channel centerline.

4. Disposal Area No. 21 shall not be used for dredged material disposal.

Since as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,



Regional Administrator

SUPPLEMENT NO. 6

HIGH ISLAND TO GALVESTON BAY

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SUPPLEMENT NO. 6

HIGH ISLAND TO GALVESTON BAY

SUPPLEMENT NO. 6
HIGH ISLAND TO GALVESTON BAY

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intracoastal Waterway (GIWW) from High Island to Galveston Bay. This portion of the waterway is about 30 miles long and is maintained at a depth of 12 feet and a width of 125 feet from the vicinity of High Island to the vicinity of the Houston Ship Channel in Galveston Bay. This channel section extends westerly and southwesterly from the State Highway 124 bridge crossing on the GIWW via East Bay Bayou cutoffs and landlocked cuts, crosses Rollover Bay, and traverses the northern section of Bolivar Peninsula to the Houston Ship Channel. The project also includes a barge assembling basin 12 feet deep, 300 feet wide, and 5,500 feet long located near Port Bolivar. The channel requires maintenance dredging about every 18 months in selected reaches to remove about 1.6 million cubic yards of material. Maintenance will be performed by contracted hydraulic pipeline dredges, and materials dredged will be deposited in confined and partially confined disposal areas. Figures 2 through 6 of the attached public notice show disposal areas Nos. 28 through 43 which are used for disposal operations. Selected sections of this reach of the waterway were last maintained during the period of May - October 1974. The next maintenance dredging is scheduled to begin after March 1976. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. The recorded tonnage of cargo handled by ports and moved on the GIWW between the Sabine River and Galveston Bay in 1974 was 40.0 million tons. Principal commodities shipped included crude petroleum, petrochemicals, and other petroleum products. The GIWW has grown consistently and has contributed substantially to the regional and national economy. A recent study by

Texas A&M University has placed the total direct and indirect value of the channel to the State of Texas at more than \$19 billion per year. Should this vital transportation system be closed because of lack of maintenance, the adverse economic impact would be felt throughout the state in loss of employment and higher commodity prices.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located in the physiographic region of Texas classified as the Coastal Prairies. This reach of the GIWW extends from High Island in the eastern portion of Galveston County through bayou cutoffs, tidal marshes, shallow bays, and along the northern section of Bolivar Peninsula to the Houston Ship Channel in Galveston Bay.

3.02 The bay areas in the vicinity of the project have shallow water depths of less than 3 feet below mean low tide and contain some submerged aquatic vegetation. The bay areas, tidal marshes, and streams provide high quality habitat used by many species of fish and crustaceans as feeding, breeding, and nursery habitat. The tidal marshes also furnish important nutrients to the bays. Rollover Pass, a man-made opening linking East Bay to the Gulf of Mexico, is important for the migration of fish and crustaceans to and from both areas.

3.03 Important species of fish and crustaceans using the project area include spotted seatrout, sand seatrout, red drum, black drum, Atlantic croaker, anchovy, menhaden, sea catfish, spot, flounder, striped mullet, brown shrimp, white shrimp, and blue crab. Oysters also are common throughout East Bay. Sport fishing is very heavy in East Bay while commercial fishing is light for finfish and heavy for shrimp and oysters.

3.04 Wildlife habitat in the project area consists of the bays, tidal marshes, tidal streams, low-lying uplands, and the disposal islands and mounds.

3.05 The bay areas, tidal marshes, and tidal streams provide feeding, resting, and nesting habitat for many species of waterfowl and other birds while the tidal marshes and streams also provide important habitat for the American alligator, mink, otter, nutria, and muskrat. The low-lying uplands and the disposal islands and mounds provide habitat for mourning dove, raccoon, opossum, rabbit, coyote, and red wolf.

3.06 Light to moderate populations of mourning dove, raccoon, opossum, rabbit, mink, otter, American alligator, coyote, and red wolf are found in the project area. Populations of nutria and muskrat are fairly large. Hunting is light for all game species and is expected to remain so in the future. Trapping is fairly intense for muskrats and moderate to light for mink, otter, and nutria.

3.07 Important species of waterfowl in the project area include the Canada goose, white-fronted goose, snow goose, pintail, shoveler, gadwall, American widgeon, blue-winged teal, green-winged teal, mottled duck, fulvous tree-duck, redhead, canvasback, lesser scaup, ring-necked duck, ruddy duck, and coot. Most of the waterfowl use is by migrants during the late fall and winter months. The mottled duck is a resident species while the fulvous tree-duck is found primarily during the summer and early fall months. Waterfowl hunting is important in the project area.

3.08 Many other birds use the project area for nesting, feeding, resting, and cover. Among these are pelican, heron, egret, bittern, ibis, roseate spoonbill, rail, gallinule, gull, tern, plover, sandpiper, common snipe, and peregrine falcon.

3.09 Endangered species known to range in the area include Florida manatee, red wolf, right whale, sperm whale, blue whale, finback whale, Attwater's prairie chicken, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrin falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, leatherback turtle, and Houston toad.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have adverse effects on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants found in some sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible, localized turbidity, burial of bottom dwelling organisms, possible resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird

nesting areas where island develop, creation of suitable substrate for oysters, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and, in some cases, may cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Photosynthetic activity along this reach of the GIWW is not a significant contributor to the bay productivity, and, therefore, increased turbidities resulting from open water disposal should have only minimal adverse effects.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy dredged material layer. Some of the more mobile organisms are able to work upward through the material while the sessile organisms perish.

4.08 Oyster reefs can be severely affected by siltation, depending on their height above the surrounding level bottom. Low profile reefs in the path of a mud flow can be covered, resulting in loss of any existing oysters. In some cases, the material is not removed by wave action and the reef becomes permanently buried. Higher reefs generally will not be covered by silt. Along this reach of the channel, there are no oyster reefs of significant size to be affected by disposal operations.

4.09 Disposal of dredged materials in open water will cover any vegetation that exists in the disposal area. In this reach, all areas that will be used for deposition of sediments have previously been used for this purpose. Therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.10 Open water disposal of polluted sediments is of much greater concern and presents more problems than land

disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.11 Sediment samples taken along this reach of the channel in August 1972 were found to exceed EPA criteria of 1/11/71 (proposed criteria for limiting open water disposal of dredged material) at some locations for total Kjeldahl nitrogen, mercury, and zinc (Table 13, Volume 1, page 3). Fish kills, however, as a result of resuspended pollutants, are not known to have occurred and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated. As required by EPA, monitoring of the effluent from disposal area No. 42 will be accomplished. This monitoring will be of sufficient quantity to predict the quality of effluent that can be expected from the area and the possible effect on the quality of the receiving water. Parameters selected will be representative of the waste products discharged to the channel. Also, in areas where dredged material is to be deposited in open water, sediment samples will be taken. If the sediments are found to exceed 1.0 mg/kg mercury or 50 mg/kg lead, they will not be deposited in open water.

4.12 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.13 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed,

particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubtful that such effects are significant.

4.14 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.15 The most significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of the area. Changes in vegetation type as a result of disposal operations in this reach will be minimal, since the areas to be used for disposal have been used previously, and the changes have already occurred.

4.16 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands

as primary food source areas, dredging practices have been changed to avoid disposal in marsh areas wherever practicable. As recommended by the NMFS, surveys of selected disposal sites will be made to determine the presence of oyster reefs and marsh vegetation within six months prior to beginning any dredging. Following these surveys, adjustments in disposal areas will be made on a case by case basis to permit maximum feasible mitigation of adverse effects on oysters and marsh vegetation.

4.17 Out of 27,300 acres of marsh adjacent to this reach of the GIWW, approximately 325 acres, or 1.2 percent, may be affected by future disposal operations. The 27,300 acres of marsh adjacent to the GIWW does not include marsh areas surrounding the major bays and river inlets. The estimate was prepared by Corps of Engineers personnel from the most recent coast charts available. It has not been practicable to make surveys of each area to determine the exact extent of marsh land within the disposal area limits. The estimates are therefore based on vegetation cover shown on the coast charts. It is considered that much of the acreage included as marsh to be covered has been covered by past dredging and is no longer marsh. It is believed that reduction of marsh areas caused by dredging of this reach will be minimal.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. Four responses to the public notice have been received. A favorable response was received from the Port of Houston Authority. The Galveston Regional Group, Sierra Club, responded with a single letter commenting on 5 public notices. The Sierra Club indicated that the notices did not give sufficient recognition to the importance of both natural and previously disturbed habitat and to living organisms in the project areas. The letter also made suggestions for alternatives to be considered and pollutant monitoring programs. All such considerations are routinely made in other project documents, including environmental statements and assessments. Responses from the USF&WS and the NMFS reiterated recommendations contained in the USF&WS report dated 10 September 1971. The recommendations stated that toe levees should be constructed along back limits and ends of each unconfined disposal area when the areas become emergent above Mean High Water, and that the toe levees should be as close to the channel as practicable and no further than 1,350 feet from the channel centerline. The distance of 1,350 feet is considered to be the minimum necessary to provide sufficient capacity for future disposal operations. Levees will be constructed at this distance from the channel centerline when the areas become emergent above Mean High Water. Maintenance of levees and drainage structures prior to and during dredging operations, as recommended by NMFS, is routinely accomplished. The NMFS also recommended that the Corps of Engineers conduct surveys of disposal areas for oyster reefs and marsh vegetation, and prepare plans and specifications designating specific discharge locations to avoid affecting such resources. Surveys of selected disposal sites will be accomplished within six months prior to beginning any dredging. While predesignation of discharge points is not considered practicable from a contractual standpoint, the intent of that recommendation will be met by adjusting disposal areas on a case by case basis to permit maximum feasible mitigation of adverse effects on oysters and marsh vegetation.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 26 March 1975, the Environmental Protection Agency approved the dredging and dredged material disposal plan under 33 CFR 209.145 for one year, subject to the following restrictions:

a. Dredged material containing more than 1.0 mg/kg mercury or 50 mg/kg lead shall not be deposited in open water disposal areas.

b. Sufficient monitoring of the effluent from disposal area No. 42 shall be accomplished for predicting the quality of effluent that can be expected from the area and the possible effect on the quality of the receiving stream. Parameters selected for monitoring must be representative of the waste products discharged to the stream where dredging will be accomplished.

c. Effluent from all fully confined disposal areas shall be discharged through control structures into the Gulf Intracoastal Waterway.

d. The backside of each open water disposal area shall be leveed as soon as possible, and as near the channel as feasible. The back levees shall not be more than 1,350 feet from the center line of the channel. The dredged materials shall not be discharged or allowed to become emerged further than 1,350 feet from the channel centerline.

In a letter dated 9 October 1975 (Vol I, page E-1), EPA modified recommendation d to read 2,300 feet instead of the 1,350 feet restriction. All requirements will be complied with. Long term EPA approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



SWGCO-1

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

PUBLIC NOTICE NO. 1WW-1'-8

22 October 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL) - HIGH ISLAND TO GALVESTON BAY

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 25 November 1974. Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel) - High Island to Galveston Bay.

PROJECT LOCATION: Near the towns of Port Bolivar and High Island in Chambers and Galveston Counties, Texas.

PROJECT DESCRIPTION: This portion of the Federally maintained 125-foot wide Gulf Intracoastal Waterway (GIWW) reaches from the vicinity of High Island to the vicinity of the Houston Ship Channel in Galveston Bay. It extends westerly and southwesterly from the State Highway 124 crossing on the GIWW via East Bay Bayou cut-offs and landlocked cuts, across Rollover Bay and traverses the northern section of the Bolivar Peninsula to the Houston Ship Channel. The project also includes a barge assembling basin 300 feet wide by 5,500 feet long located near Port Bolivar. The channel and barge assembling basin are maintained to a depth of 12 feet below mean low tide (Corps of Engineers datum).

DISPOSAL AREAS: The reach of the GIWW from High Island to Galveston Bay utilizes sixteen disposal areas. The disposal areas for the GIWW project are numbered sequentially from the Port Arthur area to Port Isabel. The areas in this section of the waterway are Nos. 28 through 43 and are used extensively for contract pipeline dredge disposal operations.

Disposal Areas Nos. 28 - 37, 39 - 40 and 42 are confined disposal areas located on adjacent banks of the waterway (see Drawing Sheets 2 - 6). These areas have existing perimeter levee systems with the exception of Disposal Area No. 39. This area now partially enclosed will be completely leveed at some future date when the balance of the area is required for disposal operations.

Disposal Areas Nos. 38, 41 and 43 are partially confined disposal areas located northwest of the waterway (see Drawing Sheets 4 - 6). These partially confined areas are located on land and bound on one or more sides by the waters of East Bay or Galveston Bay. Toe levees will be constructed at some future date when the emergent areas become large enough to contain dredge materials within a perimeter levee system and the levees will not erode away.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from the waterway consist of sands, silts and clay. Shoaling in the waterway is a result of deposits occurring from wind-driven waves and tidal actions from the Gulf and in the bayous and bays. The shoaling rate of this section of the waterway is approximately 1 million cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain this section of the waterway. The frequency of dredging in selected reaches is about every 24 months. The excavated material is transported by pipeline and placed in the various disposal areas. The average quantity of materials dredged per contract is about 1.6 million cubic yards. Selected sections of this reach of the waterway were last maintained during the period May - October 1974. The next maintenance work will be scheduled after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 28 - 30 are located on the southeastern and east banks of the waterway. The areas are bound by the waterway on the west and northwest and Horseshoe Marsh on the remaining sides.

Disposal Area No. 31 is located on the northwestern bank of the waterway and is bound by the waterway on the east, an oxbow of East Bay Bayou on the south, and grass and marsh areas on the north and west.

Disposal Areas Nos. 32 - 34 are located south of the waterway and are bound by the waterway on the north and marsh areas on the remaining sides.

Disposal Area No. 35 is located northwest of the waterway. It is bound by East Bay on the north, the waterway on the south and east, and marsh areas on the west.

Disposal Areas Nos. 36 and 37 are located on the northwest bank of the waterway. They are bound by the waterway on the southeast and marsh areas on the remaining sides.

Disposal Area No. 38 is located on the northwest bank of the waterway. It is bound by the waterway on the south, by East Bay on the north, and by marsh areas on the east and west.

Disposal Area No. 39 is located on the northwest bank of the waterway. It is bound by the waterway on the south, by Stingaree Cove on the east, by marsh areas on the north, and by Disposal Area No. 40 on the west.

Disposal Area No. 40 is located on the northwest bank of the waterway. It is bound by the waterway on the south, by Disposal Area No. 39 on the east, by Galveston Bay on the west, and by marsh areas on the north.

Disposal Area No. 41 is located northwest of the waterway. It is bound by the waterway on the southeast, by Galveston Bay on the northwest and northeast, and by grazing areas on the southwest.

Disposal Area No. 42 is located southeast of the waterway. It is bound by the waterway on the northwest, by undeveloped areas on the northeast, by residential and undeveloped areas on the southeast and by commercial and residential areas on the southwest.

Disposal Area No. 43 is located on the northwest of the waterway. It is bound by Galveston Bay on the northwest and north, and grazing areas on the remaining sides.

DREDGING BY OTHERS: Port Bolivar Fisheries, Inc., was the principal company recently performing dredging operations in the vicinity of the

Federal project. The estimated quantity of materials dredged was 42,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated:

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Galveston County
Commissioners' Court of Chambers County
Chambers-Liberty Counties Navigation District
Galveston County Navigation District No. 1

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A separate Environmental Statement will not be prepared for this reach of the GIWW. However, an Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) is being prepared and the final is scheduled to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies.

The shoaling rate in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of this main channel until after an environmental statement is filed with the Council on Environmental Quality without serious impairment to the navigability of this project.

22 October 1974

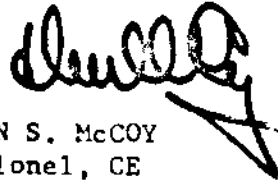
Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

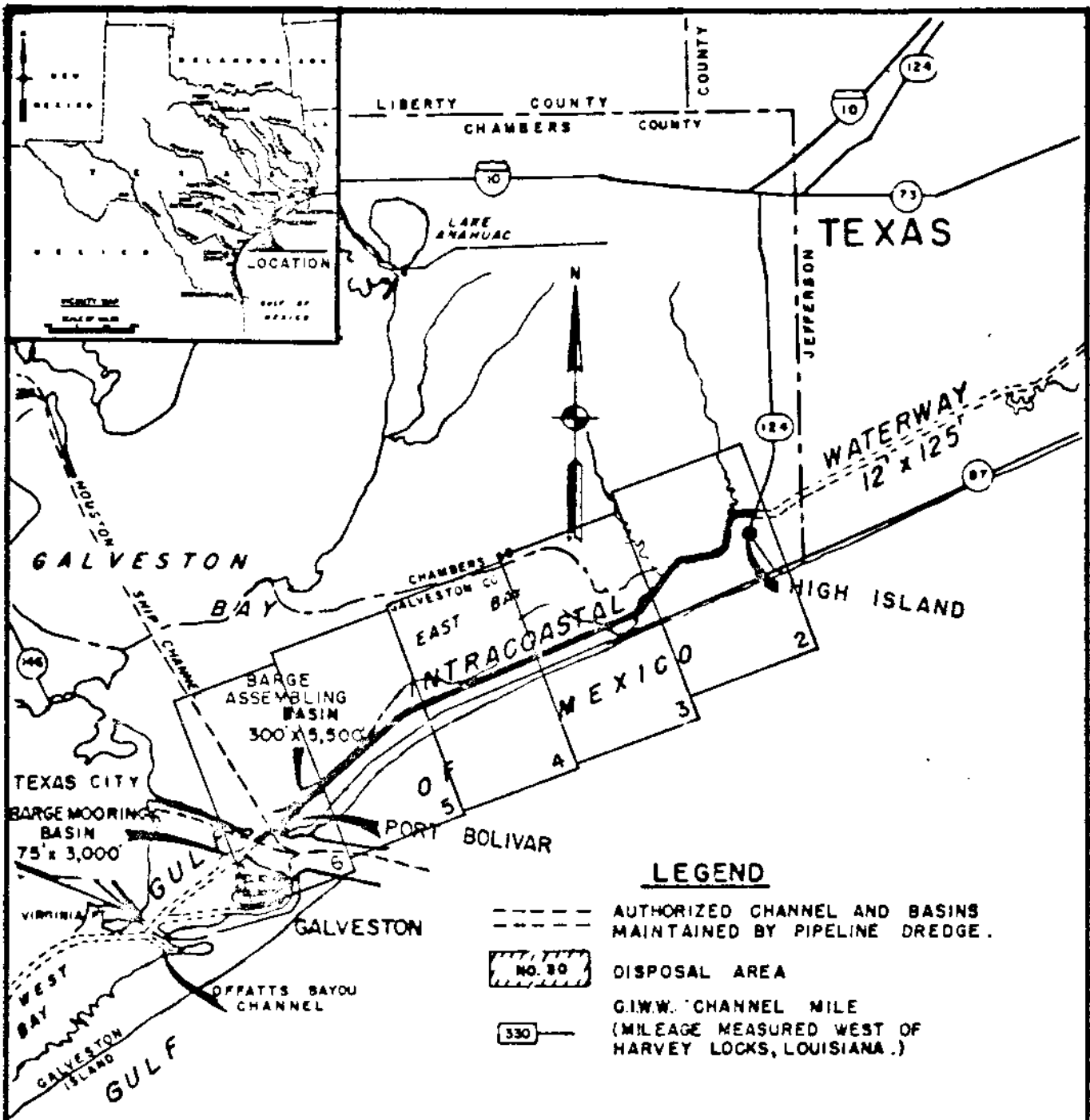
District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-8 dated 22 October 1974.



DON S. McCOY
Colonel, CE
District Engineer

1 Incl
Dwg, Oct 74



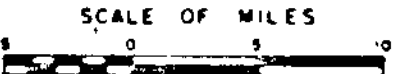
LEGEND

- AUTHORIZED CHANNEL AND BASINS MAINTAINED BY PIPELINE DREDGE.
- NO. 80 DISPOSAL AREA
- 330 GI.W.W. CHANNEL MILE (MILEAGE MEASURED WEST OF HARVEY LOCKS, LOUISIANA.)

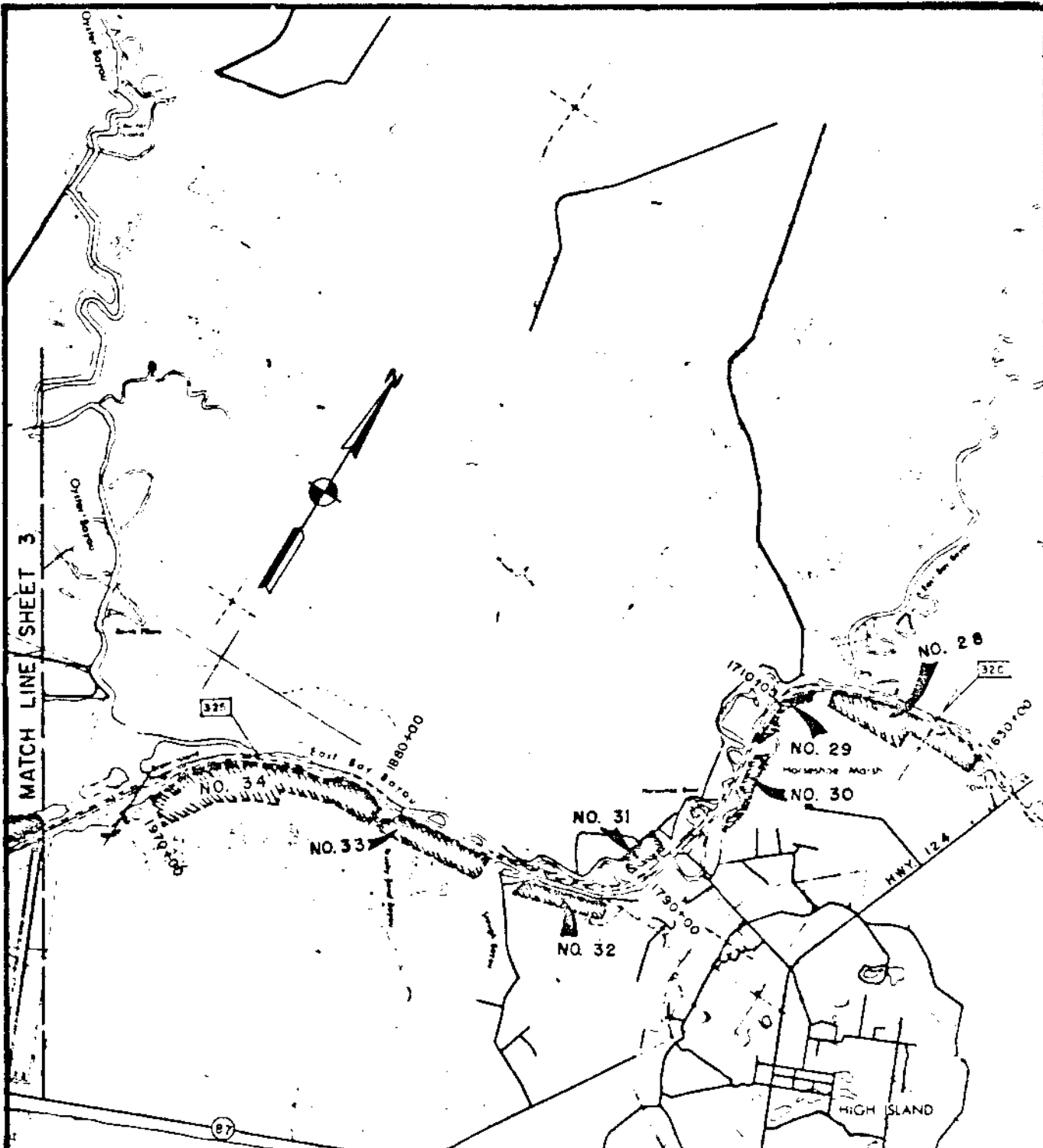
NOTE

THIS DRAWING ACCOMPANIES PUBLIC NOTICE NO. IWW-M-8.
SEE SHEETS 2 THROUGH 6 FOR DISPOSAL AREAS.

INDEX MAP



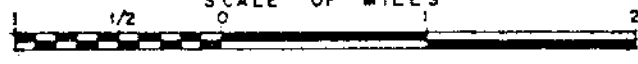
GULF INTRACOASTAL WATERWAY AND TRIBS., TEXAS
(MAIN CHANNEL)
HIGH ISLAND TO GALVESTON BAY
MAINTENANCE DREDGING
U.S. ARMY ENGINEER DISTRICT GALVESTON TEXAS



GULF OF MEXICO

SEE SHEET 1 OF 6 FOR LEGEND AND NOTES.

SCALE OF MILES

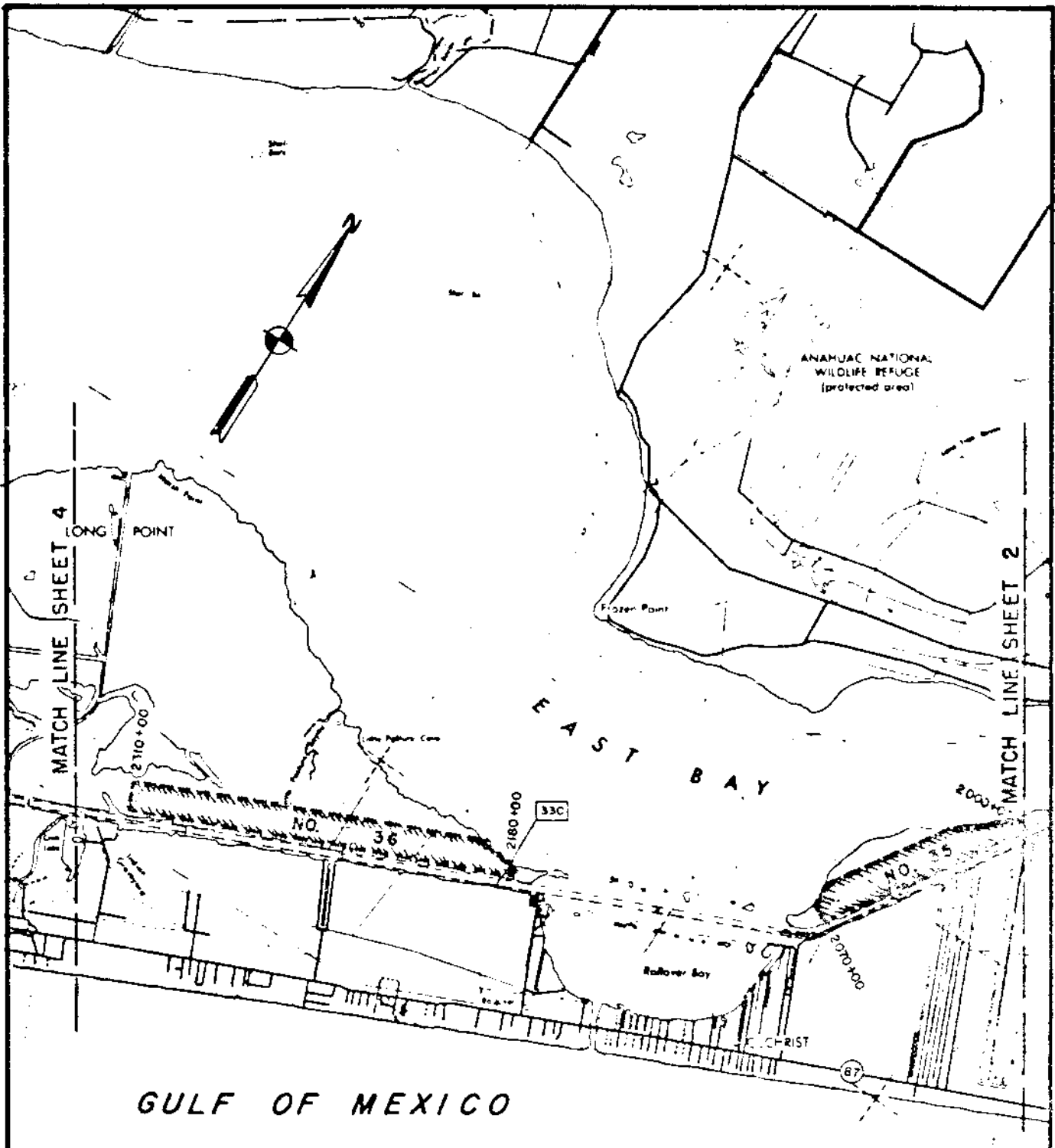


GULF INTRACOASTAL WATERWAY AND TRIBS., TEXAS
 (MAIN CHANNEL)
 HIGH ISLAND TO
 GALVESTON BAY
 MAINTENANCE DREDGING

U.S. ARMY ENGINEER DISTRICT GALVESTON TEXAS

OCTOBER 1974

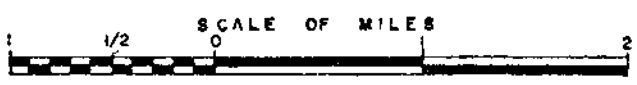
SHEET 2 OF 6

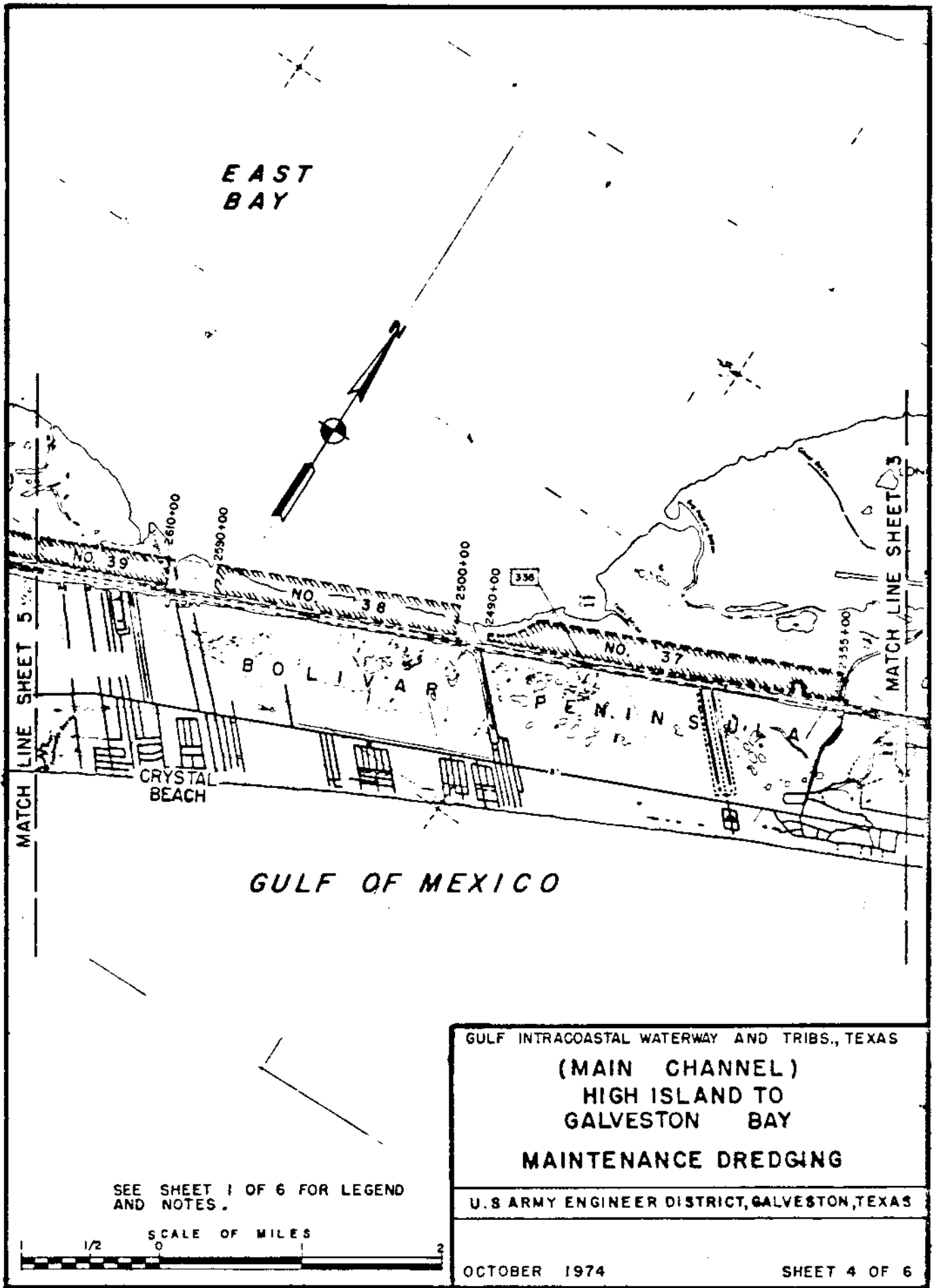


GULF OF MEXICO

GULF INTRACOASTAL WATERWAY AND TRIBS., TEXAS (MAIN CHANNEL) HIGH ISLAND TO GALVESTON BAY MAINTENANCE DREDGING	
U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS	
OCTOBER 1974	SHEET 3 OF 6

SEE SHEET 1 OF 6 FOR LEGEND AND NOTES.





**EAST
BAY**

MATCH LINE SHEET 5

MATCH LINE SHEET 3

NO. 39
2610+00
2590+00
NO. 38
2500+00
2490+00
336
NO. 37
2395+00

**BOLIVAR
PENINSULA**

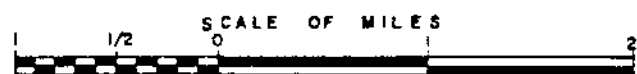
**CRYSTAL
BEACH**

GULF OF MEXICO

GULF INTRACOASTAL WATERWAY AND TRIBS., TEXAS
(MAIN CHANNEL)
HIGH ISLAND TO
GALVESTON BAY
MAINTENANCE DREDGING

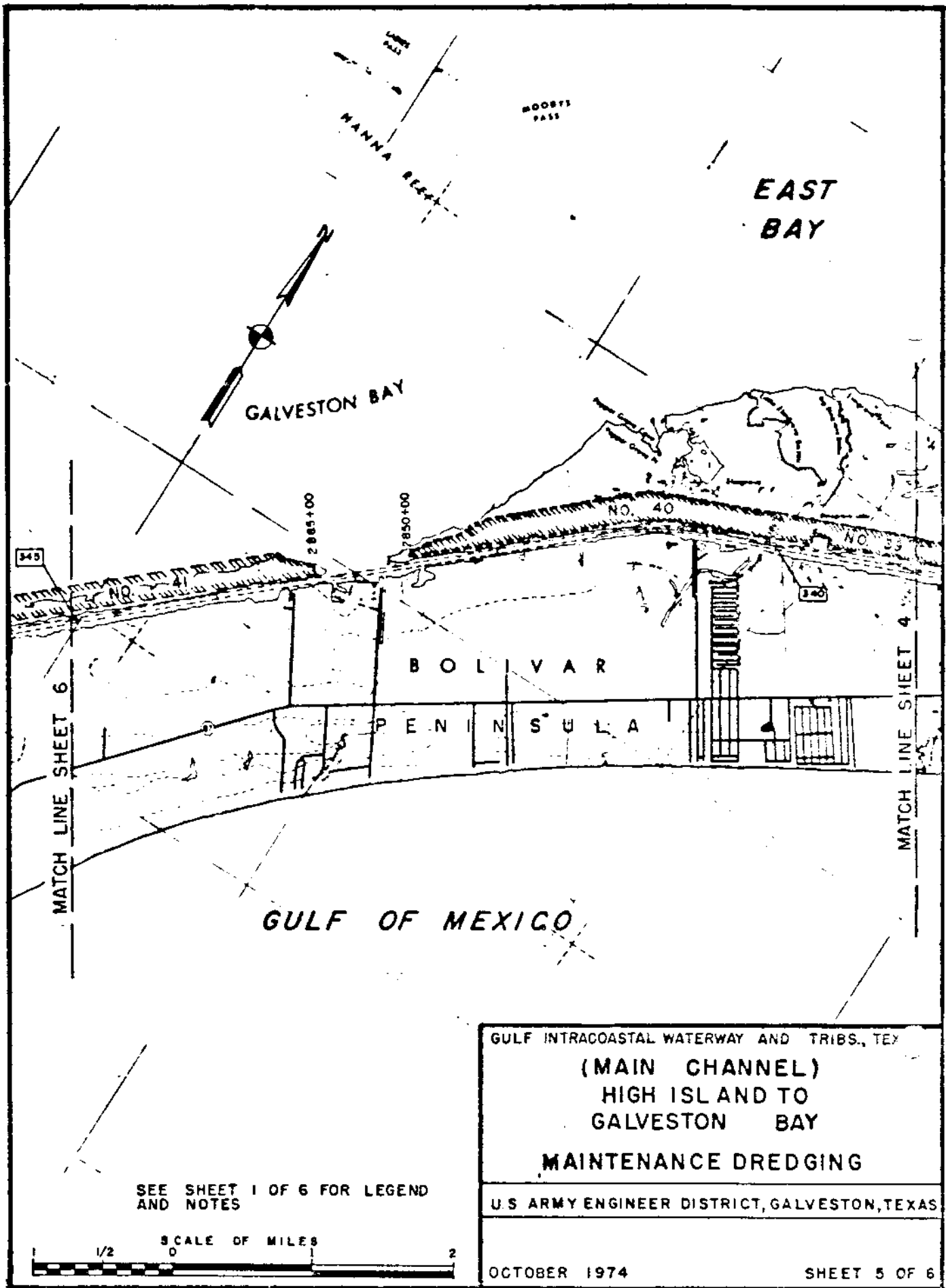
U. S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS

SEE SHEET 1 OF 6 FOR LEGEND AND NOTES.



OCTOBER 1974

SHEET 4 OF 6



EAST BAY

GALVESTON BAY

ROOSTS PASS

MANNA BEACH

345

2885+00

2850+00

NO. 40

NO. 35

MATCH LINE SHEET 6

MATCH LINE SHEET 4

BOLIVAR

PENINSULA

GULF OF MEXICO

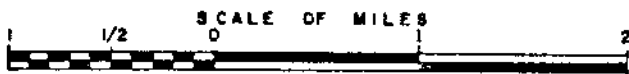
GULF INTRACOASTAL WATERWAY AND TRIBS., TEX

(MAIN CHANNEL)
HIGH ISLAND TO
GALVESTON BAY

MAINTENANCE DREDGING

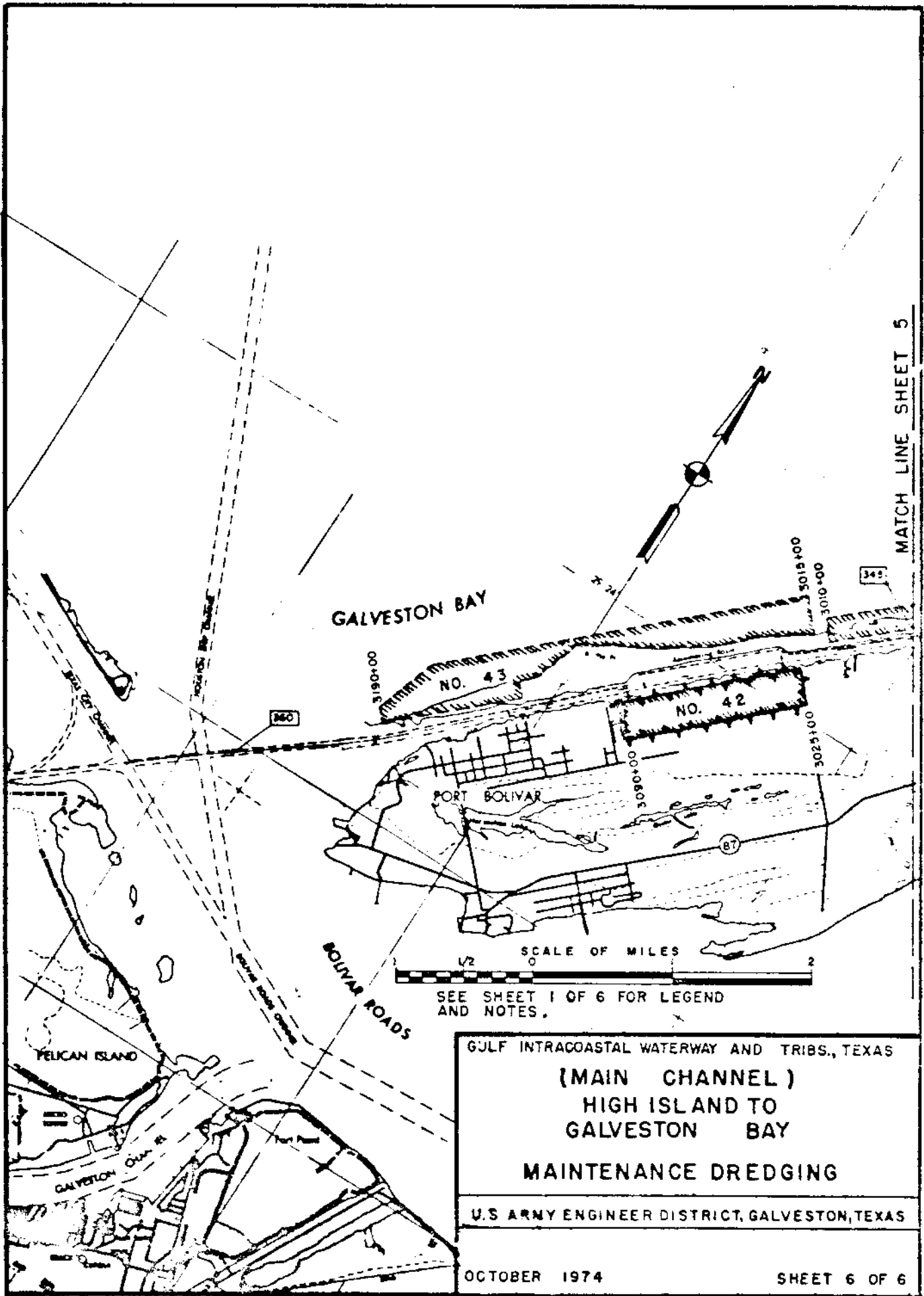
U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS

SEE SHEET 1 OF 6 FOR LEGEND AND NOTES



OCTOBER 1974

SHEET 5 OF 6



MATCH LINE SHEET 5

SEE SHEET 1 OF 6 FOR LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY AND TRIBS., TEXAS
 (MAIN CHANNEL)
 HIGH ISLAND TO
 GALVESTON BAY

MAINTENANCE DREDGING

U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS

OCTOBER 1974

SHEET 6 OF 6



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

IN REPLY REFER TO:

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 20, 1974

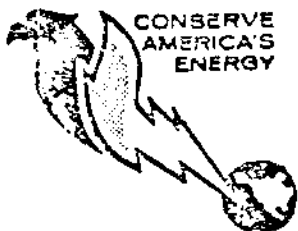
District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice No. IWM-M-8, dated October 22, 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) from High Island, Texas to Galveston Bay, Texas.

The U. S. Fish and Wildlife Service transmitted a report on this maintenance dredging project to the Corps of Engineers on September 10, 1971. Based on a review of that report and on the information presented in the public notice, we have determined that the conclusions and recommendations cited in that September 1971 report are still applicable.

We wish to take this opportunity to call your attention to one of the provisions of Recommendation No. 6 in the 1971 report. This recommendation specifies that a toe levee be constructed on the emerging spoil at a distance of 1,350 feet from the centerline of the channel. Our intent in recommending a specific distance from channel centerline was to establish a limit to the area of spoil flow thereby restricting the amount of damage to wetland or aquatic environments. It was our intent, although admittedly not clearly set forth in the report, that the distance of 1,350 feet be considered a maximum distance rather than a fixed distance. If the spoil from the present and future dredging operations can be confined within a smaller space then it would be appropriate that the toe levee be located closer to the channel centerline. Other reports on maintenance dredging projects issued by the Fish and Wildlife Service contain provisions of a similar nature and these should be interpreted in the same manner. We propose, in future



reports, to use the wording "as close to the channel as feasible but no farther than _____ feet" in order to clarify the meaning of this recommendation.

The opportunity to comment on this public notice is appreciated.

Sincerely yours,


Deputy Regional Director

cc:

Executive Director, Texas Parks and Wildlife Dept., Austin, Texas
Regional Director, National Marine Fisheries Service, St. Petersburg,
Florida
Area Supervisor, Environmental Assessment Div., NMFS, Galveston, Texas
Field Supervisor, FWS, Div. of River Basin Studies, Galveston, Texas

SWCCO-H

24 February 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference is made to Mr. Jerry Stegman's letter dated 20 November 1974 concerning Public Notice No. IHW-M-8 on maintenance dredging of the Gulf Intracoastal Waterway from High Island to Galveston Bay.

We have reviewed Recommendation No. 6 in the 1971 report to which you refer, and your present recommendation to decrease to size of disposal areas where possible. When the back limit distances were agreed to in the original report, it was with the understanding that dredged material would be deposited over the existing crest within each area. Further, that toe levees would be constructed along the specified back limits and ends when the areas became emergent 1.5 feet above Mean Sea Level (MSL) and were large enough to contain the dredged material within a perimeter levee system. A later agreement between you and the Corps of Engineers recognizes that Mean High Water datum is more workable and was therefore adopted to replace the 1.5 feet above MSL. Our review of the areas along this reach reconfirmed that the 1,850-foot limits are the minimums to which the areas can be confined and still be effectively used. Therefore, we plan to proceed with our existing agreement with you for leveeing the disposal areas between High Island and Galveston Bay.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Field Supervisor
USF&WS, Galveston, Texas 77550

E. D. McGERKE
Chief, Construction-
Operations Division



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

December 3, 1974

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
Post Office Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

By Public Notice No. IWW-M-8 dated October 22, 1974, you notified the National Marine Fisheries Service (NMFS) of the Corps of Engineers' proposed plans for spoil disposal associated with the maintenance dredging operations of the Gulf Intracoastal Waterway (Main Channel) - High Island to Galveston Bay.

The Bureau of Sport Fisheries and Wildlife (BSFW), by letter to your office dated September 10, 1971, commented on plans for spoil disposal during maintenance dredging of this segment of the Gulf Intracoastal Waterway. The NMFS assisted in the preparation of these recommendations, which subsequently received our concurrence.

We have reviewed the present proposal and offer the following recommendations. These recommendations were made in the above cited BSFW letter and are reiterated because they were not fully incorporated into the present plans:

(1) Disposal Areas 38, 41 and 43 should be leveed as soon as possible, with the backside levees as near to the channel as feasible. Meanwhile, all dredged materials placed in these unconfined areas should be discharged slightly over the crests of the existing banks. The points of discharge should be moved laterally and frequently to permit uniform distribution of emergent banks, each with a backside shoreline equidistant from the waterway. However, no spoil should be discharged, or allowed to become emergent, at a distance greater than 1,350 feet from the centerline of the channel in Disposal Areas Numbers 38 and 41, and 2,300 feet from the centerline of the channel in Disposal Area No. 45. Confining levees should connect with the peninsula at the ends of the designated spoil areas.

(2) All confinement levees should be refurbished prior to each maintenance dredging operation.

(3) Overflow from confined spoil areas should be controlled by weirs, located so that the effluent drains directly into the Gulf Intracoastal Waterway.

(4) Daily surveillance of the disposal of dredged materials should be conducted to help reduce accidental spillage of spoil materials outside of confined areas, and to insure immediate corrective measures are taken should such spillage occur.

(5) Within six months prior to any maintenance dredging, the three open-bay disposal areas (Disposal Areas 38, 41, and 43) should be surveyed to determine the presence and density of oyster beds and tidal marsh. From this survey, pipeline discharge points should be selected that would cause the least adverse impact to oysters and areas of tidal marsh.

(6) Prior to issuance of contracts for maintenance dredging, detailed plans should be submitted to the Federal and State fish and wildlife agencies, including the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550, for review. Included should be the proposed discharge points and the results of the oyster bed - tidal marsh survey.

The Corps' termination of open-bay spoil disposal in Rollover Bay and the adjacent parts of East Bay subsequent to the recommendations of the September 10, 1971, BSWF report and later informal requests by members of my staff is greatly appreciated.

Thank you for the opportunity to review and comment on the maintenance plans of this authorized Federal project.

Sincerely,

E. L. Arnold, Jr.

WHS
William H. Stevenson
Regional Director

20 February 1975

Mr. William E. Stevenson
Regional Director
National Marine Fisheries Service
Deval Building
9650 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

This is in reply to your letter dated 3 December 1974 concerning Public Notice No. IZ-M-8 on maintenance dredging of the Gulf Intracoastal Waterway - High Island to Galveston Bay.

We have reviewed your recommendations and feel we can comply as follows:

Recommendation No. 1 - Disposal Areas Nos. 38, 41 and 43 will be leveed as soon as possible. However, the existing limits of these areas are the minimum distances at which levees can be built, and use of the areas remain practical and economically feasible. Therefore, levees will be constructed along the specified limits when the areas become emergent above Mean High Water.

Recommendation No. 2 - All required levees will be refurbished, as necessary, prior to each maintenance dredging contract.

Recommendation No. 3 - Wherever economically feasible, spillways will be placed where effluent from confined areas will drain into the Gulf Intracoastal Waterway.

Recommendation No. 4 - Our contract specifications presently require the contractor to exercise precautions to lessen the possibility of levee breaks and accidental spillages.

Recommendations Nos. 5 and 6 - We have initiated plans to make surveys as you have suggested and as determined necessary by our staff biologists. Based on the findings, we will make adjustments to our disposal plans on a case by case basis. However, we cannot concur in your suggestion that

SWOOD-M

20 February 1975

Mr. William E. Stevenson

discharge points be predesignated for each contract. Predesignation of discharge points is not feasible from a contractual standpoint and is not consistent with your comments on disposal operations in Recommendation No. 1, nor previous U. S. Fish and Wildlife recommendations concerning the same subject matter. As has been our policy in the past, we will continue to furnish you plans and specifications for your review during the advertising period for each contract reach.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Area Supervisor
NMFS, Galveston, Texas 77550

E. D. McGEHEE
Chief, Construction-
Operations Division

F. Hermann Rudenberg, Ph.D.
3327 Avenue Q 1/2
Galveston, Texas 77550

District Engineer:
Galveston District, Corps of Engineers
ATTN:SWGCC-M
P. O. Box 1229
Galveston, Texas 77550

October 28, 1974

Dear Sir:

I have received Public Notices regarding maintenance dredging of waterways in the vicinity of Galveston numbered:

✓HSC-M-1 dated September 27, 1974
IWW-M-3 October 8, 1974
GALV-M-1 October 17, 1974
IWW-M-8 October 22, 1974
GALV-M-2 October 23, 1974

In all of these, disposal in "open water areas" is included. In none of these is toxicological assay, or even chemical analysis, of dredged material considered. Yet, in all (except GALV-M-2), the need to not await an environmental statement is mentioned because of the economic importance of prompt maintenance dredging necessitated by a considerable shoaling rate.

While the economic need is recognized by us, there is another economic need that is not indicated by the Corps in the Public Notices. This is the need to preserve water areas and salt marshes, and the like, as areas vital to the survival of the marine food chain. The sum-total of all this dredging and disposal, with attendant turbidity and dispersion, plus all the other dredging and disposal by industrial firms referred to in these Notices, represents a rather overwhelming challenge to the maintenance of marine organisms each of which has a part in the food chain. As already made evident by the urgent need to redredge promptly, additional redredging will again be necessary in a couple of years and increasing motorized traffic will wear away unleveed areas increasingly sooner. There is therefore a rather excessive portion of our bay, estuary, and marshland area that will not only be unproductive but serve as the burying ground for any organism that happens to be there during spoil deposition.

In the modern view recognition of the economic importance of our bays, estuaries, and marshland for portions of the life cycle of species such as shrimp, which are of direct economic importance to man, and for other organisms that are of indirect importance to man since they are part of the food chain, is a part of wise planning.

A need for elevation of highways in the coastal flood plain has already been detected. Soil for this elevation, or for grade raising in areas having subsidence, might well originate from dredging of channels, unless structurally not prudent. The economics of using dredged spoil should be studied with inclusion

of all ramifications of this use of spoil, rather than its use in open water where dredging may be required later. These economic considerations also include the value to residents of improved storm evacuation routes and the value of the marine organisms that are not destroyed because the spoil is deposited elsewhere.

I have received a detailed reply by Mr. E. D. McGehee, Chief, Construction-Operations Division, Galveston District, Corps of Engineers concerning my comments pertaining to the Galveston Harbor 40-foot project (GALV-NW-1). I appreciate his detailed comments very much. Possibly it is worth indicating that perhaps we have detected a need for new technology, technology satisfactory to the Environmental Protection Agency and others, which should be part of the instrumentation on each dredge. In this direction perhaps the Technology Utilization program of NASA, with which I was associated for 6 years, might be approachable by the Corps of Engineers so as to find a cost-effective means to monitor dredged materials for potentially toxic contents.

Certainly, as pertains the present 5 Public Notices for maintenance dredging, the chemical search for potentially toxic materials should be carried out in likely areas such as the Houston Ship Channel, Galveston Harbor Entrance, Inland Water Way by Chocolate Bay, by Freeport (Dow), etc, etc.

Finally, these Notices do not seem to give any worth to existing spoil banks. I would guess that, since the last dredging, they have acquired some vegetation, shallow water organisms, and even wildlife possibly. Thus, just because these spoil areas have been used before should not prejudice one to say that they should be used again, or that they do not have any ecological value today.

We, the members of the Executive Committee of the Galveston Regional Group of the Sierra Club are opposed to the deposition of dredged spoil in open water areas and in marshland. We recognize that alternatives are not always available, but we feel that the knowledge that we have today, and did not have some years ago, clearly indicates that alternatives should be vigorously looked for.

Thank you for your consideration.

Sincerely yours,

F. Hermann Rudenberg
F. Hermann Rudenberg
Conservation Chairman,
Galveston Regional Group,
Sierra Club

SWGCO-M

18 November 1974

Dr. F. Hermann Rudenburg
Sierra Club
3327 Avenue Q½
Galveston, Texas 77550

Dear Dr. Rudenburg:

Receipt is acknowledged of your comments concerning the Public Notices:

HSC-M-1 dated 27 September 1974
IWW-M-3 dated 8 October 1974
GALV-M-1 dated 17 October 1974
IWW-M-8 dated 22 October 1974
GALV-M-2 dated 23 October 1974

Your concern is appreciated, and the following explanations are made to the questions you have raised.

A public notice is distributed to all interested State and Federal agencies and known interested persons to make them aware of the proposed project in order that they can assist in developing facts and recommendations concerning the projects. The public notices are statements of the proposals and are not intended to include the details that are in the environmental statements such as description of tests to be conducted or evaluations of alternative disposal areas. All projects described in the above mentioned public notices, except for the Houston Ship Channel, have draft environmental statements that are being coordinated with interested State and Federal agencies and conservation organizations. The drafts have also been filed with the Council on Environmental Quality (CEQ). Houston Ship Channel is scheduled to have a draft statement filed with CEQ by 17 January 1975. These statements include detailed descriptions of chemical tests conducted and analyses of samples taken. They consider the relationship of the proposed action to land use plans; the probable impact of the proposed action on the environment; any adverse environmental effects which cannot be avoided should the proposed action be implemented; and alternatives to the proposed action. Copies of draft environmental statements are available to you upon request.

SWCCO-M

Dr. F. Hermann Rudenburg
Sierra Club

18 November 1974

With regard to your concern for toxic materials, the dredged materials from the Houston Ship Channel and some other areas contain such materials. Sediment samples from all projects are analyzed and the results considered and reported in the Environmental Statements. The sediment tests include measurement of the following: total solids, volatile solids, chemical oxygen demand, total Kjeldahl nitrogen, oil-grease, mercury, lead, zinc, arsenic, cadmium, chromium, copper and nickel. The results of these tests are considered in the evaluation of their impact on the environment.

The Corps of Engineers has a comprehensive research program in progress that will address other points raised in your letter. This research program was authorized by Public Law 91-611 and is well underway. There is inclosed a copy of the first annual report of Dredged Material Research Program for your information.

Thank you for your review and comments on the public notices.

Sincerely yours,

Incl
As stated

J. D. BISSELL
Acting Chief, Construction-
Operations Division

PORT OF HOUSTON AUTHORITY

EXECUTIVE OFFICES, 1519 CAPITOL AVENUE • P. O. Box 2562 • HOUSTON, TEXAS 77001
TELEPHONE: (713) 225-0671



RICHARD P. LEACH
GENERAL MANAGER —
ADMINISTRATION

November 14, 1974

Colonel Don S. McCoy
District Engineer
Galveston District, Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Re: Public Notices Nos. LWW-M-3 and LWW-M-8, 8 and 22 October 1974.

Dear Colonel McCoy:

This is to advise that the Port of Houston Authority is strongly in favor of continued and uninterrupted maintenance dredging of those portions of the Gulf Intracoastal Waterway covered by the subject public notices.

Barge traffic is an important part of the commerce moving through the Port of Houston. Any reduction in the depth of the Gulf Intracoastal Waterway would adversely impact this commerce, with a comparable adverse effect on the economy of Houston and Harris County.

The alternatives to moving goods by barge over the Gulf Intracoastal Waterway are more costly and would increase the cost of living to the vast majority of the people of Texas and the United States. This is surely not in the public interest, most particularly at this time. The economic well being of the citizens of this area should preclude the possibility of any cessation or interruption of maintenance dredging of the Gulf Intracoastal Waterway.

Yours very truly,

General Manager -
Administration

RPL:hh

SH030-M

19 November 1974

Mr. Richard P. Leach
General Manager - Administration
Port of Houston Authority
P. O. Box 2562
Houston, Texas 77001

Dear Mr. Leach:

Receipt is acknowledged of your comments concerning Public Notices Nos. HSI-M-3 and HSI-M-8, dated 8 and 22 October 1974, pertaining to the maintenance dredging of portions of the Gulf Intracoastal Waterway. Thank you for your review and comment.

Sincerely yours,

J. D. BISSILL
Acting Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

March 26, 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (788915)

Colonel Don S. McCoy, District Engineer
U. S. Army Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your project "Gulf Intracoastal Waterway (main channel)- High Island to Galveston Bay", as covered in Public Notice No. IWW-M-8 dated October 22, 1974. We have also reviewed your March 17, 1975, Statement of Findings concerning this project in accordance with 33 C.F.R. 209.145.

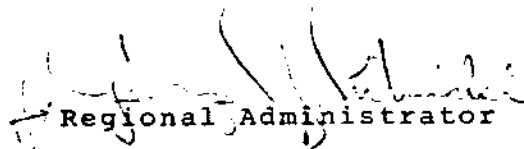
Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Dredged material containing more than 1.0 mg/kg mercury or 50 mg/kg lead shall not be deposited in open water disposal areas.
2. Sufficient monitoring of the effluent from disposal area No. 42 shall be accomplished for you to predict the quality of effluent that can be expected from the area and the possible affect on the quality of the receiving stream. Parameters selected for monitoring must be representative of the waste products discharged to the stream where dredging will be accomplished.
3. Effluent from all fully confined disposal areas shall be discharged through control structures into the Gulf Intracoastal Waterway.
4. The backside of each open water disposal area shall be leveed as soon as possible, and as near the channel as feasible. The back levees shall not be more than 1,350 feet from the center line of the channel. The dredged materials shall not be discharged or allowed to become emerged

further than 1,350 feet from the channel
centerline.

Since, as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,



Regional Administrator

SUPPLEMENT NO. 7

CORPUS CHRISTI BAY TO MUD FLATS

SUPPLEMENT NO. 7

CORPUS CHRISTI BAY TO MUD FLATS

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SUPPLEMENT NO. 7
CORPUS CHRISTI BAY TO MUD FLATS

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intracoastal Waterway (GIWW) from Corpus Christi Bay to Mud Flats. This portion of the existing waterway is a shallow-draft channel about 58 miles long which extends from south Corpus Christi Bay southerly through the Laguna Madre to the Mud Flats near the mid-eastern coastline of Kenedy County, Texas. Channel dimensions are 12 feet deep by 125 feet wide. The federally maintained waterway also includes three water exchange passes, generally 5 feet deep by 200 feet wide, which improve water circulation and fish migration in "The Hole" area. The channel requires maintenance dredging every 18 to 24 months in selected reaches to remove approximately 1.5 million cubic yards of sediment. Maintenance is performed by contracted hydraulic pipeline dredges, and materials dredged are deposited in both land and open water areas. Figures 2 through 4 of the attached public notice show the channel, disposal areas, and general project vicinity. The next maintenance dredging is scheduled after 31 December 1976. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION.

2.01 Periodic maintenance dredging of the concerned channel reach must be accomplished to prevent shoaling of the channel to depths that would inhibit or curtail navigation. The channel provides the only inland waterway transportation route between the central and lower coastal areas of Texas. In 1974, the more than 2.7 million tons of cargo carried over the waterway included basic chemicals and related products, gasoline, fuel oils, liquified gases, sand and gravel, iron and steel scrap, and agricultural and fishery products. Should this vital transportation system be closed because of a lack of maintenance, the adverse economic impact would be felt throughout the state in loss of employment, higher commodity prices, and reduction in real estate values.

2.02 Another major benefit of continued maintenance of this section of the GIWW is perpetuation of environmental benefits derived from construction of the channel. Prior to construction of the channel, much of the Laguna Madre was an inaccessible, shallow, hypersaline bay area, unsuited as habitat for fish and crustaceans. Massive fish kills caused by hypersalinity and temperature extremes were common, usually occurring several times a year. Since construction of the GIWW and the side channels into "The Hole", fish kills due to hypersalinity have been eliminated, and kills caused by temperature extremes have been substantially reduced. Lowered salinities caused by improved circulation have resulted in nearly all of the Laguna Madre becoming productive of fish and shellfish and in a large extension of submerged grass beds where such vegetation could not previously develop. Other benefits include development of large rookeries on islands formed of dredged materials. Failure to maintain this reach of the GIWW would eventually result in elimination of these environmental benefits.

3. ENVIRONMENTAL SETTING.

3.01 The project area is located on the lower Texas coast in Nueces, Kleberg, and Kenedy Counties. This portion of the coast is characterized by a barrier island (Padre Island) along the Gulf of Mexico, the shallow waters and extensive sand and mud flat areas of the Laguna Madre between Padre Island and the mainland, and a relatively undeveloped, low-lying mainland area devoted primarily to ranching. Low annual rainfall and high temperatures that prevail in this section of the Texas coast result in slow vegetation growth and a high salinity environment.

3.02 Prior to construction of the GIWW, the Laguna Madre was an inaccessible, hypersaline, shallow bay characterized by restricted water circulation, very little freshwater inflow, and generally low productivity. As discussed in Section 2.02, construction of the GIWW was responsible for part of the marine productivity now extant in much of the Laguna Madre.

3.03 Important fish and wildlife habitat occurs in the upper Laguna Madre, which for the most part has shallow

waters. Dense growths of submerged vegetation are found throughout most of the shallow waters. The submerged vegetation provides high quality habitat used by many species of fish and crustaceans as feeding, breeding, and nursery habitat. Important species of fish and crustaceans using the area include Atlantic croaker, black drum, red drum, flounder, striped mullet, pompano, sea catfish, spotted seatrout, sheepshead, blue crab, and shrimp.

3.04 Sport fishing is heavy in the upper Laguna Madre. Elsewhere it is moderate to light. About 400,000 man-days of sport fishing occur annually in the area.

3.05 Commercial fishing also is important in the area. During 1973, about 1,460,000 pounds of finfish valued at \$330,000; 20.3 million pounds of shrimp valued at \$34.3 million; and 41,000 pounds of blue crab valued at \$35,560 were taken by commercial fishermen in the upper Laguna Madre and in the Gulf of Mexico in areas adjacent to the upper Laguna Madre - Corpus Christi Bay area. Most of these shrimp were nurtured in the shallow waters of the upper Laguna Madre-Corpus Christi Bay area.

3.06 Wildlife habitat in the project area consists of bay waters, tidal flats, and disposal areas. The disposal areas have populations of coyote, rabbit, bobwhite, mourning dove, waterfowl, wading birds, and shorebirds. The tidal flats and bay waters support populations of waterfowl, wading birds, and shorebirds. The shallow vegetated bay areas and tidal flats are used by waterfowl for feeding, while the deeper portions of the bay are used for resting.

3.07 Important species of waterfowl in the area include Canada goose, snow goose, gadwall, American widgeon, pintail, green-winged teal, blue-winged teal, mottled duck, redhead, canvasback, lesser scaup, bufflehead, ruddy duck, and coot.

3.08 Many other birds use the project area for resting, feeding, and nesting. Among these are pelican, cormorant,

gull, tern, heron, egret, ibis, roseate spoonbill, merganser, grebe, common snipe, plover, sandpiper, avocet, curlew, black-necked stilt, and peregrine falcon.

3.09 Florida manatee, ocelot, right whale, sperm whale, blue whale, finback whale, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle are endangered species known historically to occur in the project area.

3.10 South Bird Island, a National Audubon Society Sanctuary, and other islands south of the JFK Causeway are used heavily by many species of birds. They nest in these areas during the months of March through June.

3.11 The principal hunting in the area is for waterfowl. It is very heavy in the vicinity of Corpus Christi and light to moderate in other areas of the upper Laguna Madre.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have both adverse and beneficial effects on the natural environment. The significance of adverse effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat. Many benefits to the natural environment have resulted from improved water circulation caused by construction of the GIWW and the Port Mansfield Channel across the lower Laguna Madre. These benefits include elimination of fish kills due to hypersalinity, increased flounder landings, increased vegetative growth both in stand and in range, and an increase in the range of juvenile brown shrimp. The perpetuation of these benefits is dependent on continued maintenance of these channels. Failure to maintain these channels would result in gradual return to near pre-construction conditions of reduced circulation, hypersalinity, and lower productivity.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basins will disturb or remove swimming

and benthic organisms. However, because of the instability of the sediments and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, possible minor resuspension of pollutants in that turbid area, and loss of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy submerged vegetation, as channel depths preclude development of vegetation because of reduced sunlight penetration. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible, localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, resuspension of nutrients, and provisions of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and, in some cases, may cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss

will be projected up the food chain, resulting in fewer organisms available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy dredged material layer. Some more mobile organisms are able to work upward through the material while the sessile organisms perish.

4.08 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.09 Disposal of dredged materials in open water will cover any submerged vegetation that exists in the disposal area. In the lower Laguna Madre, submerged vegetation is a major source of organic matter to the bay system. Because of its values as a primary food source, dredging practices have been changed to avoid disposal in areas of submerged vegetation wherever practicable. All areas that will be used for deposition of sediments have previously been used for this purpose. Therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation. As requested by NMFS, surveys of disposal areas to determine the presence of submerged seagrasses and tidal marsh will be made prior to dredging. From these surveys, adjustments in disposal areas will be made on a case by case basis to permit maximum feasible mitigation of adverse effects.

4.10 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous disposal areas blocking or changing the normal current patterns in bay areas. Past dredging in the reach is not known to have caused any significant adverse effects.

4.11 Open water disposal of polluted sediments is of much greater concern and presents more problems than

land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life, such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation. Along this reach there are no major industrial complexes, leaving pesticides from nearby agricultural activities as the only possible pollutant.

4.12 Fish kills along this reach as a result of resuspended pesticides are considered unlikely. Past dredging is not known to have caused any fish kills; and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation as well as the effects on the natural environment of the project area. The "no action" alternative has been considered as well as alternate methods of open water and land disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with recommended changes as described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 13 November 1974. The notice has been made available to all known Federal and State agencies and all known interested parties. Five responses to the public notice have been received. One response, from the Coastal Bend Conservation Association, gave objections to continuing maintenance dredging of the channel without having first filed a final environmental statement with the Council on

Environmental Quality (CEQ). Current schedules indicate that the final statement should be filed with CEQ prior to the next maintenance dredging. Should dredging be required before the final statement is filed, the procedures given in Federal dredging regulations, 33 CFR 209.145, which address continued maintenance in absence of a final statement, will be followed. Carlos H. Mendoza, Student, Texas A&I University, requested that dredging activities not occur during the nesting season of large fish-eating birds (Feb. - Aug.), and that dredged material be deposited in such a manner as to increase the possibility of the disposal areas being used as rookeries. As previously coordinated with USF&WS, dredging operations will not be performed during March through June between Station 26+800 and 88+500. Also, an effort to increase disposal areas for use as rookeries will be made. In responding to the public notice, the National Park Service made several recommendations for the protection and enhancement of major bird rookeries located within Padre Island National Seashore. The recommendations include limiting the disposal of dredged material to the unvegetated portion of disposal areas No. 185 and 191 and existing islands. All of the above recommendations have been resolved. The two responses received from other Federal agencies noted compliance with their recommendations concerning mitigation of adverse effects and pointed out additional environmental benefits that have resulted from construction and maintenance of the channel, including expanded rookeries and additional growths of submerged vegetation.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 27 February 1975, the Environmental Protection Agency approved the dredging and dredge material disposal plan under 33 CFR 209.145 for one year subject to the following restrictions:

a. Openings between disposal areas shall be maintained such that, in any two mile segment of the channel between Stations 0+00 and 217+870 no more than 50 percent of the longitudinal section parallel to the channel is blocked. Openings shall be maintained at sufficient depths to allow maximum possible flow between dredged material disposal areas.

b. Dredging, that would require use of disposal areas Nos. 175-185 or 191, will not be scheduled during March through June.

c. The backside and ends of each open water disposal area shall be leveed as soon as possible. The back levees shall not be more than 1,500 feet from the centerline of the channel, and the dredged material shall not be discharged or allowed to become emerged further than 1,500 feet from the channel centerline.

d. Dredged material shall not be placed on the vegetated portion of emergent land located between Stations 88+000 and 88+500 or between Stations 125+600 and 126+500.

e. Dredged material shall not be placed in disposal area No. 185 except for the purpose of expanding the size of the rookery presently established on emergent land located between Stations 88+000 and 88+500. The method of placement and boundaries must conform to the Department of the Interior recommendations for preservation of vegetation on the emergent land and South Bird Island.

In a letter dated 9 October 1975 (Vol. I, Page E-1) EPA modified these recommendations by deleting recommendation a. All requirements will be complied with. Long-term approval of dredging was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-9

13 November 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL) - CORPUS CHRISTI BAY TO MUD FLATS

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 16 December 1974.

Laws under which the proposed dredging is to be reviewed:

- Federal Water Pollution Control Act
- Coastal Zone Management Act of 1972
- National Environmental Policy Act of 1969
- Fish and Wildlife Act of 1956
- Migratory Marine Game-Fish Act
- Fish and Wildlife Coordination Act
- Endangered Species Act of 1973
- National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel) - Corpus Christi Bay to Mud Flats.

PROJECT LOCATION: From Corpus Christi Bay southward through the Laguna Madre to the Mud Flats in Nueces, Kleberg, and Kenedy Counties, Texas.

PROJECT DESCRIPTION: This portion of the Federally maintained Gulf Intracoastal Waterway (GIWW) reaches from south Corpus Christi Bay southerly through Laguna Madre to the Mud Flats near the mid-eastern coastline of Kenedy County, Texas. Extending southerly from Corpus Christi Bay the channel passes through the John F. Kennedy Causeway to vicinity of Baffin Bay. Continuing south, the GIWW enters and passes through the land cut area known as the Mud Flats to the vicinity of Banderia Point. This GIWW

reach is about 58 miles long and is maintained to project dimensions of 12 feet deep by 125 feet wide. Several water exchange passages are also maintained along this reach. These passages were dredged to improve water circulation patterns within the Laguna Madre. The water exchange passages, generally 5 feet deep by 200 feet wide, also serve as fish passes through existing disposal areas connecting isolated areas such as "the hole" to the GIWW. All depths are measured below Mean Low Tide (Corps of Engineers datum).

DISPOSAL AREA: The portion of the GIWW from Corpus Christi Bay to the Mud Flats utilizes 38 disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 171 through 208 (see attached drawings).

Disposal Area No. 171 is an open water area located in southeastern Corpus Christi Bay. Dredged materials will be deposited uniformly along the area and toe levees will be constructed when the emergent area becomes large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

Disposal Areas Nos. 172 - 202 are open water areas located in the Laguna Madre. Dredged materials will be deposited uniformly along these areas and toe levees will be constructed at some future date when the emergent areas become large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

Disposal Areas Nos. 203, 204, 206 - 208 are presently unconfined areas located in sand and mud flat areas. Levees will be constructed as needed when these areas are next utilized.

Disposal Area No. 205 is an open water area located adjacent to a water exchange passage in that portion of the Laguna Madre known as "the hole". Dredged materials will be deposited uniformly along the area and toe levees will be constructed at some future date when the emergent area becomes large enough to contain the dredge material within a perimeter levee system and the levees will not erode away.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from this reach of the waterway consist of sands, silts, and clays. Shoaling in the channel is a result of deposits occurring from wind driven sands and waves, and tidal actions in the Laguna Madre and adjacent bays. The shoaling rate of this reach of the waterway is approximately 2.6 million cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain this section of the waterway. The frequency of dredging in selected reaches is about every 30 to 36 months. The excavated material is transported by pipeline and placed in the various disposal areas. The average quantity of materials

dredged per contract is about 1.5 million cubic yards. Selected reaches of the channel are presently being maintained. The next maintenance dredging is scheduled after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 171 - 202 are located in the Laguna Madre at Latitudes, Longitudes 27°42'00", 97°12'55"; 27°40'00", 97°13'40"; 27°38'45", 97°13'55"; 27°38'15", 97°14'10"; 27°37'50", 97°14'15"; 27°37'05", 97°14'45"; 27°36'10", 97°15'10"; 27°35'25", 97°15'35"; 27°34'25", 97°16'10"; 27°33'45", 97°16'25"; 27°32'50", 97°17'00"; 27°32'00", 97°17'25"; 27°30'50", 97°18'00"; 27°30'00", 97°18'50"; 27°29'05", 97°18'55"; 27°28'25", 97°19'45"; 27°27'25", 97°19'45"; 27°25'45", 97°20'35"; 27°25'05", 97°21'25"; 27°24'05", 97°21'25"; 27°23'20", 97°21'50"; 27°22'30", 97°22'15"; 27°21'50", 97°23'10"; 27°20'55", 97°23'00"; 27°19'55", 97°23'20"; 27°19'15", 97°24'10"; 27°17'05", 97°24'20"; 27°15'35", 97°25'05"; 27°14'45", 97°24'50"; 27°13'30", 97°24'55"; 27°11'30", 97°25'35"; and 27°09'35", 97°26'00", respectively. The disposal areas and adjacent waters are used for commercial and sport fishing.

Disposal Areas Nos. 203, 204, 206 - 208 are located along the channel from the vicinity of Potrero Grande to the vicinity of Banderia Point. They are located at Latitudes, Longitudes 27°07'20", 97°26'20"; 27°05'15", 97°26'30"; 27°03'10", 97°26'35"; 27°00'15", 97°26'45"; and 26°56'00", 97°27'15", respectively. The areas are surrounded by normally emergent sand and mud flats.

Disposal Area No. 205 is located adjacent to a water exchange passage connecting the GIWW with the area in the Laguna Madre known as "the hole". The area is surrounded by shallow waters of the Laguna Madre.

DREDGING BY OTHERS: Oil companies are the principal organizations performing non-Federal dredging in the reach of the GIWW from Corpus Christi Bay to the Mud Flats. Most of their dredging is for maintenance of oil well channels connected with the GIWW. The estimated quantity of materials dredged annually by these companies is about 370,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA, except for Disposal Area No. 205 which is used for dredging a water exchange passage.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce

U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Nueces County
Commissioners' Court of Kleberg County
Commissioners' Court of Kenedy County
City of Corpus Christi

ENVIRONMENTAL STATEMENT: The continued maintenance of the Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A separate Environmental Statement will not be prepared for this reach of the GIWW. However, an Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) is being prepared and the final is scheduled to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies.

The shoaling rate in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of this main channel reach until after an environmental statement is filed with the Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator, EPA, in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan will also be considered.

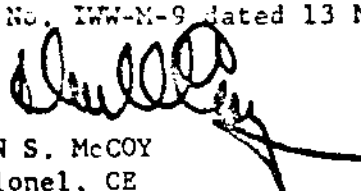
13 November 1974

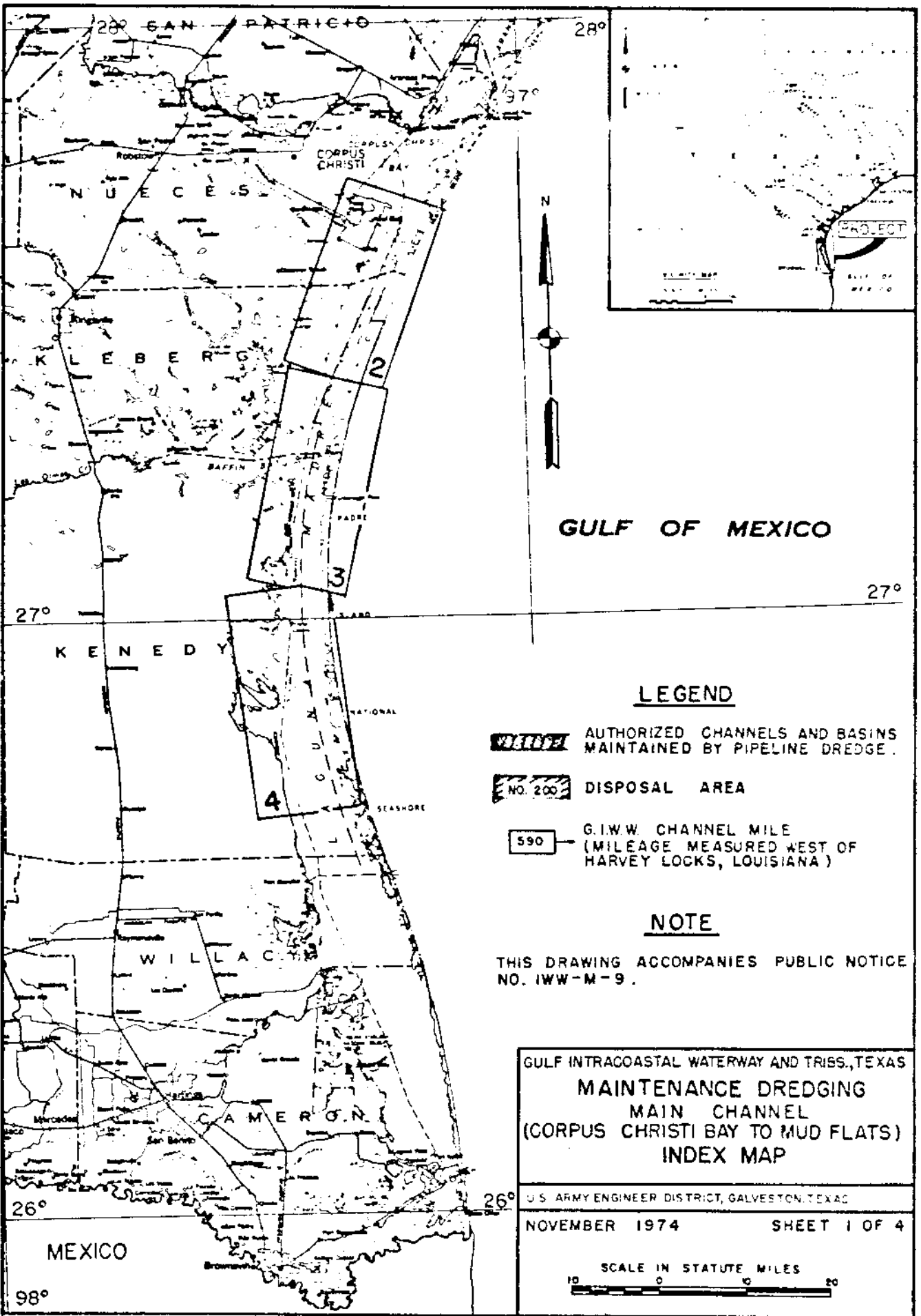
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-9 dated 13 November 1974.

1 Incl
Drawing, Nov 1974


DON S. McCOY
Colonel, CE
District Engineer



28° SAN PATRICKO

28°

97°

CORPUS CHRISTI BAY

NUECES

KLEBERG

27°

KENEDY

NATIONAL

SEASHORE

WILLACY

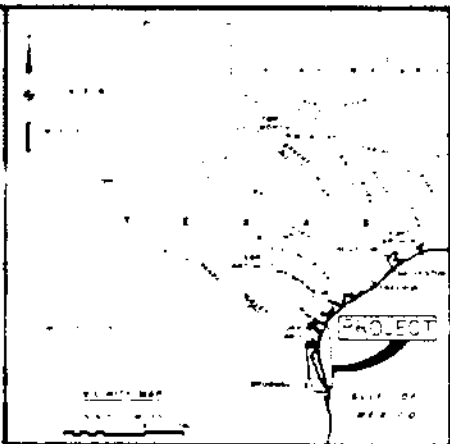
CAMERON

26°

26°

MEXICO


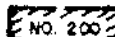

98°



GULF OF MEXICO

27°

LEGEND

-  AUTHORIZED CHANNELS AND BASINS MAINTAINED BY PIPELINE DREDGE.
-  DISPOSAL AREA
-  G.I.W.W. CHANNEL MILE (MILEAGE MEASURED WEST OF HARVEY LOCKS, LOUISIANA)

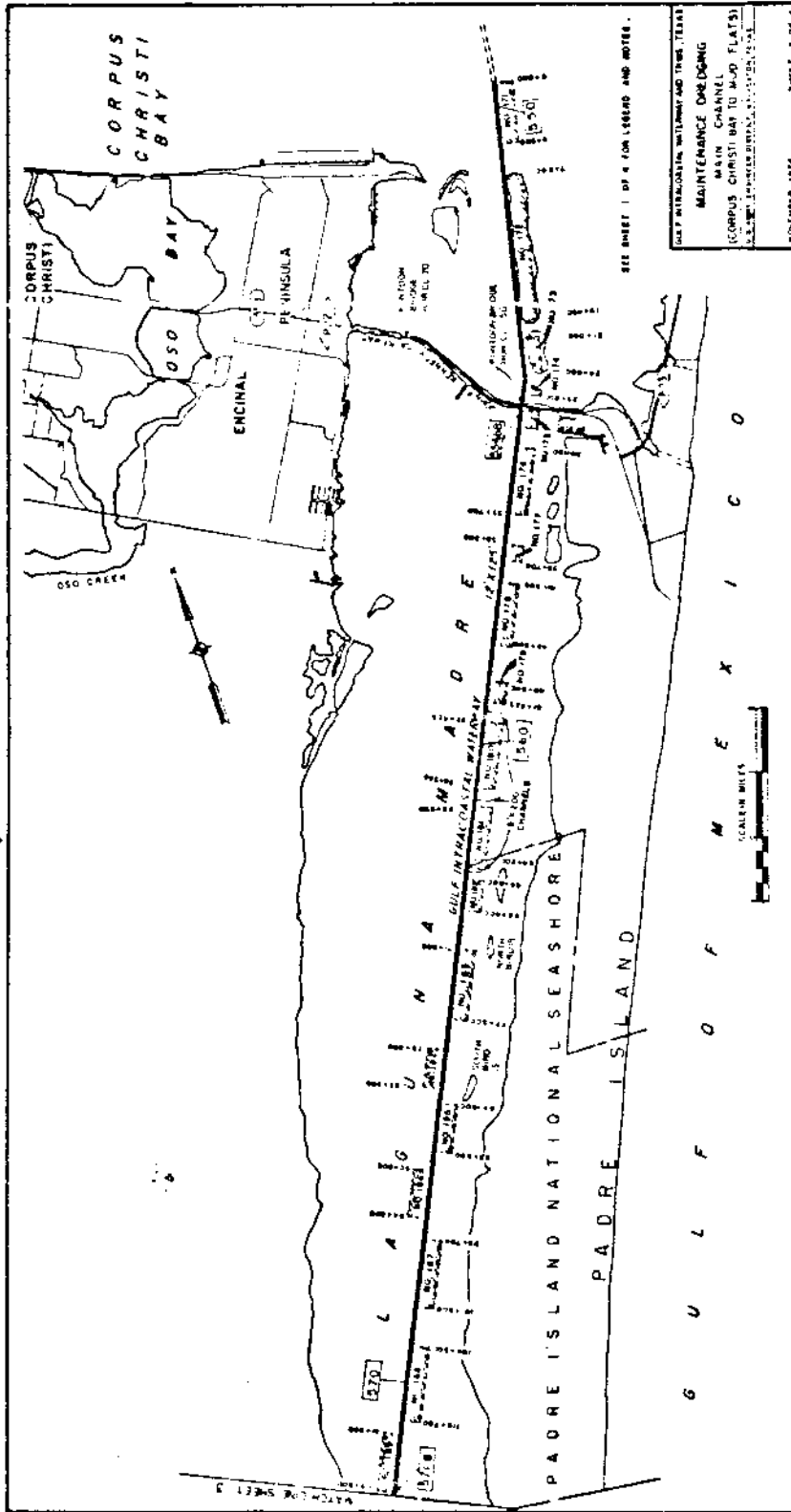
NOTE

THIS DRAWING ACCOMPANIES PUBLIC NOTICE NO. IWW-M-9.

GULF INTRACOASTAL WATERWAY AND TRIBS., TEXAS
**MAINTENANCE DREDGING
 MAIN CHANNEL
 (CORPUS CHRISTI BAY TO MUD FLATS)
 INDEX MAP**

U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS
 NOVEMBER 1974 SHEET 1 OF 4

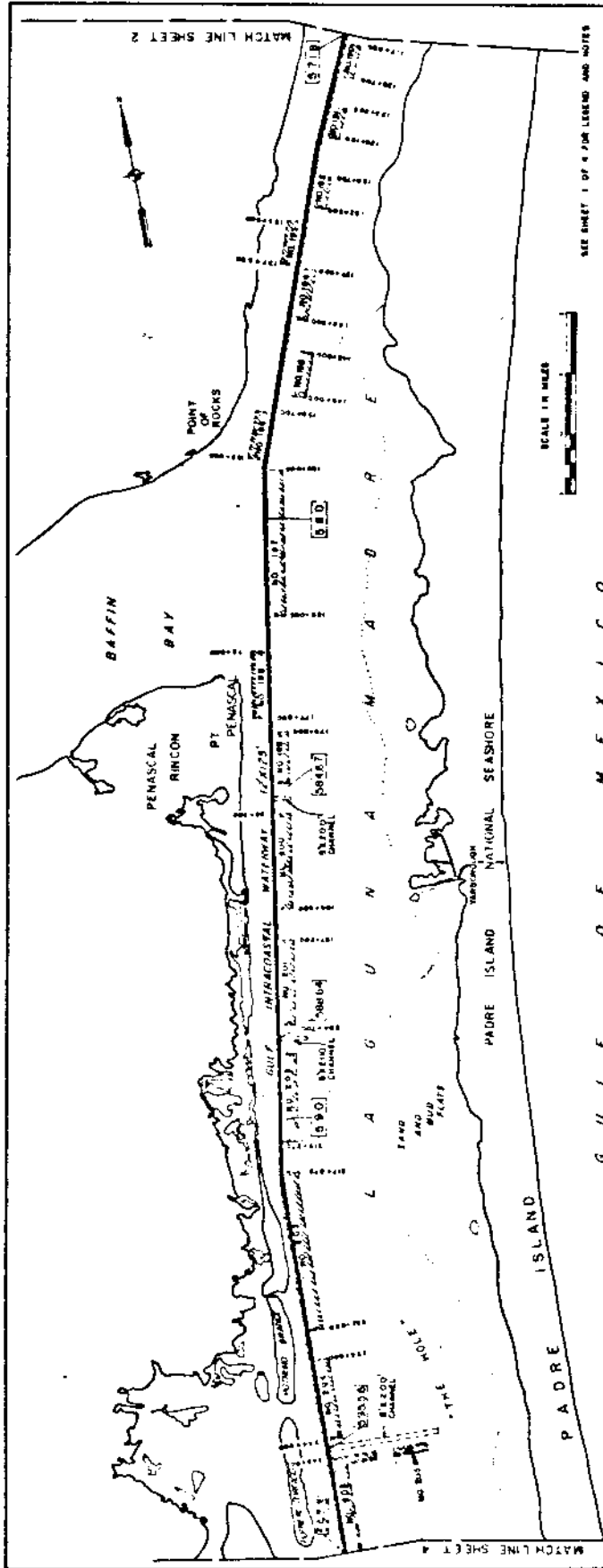




SEE SHEET 1 OF 4 FOR LEGEND AND NOTES.

GULF AIRCRAFT WILMAY AND TRIM TEST
 MAINTENANCE BUILDING
 MAIN CHANNEL
 (CORPUS CHRISTI BAY TO ALTO FLATS)
 NOVEMBER 1974
 SHEET 2 OF 4

G U L F O F M E X I C O
 SCALE BAR



SEE SHEET 1 OF 4 FOR LEGEND AND NOTES

GULF INTRACOASTAL WATERWAY AND TRAFFIC LANE
 MAINTENANCE DREDGING
 MAIN CHANNEL
 (CAMPUS CHRISTI BAY TO MAD FLATS)
 2.5 INCH DRAWING SHEET
 NOVEMBER 1974 SHEET 3 OF 4

MATCH LINE SHEET 2

MATCH LINE SHEET 4



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

February 10, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

Public Notice No. IWW-M-9 dated November 13, 1974, notified the National Marine Fisheries Service (NMFS) of the Corps of Engineers' policy, practice and procedures to be followed in connection with the maintenance dredging operations Gulf Intracoastal Waterway (Main Channel) - Corpus Christi to Mud Flats.

We have reviewed the project and are pleased to find that most of the recommendations proposed in the Fish and Wildlife Service's report of August 20, 1971, which received NMFS concurrence, generally have been incorporated into your proposal. However, recommendations 4 and 5 of that report were not included. Therefore, we offer the following three recommendations. The first two are slightly modified from the August 20 report and the third is submitted in anticipation of changes occurring in locations of dense beds of aquatic vegetation during the next several years:

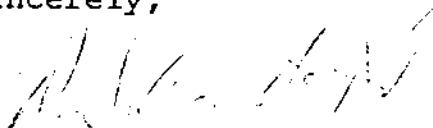
1. For each dredging operation toe levees should be constructed on the ends and along the backside no more than 1,500 feet from the centerline of the channel where existing spoil banks are emergent at 1.5 feet above mean low tide at a distance of no more than 1,500 feet from the centerline of the channel.
2. Spoil in open water should be placed slightly over crests of existing spoil banks. When any part of the bank becomes emergent at 1.5 feet above mean low tide at a distance of no more than 1,500 feet from the centerline of the channel, toe levees should be constructed and subsequently refurbished before each dredging operation on the ends and land side of the spoil area.
3. Within six months prior to commencement of maintenance dredging, the Corps of Engineers should have an investigation conducted to determine the locations and density of submerged

2

grasses that may have developed in and adjacent to unconfined disposal areas. From these investigations, the Corps, in consultation with the Federal and State fish and wildlife agencies, should designate locations for pipeline discharge points within the disposal areas that would cause the least damage to the submerged grasses.

Thank you for the opportunity to comment on this Federal project. Please send detailed plans for each maintenance dredging operation to the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550.

Sincerely,



4
William H. Stevenson
Regional Director

3 March 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

This is in reply to your letter dated 10 February 1975 concerning Public Notice No. INW-M-9 on maintenance dredging of the Gulf Intracoastal Waterway from Corpus Christi Bay to the Mud Flats.

We have reviewed your recommendations and feel we can comply as follows:

Recommendation Nos. 1 and 2 - Dredged material will be placed over the crest of existing banks within the disposal areas. Toe levees will be constructed along the specified limits when the areas become emergent above Mean High Water and are large enough to contain the material within a perimeter levee system. All existing levees which are to be used during a dredging contract will be refurbished, as necessary, prior to their use. Please note that we have used Mean High Water datum rather than the Mean Low Tide to which you refer. Experience in the field has shown that the Mean High Water datum is more workable, and by mutual agreement between the USFWS and the Corps of Engineers, it has been adopted instead of the 1.5 feet above Mean Low Tide.

Recommendation No. 3 - We have initiated plans to make surveys as you have suggested and as determined necessary by our staff biologists. Based on their findings, we will make adjustments to our disposal plans on a case by case basis. However, we cannot concur in your suggestion that discharge points be predesignated for each contract. Predesignation of discharge points is not feasible from a contractual standpoint and is not consistent with your comments on disposal operations in Recommendation No. 2, nor

SWCCO-M

3 March 1975

Mr. William E. Stevenson

with suggested disposal methods contained in Recommendation No. 5 of the 29 August 1971 Fish and Wildlife report you have referenced.

Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
NMFS, Galveston, Texas 77550



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

December 2, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

We have received the maintenance dredging plans for the Gulf Intra-coastal Waterway (Main Channel) - Corpus Christi Bay to Mud Flats, as presented in Public Notice IWW-M-9, dated November 13, 1974. We have discussed and coordinated our views of the project plans as presented in the public notice with the Texas Parks and Wildlife Department and the National Marine Fisheries Service.

We are pleased that the Corps has included most of the Service's recommendations contained in our report of August 20, 1971. These recommendations included deletion of spoil areas, modification in size of others, provisions for 1,000- to 2,000-foot openings between spoil banks, and the construction of a channel to the "hole" to permit water exchange and egress of fish during critically low water periods.

We believe that the public notice should be more specific concerning the timing of construction and location of toe levees. Our report recommended that toe levees be constructed on the ends and 1,500 feet from the centerline of the channel when spoil banks are emergent at 1.5 feet above mean low tide. For open water spoil disposal it was recommended that the material be placed over the crest of existing spoil banks and that toe levees be constructed when any part of the bank becomes emergent at 1.5 feet above mean low tide at a distance of 1,500 feet from the centerline of the channel.

We trust that dredging schedules can be timed so that dredging will not occur in the channel reach between Stations 26+800 and 88+500 during the period of March through June when wading birds and shorebirds are nesting.

The opportunity to comment on the public notice is appreciated.

Sincerely yours,

Deputy Regional Director

236



Save Energy and You Serve America!

13 December 1974

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish & Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference Mr. Jerry Stegman's letter dated 2 December 1974 concerning Public Notice No. I-W-4-9 on maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - Corpus Christi Bay to Mud Flats.

Paragraph 3 of your letter refers to construction of toe levees. Dredge material will be deposited over existing areas within the disposal areas. Toe levees will be constructed along the specified back limits and ends when the areas become emergent above Mean High Water and are large enough to contain the dredged material within a perimeter levee system.

As requested in paragraph 4, maintenance dredging will not be performed during the period of March through June between Stations 26+800 and 88+500.

Thank you for your review and comments.

Sincerely yours;

Copy furnished:
Field Supervisor
U. S. Fish and Wildlife
Service
Custom House, Room 327
Galveston, Texas 77550

E. D. MOSEBEE
Chief, Construction-
Operations Division



United States Department of the Interior

NATIONAL PARK SERVICE

Padre Island National Seashore
10235 South Padre Island Drive
Corpus Christi, Texas 78418

IN REPLY REFER TO:

L3023

December 12, 1974

District Engineer (SWGCO-M)
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Re: Public Notice No. IWW-M-9, Dated November 13, 1974

The National Park Service recognizes the need for permanent, designated areas for deposition of dredged materials. For the most part, we agree with those areas that have been established within the boundaries of the National Seashore, even though the National Park Service had no say in their establishment. However, the National Park Service is deeply concerned about the exact placement of dredged materials within the boundaries of Padre Island National Seashore. We believe such placement should coincide with certain National Park Service management objectives such as marine habitat preservation, recreational visitor use, and protection of fish eating bird habitats and rookeries.

In order to accomplish these objectives, the National Park Service made a determination several years ago to remove all spoil bank cabins from within the boundaries of the National Seashore. These cabins are now being phased out. All special use permits relating to these cabins will be terminated by the end of 1975. All cabins will be removed by April 1976.

Management concepts can change just as natural ecological changes take place over the years. Therefore, we believe that ecological changes should be influenced as little as possible by deposition of dredged materials. Management concepts relate to these changes.

There are some specific locations within a few of the designated spoil deposition areas that require critical management practices. Three of these specific locations have developed, or, are developing into major rookeries for a wide variety of fish eating birds. One very critical location is the spoil island at ICW Marker 57A which appears to be in, or partially in, Disposal Area No. 185. A smaller spoil island near ICW Marker 55, which appears to be at the north end of Disposal Area No. 185, is developing into a small, but important rookery for herons and egrets. Both of the rookeries are in close proximity to South Bird Island. There are indications that these two

spoil islands are being established as extensions of the South Bird Island rookery. A third spoil island within Disposal Area No. 191 has also developed as a major fish eating bird rookery. Spoil should not be dumped on the vegetated portion of these islands. We feel material should be dumped around the islands, increasing their size and improving them as rookeries.

The three locations mentioned are presently the only rookeries on spoil islands in the National Seashore that are of major importance at this time. If others develop in the future, they can be dealt with at that time.

As previously mentioned, another resource management concern of the National Seashore is the preservation of the marine habitat. The pumping of dredged material directly into the water north of Station 88+500 (ICWW Marker No. 59) and east of the ICWW would do considerable long-term damage to the marine habitat. This portion of the Laguna Madre is very shallow, contains extensive grass beds, and besides being a prime marine habitat is also one of the prime winter feeding areas for the Redhead Duck.

Several years ago the National Seashore adopted a policy requiring gas and oil operators to place channel dredgings on existing emergent islands and retain this material behind levees. The reason for this, of course, is to prevent damage to the marine habitat. The National Seashore intends to continue with this policy.

In those designated spoil areas where there is sufficient emergent material, a bulldozer should be used to push this material to the east, north and south limits of the disposal area. Levees should then be constructed and all dredged material should be pumped inside the levees. However, in some designated areas, or portions of areas, there is not sufficient emergent material to build levees. In these cases, dredged material should be deposited on the mid portion or highest portion of the island, allowing the material to spread out, increasing both the height and circumference of the emergent area.

Leveeing is the primary method preferred to prevent widespread damage to the marine habitat. The pumping of dredged material directly into open water is wholly unacceptable. Very shallow water exists between the southern end of South Bird Island and the northern end of Designated Area No. 185. No dredged material should be allowed to enter this area. Any further shallowing of the water here would greatly restrict north and south water flow, and would result in considerable damage to the marine habitat.

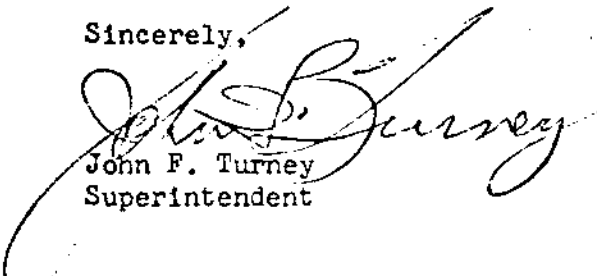
In Deposition Areas No. 182 and No. 183, there are gas and oil operation related channels extending from the ICWW that are not shown on the drawings attached to Public Notice No. IWW-M-9. The National Seashore would like to see these channels remain intact to provide future access to the spoil islands as well as additional water circulation.

The National Seashore plans to allow primitive camping on some of the spoil islands in the future. This camping would in no way interfere with spoil deposition. It would permit use of certain spoil islands and protect rookery islands while being compatible with dredging needs.

In "the hole," deposition Area No. 205 should be enlarged and leveed by bulldozer. Because of the delicate ecological nature of the marine habitat, no additional dredged material should be allowed in open water. At present, there is sufficient emergent material to be spread and leveed by bulldozer.

Representatives of Padre Island National Seashore will be delighted to meet with you to discuss any or all proposals made here, and answer any questions you may have.

Sincerely,



John F. Turney
Superintendent

cc:

Regional Director, Southwest Region, Santa Fe, N Mex
Director, Fish & Wildlife Service, Albuquerque
Ernest Simmons, Tex Parks & Wildlife Dept., Rockport
Mr. Boatner, Asst. to Reg. Dir., Texas, NPS

15 January 1975

Mr. John F. Turney
Superintendent
Padre Island National Seashore
10235 South Padre Island Drive
Corpus Christi, Texas 78418

Dear Mr. Turney:

On 8 January 1975, Messrs. J. Bissell, V. Keesecker, W. Sky-Eagle and Major M. Howell of the Galveston District Engineers met with you, Mr. M. Hancock and Mr. R. McCannant to discuss your letter dated 12 December 1974 reference to Public Notice No. 14W-M-9, dated 13 November 1974. During the discussions, it was apparent that our previous coordination with the U. S. Department of the Interior, Fish and Wildlife Services, had resolved most of the areas where you were concerned. We had previously agreed not to dredge between Stations Nos. 26+800 and 88+500 between March and June so as not to disturb nesting birds. We had also adjusted some of the disposal areas because of rookeries which have been established on some of the emergent land.

During the meeting, the following was discussed:

a. The rookery on emergent land near ICWW Marker 57A was located in Disposal Area No. 185 between Station Nos. 88+000 and 88+500. It was agreed that future dredged materials would be placed on the back side of the emergent area below the vegetation line to minimize covering vegetated portions of the rookery.

b. The rookery located on emergent land near ICWW Marker 55 was outside of the disposal area and thus, in no danger.

c. The rookery located on emergent land in Disposal Area No. 191 was found to be between Station Nos. 125+600 and 126+100. The remainder of the emergent land located between Station No. 126+100 and approximately Station No. 126+500 will not be used as it is outside the disposal area. Dredged materials will be placed below the vegetation line on the back shore portion of emergent land between Station Nos. 125+600 and 126+100.

d. It was noted that when land becomes emergent above mean high water and

SWGCO-M

15 January 1975

Mr. John F. Turney
Superintendent

large enough to contain dredged materials within a perimeter levee system, toe levees would be constructed along the specified back limits and ends of the disposal area. This was agreeable to all concerned.

e. It was pointed out that no disposal was being done on the east side of the GIWW between Station Nos. 77+500 and 84+500. This area was eliminated to protect the marine habitat in the shallow waters around South Bird Island.

f. No gas and oil operation related channels could be found in Disposal Area No. 182. One channel was found in Disposal Area No. 183. There are two channels located at Station Nos. 71+050 and 69+150, but these are between Disposal Areas Nos. 182 and 183. Although our policy is not to maintain these channels, we will not fill them with dredged materials. We are maintaining channels (5' X 200') at Station Nos. 64+950, 59+150 and 52+025 for water circulation.

g. Disposal Area No. 205 consists of extremely soft materials. When emergent land is above mean high water and will support the levees along the boundaries of the disposal area, levees will be constructed. At present, it is not feasible to put a bulldozer in the area to enlarge and levee it.

In conclusion, it appears we have resolved those areas where you were concerned to our mutual satisfaction. We wish to express our appreciation for the field trip you arranged to look at the disposal areas and rookeries. If we can be of further assistance, please contact us.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Don S. McCoy
Colonel, CE
District Engineer
Galveston District, Corps of Engineers
Galveston, Texas 77550

13 December 1974

Mr. McCoy:

I have, along with my partner Rene R. Ortiz, recently completed a 20-month study (graduate thesis) of 11 spoil banks in the Upper Laguna Madre. This study was made in an attempt to relate anatomical and vegetational features of spoil banks to usage (nesting, roosting, feeding, etc.) by large fish-eating birds. Some of the spoil banks we investigated were within designated disposal areas established by your office in public notice No. IWW-M-9, 13 Nov. 74. These include disposal areas No. 181, 182, 183, and 185.

Our major concern relative to the maintenance dredging proposal is two fold: 1) dredging activities must not occur during the nesting season of large fish-eating birds (Feb. - Aug.), especially around known rookeries. It was our experience that 10 minutes was enough to cause these birds to abandon their nesting sites. 2) any disposal of dredged material on spoil banks must be carefully coordinated so as to augment existing topographical features and increase the possibility of having them used as future rookeries. In the same sense, dredged material must not be deposited on existing rookeries.

The results of our investigation indicated that birds "prefer" specific vegetational areas and/or areas with varying percent plant cover. We found that these vegetational conditions were a direct consequence of island topography. In order to promote an understanding of bird rookeries, conditions leading to the usage of spoil banks as nesting sites should be duplicated.

If I can be of any assistance, please feel free to contact me. My address is:

Carlos H. Mendoza
Biology Department
Texas A&I University
Kingsville, Texas 78363

Sincerely,

Carlos H. Mendoza

Carlos H. Mendoza

8 May 1975

Mr. Carlos H. Mendoza
Biology Department
Texas A&I University
Kingsville, Texas 78363

Dear Mr. Mendoza:

Receipt is acknowledged of your letter pertaining to Public Notice No. IWW-M-9, dated 13 November 1974, concerning maintenance dredging of the Gulf Intracoastal Waterway - Corpus Christi Bay to Mud Flats. Your letter was accidentally misplaced which resulted in this late acknowledgement. We apologize for this unintentional oversight.

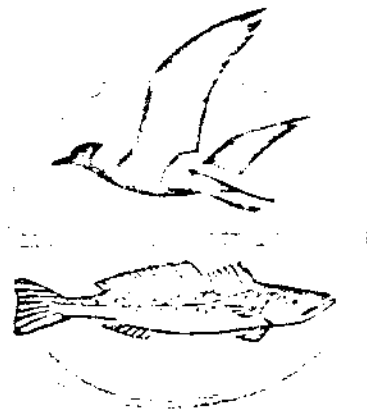
On 2 December 1974, we received a similar letter to yours from the U. S. Department of the Interior, Fish and Wildlife Service. Their concern for the nesting period was from March through June between Station Nos. 26+800 and 88+500 (this correlates to Disposal Areas Nos. 175 - 185). We agreed in a letter on 13 December 1974 not to perform dredging during the period of March through June between Station Nos. 26+800 and 88+500 to minimize interruption of the nesting period.

On 12 December 1974, we received a letter from the U. S. Department of the Interior, Padre Island National Seashore. They were particularly concerned about rookeries which had formed between Station Nos. 88+000 and 88+500 on Disposal Area No. 185; between Station Nos. 125+600 and 126+000 on Disposal Area No. 191; and on emergent land near ICWW Marker 55. We have agreed to take actions to minimize the impact of dredged material to these areas.

We appreciate your concern and would like to reassure you that we fully coordinate our plans with various state, local, and Federal agencies in order to protect the environment to the maximum extent possible while still performing our job of maintaining the GIWW.

Sincerely yours,

E. D. McGRHEE
Chief, Construction-
Operations Division



December 13, 1974

District Engineer
Galveston District, Corps of Engineers
Attn: SW300-M
P.O. Box 1229
Galveston, TX. 77550

RE: Public Notice IWW-M-9 dated 13 November 1974.

Dear Sir:

We would like to go on record here as officially protesting the continuance of maintenance dredging of this section of the Gulf Intracoastal Waterway without adequate consideration of adverse environmental effects.

In attempting to proceed with the proposed project in advance of the issuance of a final Environmental Statement, it is our opinion that the intent of the National Environmental Policy Act is being compromised, especially in light of the fact that supporting data for the following statement quoted from Public Notice No. IWW-M-9, Page 4, has not been provided in the Notice:

"The shoaling rate in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of this main channel reach until after an environmental statement is filed with the Council on Environmental Quality without serious impairment to the navigability of this project."

It is also our position that a dredge material disposal policy, including a plan for dredge material management is an urgent necessity, especially for the section of the GIWW traversing the extremely productive and environmentally sensitive Laguna Madre.

Unless the clear necessity, based upon reasons of navigability, for maintenance of this section of GIWW as scheduled can be demonstrated, it is our position that maintenance work should be deferred until plans for spoil disposal can be made relative to a final environmental statement for the project. We have no objection to such a statement being included, under the same cover, as part of an Environmental Statement for maintenance dredging of the entire GIWW, Texas Section.

245

Very truly yours,

Steve Fishkin
Steve Fishkin

SWCOO-M

17 January 1975

Mr. Steve Frishman
President
Coastal Bend Conservation Association, Inc.
Box 500
Corpus Christi, Texas 78403

Dear Mr. Frishman:

Receipt is acknowledged of your letter dated 13 December 1974, pertaining to Public Notice No. RW-8-9 dated 13 November 1974, concerning the maintenance dredging of the Gulf Intracoastal Waterway - Corpus Christi Bay to Mud Flats. We are equally concerned with the productivity and environmental sensitivity of the Laguna Madre. Accordingly, we have closely coordinated our proposed plan with National Marine Fisheries Service, Fish and Wildlife Service, Environmental Protection Agency, Padre Island National Seashore and other agencies. We have prepared and placed on file with the Council on Environmental Quality on 30 October 1974 a draft Environmental Statement. Since we are not sure if you have received a copy, we are inclosing one for your information. We have received comments on the draft Environmental Statement and are currently finalizing the Statement. We presently expect to have the final Environmental Statement filed with CEQ in May 1975. If the Environmental Statement continues on schedule, we do not anticipate dredging the Corpus Christi Bay to Mud Flats reach of the GIWW before the final is filed with CEQ.

Thank you for your review and comments.

Sincerely yours,

1 Incl
As stated

E. D. McGEHEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

February 27, 1975

CERTIFIED MAIL RETURN RECEIPT REQUESTED (628597)

Colonel Don S. McCoy
District Engineer
Galveston District
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your plan for maintenance dredging of GIWW (Main Channel) - Corpus Christi Bay to Mud Flats as covered in Public Notice No. IWW-M-9 dated November 13, 1974. We have also reviewed your February 10, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Openings between spoil disposal areas shall be maintained such that, in any two mile segment of the channel between stations 0+00 and 217+870, no more than 50% of the longitudinal section parallel to the channel is blocked. Openings shall be maintained at sufficient depths to allow maximum possible flow between dredged material disposal areas.
2. Dredging that would require use of disposal areas Nos. 175-185 or 191 will not be scheduled during March through June.
3. The backside and ends of each open water disposal area shall be leveed as soon as possible. The back levees shall not be more than 1500 feet from the centerline of the channel and the dredged material shall not be discharged or allowed to become emerged further than 1500 feet from the channel centerline.

4. Dredged material shall not be placed on the vegetated portion of emergent land located between stations 88+000 and 88+500 or between stations 125 + 600 and 126 + 500.
5. Dredged material shall not be placed in disposal area No. 185 except for the purpose of expanding the size of the rookery presently established on emergent land located between stations 88+000 and 88+500. The method of placement and boundaries must conform to the Department of the Interior recommendations for preservation of vegetation on the emergent land and shallow water area between the emergent land and South Bird Island.

Since, as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,

George F. Putnam
Regional Administrator

SUPPLEMENT NO. 8

SAN BERNARD RIVER CHANNEL

SUPPLEMENT NO. 8
SAN BERNARD RIVER CHANNEL

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SUPPLEMENT NO. 8

SAN BERNARD RIVER CHANNEL

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the San Bernard River Channel. The existing channel originates at the GIWW and extends 26 miles inland. The channel is 9 feet deep and 100 feet wide and terminates at Farm Road 522. The channel requires maintenance dredging once every two years to remove 50,000 cubic yards of sediment. Maintenance dredging is performed by hydraulic pipeline dredge with dredged materials disposed on land disposal areas. The disposal areas for this channel are numbered 1 through 13 and are shown in the attached public notice. The next maintenance dredging of the San Bernard River Channel is scheduled for after 31 December 1976. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. In 1974 over 506 thousand tons of cargo were carried over the waterway. The principal commodities were basic chemicals, basic chemical products, and marine shells. The economy of the project area is heavily dependent upon continued use of low cost waterborne transportation.

3. ENVIRONMENTAL SETTING.

3.01 The San Bernard River rises as the boundary between Colorado and Austin Counties and flows southeasterly for 105 miles across the Gulf Coast Prairie. It empties directly into the Gulf of Mexico just east of the Cedar Lakes estuary. The principal tributaries of the river are East, Middle, and West Bernard Creeks. The Gulf Intracoastal Waterway crosses the river a mile above the mouth.

3.02 The San Bernard River drains most of the Brazos-Colorado Coastal Basin. This area is subject to heavy rainstorms sometimes associated with tropical hurricanes. The river overflows its banks several times a year and causes considerable agricultural damage.

3.03 The San Bernard River is tidal for 40 miles. Other tidal waters in the project area are Redfish Bayou and Pelican Lake which empty into the river just upstream from the Gulf Intracoastal Waterway. The quality of these waters is generally good. They provide habitat for many species of fish and crustaceans including red drum, gafftopsail catfish, spotted seatrout, sheephead, flounder, croaker, menhaden, mullet, brown shrimp, white shrimp, and blue crab. Marine sport and commercial fishing of importance occurs in the San Bernard River.

3.04 Brackish marshes border the lower reach of the river. Bottomland hardwoods border the river upstream of the marshes. The clay and loam soil of the river bottomlands is intermixed with alluvial sands deposited at flood stages. This area is timbered with ash, hackberry, pecan, and cottonwood. Woodlands along the river give way to the native tall grasses, improved pastures, and cultivated crops of the coastal prairie.

3.05 White-tailed deer, squirrel, mourning dove, cottontail and swamp rabbits, raccoon, opossum, bobwhite, bobcat, armadillo, skunk, and coyote are species found along the river. Landowner restrictions and the high cost of hunting fees and leases limit hunting in the area.

3.06 The river and its associated marshes provide habitat for limited numbers of beaver, otter, and mink, but these animals are not populous enough to support trapping.

3.07 The most important wildlife in the project area is waterfowl. Mallard, pintail, baldpate, lesser scaup, teals, and canvasback are the principal wintering species. Mottled ducks nest in the tall grass near tributary streams. A variety of shore and wading birds are found on the coastal marshes along the lower reach of the river.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of the San Bernard River Channel will have some adverse effects on the natural environment.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of the extreme fluctuations in the channel from fresh to saline conditions benthic populations are expected to be low and their loss is considered minimal. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Turbidities caused by the action of the cutterhead have some damaging effects on productivity. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. Because of the heavy silt loads known to occur in the river, photosynthetic activity along the channel is not believed to be a significant contributor to productivity, and, therefore, increased turbidities from the cutterhead should have only minimal adverse effects.

4.04 Maintenance dredging will not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile fresh and marine species, as they are able to avoid the dredge.

4.05 Fish kills along the channel as a result of resuspended pollutants are considered unlikely. Past dredging is not known to have caused any fish kills; and since sediments dredged in the past were in all probability

at least as polluted as those that will be dredged in the future, fish kills are not anticipated. As requested by EPA, sediment samples will be taken at various locations above river mile 10 when the channel above mile 10 is dredged. If pollutants are found to exceed established criteria necessary measures will be taken to confine the dredged material in leveed disposal areas.

4.06 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal along this channel includes only land disposal.

4.07 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.08 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.09 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.10 The most significant long-term adverse environmental effect that results from land disposal of maintenance

dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type resulting from disposal of dredged material will be minimal since the areas to be used for disposal have been used previously, and the changes have already occurred.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 13 December 1974. The notice was made available to all interested Federal and State agencies and all known interested parties. Nine responses to the public notice have been received. One response was favorable and two responses from Federal agencies recommended that disposal area No. 2 be totally confined prior to the next maintenance dredging. Because of environmental and other concerns expressed over disposal area No. 2, the area has been eliminated from consideration at this time. Ms. Norma Schillinger protested any dredging planned for the San Bernard River and requested a public hearing on the dredging and an Environmental Statement on the project. Ms. Schillinger was sent a copy of the draft Environmental Statement and was requested to send additional information regarding her protest and request for a public hearing. Additional information has not been received and it was concluded that her request had been

withdrawn. Mr. D. M. Parmelee expressed concern that the Ducroz Cemetery was being destroyed by dredged material. The disposal area concerned is area No. 2. The area has been deleted from consideration at this time. Mr. Arthur C. Fennekohl wanted information on the possible effects maintenance dredging would have on bank erosion along the channel and if some type of protection was possible. Bank erosion in many rivers along the Texas coast is a natural process and should occur with or without a navigation channel. Barge traffic along the river causes some bank erosion, but the natural flow of water is the principal factor causing erosion. No provision for bank protection was included in the congressional act authorizing the project. A letter from Mr. Kirk F. Sniff raised several objections. The first objection requested a solution to pollutant problems associated with dredging and disposal along the channel. At this time, no known source of significant pollutants occurs along the channel. However, sediment and water samples will be taken before dredging in the upper reaches of the project channel to determine their pollutant status. If samples are found to exceed established criteria, necessary measures will be taken to confine the dredged material. In addition, Mr. Sniff requested justification for the urgency of the project. A recent hydrographic bulletin shows that between mile 0 and 0.5 shoals have reduced the project depth of 9 feet to 6 feet on the left outside quarter and 7 feet on the right outside quarter. The remainder of the project does not require dredging at this time and no dredging is scheduled in the near future. Finally, Mr. Sniff requested a public hearing. Additional information is required to determine the need for a public hearing. Mr. Sniff was requested to furnish information concerning his interest to be affected, but that information has not been received. The National Audubon Society agreed with recommendations of the USF&WS and NMFS. The Texas Water Quality Board requested that they be furnished detailed disposal plans prior to the initiation of the project. Plans will be sent prior to issuance of dredging contracts.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 21 April 1975, EPA approved the dredged material disposal plan under 33 CFR 209.145 for one year, subject to the following restrictions:

a. Dredged material shall not be placed in disposal area No. 2.

b. No dredged material shall be placed or allowed to spill into Cedar Lakes at any time.

c. Material dredged above river mile 10 shall be placed in fully confined disposal areas until sediment surveys are completed. After the sediment quality is defined, disposal in unleveed areas can be considered.

d. In disposal areas Nos. 4 (above mile 2) and 5, dredged material shall not be discharged further than 3,000 feet from the centerline of the channel or closer than 1,000 feet.

All requirements will be complied with. Long-term approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-11

13 December 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY-SAN BERNARD RIVER, TEXAS

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 17 January 1975.

Laws under which the proposed dredging is to be reviewed:

- Federal Water Pollution Control Act
- Coastal Zone Management Act of 1972
- National Environmental Policy Act of 1969
- Fish and Wildlife Act of 1956
- Migratory Marine Game-Fish Act
- Fish and Wildlife Coordination Act
- Endangered Species Act of 1973
- National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway-San Bernard River, Texas.

PROJECT LOCATION: Near the San Bernard National Wildlife Refuge, and the Cities of Brazoria, Sweeny, and West Columbia in Brazoria County, Texas.

PROJECT DESCRIPTION: The San Bernard River Channel is a Federally maintained channel 9 feet deep by 100 feet wide, and 26.0 miles long. The channel reaches from its junction with the GIWW upstream through the San Bernard River to its completed upstream limit at Farm Road 522. All depths are referenced to Corps of Engineers Mean Low Tide Datum.

DISPOSAL AREA: There are 13 disposal areas utilized in maintaining the San Bernard River Channel (see attached drawings). All the areas are used for disposal of dredged material by contract pipeline dredges. The County of Brazoria is the sponsoring agency and is required to furnish the necessary rights-of-way and disposal areas for maintenance of the project.

Disposal Area No. 1 is a confined disposal area located on land east of the channel's junction with the GIWW.

Disposal Areas Nos. 2 and 3 are partially confined areas located south and west, respectively, of the channel's junction with the GIWW. Dredged materials will be uniformly deposited along the areas and levees will be constructed at some future date when the emergent areas become large enough to contain dredged material within a perimeter levee system and the levees will not erode away.

Disposal Area No. 4 is an unleveed area located northeast of the channel. The extreme downstream end of the area will be leveed prior to its next use in order to protect surrounding lowlands.

Disposal Area No. 5 is an unleveed area located east of the channel in the vicinity of Channel Mile 8.

Disposal Area No. 6 is a leveed area located south of the channel in the vicinity of Channel Mile 15.

Disposal Areas Nos. 7 - 13 are unleveed areas located adjacent to the channel.

COMPOSITION AND QUANTITY OF MATERIALS: Excavated materials consist of fine grained sands, silts, and clays. Shoaling in the project area is a result of alluvial deposits occurring during high water periods on the San Bernard River. The shoaling rate for this channel is approximately 25,000 cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are used to maintain the channel. The dredging frequency for selected reaches of this channel is about every 24 months. The quantity of material removed per contract is about 50,000 cubic yards. Portions of the project were last maintained during the period of May - July 1973. Future maintenance dredging for the channel is currently scheduled after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 1 is located east of the channel's junction with the GIWW. The area is bound on the northwest by the GIWW, on the northeast by lowlands, on the southeast by a ditch, and on the southwest by the San Bernard River.

Disposal Area No. 2 is located south of the channel's junction with the GIWW. The area is bound on the northwest by the GIWW, on the northeast by the San Bernard River, and on the southeast and southwest by lowlands.

Disposal Area No. 3 is located west of the channel's junction with the GIWW. The area is bound by a County Road, undeveloped and recreational areas on the north, a County Road on the east, the GIWW on the south, and a lake on the west.

Disposal Area No. 4 is located northeast of the channel from the vicinity of Channel Mile 1 to the vicinity of Channel Mile 7. The area is bound on the south and west by wooded areas, the channel, and in one area an oxbow

lake caused by bend rectification. It is bound on the north and east by lowlands.

Disposal Area No. 5 is located east of the channel in the vicinity of Channel Mile 8. The area is bound on the west by woods, and by grazing lands and undeveloped lowlands on the other sides.

Disposal Area No. 6 is located adjacent to the south side of the channel in the vicinity of Channel Mile 15. The area is bound by the channel on the north, and by wooded areas on all other sides.

Disposal Area No. 7 is located east of the channel in the vicinity of Channel Mile 18. The area is bound by the channel on the west, and by wooded areas on all other sides.

Disposal Area No. 8 is located adjacent to the channel in the vicinity of Channel Mile 20. The area is bound on the west and south by the channel, on the north by the Missouri Pacific Railroad, and on the east by woods.

Disposal Area No. 9 is located east of the channel in the vicinity of Channel Mile 21. The area is bound by the channel on the west, by the Missouri Pacific Railroad on the south, and by wooded areas on the north and east.

Disposal Area No. 10 is located north of the channel in the vicinity of Channel Mile 22. The area is bound by the channel on the south, Disposal Area No. 11 on the west, an unnamed road on the north, and a wooded area on the east.

Disposal Area No. 11 is located north of the channel in the vicinity of Channel Mile 22.5. The area is bound by the channel on the south, cultivated land on the west, an unnamed road on the north, and Disposal Area No. 10 on the east.

Disposal Area No. 12 is located east of the channel in the vicinity of Channel Mile 25. The area is bound on the west by the channel, on the north by cultivated lands, and on the east and south by wooded areas.

Disposal Area No. 13 is located west of the channel in the vicinity of Channel Mile 26. The area is bound on the north by cultivated land, on the east by the channel, and on the south and west by wooded areas.

DREDGING BY OTHERS: There has been no significant dredging by non-Federal agencies in the vicinity of the San Bernard River Project.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Brazoria County

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of the San Bernard River Channel will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). An Environmental Statement will not be prepared for the tributary channel; however, an Environmental Statement for the GIWW-Texas Section including tributary channels is being prepared and is expected to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies and others. The draft statement is currently in review by these agencies and the public, and single copies are available upon request to the District Engineer, ATTN: SWGED-E.

The shoaling rates in the San Bernard River project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity. Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

SWGCO-M

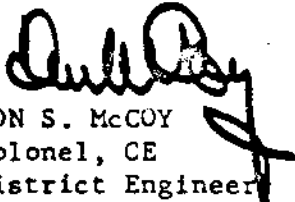
PUBLIC NOTICE NO. IWW-M-11

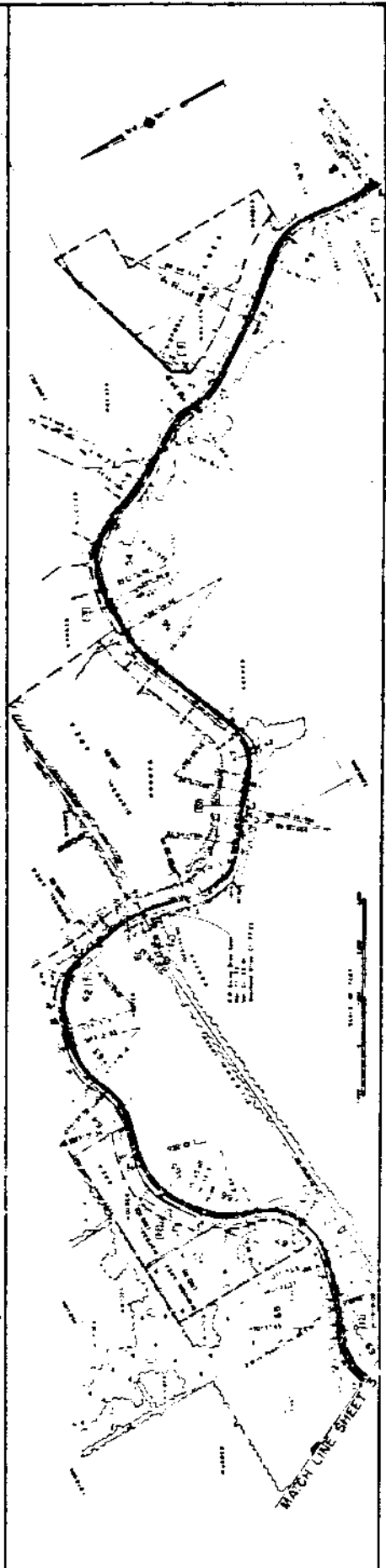
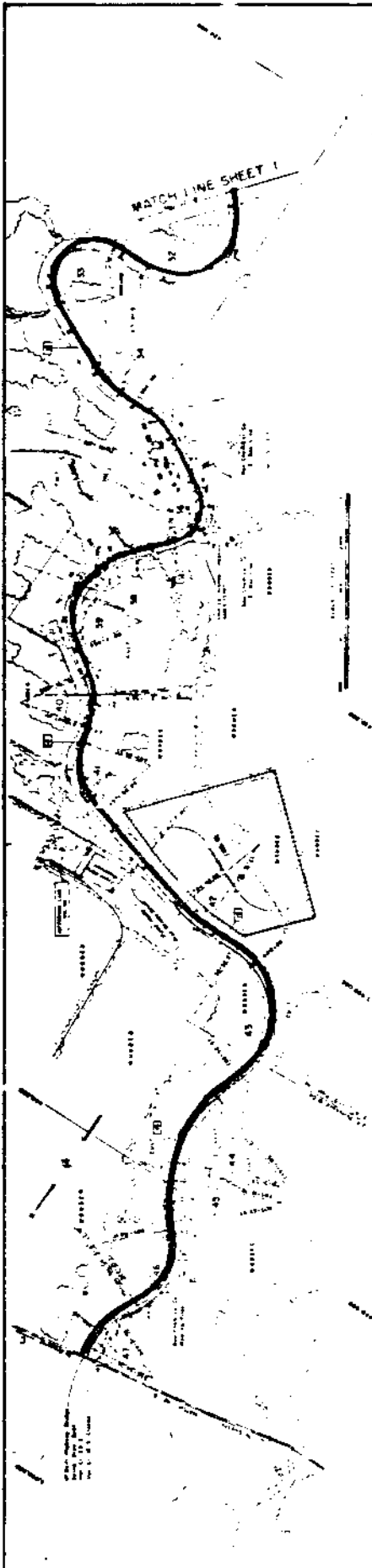
13 December 1974

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-11 dated 13 December 1974.

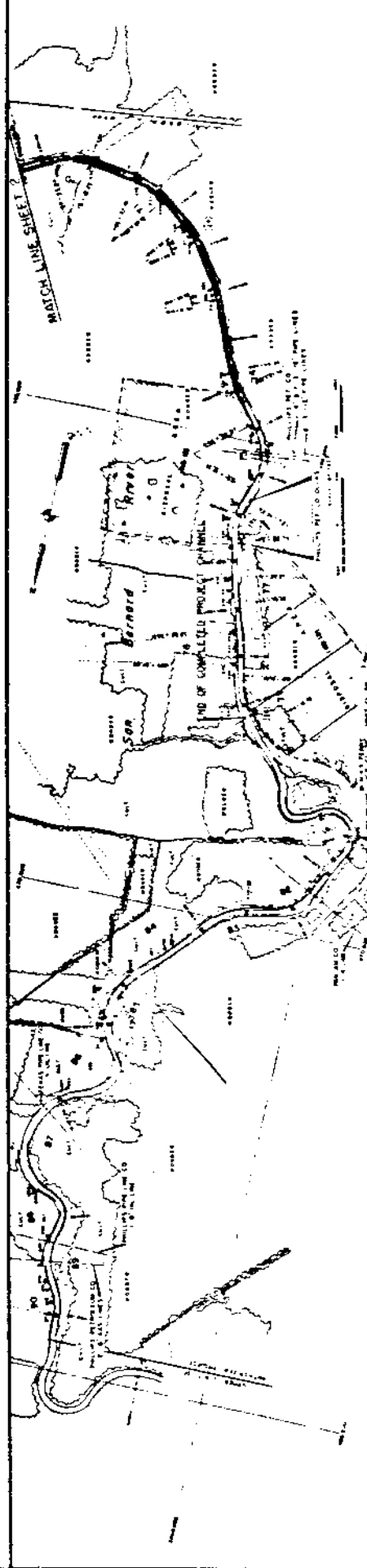
1 Incl
Drawing, Dec 1974


DON S. McCOY
Colonel, CE
District Engineer



SEE SHEET 1 OF 3 FOR LEGEND AND NOTES.

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
 SAN BERNARD RIVER
 MAINTENANCE DREDGING
 U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
 DECEMBER 1974 SHEET 2 OF 3



SEE SHEET 1 OF 3 FOR LEGEND AND NOTES.

SAN BERNARD RIVER
 MAINTENANCE DREDGING
 U.S. ARMY CORPS OF ENGINEERS, CALIFORNIA DISTRICT
 DECEMBER 1974 SHEET 3 OF 3



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

January 6, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-11 dated December 13, 1974, wherein the Corps of Engineers requested comments on proposed plans for spoil disposal associated with the maintenance dredging of Gulf Intracoastal Waterway, San Bernard River, Texas.

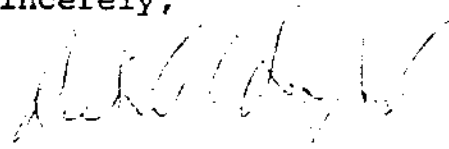
The Bureau of Sport Fisheries and Wildlife (BSFW), by letter to your office dated June 1, 1973, commented on proposed plans for spoil disposal during maintenance dredging of this waterway. Their recommendations were prepared with the assistance of the NMFS and received our concurrence in a draft of that report, as indicated by our April 30, 1973, letter to the BSFW Regional Director.

Your indicated practices and procedures in the present public notice would comply with these recommendations. However, we note that Disposal Area No. 2 was not included in the original Disposal Area Plans for the San Bernard River (File No. IWW 1150-790 dated April 1971) to which the above-mentioned BSFW report addressed itself. This is the same spoil area designated as Disposal Area No. 91 in the Public Notice IWW-M-3 for the GIWW segment, Galveston Bay to Matagorda Bay. Our letter dated November 18, 1974, responding to that public notice (IWW-M-3), recommended elimination of the portion of Disposal Area No. 91 lying west of Corps of Engineers' Stations 267+000 on the main GIWW Channel. We, therefore, reiterate this recommendation and further recommend that the remaining eastern portion of this disposal area be completely confined to prevent spoil material from spilling into adjacent marsh areas and Cedar Lakes.

2

Thank you for the opportunity to comment on the maintenance plans of this authorized Federal project.

Sincerely,



William H. Stevenson
Regional Director

SWCCO-M

13 February 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference is made to your letter dated 6 January 1975 concerning Public Notice No. IFW-M-11 on maintenance dredging of the Gulf Intracoastal Waterway - San Bernard River, Texas.

We have reviewed our disposal plan in the vicinity of Cedar Lakes and have considered your recommendation that Disposal Area No. 2 be leveed. Our easement for this area does not provide for constructing levees. Therefore, prior to our next dredging contract in the vicinity of this disposal area we will contact the landowner, and subject to his approval we will levee the area.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Area Supervisor
NFFS, Galveston, Texas

E. D. McGUIRE
Chief, Construction-
Operations Division



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

January 15, 1975

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice No. IWW-M-11, dated December 13, 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway - San Bernard River, Texas.

The U. S. Fish and Wildlife Service transmitted a letter report on this maintenance dredging project to the Corps of Engineers on June 1, 1973. It is noted that the recommendations offered in that June 1973 report have been incorporated into the project plans as reflected in the public notice.

We also note, however, that Disposal Area No. 2 near Cedar Lakes was not previously designated for use in maintenance dredging plans for the San Bernard River Channel.

A survey conducted during the period February 1973 to January 1974 by the Texas Parks and Wildlife Department revealed that the eastern segment of the Cedar Lakes is extremely valuable nursery habitat for white shrimp, brown shrimp, blue crabs, Gulf menhaden, sand seatrout, spotted seatrout, Atlantic croaker, and Southern flounder.

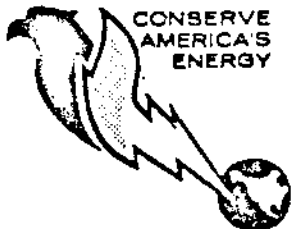
In order to prevent the potential loss of any portion of this valuable estuarine area due to inadvertent filling by spoil deposition, Disposal Area No. 2 should be totally confined prior to the next scheduled maintenance dredging.

Appreciation is extended for the opportunity to comment on this public notice.

Sincerely yours,

Acting Regional Director

267



Save Energy and You Serve America!

cc:

Executive Director, Texas Parks and Wildlife Dept., Austin, Texas
Regional Director, National Marine Fisheries Service, St. Petersburg,
Florida
Area Supervisor, NMFS, Environmental Assessment Div., Galveston, Texas
Field Supervisor, FWS, Div. of River Basin Studies, Galveston, Texas

SWGCO-M

13 February 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish & Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference Mr. Jerry Stegman's letter dated 15 January 1975 concerning Public Notice No. IWW-M-11 on maintenance dredging of the Gulf Intra-coastal Waterway - San Bernard River, Texas.

The letter contained only one recommendation, that Disposal Area No. 2 should be totally confined prior to the next scheduled maintenance dredging. Our assessment for this area does not provide for constructing levees. Therefore, prior to our next dredging contract in the vicinity of this disposal area, we will contact the landowner, and subject to his approval we will levee the area.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Field Supervisor
USF&WS, Galveston, Texas

K. D. McGENEE
Chief, Construction-
Operations Division

January 12 1975

Col. Don S. McCoy;

Dear Sir,

My home is on the banks of the San Bernard river where the Corps of Engineer have the gall to want to dredge again. For your information we have not got over the last time dredging was done about 1½ years ago to the cost of \$120,000. of taxpayers money.

Col. McCoy I am asking for a public hearing on the dredging of the San Bernard, we the people are entitled to a hearing and no less.

I am asking now for an Environmental Impact Statement on this project for comments to be sent to me.

I want to go on record that I protest any dredging that is planned for the San Bernard now or the future.

You didn't ask me Colonel McCoy but I think this whole thing smells and not of roses.

Yours Truly

Norma Schillinger

Norma Schillinger

P. O. Box 703

Freeport, Texas 77541



SWCCO-M

17 January 1975

Ms. Norma Schillinger
P. O. Box 703
Freeport, Texas 77541

Dear Ms. Schillinger:

Receipt is acknowledged of your letter pertaining to Public Notice No. IAW-M-11, dated 13 December 1974, concerning maintenance dredging of the Gulf Intracoastal Waterway - San Bernard River, Texas. Attached as you requested is a copy of the draft Environmental Statement. This Statement was filed with the Council on Environmental Quality on 30 October 1974. A final revision is presently being prepared.

Your request for a public hearing has been reviewed and additional information is needed. As stated in the public notice, it is required that specifics be set forth in writing describing the interests affected by the proposed discharge of dredged material and the manner in which they will be affected. Upon receipt of your information, a determination will be made as to whether a public hearing is required. If a public hearing is to be held, we will issue a 30-day public notice scheduling the hearing, describing the subject matter of the hearing, and the issues to be considered. The public notice will be issued to all Federal and State agencies affected by the proposed action, to local organizations, and known individuals having an interest in this matter. The notice will also be posted in appropriate Government buildings and published in newspapers of general circulation.

Thank you for your review and comments on the project. If we can be of further service, please contact us.

Sincerely yours,

DON S. McCOY
COLONEL, CE
DISTRICT ENGINEER

1 Incl
As stated

CERTIFIED MAIL 685144
RETURN RECEIPT REQUESTED

EWGCO-M

12 March 1975

Ms. Norma Schillinger
P. O. Box 703
Freeport, Texas 77541

Dear Ms. Schillinger:

We received your letter, dated 12 January 1975, concerning our Public Notice No. IHW-M-11, dated 13 December 1974, pertaining to maintenance dredging of the Gulf Intracoastal Waterway - San Bernard River, Texas. We replied to your letter on 17 January 1975 (copy attached).

Since it has been almost two months without a reply from you, we suspect your objections have been satisfied. If we do not receive the information requested in our 17 January 1975 letter by 24 March 1975, we will conclude your request for a public hearing has been withdrawn.

Sincerely yours,

1 Incl
As stated

DON S. McCOY
Colonel, CE
District Engineer

SWGCO-M

26 February 1975

Mrs. D. M. Parmelee
P. O. Box 237
Austin, Texas 78767

Dear Mrs. Parmelee:

On 7 January 1975, you talked with Messrs. E. D. McGehee and E. H. Wittig pertaining to Public Notice No. DW-M-11 concerning maintenance dredging of the San Bernard River. You stated you had received a call from Mr. Erigance, Brazoria County Commissioner, regarding the Ducroz Cemetery and the possibility of the cemetery being destroyed by dredged material.

We have completed a field survey and have located the cemetery (see inclosed aerial photographs). The cemetery is 475 feet southeast of the back boundary of Disposal Area No. 2. As a precaution, we will construct levees along the back boundary of the disposal area to insure dredged materials do not encroach on the cemetery.

We hope this information is helpful to you.

Sincerely yours,

2 Incls
As stated

E. D. McGEHEE
Chief, Construction-
Operations Division

ARTHUR C. FENNEKOHL
3827 INWOOD DRIVE
HOUSTON, TEXAS 77019
NA 2-1697

January 15, 1975

Mr. E. D. McGehee, Chief,
Construction & Operations Div.,
Corps of Engineers,
Galveston, Texas.

Dear Mr. McGehee:

This is to express to you our appreciation for the courtesy you extended to Bill Fountain and myself at the time of our interview today.

As a result of our conversation I believe we both came away with a greater understanding of the factors involved in our dilemma of the flooding and erosion along the San Bernard River.

If a comparison of the shorelines could be made, as they are now, & as they were when the 1971 Survey was completed and submitted, we might well be able to tell were, if any, changes have been made which have resulted in such rav-
ashing and destructive flooding now.

Anything you are able to come up with which might be helpful at this time when so many peoples shoreline holdings are being destroyed, would, needless to say, be highly appreciated.

Bill joins me in thanking you for your help-fulness, time and interest shown in our vexing problem.

Cordially yours,

A. Fennekoehl

SWGCO

28 January 1975

Mr. Arthur C. Fennekohl
Route 1, Box 530
West Columbia, Texas 77486

Dear Mr. Fennekohl:

This is in furtherance to my meeting with you and Mr. W. C. Fountain on 14 January 1975 and your letter of 15 January 1975 concerning the San Bernard River. You raised several questions concerning our public notice IWW-M-11 dated 13 December 1974 regarding maintenance dredging of the San Bernard River. To reiterate, you were concerned with future maintenance dredging of the river and the possible effect it would have on erosion of the banks of the river within the navigation channel and perhaps more so to the improved property located upstream of navigation. I explained that other than our dredging about every two years at the mouth of the river where it intersects the Gulf Intracoastal Waterway (GIW) we have, since the channel was authorized, only dredged the river channel on three occasions, (1950, 1960, and 1973). On those three occasions we only dredged selected reaches. For the most part the river has required no maintenance dredging.

Most of the disposal areas shown on the map that accompanied the notice, have not been used in twenty years and no plans presently exist to use them at the junction of the San Bernard River with the GIW. A recent report and bulletin show that between mile 0 and 0.5 (Station Sta. 0+00 to 0+50) we have built up levees and project depth of 9 feet to 6 feet on the left side quarter and 7 feet on the right outside quarter. The remainder of the project does not require dredging at this time and, unless some emergency condition arises, no dredging is scheduled in the future. We feel it is important, however, to reduce the depth to the project depth of 9 feet between Mile 0 and 0.5 as soon as practicable to prevent possible barge grounding and other navigational hazards.

I hope that I was not wrong in assuming your acceptance of my explanation that the San Bernard River has a natural system of erosion along its banks that is similar to many other rivers along the Texas Coast and that the river will continue to move with the same condition of erosion with or without the

SWCCO

28 January 1975

Mr. Arthur C. Fennakohl

navigation channel. I am sure the slow moving barge tows that transit the river cause the banks to erode to some degree, but the natural flow of water is the principal factor causing erosion.

Your documentation of the erosion that has occurred was very enlightening and the concern of the local property owners is quite evident. I regretted not being able to give you a more favorable answer concerning bank protection on the San Bernard River. However, the Congressional Act that authorized the navigation project (River and Harbor Act of 20 June 1938, Public Law 75-685), includes no such provisions. In fact, the authorizing document specifically states that it is the obligation of the local sponsor, among other things, to hold and save the United States free from any damages that may result from the execution and maintenance of the project.

In regard to other authority there is no existing legislation which would permit the Federal Government to share in the cost of bank protection. The only general authority available to the Corps of Engineers for bank protection work is Section 14 of the Flood Control Act approved 24 July 1946 (Public Law 526, 79th Congress), which authorizes the construction of emergency bank protection works to prevent flood damage to highways, bridge approaches, and public works. This act does not authorize work for protection of private property from bank erosion.

Mr. Fountain was concerned with pollution. At this time we know of no pollutants in the San Bernard River. We do, however, plan to take sediment and water samples before dredging in the upper reaches of the river to determine whether they are polluted or not. If pollutants exceed criteria established by the Environmental Protection Agency, we will take special measures in confining the dredged material.

In regard to aerial photos of the river, we took photos of the lower four miles of the river during the week of 15 January. We do not have the photos as yet, but you are welcome to view these when they become available. We have no other aerial photos of the river.

Please feel free to call should you need additional information.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-Operations Division



SOUTHERN METHODIST UNIVERSITY

Environmental Law Clinic
Tel: 214-692-2855 or 214-692-2562

SCHOOL OF LAW
DALLAS, TEXAS 75222

January 10, 1975

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

This letter is in reference to Public Notice No. IWW-M-11 dated December 13, 1974 and issued in regard to proposed maintenance dredging of the San Bernard River Channel of the Gulf Intracoastal Waterway.

The affected portion of the San Bernard River is a significant natural area which could suffer irreparable injury if proper safeguards are not employed in connection with the proposed project. In view of the area's value both to naturalists and the general public I raise the following objections:

1. The Draft Environmental Statement for the entire waterway project concedes that dredged material can contain dangerous levels of oil and grease, mercury, lead and zinc. The resuspension of these contaminants represents an immediate threat^{to} a number of marine species of both sport and commercial value. The Corps of Engineers has proposed no solutions for this problem; nor has the Corps suggested means to at least minimize the catastrophic effects.

2. The resuspension of toxic pollutants allows them to enter the food chain. This could lead to the eventual destruction of the affected ecosystem. The accumulation of toxic substances can indeed endanger more than an isolated disposal site. Nevertheless, the Corps has failed to provide measures designed to prevent the introduction of pollutants into this fragile food chain.

3. Of the thirteen proposed disposal areas, at least nine of them are unleveed. Nor has the Corps proposed specific containment levee systems designed to prevent dredged material from flowing into adjacent wooded areas. These areas are among the finest natural areas in Texas and contamination of the plantlife could result in the destruction of valuable recreational and natural land.



SOUTHERN METHODIST UNIVERSITY

Environmental Law Clinic
Tel: 214-692-2855 or 214-692-2562

SCHOOL OF LAW
DALLAS, TEXAS 75222

District Engineer
page two

4. Finally, the Corps of Engineers has failed to justify with any specificity why dredging must be undertaken at such an early date. The Public Notice does not explain why it is imperative that the project be commenced immediately. Such expeditious treatment circumvents the necessary public participation which should accompany decisions of such great magnitude.

Accordingly, I object the initiation of maintenance dredging on the San Bernard River Channel.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Kirk F. Sniff".

Kirk F. Sniff
Student



SOUTHERN METHODIST UNIVERSITY

Environmental Law Clinic

SCHOOL OF LAW
DALLAS, TEXAS 75222

January 13, 1975

District Engineer
Galveston District, Corps of Engineers
Department of the Army
P.O. Box 1229
Galveston, Texas 77550

Dear Sir:

In my letter of January 10, 1975, I raised several objections to the proposed maintenance dredging of the San Bernard Channel of the Gulf Intracoastal Waterway as described in Public Notice No. IWW-M-11. Please consider this letter, in conjunction with my correspondence of January 10, 1975, as a formal request for a public hearing.

In addition, we request that the time established for public comment be extended by thirty (30) days in order to allow for the fullest measure of public participation. This additional time is also necessary in order that the Corps of Engineers may amend Public Notice No. IWW-M-11 in order to comply with 33 CFR 209.145(f)(viii)(4) which provides, in part, that: "The public notice will . . . describe explicitly the emergency situation and indicate that this work will be performed immediately." (Emphasis supplied.)

In our opinion, the public has not been fully apprised of the nature of the proposed project. Furthermore, the Corps has failed to explicitly describe the exigencies of the situation. Accordingly, we feel that an extended comment period is warranted.

Sincerely yours,

Kirk F. Sniff
Student

686941

SWGCO-M

30 January 1975

Mr. Kirk F. Sniff
Southern Methodist University
Environmental Law Clinic
School of Law
Dallas, Texas 75275

Dear Mr. Sniff:

Receipt is acknowledged of your letters dated 10 January 1975 and 13 January 1975 pertaining to Public Notice No. IWW-M-11, dated 13 December 1974, concerning proposed maintenance dredging of the San Bernard River Channel of the Gulf Intracoastal Waterway.

In your letter of 10 January 1975, you raised several objections against continued maintenance of the project. We have coordinated our disposal plans with U. S. Department of the Interior, Fish and Wildlife Service; U. S. Department of Commerce, National Marine Fisheries Service; Texas Parks and Wildlife; Environmental Protection Agency; and Texas Water Quality Board. We are complying with all recommendations offered by them to protect the existing habitat. Where levees were determined to be required to protect valuable wildlife habitat such as in Disposal Areas Nos. 1, 2, and 3, we have constructed levees. These areas coincide with the reach most frequently dredged. In the past twenty years, we have dredged the reach from Station Nos. 0+10 to 40+00 about ten times. Except for the channel reach between Station Nos. 265+00 to 266+50 where we have dredged three times, and between Station Nos. 1320+00 to 1372+50 where we have dredged twice, no other segment of the river has been maintained over once in the past twenty years and in fact, most of the project channel has not required maintenance.

Thus, most of the disposal areas have not been used in twenty years or more and no plans presently exist to use them except at the junction of the San Bernard River with the GIW or in the event of an emergency. A recent hydrographic bulletin shows that between Mile 0 and 0.5 (Station Nos. 0+00 to 30+00) shoals have reduced the project depth of 9 feet to 6 feet on the left outside quarter and 7 feet on the right outside quarter. The remainder of the

SWCCO-M

30 January 1975

Mr. Kirk F. Saiff

project does not require dredging at this time and unless some emergency condition arises, no dredging is scheduled in the near future. We feel it is important, however, to reduce the shoals to the project depth of 9 feet between Mile 0 and 0.5 as soon as possible to prevent possible barge grounding and other navigational hazards which might result in damage to the environment should a spill occur.

At this time, we know of no pollutants in the San Bernard River Channel. The lack of sources of pollutants as well as the limited industrialization in the area have led us to believe the heavy metals you mention are not significant. We do, however, plan to take sediment and water samples before dredging in the upper reaches of the project channel to determine whether they are polluted or not. If they exceed criteria established by the Environmental Protection Agency, we will take measures to confine the dredged material.

In regard to your letter of 13 January 1975 concerning a public hearing, we have reviewed your request and need additional information. As stated in the public notice, it is necessary that specifics be set forth in writing describing the interests affected by the proposed disposal plan and the manner in which they will be affected. We are also not sure why you reference 33 C.F.R. 209.145 (f) (viii) (4) in your letter as the public notice was not issued because of emergency conditions. We suggest you review 33 C.F.R. 209.145 (f) again as we are complying with the guidelines outlined for Federal projects which commenced before 1 January 1970.

Your request for a thirty day extension cannot be favorably considered. In the second paragraph of each notice, a limiting date has been set for submission of comments regarding the proposed dredge disposal plan. An average of thirty (30) days was allotted in each case for interested parties to express their views. This review time is incorporated in an over-all schedule involving thirty-six other public notices and other various actions such as environmental assessments, determination and findings, statement of findings, and final reviews by the Environmental Protection Agency. All of these actions are keyed to a timetable we must maintain in order to meet established deadlines set by the Office of the Chief of Engineers. A time extension cannot be given without seriously jeopardizing the schedules on the remaining environmental requirements.

Upon receipt of the additional information we have requested, a determination will be made as to whether a public hearing is required. If a public hearing is to be held, we will issue a 30-day public notice scheduling the hearing, describing the subject matter of the hearing, and the issues to be considered. If we do not hear from you before 12 February 1975, we will assume our response satisfied your concerns and a public hearing is no longer deemed necessary.

Sincerely yours,

DON S. MOCOY
COLONEL, CE
DISTRICT ENGINEER



PHILLIPS PETROLEUM COMPANY

P. O. Box 866
Sweeny, Texas 77480

January 13, 1975

Re: San Bernard River Navigable Use

Col. Don S. McCoy
District Engineer
Galveston District
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

According to the Brazosport Facts, I understand a civic group is intending to request a meeting with the Corps of Engineers to question maintaining the San Bernard River as a navigable stream.

I would like to make Phillips Petroleum Company's use of the San Bernard River navigation clear to you. Phillips temporarily reduced the traffic in the San Bernard several years ago by diverting some crude shipments that were being received at our San Bernard River docks to our Freeport Harbor location. However, the continued use of San Bernard River barge transportation is vital to us so that we will be able to receive raw materials including crude oil and make shipments of heavy fuel oil and special products such as aromatic concentrate, toluene, waste caustic, etc. that are not practical for us to transport to other locations except by barge down the San Bernard River.

Yours very truly,

A handwritten signature in cursive script, appearing to read "L. H. Vautrain".

L. H. Vautrain
Plant Manager

LHV:nl

cc: Peter Schaff

SWCCO-M

22 January 1975

Mr. L. H. Vastrain
Plant Manager
Phillips Petroleum Company
P. O. Box 866
Sweeny, Texas 77480

Dear Mr. Vastrain:

Receipt is acknowledged of your letter dated 13 January 1975, pertaining to Public Notice No. IWW-M-11 concerning the proposed maintenance dredging of the GIWW-San Bernard River Channel. Thank you for your review and indorsement of the project.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

SOUTHWESTERN REGIONAL OFFICE
John L. Franson, Representative
Louisiana
New Mexico
Texas
(Mexico)



NATIONAL AUDUBON SOCIETY

2507 ROGGE LANE, AUSTIN, TEXAS 78723 - PHONE (512) 928-2047

June 30, 1975

Colonel Don S. McCoy
District Engineer
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

RE: PUBLIC NOTICE NO. IWW-M-11, MAINTENANCE DREDGING OF THE GULF
INTRACOASTAL WATERWAY - SAN BERNARD RIVER CHANNEL, TEXAS

Dear Colonel McCoy:

In regard to the permit issued on the above subject, we have reviewed various correspondence including that of the Fish and Wildlife Service dated June 1, 1973 and the National Marine Fisheries Service, NOAA, dated January 6, 1975.

Our reservations in regard to the project are adequately expressed in the correspondence that your office has received from the Fish and Wildlife Service and the National Marine Fisheries Service.

Please register our support of these documents which reflect our reservations in any future documentations.

Sincerely,

John L. Franson
Southwest Regional Representative

cc: Council on Environmental Quality
Environmental Protection Agency, Regional Office
U.S. Department of the Interior
National Marine Fisheries Service, NOAA
U.S. Fish and Wildlife Service, Albuquerque
Texas Parks and Wildlife Department
Texas General Land Office
National Audubon Society
Houston Audubon Society 284

SHCCO-M

28 August 1975

Mr. John L. Franson
Southwest Regional Representative
National Audubon Society
2507 Rogge Lane
Austin, Texas 78723

Dear Mr. Franson:

This is in reply to your letter dated 30 June 1975 concerning Public Notice No. LW-M-11 on maintenance dredging of the Gulf Intracoastal Waterway - San Bernard River Channel, Texas.

We have completed our review of the 1 June 1973 U. S. Fish and Wildlife Service report and 6 January 1975 National Marine Fisheries Service letter referenced in your letter. On 8 August 1974 the Corps issued its response to the U. S. Fish and Wildlife Service, followed on 30 April 1975 by a response to the National Marine Fisheries Service, stating our intentions to comply with the recommendation presented by each agency where possible, based on what is considered in the best overall public interest.

Your letter has been placed in our permanent records file for the CDM - San Bernard River Channel public notice, and it will be given full consideration in any future documentations.

Thank you for your review and comments.

Sincerely yours,

E. D. McGERKE
Chief, Construction-
Operations Division

J. DOUGLASS TOOLE
CHAIRMAN

TEXAS WATER QUALITY BOARD

J. E. PEAVY, MD

FRANK H. LEWIS
VICE CHAIRMAN

BEN RAMSEY

CLYDE JOHNSON

HUGH C. YANTIS, JR.
EXECUTIVE DIRECTOR

HARRY P. BURLEIGH



CLAYTON T. GARRISON

PH. (512) 475-2651

1700 NORTH CONGRESS AVE. 78701
P.O. BOX 13246 CAPITOL STATION 78711
AUSTIN, TEXAS

January 31, 1975

RE: Public Notice No. IWW-M-11

Col. Don S. McCoy, C.E.
District Engineer
U. S. Army Corps of Engineers
Galveston District
P. O. Box 1229
Galveston, Texas 77550

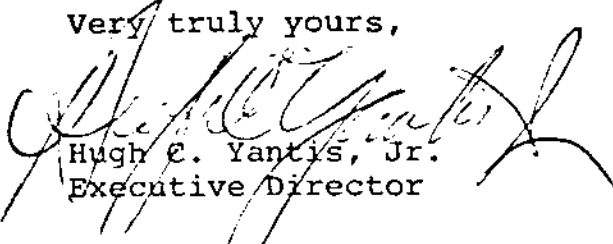
Dear Colonel McCoy:

We are in receipt of the referenced public notice. We have noted that the final Environmental Statement will not be available until after the commencement of the project. Therefore, it is requested that the detailed plans for the disposal of dredged material be furnished to this agency and that, prior to the initiation of the project, a monitoring program be coordinated with this agency.

Several studies by this agency indicate a possible buildup of sulfur in bottom sediments, therefore spoil disposal areas should be carefully monitored to prevent turbid runoff from reentering the San Bernard. I am enclosing three studies on the San Bernard River performed by this agency for your information.

If we may be of service, please let me know.

Very truly yours,


Hugh C. Yantis, Jr.
Executive Director

286

ccs: Mr. Clayton T. Garrison, Executive Director
Texas Parks and Wildlife Department
Texas Water Quality Board District 7

Encl.

SWGCO-M

20 March 1975

Mr. Hugh C. Yantis, Jr.
Executive Director
Texas Water Quality Board
P. O. Box 13246, Capitol Station
Austin, Texas 78711

Dear Mr. Yantis:

Receipt is acknowledged of your letter dated 31 January 1975 concerning Public Notice No. IWW-M-11 pertaining to maintenance dredging of the Gulf Intracoastal Waterway - San Bernard River, Texas, project.

As has been our policy, we will continue to furnish you with plans for the disposal of dredged material prior to the commencement of dredging of this project. Before the next dredging, we will also coordinate our sampling program with you.

Thank you for your review.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

APR 21 1975

OFFICE OF THE
REGIONAL ADMINISTRATOR

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (787238)

Colonel Don S. McCoy
District Engineer
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your project "Gulf Intracoastal Waterway-San Bernard River, Texas" as covered in Public Notice No. IWW-M-11 dated December 13, 1974. We have also reviewed your April 1, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Dredged material shall not be placed in Disposal Area No. 2.
2. No dredged material shall be placed or allowed to spill into Cedar Lakes at any time.
3. Material dredged above river mile 10 shall be placed in fully confined disposal areas until sediment surveys are completed. After the sediment quality is defined, disposal in unleveed areas can be considered.
4. In Disposal Areas Nos. 4 (above mile 2) and 5, dredged material shall not be discharged further than 3,000 feet from the center-line of the channel or closer than 1,000 feet.

Since, as stated in your Public Notice, an Environmental Impact Statement

has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the council on Environmental Quality.

Sincerely yours,

George J. Robinson
for Regional Administrator

SUPPLEMENT NO. 9

PORT ARTHUR TO HIGH ISLAND

SUPPLEMENT NO. 9

PORT ARTHUR TO HIGH ISLAND

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SUPPLEMENT NO. 9

PORT ARTHUR TO HIGH ISLAND

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intracoastal Waterway (GIWW) main channel section between the Port Arthur Canal and High Island. This portion of the federally maintained 12-foot deep by 125-foot wide channel extends from its junction with the Sabine-Neches Waterway southwesterly to the State Highway 124 bridge in the vicinity of High Island. The reach includes a barge mooring basin 75 feet wide and 2,300 feet long near the Port Arthur Canal. The main channel extends westerly from the Port Arthur Canal through marsh areas, crosses Salt Bayou, Spindletop Ditch, Barnes Slough, and Mud Bayou to the bridge on Highway 124. All depths are measured below Mean Low Tide (Corps of Engineers datum). Contract pipeline dredges are utilized to maintain this reach of the waterway. The frequency of dredging in selected reaches is about every 60 months. The excavated material is transported by pipeline and placed in the various disposal areas. The average quantity of materials dredged per contract is about 2.0 million cubic yards. Selected sections of this reach were last maintained during the period October 1973 - January 1974. The next maintenance dredging will be scheduled after 30 June 1977. The portion of the GIWW from Port Arthur Canal to High Island utilizes 27 disposal areas. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 1 through 27 and are shown on the figures attached to the public notice.

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. The recorded tonnage of cargo handled by ports and moved on the GIWW between the Sabine River and Galveston Bay in 1974 was 40.0 million tons. Principal

commodities shipped included crude petroleum, petrochemicals, and other petroleum products. The GIWW has grown consistently and has contributed substantially to the regional and national economy. A recent study by Texas A&M University has placed the total direct and indirect value of the channel to the State of Texas at more than \$19 billion per year. Should this vital transportation system be closed because of lack of maintenance, the adverse economic impact would be felt throughout the state in loss of employment and higher commodity prices.

3. ENVIRONMENTAL SETTING.

3.01 This reach of the Gulf Intracoastal Waterway was cut through low-lying lands which are comprised principally of tidal or freshwater marshes, streams, and lakes. Disposal material from previous dredgings was placed on both sides of the waterway and has cut off most of the marshes from tidal influence. The J. D. Murphree Wildlife Management Area (formerly Big Hill Bayou Wildlife Management Area), administered by the Texas Parks and Wildlife Department, lies north and adjacent to the waterway between Stations 95+00 and 322+00.

3.02 Tidal streams and adjacent marshes which have not been cut off by disposal material or other obstacles provide high quality habitat used by many species of fish and crustaceans for feeding, breeding, and nursery areas. The tidal marshes also contribute important organic materials to the waters. Some of the water areas cut off from tidal influence and other waters with low salinities provide feeding, nursery, and breeding habitat for many species of freshwater fish.

3.03 Important species of fish and crustaceans using the project area include spotted seatrout, red drum, black drum, Atlantic croaker, sheepshead, flounder, menhaden, striped mullet, spot, gar, bowfin, gizzard shad, channel catfish, blue catfish, yellow bass, largemouth bass, white crappie, bluegill and other sunfish, white shrimp, brown shrimp, and blue crab. Sport fishing and crabbing is intensive wherever public access is available

for bank fishing and is slight elsewhere. There is little commercial fishing in this reach of the waterway.

3.04 Wildlife habitat in the project area consists of the tidal and freshwater marshes and streams, adjacent lakes, low-lying uplands, and the disposal areas. Some of the finest marsh habitat in the State of Texas occurs along this reach of waterway.

3.05 The marshes, streams, and lakes provide feeding, resting, and nesting habitat for many species of waterfowl and other birds, as well as, important habitat for the American alligator, mink, otter, nutria, and muskrat. The low-lying uplands and the disposal areas are habitat for mourning dove, raccoon, opossum, rabbit, skunk, coyote, and red wolf.

3.06 Small to moderate populations of mourning dove, raccoon, opossum, mink, otter, American alligator, and red wolf use the marshes and designated disposal areas. Populations of rabbit, nutria, and muskrat are fairly large. While mink, otter, and red wolf occur in few to moderate numbers, their density in this reach is among the highest in the state. Hunting is slight for game species in general. However, rabbit hunting is fairly intensive. Trapping occurs in moderate amounts for mink and otter and to a greater extent for muskrat and nutria. The amount of hunting and trapping is expected to remain the same in the future.

3.07 Important species of waterfowl in the project area include the Canada goose, snow goose, white-fronted goose, mallard, pintail, mottled duck, American widgeon, gadwall, green-winged teal, blue-winged teal, shoveler, lesser scaup, canvasback, ring-necked duck, ruddy duck, and coot. Most of the waterfowl use is by migrants during the winter months. The marshes, including those adjacent to existing disposal areas, are prime nesting habitat for the mottled duck which is a resident species. Waterfowl hunting is popular and is expected to remain so in the future.

3.08 Many other birds use the project area for nesting, feeding, resting, and cover. Among these are grebe,

merganser, heron, egret, bittern, ibis, roseate spoonbill, rail, gallinule, gull, tern, plover, sandpiper, and common snipe.

3.09 Endangered species known to range in the area include Florida manatee, red wolf, right whale, sperm whale, blue whale, finback whale, Attwater's prairie chicken, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, leatherback turtle, and Houston toad.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants that may be found in some sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters as channel depths preclude development of vegetation because of reduced sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach are all land disposal areas.

4.05 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.06 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.07 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.08 The most significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally

change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type will be minimal, as the areas to be used for disposal have been used previously, and the changes have already occurred.

4.09 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands as primary food source areas, dredging practices have been changed to avoid disposal in marsh areas wherever practicable.

4.10 Out of 89,000 acres of marsh adjacent to this reach of the GIWW, approximately 1,400 acres, or 1.6 percent, may be affected by future disposal operations. The estimate was prepared by Corps of Engineers personnel from the most recent coast charts available. It has not been practicable to make surveys of each area to determine the exact extent of marsh land within the disposal area limits. The estimates are therefore based primarily on vegetation cover shown on the coast charts. It is considered that much of the acreage included as marsh to be covered has been covered by past dredging and is no longer marsh. It is believed that reduction of marsh areas caused by dredging of this reach will be minimal.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described

in the public notice with the recommended changes described in Section 6 of the summary.

6. RESPONSES TO THE PUBLIC NOTICE. Two responses to the public notice have been received. Responses from the U. S. Fish and Wildlife Service and National Marine Fisheries Service recommended that back levees be constructed on disposal areas 14, 15, 19, 20, and 21 at a maximum distance of 1,650 feet from the centerline of the channel, and that, until the levees are constructed, discharge points should be on areas of high ground. NMFS also recommended that these discharge points should be used in subsequent maintenance dredging operations. The recommended levees will be constructed.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 11 June 1975, EPA approved the dredged material disposal plan under 33 CFR 209.145 for one year, subject to the following restrictions:

a. Effluent from all fully confined disposal areas shall be discharged through control structures into the Gulf Intracoastal Waterway.

b. Dredged material shall not be discharged further than 1,000 feet from the channel centerline into disposal areas 14, 15, 19, 20, and 21.

c. The backside of each open water disposal area shall be leveed as soon as possible, and as near the channel as feasible. The back levees shall not be more than 1,650 feet from the center line of the channel.

In a letter dated 9 October 1975 (Vol. I, page E-1) EPA modified these recommendations by deleting recommendation b. All requirements will be complied with. Long-term approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council of Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-12

2 January 1975

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL)-PORT ARTHUR CANAL TO HIGH ISLAND

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable water or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 3 February 1975.

Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Marine Protection, Research and Sanctuaries Act of 1972
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel) - Port Arthur Canal to High Island.

PROJECT LOCATION: From its junction with the Sabine-Neches Waterway near Port Arthur to the vicinity of High Island in Jefferson, Chambers, and Galveston Counties, Texas, respectively.

PROJECT DESCRIPTION: This portion of the Federally maintained 10-foot deep by 125-foot wide Gulf Intracoastal Waterway (GIWW) extends from its junction with the Sabine-Neches Waterway southwesterly to the vicinity of High Island. The reach includes a barge mooring basin 75-feet wide and 2,500 feet long near the junction area. The main channel extends westerly from the Port Arthur Canal through marsh areas, crosses Salt Bayou, Spindletop Ditch, Jones Slough, and Mud Bayou to a bridge on Texas State Highway 124 near the Community of

High Island, Texas. All depths are measured below Mean Low Tide (Corps of Engineers datum).

DISPOSAL AREA: The portion of the GIWW from Port Arthur Canal to High Island utilizes 27 disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 1 through 27 (see attached drawings).

DISPOSAL AREAS NOS. 1-13, 16-18, and 22-27 are all confined areas located adjacent to the channel.

DISPOSAL AREAS NOS. 14,15, and 19-21 are all partially confined areas located adjacent to the channel. No back levees have been built at landowners' requests.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from this reach of the waterway consist of sands, silts, and clays. Shoaling in the waterway is a result of deposits occurring from wind-driven waves and alluvial deposits from sloughs and bayous during high water periods. The shoaling rate of this section of the waterway is approximately 400,000 cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain this reach of the waterway. The frequency of dredging in selected reaches is about every 60 months. The excavated material is transported by pipeline and placed in the various disposal areas. The average quantity of materials dredged per contract is about 2.0 million cubic yards. Selected sections of this reach were last maintained during the period October 1973-January 1974. The next maintenance dredging will be scheduled after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 1 is located south of the waterway at its junction with the Port Arthur Canal. The area is bound by the waterway on the north, State Hwy 87 and the Port Arthur Canal on the east, and marsh areas on the south and west.

Disposal Areas Nos. 2-4 are all located adjacent to the southeasterly side of the waterway. The areas are bound by the channel on the north, and by marsh areas on all other sides.

Disposal Area No. 5 is located on the northwesterly side of the waterway. The area is bound on the southeast by the channel, on the southwest by an unnamed channel, and on the northwest and northeast by marsh areas.

Disposal Area No. 6 is located on the northwesterly side of the waterway. The area is bound by the channel on the southeast, and by marsh areas on all other sides.

Disposal Area No. 7 is located on the northwesterly side of the waterway. The area is bound by an unnamed channel on the northeast, by the waterway on the southeast, and by marsh areas on the other sides.

Disposal Areas Nos. 8-11 are located on the northwest bank of the waterway. The areas are bound by the channel on the southeast, and by marsh areas on the other sides.

Disposal Areas Nos. 12-15 are located northwest of the waterway. These areas are continuous, lying adjacent to the channel and to each other. They are bound by the waterway on the southeast, by Salt Bayou on their westerly end, by marshland on the northwest, and on the northeasterly end by marsh area.

Disposal Area No. 16 is located northwest of the waterway. The area is bound by the channel on the southeast, marsh areas on the southwest and northwest, and by an unnamed road on the northeast.

Disposal Area No. 17 is located on the northwest banks of the waterway. The area is bound by the channel on the southeast, Disposal Area No. 18 on the southwest, marsh area on the northwest, and Spindletop Ditch on the northeast.

Disposal Area No. 18 is located on the northwest banks of the waterway. The area is bound by the channel on the southeast, marsh area on the southwest and northwest, and Disposal Area No. 17 on the northeast.

Disposal Area No. 19 is located on the northwest bank of the waterway. The area is bound on the southeast by the waterway, and by marsh area on the other sides.

Disposal Areas Nos. 20-25 are located on the southeast banks of the waterway. They are bound by the waterway on the northwest, and surrounded by marsh areas on all other sides.

Disposal Area No. 26 is located southeast of the waterway. The area is bound by the waterway on the northwest, and by a combination of marsh areas and stretches of Mud Bayou on the other sides.

Disposal Area No. 27 is located south of the waterway. The area is bound on the north by the waterway, on the east by Mud Bayou, on the south by marsh area, and on the west by Texas State Highway 124.

DREDGING BY OTHERS: There is not a significant amount of dredging by non-Federal agencies in the vicinity of the Federal project. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Jefferson County
Commissioners' Court of Chambers County
Commissioners' Court of Galveston County

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P. L. 91-190). A separate Environmental Statement will not be prepared for this reach of the GIWW. However, a Draft Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) has been prepared and the final statement is scheduled to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies. The draft statement is currently being reviewed by these agencies and the public, and single copies are available upon request to the District Engineer, ATTN: SWGED-E.

In the event an emergency situation occurs, the shoaling in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.


Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan will also be considered.

2 January 1975

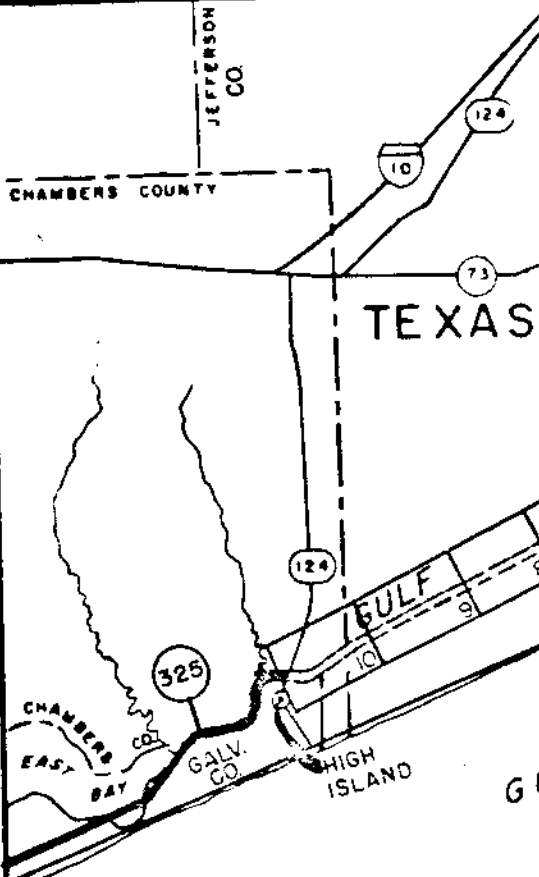
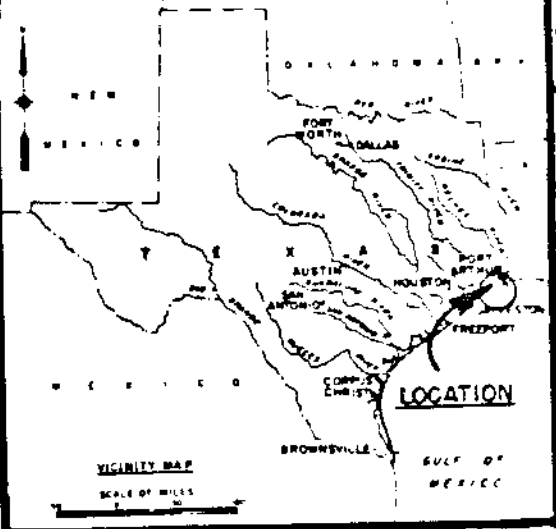
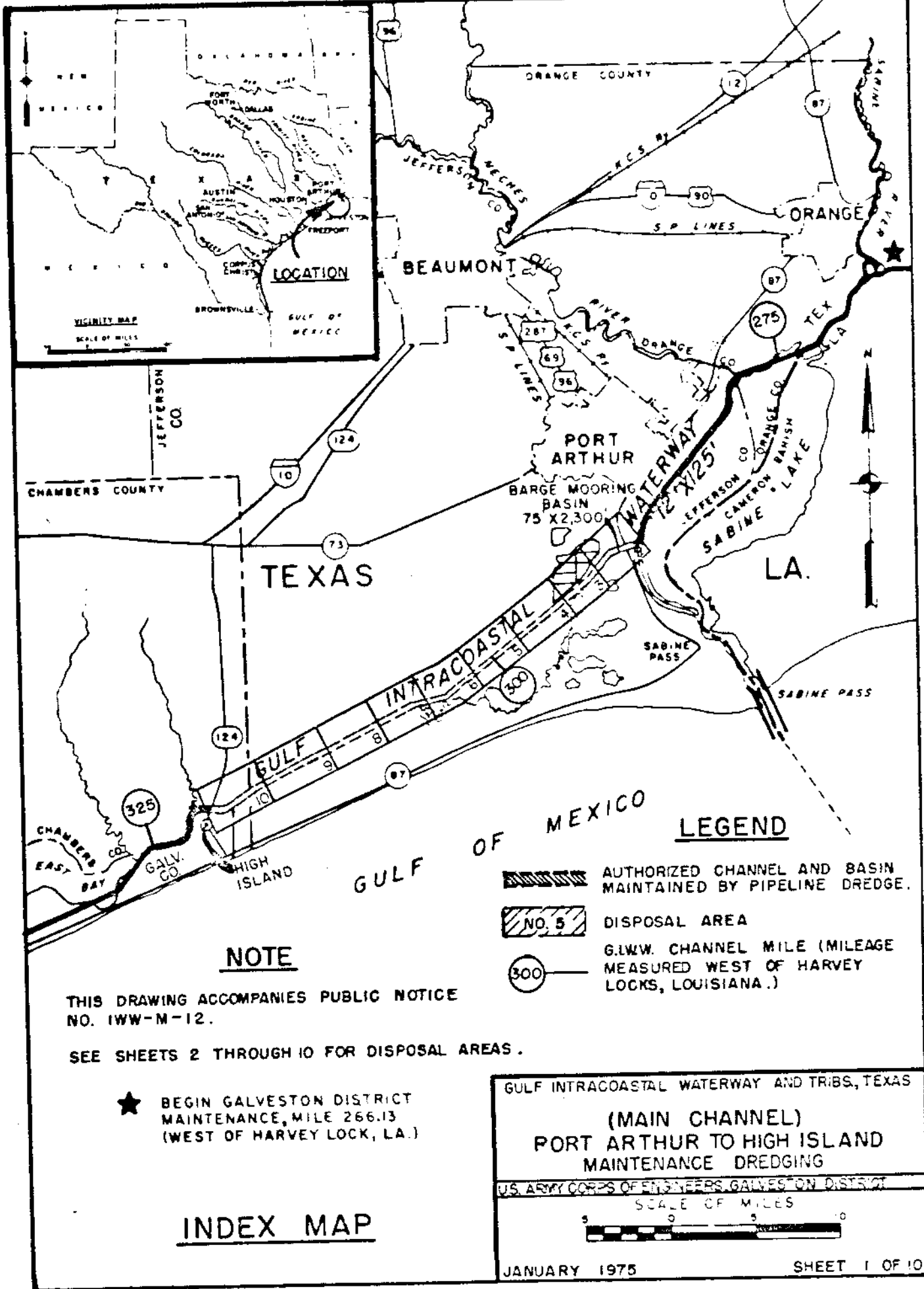
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:




District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-12 dated 2 January 1975.


DON S. McCOY
Colonel, CE
District Engineer

1 Incl
Drawing, Jan 1975



- LEGEND**
-  AUTHORIZED CHANNEL AND BASIN MAINTAINED BY PIPELINE DREDGE.
 -  DISPOSAL AREA
 -  G.I.W.W. CHANNEL MILE (MILEAGE MEASURED WEST OF HARVEY LOCKS, LOUISIANA.)

NOTE

THIS DRAWING ACCOMPANIES PUBLIC NOTICE NO. IWW-M-12.

SEE SHEETS 2 THROUGH 10 FOR DISPOSAL AREAS.

★ BEGIN GALVESTON DISTRICT MAINTENANCE, MILE 266.13 (WEST OF HARVEY LOCK, LA.)

INDEX MAP


GULF INTRACOASTAL WATERWAY AND TRIBS, TEXAS

(MAIN CHANNEL)

PORT ARTHUR TO HIGH ISLAND MAINTENANCE DREDGING

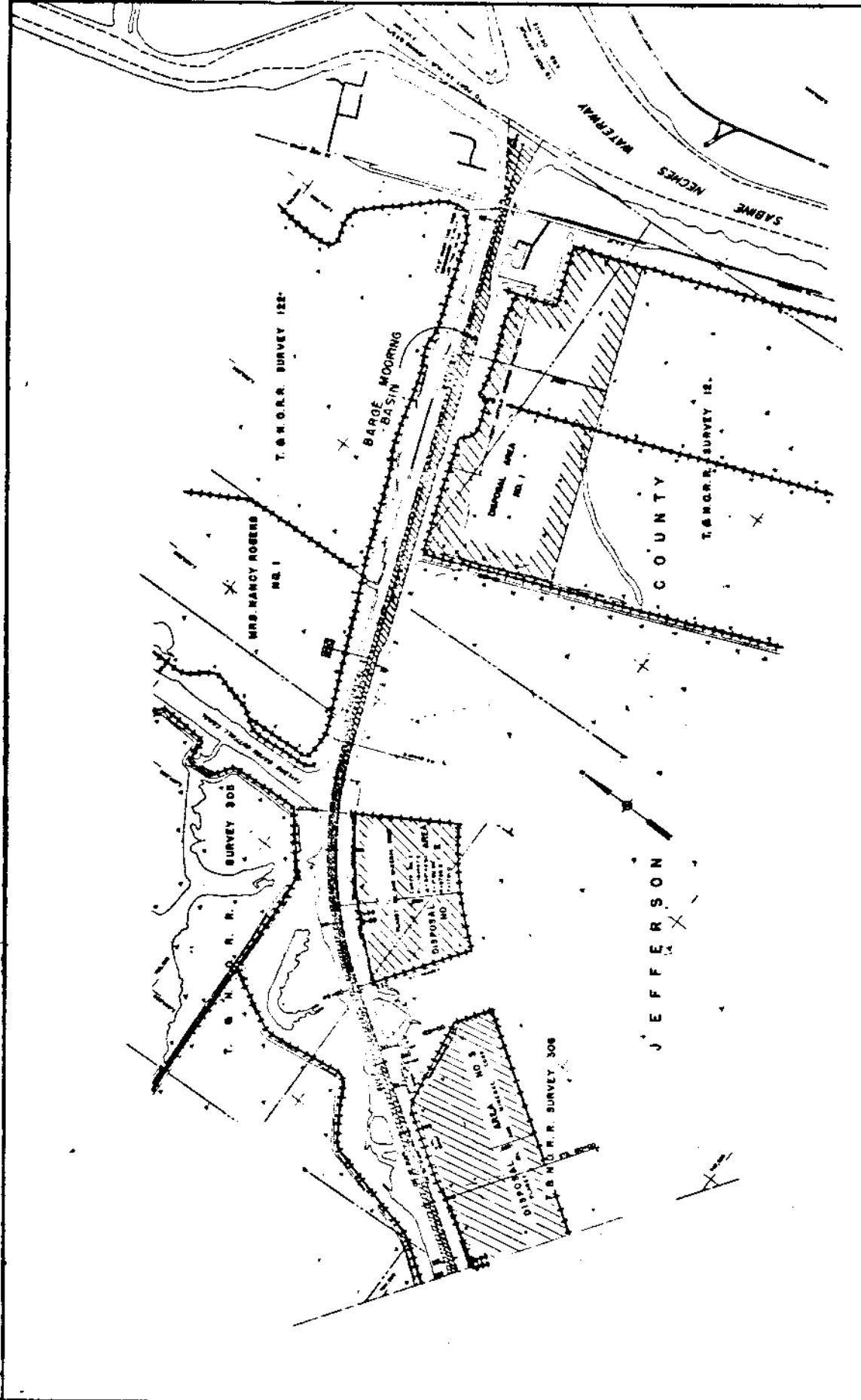
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

SCALE OF MILES



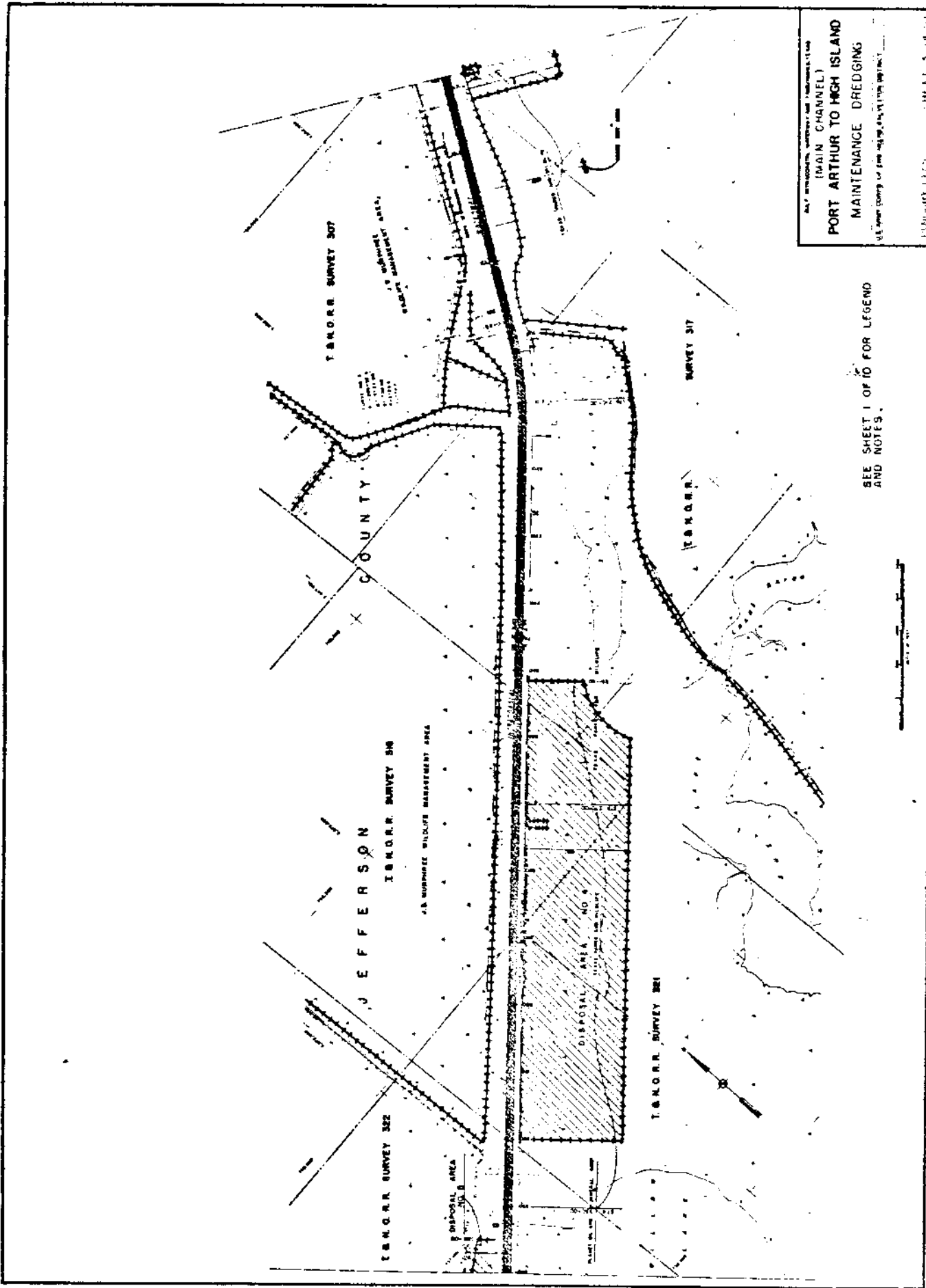
JANUARY 1975

SHEET 1 OF 10



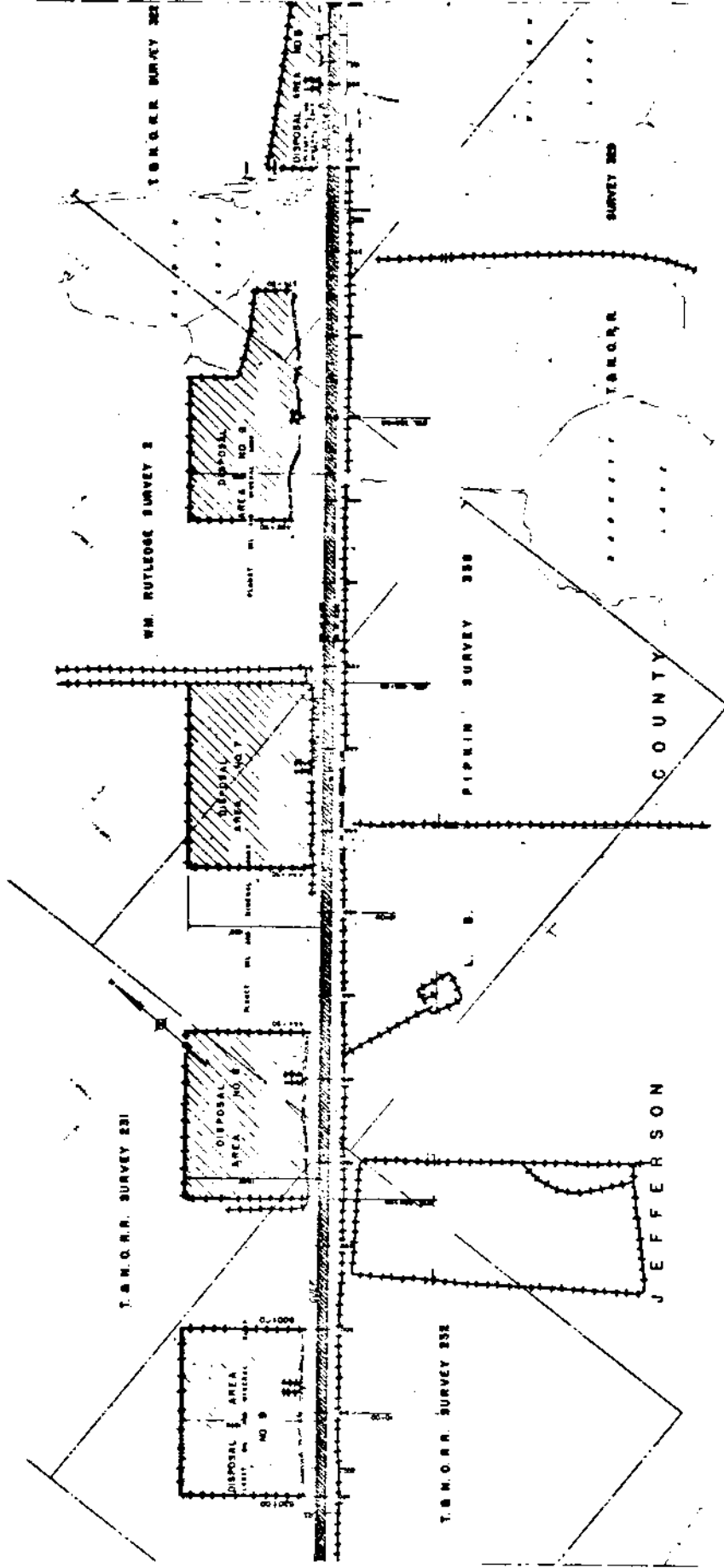
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 (MAIN CHANNEL)
PORT ARTHUR TO HIGH ISLAND
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, New Orleans, Louisiana
 JANUARY 1975 SHEET P. OF 10

SEE SHEET 1 OF 10 FOR LEGEND
 AND NOTES.



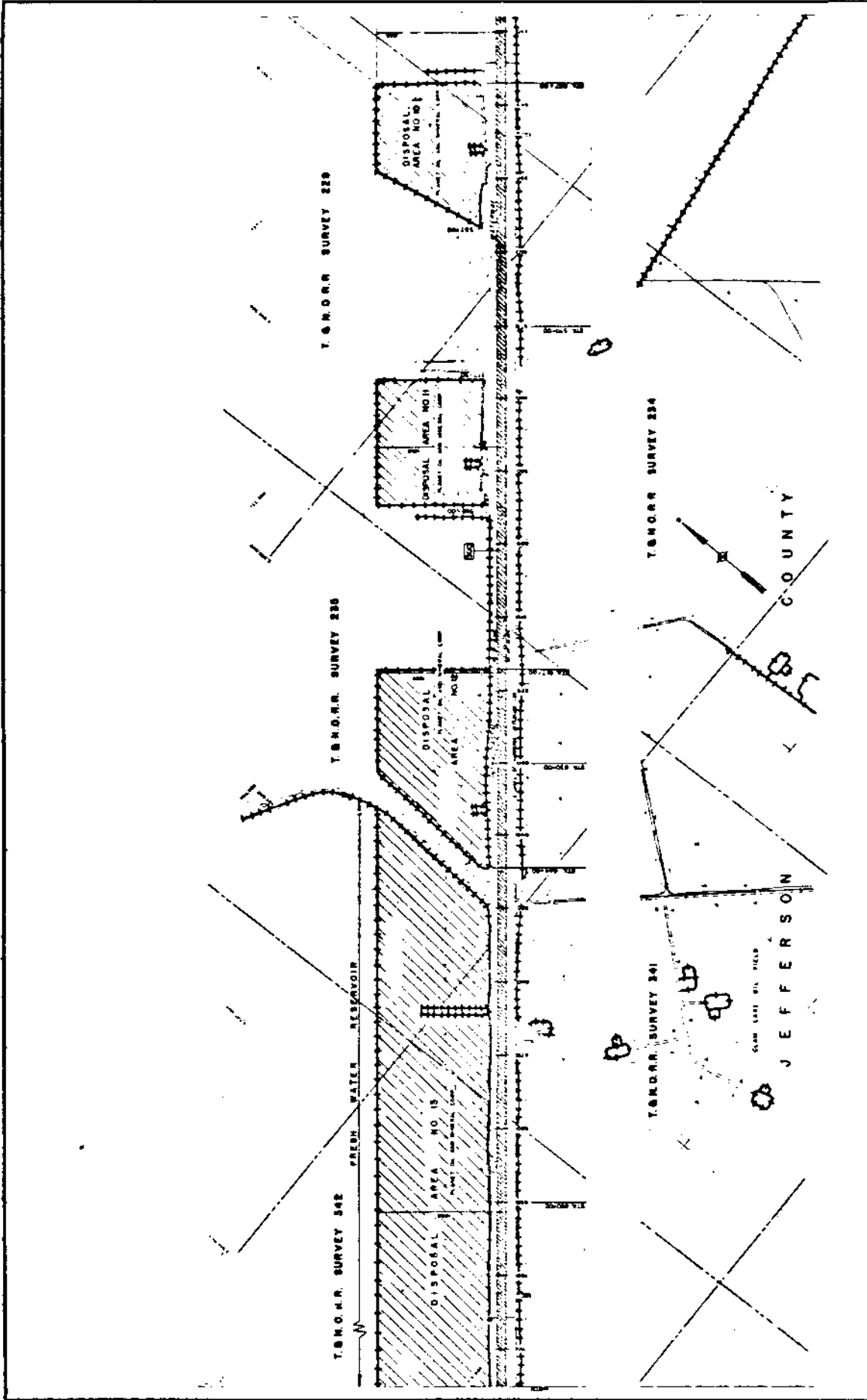
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 (MAIN CHANNEL)
PORT ARTHUR TO HIGH ISLAND
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, Vicksburg District
 VICKSBURG, MISSISSIPPI
 SHEET 5 OF 5

SEE SHEET 1 OF 5 FOR LEGEND AND NOTES.



U.S. Army Corps of Engineers, District of Columbia
 PORT ARTHUR TO HIGH ISLAND
 (MAIN CHANNEL)
 MAINTENANCE DREDGING
 JANUARY 1975 SHEET 4 OF 10

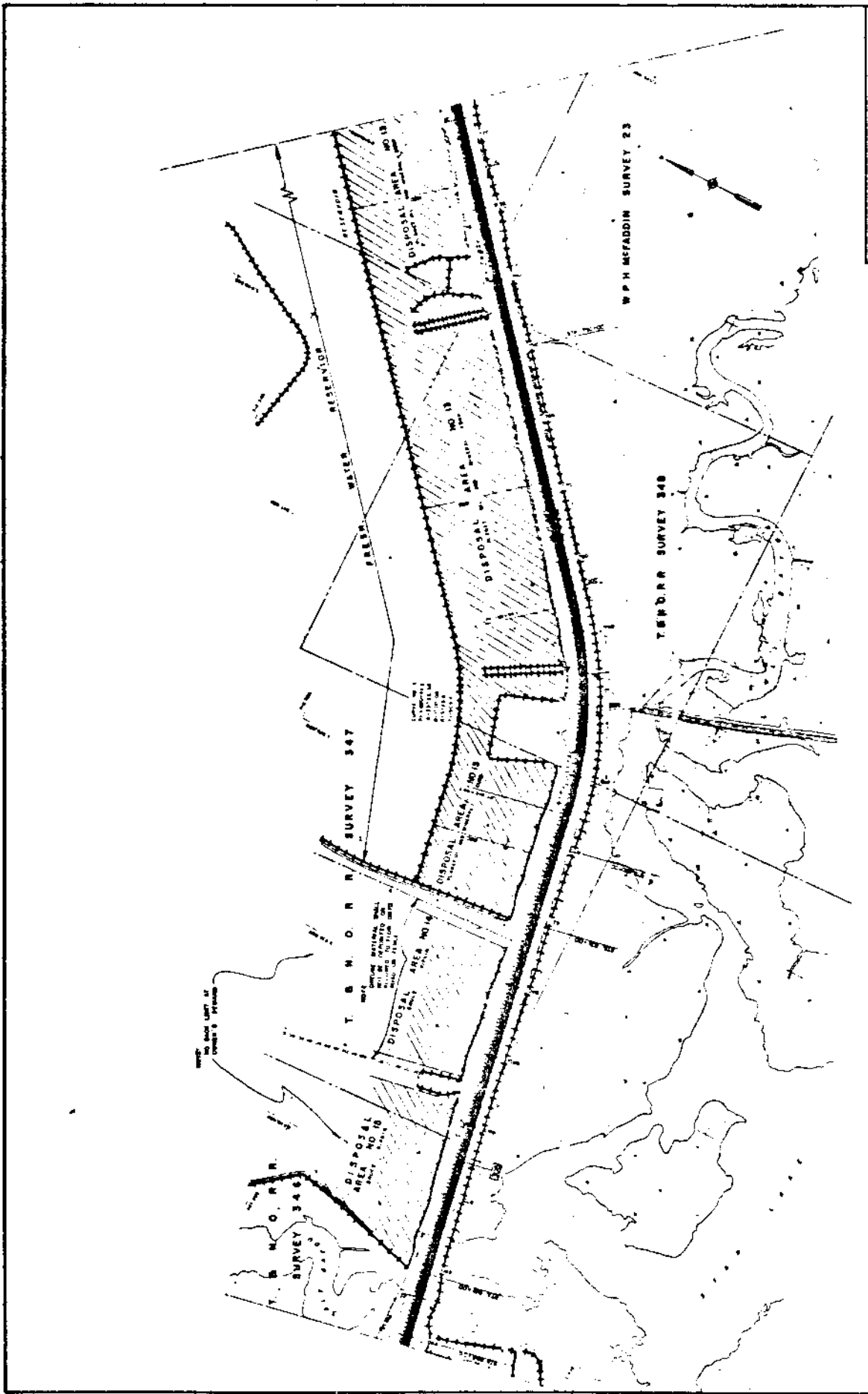
SEE SHEET 1 OF 10 FOR LEGEND AND NOTES.



U.S. GEOLOGICAL SURVEY AND HYDROLOGICAL
 (MAIN CHANNEL)
PORT ARTHUR TO HIGH ISLAND
 MAINTENANCE DREDGING
 U.S. GEOLOGICAL SURVEY OF THE UNITED STATES

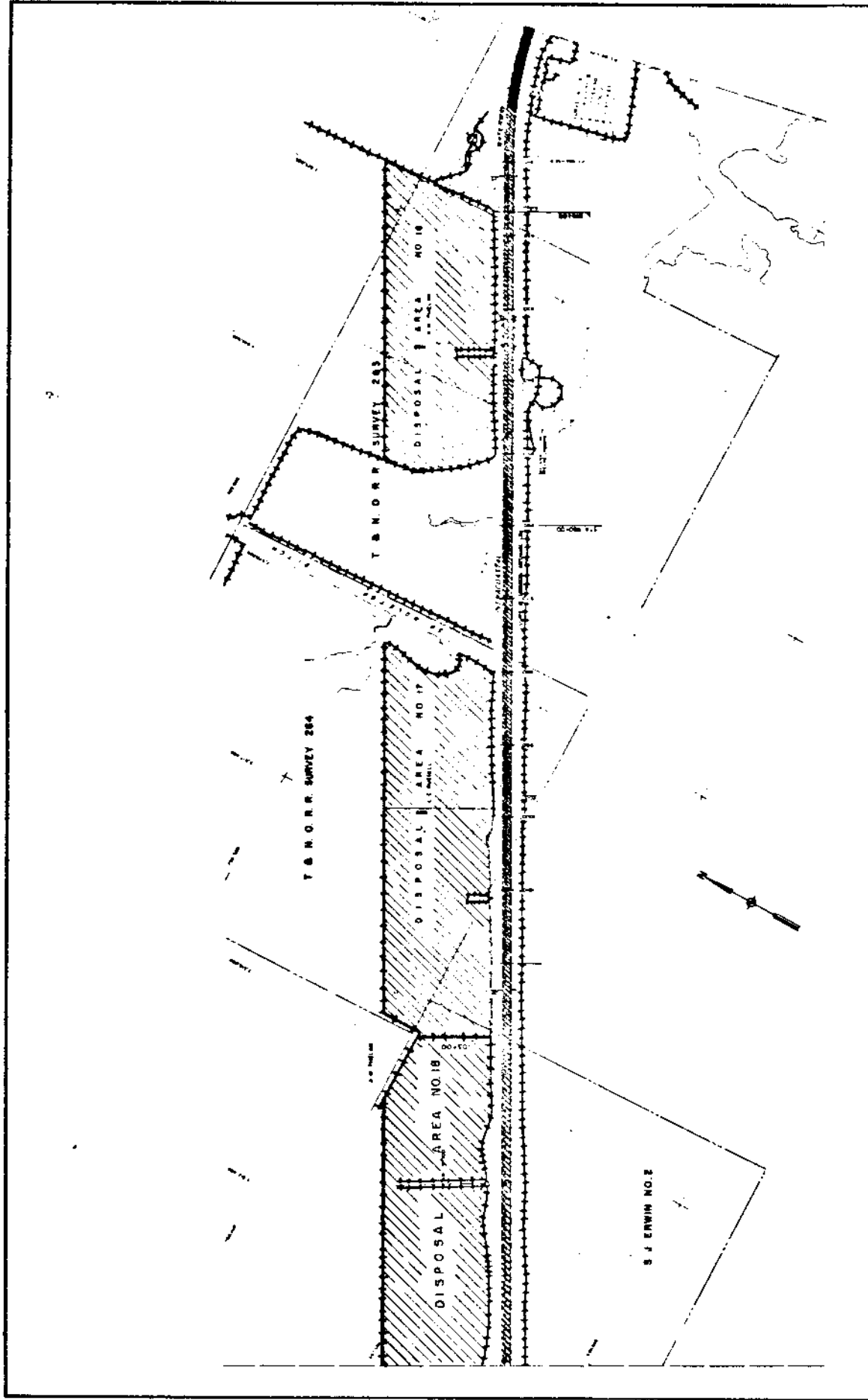
SEE SHEET 1 OF 10 FOR LEGEND AND NOTES.

PLATE NO. 1000



UNITED STATES NAVY, OFFICE OF THE CHIEF OF NAUTICAL SURVEYS
 (MAIN CHANNEL)
 PORT ARTHUR TO HIGH ISLAND
 MAINTENANCE DREDGING
 U.S. NAUTICAL SURVEYS, WASHINGTON, D.C. 20370
 JANUARY 1974 SHEET 1 OF 10

SEE SHEET 1 OF 10 FOR LEGEND AND NOTES.



U.S. ARMY CORPS OF ENGINEERS, WASHINGTON, D.C.

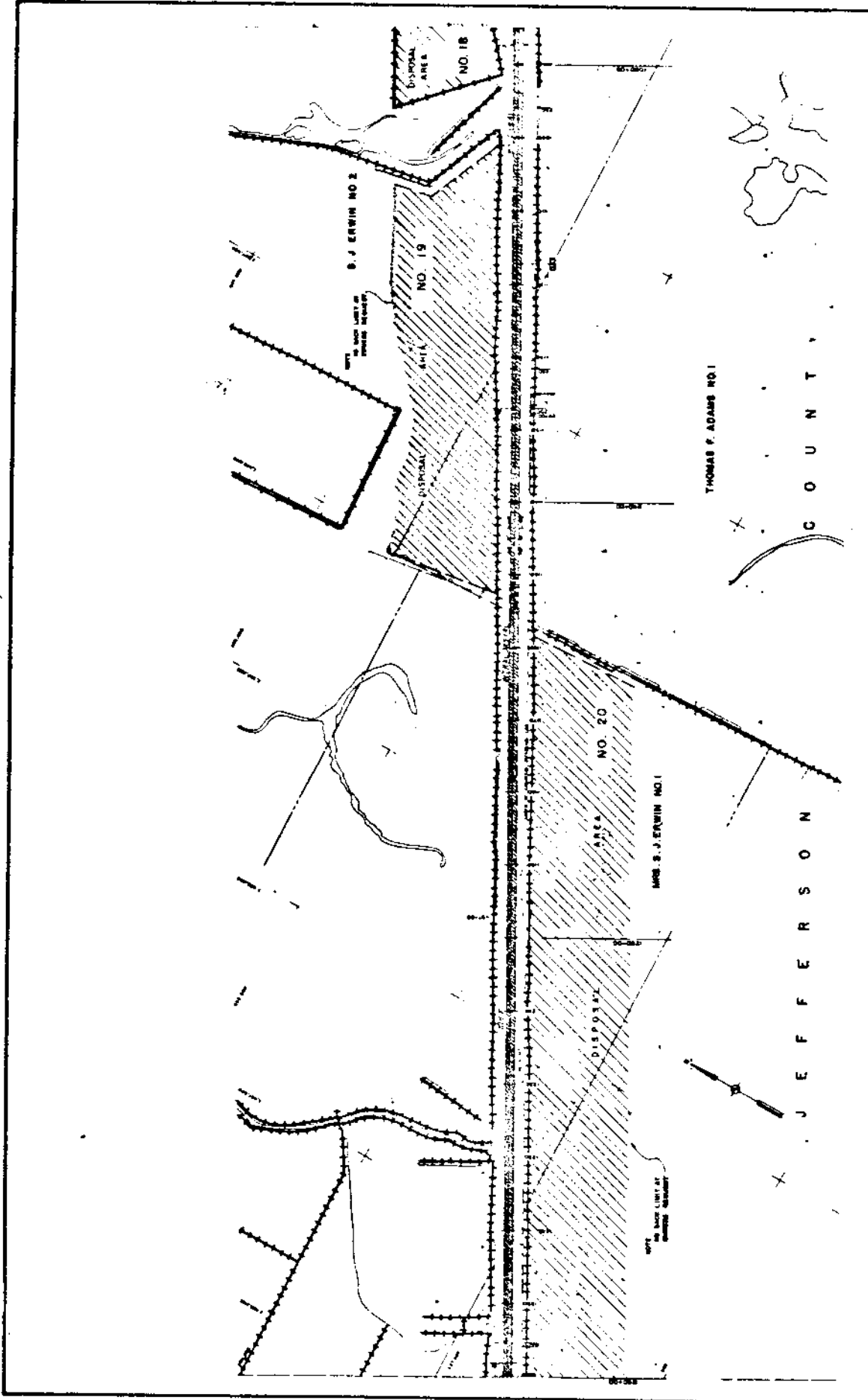
PORT ARTHUR TO HIGH ISLAND

MAINTENANCE DREDGING

(MAIN CHANNEL)

JANUARY 1976 SHEET 7 OF 10

SEE SHEET 1 OF 10 FOR LEGEND AND NOTES.



U.S. GOVERNMENT PRINTING OFFICE: 1975
 (MAIN CHANNEL)
PORT ARTHUR TO HIGH ISLAND
 MAINTENANCE DREDGING
 U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT

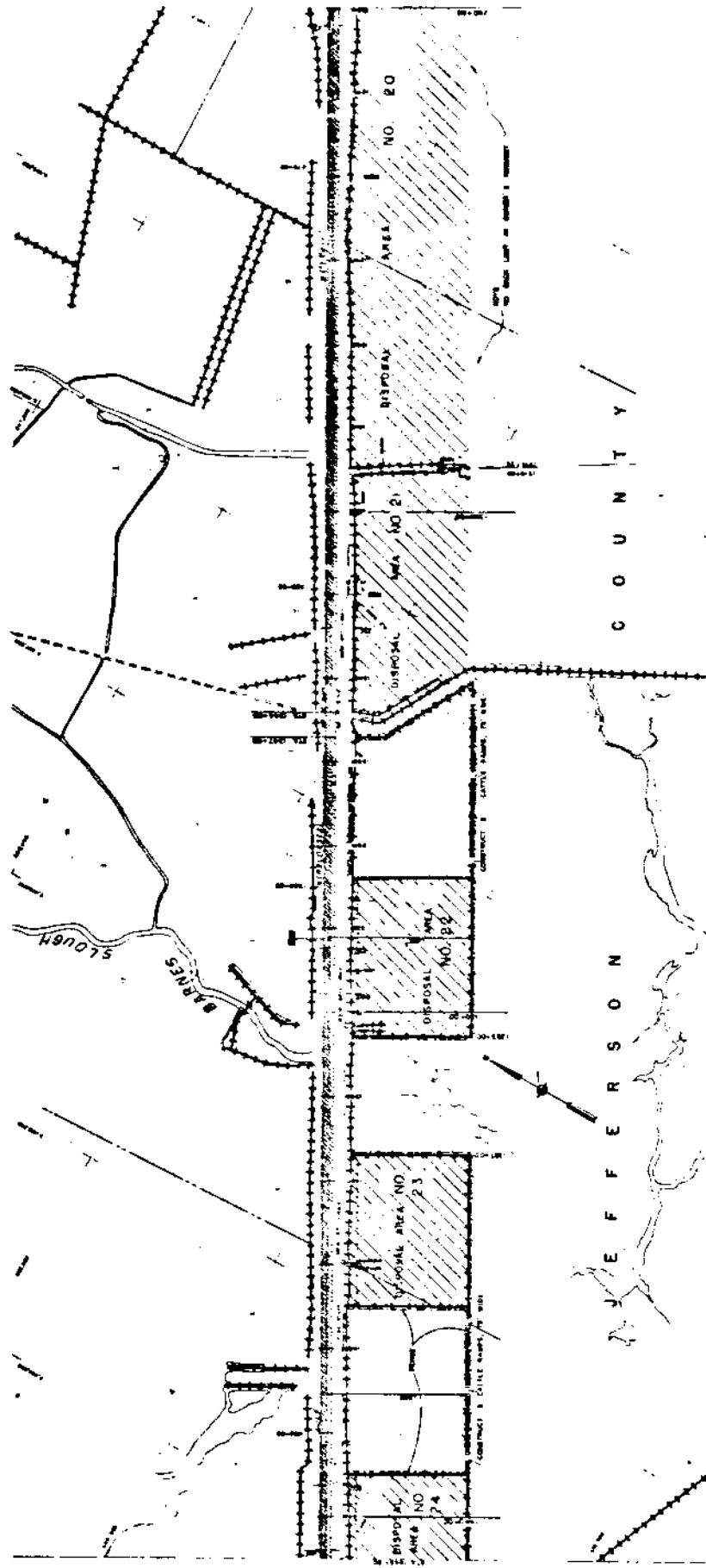
SEE SHEET 1 OF 10 FOR LEGEND
 AND NOTES.

THOMAS F. ADAMS NO. 1

MRS. S. J. ERWIN NO. 1

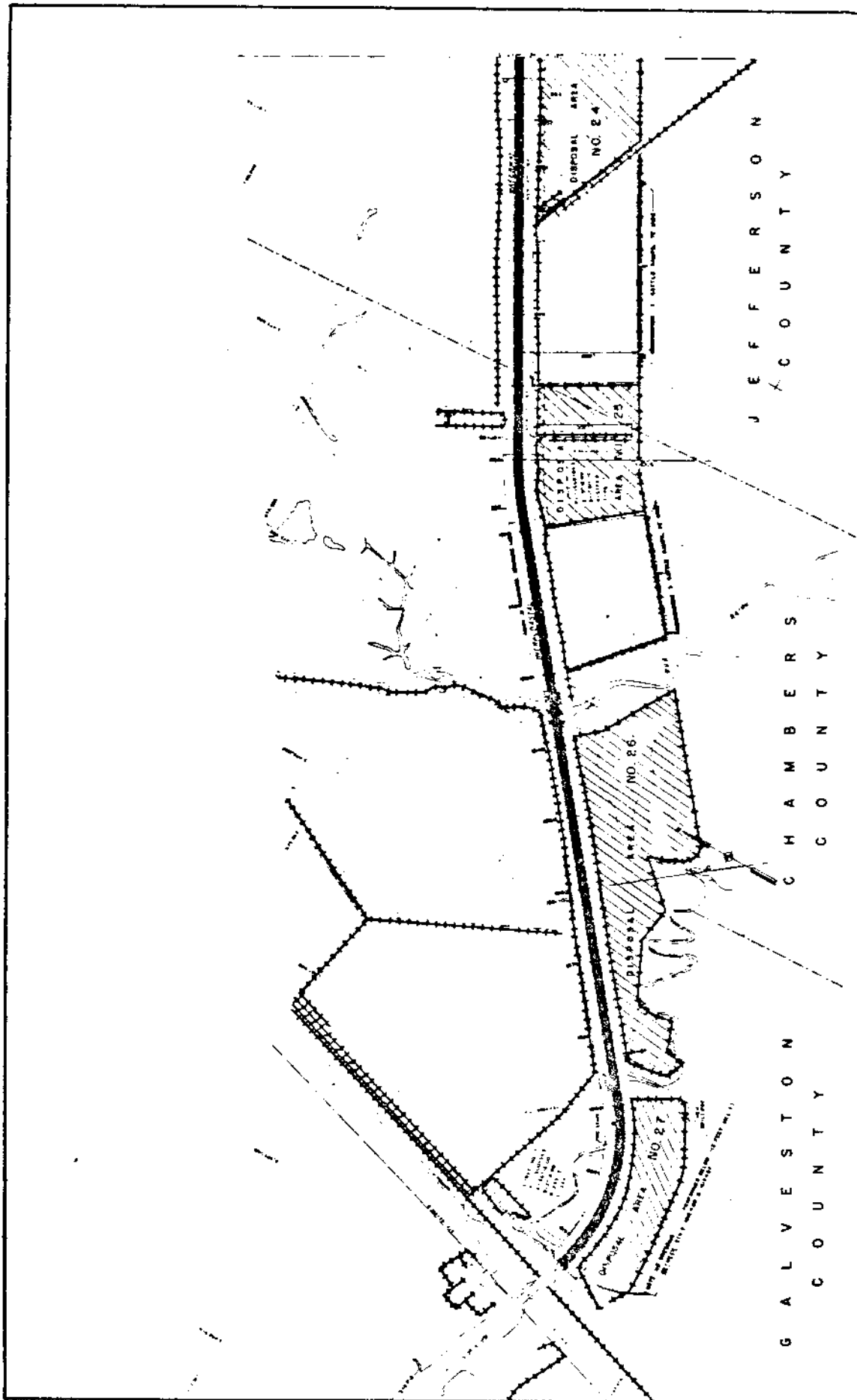
J E F F E R S O N

C O U N T Y



U.S. ARMY CORPS OF ENGINEERS
 (MAIN CHANNEL)
PORT ARTHUR TO HIGH ISLAND
 MAINTENANCE DREDGING
 U.S. ARMY CORPS OF ENGINEERS

SEE SHEET 1 OF 10 FOR LEGEND
 AND NOTES.



J E F F E R S O N
C O U N T Y

C H A M B E R S
C O U N T Y

G A L V E S T O N
C O U N T Y

PORT AUTHORITY DISTRICT OF HOUSTON TEXAS
(MAIN CHANNEL)
PORT ARTHUR TO HIGH ISLAND
MAINTENANCE OVERTIDING
U.S. SHIP CHANNELS OF THE GULF OF MEXICO, PORT AREA I

SEE SHEET 1 OF 10 FOR LEGEND
AND NOTES.

JANUARY 1975 SHEET 10 OF 10



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

January 29, 1975

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
Post Office Box 1229
Galveston, Texas 77550

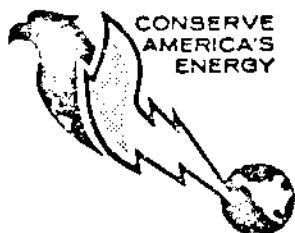
Dear Sir:

Reference is made to your Public Notice No. IW-M-12, dated January 2, 1975, regarding the maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - Port Arthur Canal to High Island.

The U. S. Fish and Wildlife Service released a report on this maintenance dredging project on February 14, 1972. Following receipt of the public notice, we reexamined the project site and reviewed our 1972 report. In this report we recommended that no spoil material be placed north of the waterway between Corps of Engineers Stations 630+00 and 827+00 and south of the waterway between Stations 1010+00 and 1031+50. We also recommended that spoil generated from this project be placed south of the waterway between Stations 630+00 and 790+00, and 810+00 and 850+00. Our recommendations could not be honored, as evidenced by letter from the District Engineer to the Regional Director dated February 22, 1973, because Corps of Engineers negotiations with the landowner to trade perpetual disposal rights from the north side of the waterway to the south side were unsuccessful.

Since the deterioration and destruction of valuable fish and wildlife habitat has already occurred in these specific project areas, the Fish and Wildlife Service offers no further objection to their continued use.

A further recommendation in our 1972 report was that prior to any maintenance dredging operation, existing levees be refurbished and new levees be constructed and subsequently refurbished on the ends and at a distance of 1,650 feet back from the centerline of the channel for each spoil area between Stations 60+00 and 1615+00. As



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Save Energy and You Serve America!

14, 15, 19,

*Glenn Sekawec called
(Nat'l U.S. Fish & Wildlife Service)
in these 3 additional
areas on 5 Feb. 1975.
Dolan Dunn*

depicted in this public notice, spoil disposal areas Nos. 20 and 21 have no back limit. Back levees were not placed at these sites at the owners request. The Fish and Wildlife Service believes that back levees are essential to the preservation of adjacent marsh areas and should be constructed to contain the spoil. In the event that back levees cannot be constructed, it would be appropriate to concentrate the spoil near the channel to help prevent it from spreading into the adjacent marsh areas.

We refer again to the recommendation in our 1972 report which specifies that levees be constructed and subsequently refurbished at a distance of 1,650 feet from the centerline of the channel. We would reiterate, our intent in recommending a specific distance from the channel centerline was to establish a limit to the area of spoil flow, thereby restricting the amount of damage to adjacent wetlands. It is our intent that the distance of 1,650 feet be considered a maximum distance rather than a fixed distance. If the spoil from this and future dredging operations can be confined within a smaller space, then it is appropriate that the levee be located closer to the channel centerline.

Other conclusions and recommendations of the 1972 report are still applicable. We have no additional comments at this time. Thank you for the opportunity to comment on this public notice.

Sincerely yours,



Deputy Regional Director

- cc:
- Executive Director, Texas Parks and Wild. Dept., Austin, Tex.
- Regional Director, Nat'l Marine Fish. Serv., St. Petersburg, Fla.
- Area Suprv., NMFS, Envr. Assmt. Div., Galveston, Tex.
- Field Suprv., FWS, Div. of River Basin Studies, Galveston, Tex.

BWGCO-M

15 April 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

This is in reply to Mr. Jerry Stegman's letter dated 29 January 1975 concerning Public Notice No. IWW-M-12 on maintenance dredging of the Gulf Intracoastal waterway from the Port Arthur Canal to High Island, Texas.

As you have recommended in paragraph 4 of the letter, existing levees will be refurbished, as necessary, prior to each use. Concerning the disposal areas you have referenced in the same paragraph, we will again contact the landowners for their permission to construct levees. If the landowners give their consent, levees will be constructed. If levees cannot be constructed, you may rest assured that contractors will concentrate the material as near the channel as practicable to reduce pumping distance.

In reference to paragraph 5, levees have been built around all areas except 14, 15, 19, 20 and 21. If the landowners give their consent to total confinement, levees will be constructed along a line 1650 feet from the center line of the channel, as this is the minimum distance to which the areas could be confined with use of the areas remaining economically feasible.

Thank you for your review and comments.

Sincerely yours,

Copy furnished:
Field Supervisor
USFWS, Galveston, Texas 77550

E. D. McGEREE
Chief, Construction-
Operations Division



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

January 29, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice IWW-M-12 dated January 2, 1975, wherein the Corps of Engineers requested comments on proposed plans for spoil disposal associated with the continuation of maintenance dredging of Gulf Intracoastal Waterway (Main Channel)-Port Arthur Canal to High Island, Texas.

The Bureau of Sport Fisheries and Wildlife (BSFW), by letter to your office dated February 14, 1972, commented on proposed plans for spoil disposal during previous maintenance dredging of this waterway. Their recommendations were prepared with the assistance of the NMFS and received our concurrence, as indicated by our memo dated October 12, 1971, attached to their letter.

In letters dated February 22 and June 8, 1973, the Corps of Engineers advised the BSFW Regional Director that the Corps would be unable to comply with the first two recommendations made in the BSFW report because of objections by landowners in the project area. Specifically, the two recommendations were: (1) that no spoil material be placed north of the waterway between Corps of Engineers Stations 630+00 and 872+00 (NOTE: this is the same area described as Disposal Area No. 13 in the present public notice); and (2) that the spoil be placed south of the waterway between Stations 630+00 and 790+00, and 810+00 and 850+00. Non-compliance was because negotiations with the landowner to trade the perpetual disposal right from the north side to the south of the channel were unsuccessful. As a result, disposal area no. 13 was back-leveed and used for spoiling, and the environmental damage we wanted to avert has occurred. We, therefore, recommend that

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the back levee of this disposal area be adequately maintained to prevent any further destruction of habitat by accidental spillage of dredged materials.

Another recommendation (No. 3) made in the BSWF letter, which has not been fully complied with, was that back levees be constructed at a distance no further than 1,650 feet from the centerline of the channel in each spoil area between Corps of Engineers' Stations 60+00 and 1615+50. This has been accomplished for all disposal areas except Areas Nos. 14, 15, 19, 20 and 21 which have not been back-leveed due to the requests and/or demands of the landowners. Areas adjacent to these five disposal areas are freshwater marsh and, even though they do not provide estuarine nursery area directly, they do supplement the estuarine ecosystem with nutrients which contribute significantly to the integrity of the estuarine environment. Unconfined spoiling in these areas will unnecessarily consume many more acres of marshland.

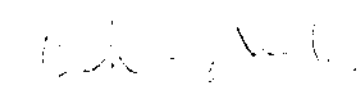
In view of the above, the NMFS reiterates the recommendations made in the BSWF letter of February 14, 1972, excluding recommendations Nos. 1 and 2. In addition, we recommend the following:

1. As soon as possible, consent of the landowners should be sought for the construction of back levees in Disposal Areas Nos. 14, 15, 19, 20 and 21. Until such time, spoil should be placed in as few discharge points as possible, each point being located on areas of higher ground within each disposal area. Also, these same discharge points should be used during each subsequent maintenance dredging operation to impact the least possible area of marshland within and adjacent to these disposal areas.

2. Prior to issuance of contracts for maintenance dredging, detailed plans should be submitted to the Federal and State fish and wildlife agencies, including the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550, for review. Included should be the proposed discharge points to be utilized in Disposal Areas 14, 15, 19, 20 and 21.

Thank you for the opportunity to review and comment on the maintenance plans of this authorized Federal project.

Sincerely,


William H. Stevenson
Regional Director

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7 March 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference is made to your letter dated 29 January 1975 concerning Public Notice No. FW-M-12 on maintenance dredging of the Gulf Intracoastal Waterway from the Port Arthur Canal to High Island, Texas.

We have reviewed your recommendations and feel we can comply as follows:

Recommendation No. 1 - The next time dredging occurs along this reach, the landowners will be contacted for their permission to construct levees. If the landowners give their consent, levees will be built. Until the levees are built, the dredged material will be discharged as close to the channel as possible within the disposal areas. We do not plan to pre-designate the discharge points, however, since this is not feasible from a contractual standpoint.

Recommendation No. 2 - As has been our policy in the past, we will furnish the suggested agencies plans and specifications for review during the advertising period for each contract. However, as stated above, we do not plan to pre-designate discharge points.

Thank you for your review and comments.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
NMFS, Galveston, Texas 77550

317



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V
1600 PATTERSON
DALLAS, TEXAS 75201

June 11, 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (788940)

Colonel Don S. McCoy
District Engineer
Galveston District
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your maintenance dredging plan "GIWW(Main Channel)-High Island-to-Galveston Bay" as covered in Public Notice No. IWW-M-12 dated January 2, 1975. We have also reviewed your May 19, 1975, Statement of Findings concerning this project in accordance with 33 C.F.R. 209.145.

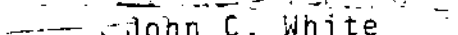
Your dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Effluent from all fully confined disposal areas shall be discharged through control structures into the Gulf Intracoastal Waterway.
2. Dredged material shall not be discharged further than 1,000 feet from the channel centerline into disposal areas 14,15,19,20 and 21.
3. The backside of each open water disposal area shall be leveed as soon as possible, and as near the channel as feasible. The back levees shall not be more than 1,650 feet from the center line of the channel.

Since, as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we

have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,


John C. White
Acting Regional Administrator

SUPPLEMENT NO. 10
CHANNEL TO PALACIOS, TEXAS

SUPPLEMENT NO. 10
CHANNEL TO PALACIOS, TEXAS

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SUPPLEMENT NO. 10
CHANNEL TO PALACIOS, TEXAS

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Channel to Palacios, Texas. The Federally maintained project consists of a channel 12 feet deep by 125 feet wide extending northwesterly from its junction with the GIWW through Matagorda Bay to the City of Palacios, a distance of 16.1 miles. At the City of Palacios, a turning basin 200 feet wide by 635 feet long, a turning basin 300 feet wide by 1,150 feet long, and a connecting channel with varying widths of 150 to 480 feet and 450 feet long are also maintained under this project. All depths are measured below Mean Low Tide (Corps of Engineers datum). Contract pipeline dredges are utilized to maintain the channel. The frequency of dredging for selected reaches of the channel is about 36 months. The average quantity of materials dredged per contract is about 1.5 million cubic yards. The channel was last maintained during the period October-December 1973. The next maintenance dredging will be scheduled after 30 June 1977. The disposal areas for this reach of the channel are numbered 1 through 16 and are shown on the 4 figures of the attached public notice.

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. In 1974 over 78,834 tons of cargo were carried over the waterway. The principal commodities were basic chemicals, basic chemical products, and marine shells. The economy of the project area is heavily dependent upon continued use of low cost waterborne transportation.

3. ENVIRONMENTAL SETTING.

3.01 The project is located in an area of high-quality habitat used by fishes and crustaceans as feeding, breeding, and nursery grounds. A live oyster reef lies across Tres Palacios Bay in the general vicinity of Stations 135+00 and 176+00. The important species of fish and crustaceans using the area include red drum, black drum, spotted seatrout,

sand seatrout, Atlantic croaker, southern flounder, striped mullet, menhaden, gafftopsail catfish, spot, sheepshead, blue crab, brown shrimp, and white shrimp.

3.02 The area also contains habitat of importance to waterfowl, shorebirds, and wading birds. Most of the waterfowl use is by migrants during the winter. Principal species of waterfowl include the pintail, mallard, mottled duck, redhead, canvasback, lesser scaup, American widgeon, blue-winged teal, green-winged teal, shoveler, and American coot. The principal shorebirds and wading birds are ibis, egret, heron, gull, tern, pelican, roseate spoonbill, rail, sandpiper, and plover.

3.03 The existing channel to Palacios is a shallow-draft channel of 12-foot depth. Much of this channel traverses bay water 10 feet or greater in depth. Disposal material from previous dredging has not as yet accumulated to the extent of causing circulation problems in Tres Palacios and Matagorda Bays. Neither has placement of disposal material in these areas hindered boat or fish movement.

3.04 Endangered species known to range in the area include Florida manatee, red wolf, right whale, Attwaters' prairie chicken, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this channel will have minor adverse effects on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basins will disturb or remove swimming and benthic organisms. However, because of pollutants that may be found in some sediments, instability of the sediments, and frequency of maintenance dredging, it

is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods, rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, possible resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, creation of suitable substrate for oysters, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up the food chain,

resulting in fewer organisms being available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy dredged material layer. Some of the more mobile organisms are able to work upward through the silt while the sessile organisms perish.

4.08 Oyster reefs can be severely affected by siltation, depending on their height above the surrounding level bottom. Low profile reefs in the path of a mud flow can be covered, resulting in loss of any existing oysters. In some cases, the material is not removed by wave action and the reef becomes permanently buried. Higher reefs generally will not be covered by dredged materials. As requested by the USF&WS and NMFS, surveys of selected disposal areas will be made to determine the presence of oyster reefs. From the surveys, disposal areas will be adjusted on a case by case basis to permit maximum feasible mitigation of adverse effects on the oyster reefs.

4.09 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.10 Disposal of dredged materials in open water will cover any vegetation that exists in the disposal areas. All areas that will be used for deposition of sediments have at least partially been used for this purpose and, therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.11 Another important possibility of dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous disposal areas blocking or changing the normal current patterns in bay areas. Past dredging in this reach is not known to have caused any significant adverse effects on circulation.

4.12 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.13 Fish kills along this reach, as a result of resuspended pollutants, are considered unlikely. Past dredging is not known to have caused any fish kills; and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.14 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.15 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.16 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused

by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.17 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type as a result of disposal operations will be minimal, since the areas to be used for disposal have been used previously for this purpose, and the changes have already occurred.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice describing the proposed action and soliciting comments was issued 10 February 1975, as required by Federal dredging regulations (33 CFR 209.145). Three responses to the public notice have been received. The U.S. Fish and Wildlife Service (USF&WS) noted that its previous recommendations had been adopted and made the additional request that the vicinity of all disposal areas be investigated for oyster reefs within 3 months prior to dredging,

and that the Corps of Engineers designate discharge points on contract plans to avoid damaging such oyster reefs as may be located. The National Marine Fisheries Service (NMFS) also noted that its previous recommendations had been adopted and additionally recommended that the bay bottom in and adjacent to disposal areas be investigated for oyster beds within 6 months prior to dredging. NMFS also recommended that disposal plans be adjusted to protect any oyster beds located during the surveys. The recommended surveys for oyster beds will be conducted by staff biologists, and disposal plans will be adjusted on a case by case basis to protect significant oyster beds. However, the recommendation from USF&WS to pre-designate discharge points is not feasible from a contractual standpoint. The response received from Mr. Kendall Laughlin, student, SMU Law School, commented on both the public notice and the environmental statement. Mr. Laughlin commented primarily on procedures addressed in the Federal dredging regulations and on what information he believed should be presented in the public notice. He had no comments concerning how adverse effects might be further mitigated.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 13 June 1975, EPA approved the dredged material disposal plan under 33 CFR 209.145 for one year, subject to the following restrictions:

a. Disposal Areas 12, 13, and 14 shall not be used. Definition of these areas shall be delayed until the location and density of all oyster reefs within one-half mile of the disposal areas are identified.

b. The Statement of Findings shall be amended to include plans for fulfilling conditions as described in proposed Guidelines 40 CFR 230-5(b)(4).

The recommendations will be complied with and compliance with 40 CFR 230 is discussed in Vol. I paragraph 1.04. Long-term approval of dredging plans was deferred until a final Environmental Statement has been filed with the Council of Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-15

10 February 1975

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY-CHANNEL TO PALACIOS, TEXAS

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 14 March 1975.

Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway-Channel to Palacios, Texas.

PROJECT LOCATION: Near the City of Palacios in Matagorda County, Texas.

PROJECT DESCRIPTION: The Federally maintained project consists of a channel 12 feet deep by 125 feet wide extending northwesterly from its junction with the GIWW through Matagorda Bay to the City of Palacios, a distance of 16.1 miles. At the City of Palacios, a turning basin 200 feet wide by 635 feet long, a turning basin 300 feet wide by 1,150 feet long, and a connecting channel with varying widths of 150 to 480 feet and 450 feet long are also maintained under this project. All depths are measured below Mean Low Tide (Corps of Engineers datum).

DISPOSAL AREA: The Matagorda County Navigation District No. 1, the sponsoring agency, is responsible for furnishing the necessary rights-of-way, easements, and lands required for improving and maintaining the project. The project utilizes sixteen (16) disposal areas (see attached drawings).

Disposal Areas Nos. 1-14 are open water areas located adjacent to the channel in Matagorda and Tres Palacios Bays.

Disposal Area No. 15 is a leveed area located west of the Municipal Turning Basin.

Disposal Area No. 16 is a leveed area located north of the City Turning Basin.

COMPOSITION AND QUANTITY OF MATERIALS: Materials to be dredged from the Channel to Palacios consist of fine grained sands, silts, and clays. Shoaling in the channel is a result of tidal actions and wind driven waves in Matagorda and Tres Palacios Bays. The shoaling rate in the channel is approximately 500,000 cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain the channel. The frequency of dredging for selected reaches of the channel is about 36 months. The average quantity of materials dredged per contract is about 1.5 million cubic yards. The channel was last maintained during the period October-December 1973. The next maintenance dredging will be scheduled after 30 June 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 1-14 are open water areas located generally west of the channel. The easterly edges of the disposal areas are located between Stations 835+00 & 805+00; 780+00 & 750+00; 725+00 & 695+00; 660+00 & 620+00; 600+00 & 560+00; 540+00 & 500+00; 475+00 & 445+00; 425+00 & 395+00; 375+00 & 345+00; 325+00 & 300+00; 280+00 & 230+00; 210+00 & 170+00; 140+00 & 108+00; 88+00 & 60+00. The waters adjacent to these areas are used primarily for commercial and sport fishing.

Disposal Area No. 15 is located on land west of the Municipal Turning Basin. The area is bound on the east by port facilities, on the south by the shoreline of Tres Palacios Bay, on the west by a drainage area, and on the north by undeveloped land.

Disposal Area No. 16 is located on land north of the City Turning Basin. The area is bound on the east by the City of Palacios, on the south by State Highway No. 35, on the west by 12th Street, and on the north by Moore Street.

DREDGING BY OTHERS: Non-Federal dredging in the vicinity of the channel to Palacios project has been relatively minor. The majority of the work has been done by private individuals and organizations, with the estimated quantity of material removed annually being approximately 40,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Matagorda County
City of Palacios
Matagorda County Navigation District No. 1

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of the Channel to Palacios will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A Draft Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) has been prepared and was filed with the Council on Environmental Quality on 30 October 1974. This tributary channel is included in the GIWW Environmental Statement. The final statement is scheduled to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies. The draft statement is currently being reviewed by these agencies and the public, and single copies are available upon request to the District Engineer, ATTN: SWGED-E.

No dredging is presently scheduled for this tributary of the GIWW, and a Final Environmental Statement should be on file before the next dredging occurs. However, should an abnormal shoaling rate cause an emergency situation, the importance of the Channel to Palacios to local navigation will not permit postponement of maintenance of the channel until after an Environmental Statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal

SWGCO-M

PUBLIC NOTICE NO. IWW-M-15

10 February 1975

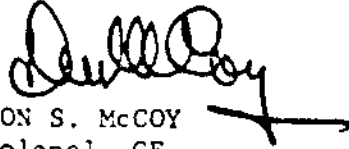
plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

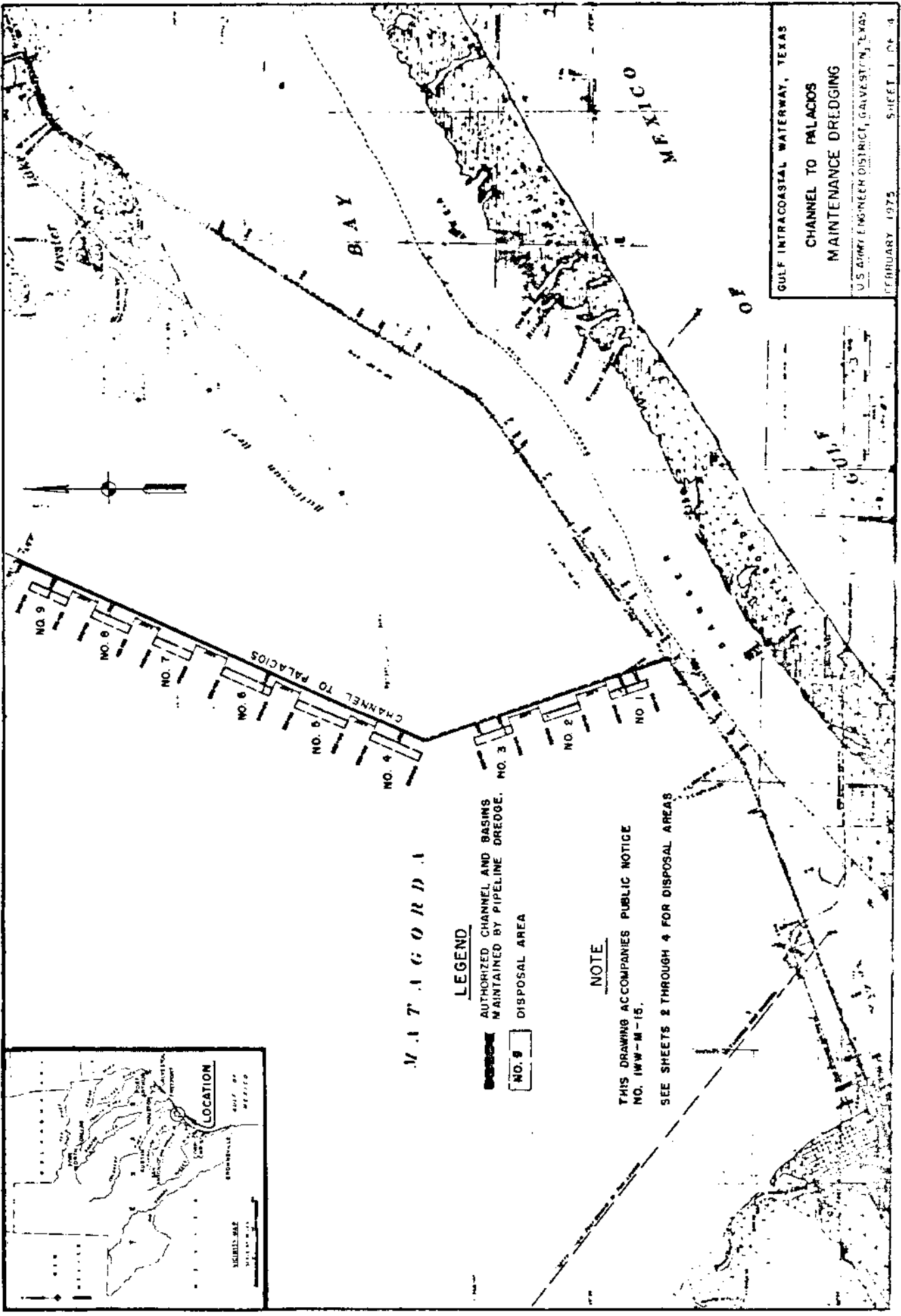
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

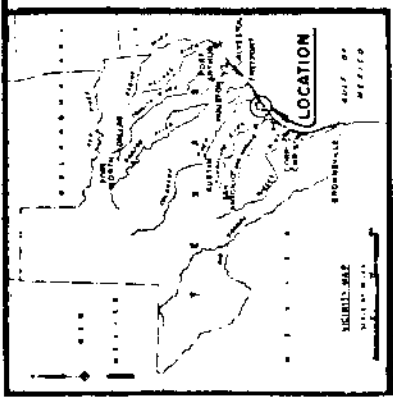
with specific reference to Public Notice No. IWW-M-15 dated 10 February 1975.

1 Incl
Drawing, Feb 1975


DON S. McCOY
Colonel, CE
District Engineer



GULF INTRACOASTAL WATERWAY, TEXAS
 CHANNEL TO PALACIOS
 MAINTENANCE DREDGING
 U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS
 FEBRUARY 1975 SHEET 1 OF 4



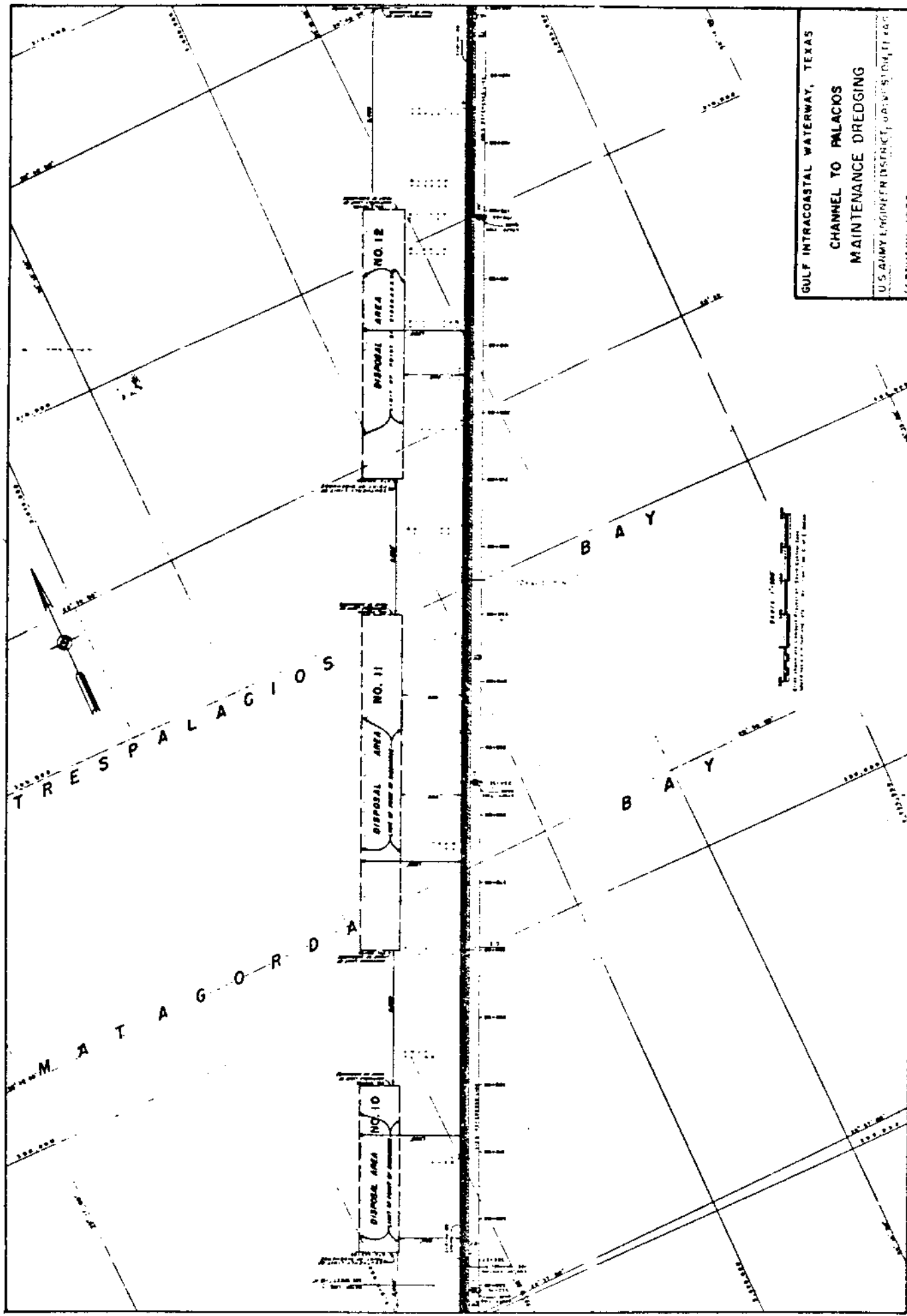
MATAGORDA

LEGEND

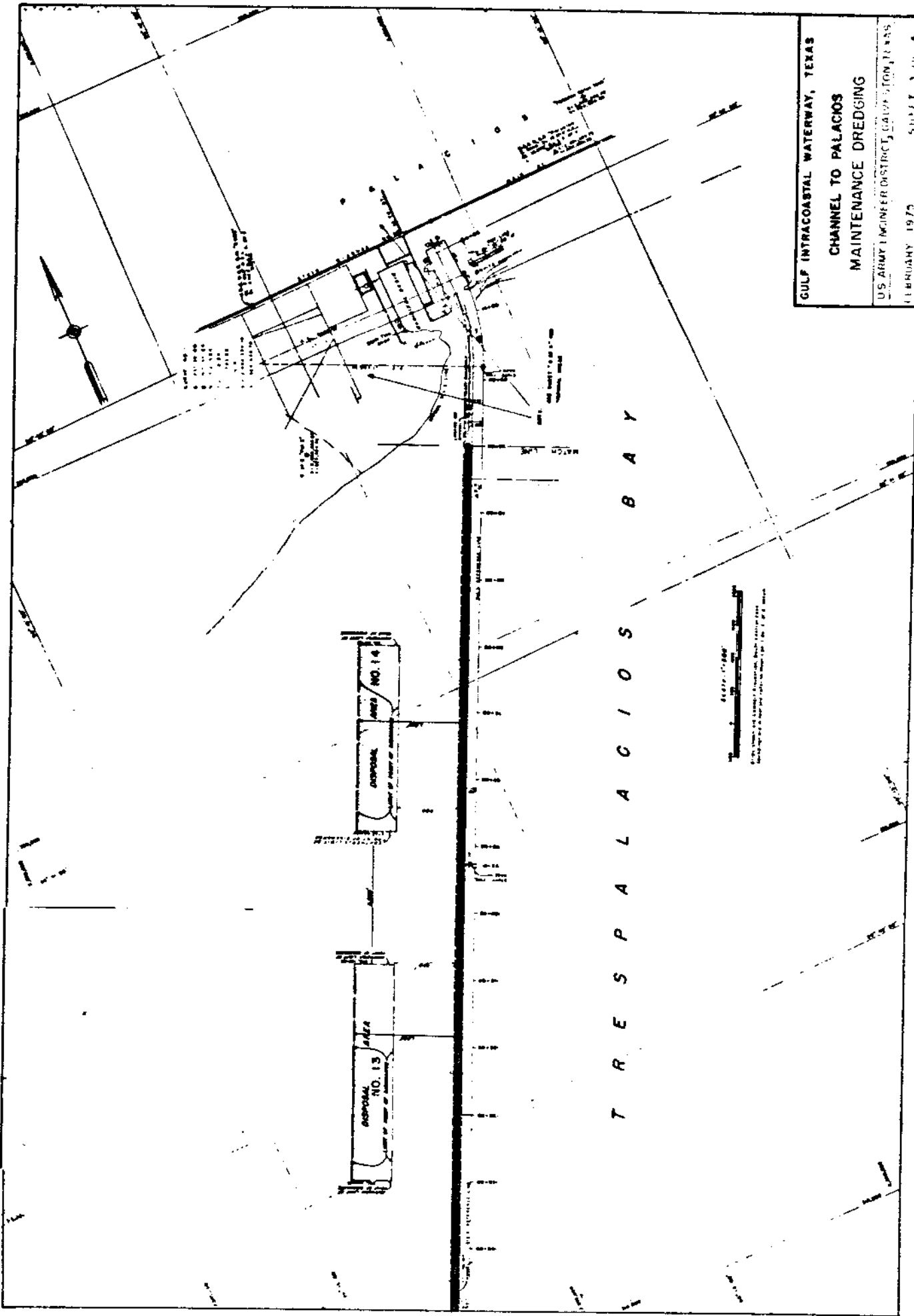
- AUTHORIZED CHANNEL AND BASINS MAINTAINED BY PIPELINE DREDGE, NO. 3
- DISPOSAL AREA, NO. 9

NOTE

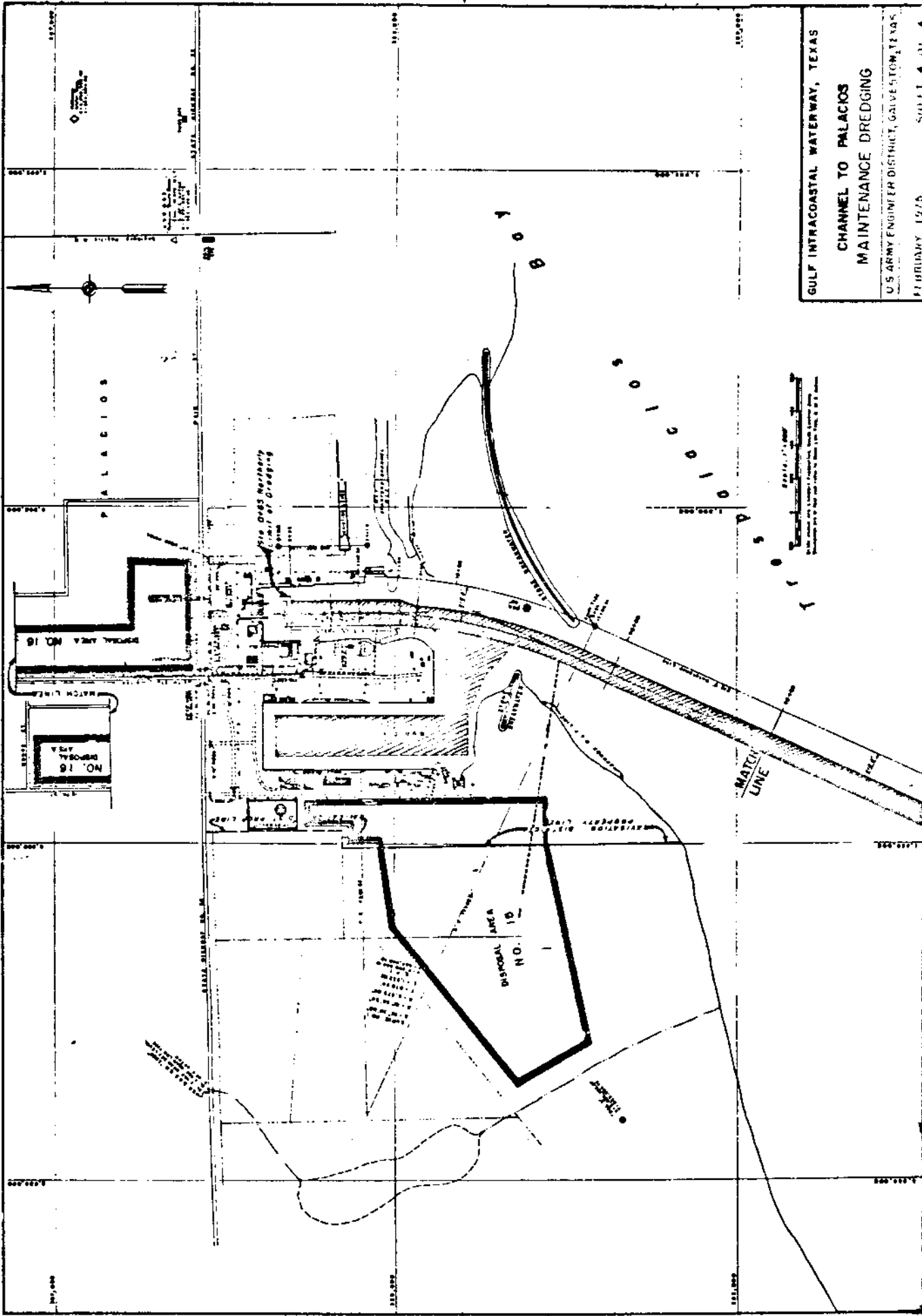
THIS DRAWING ACCOMPANIES PUBLIC NOTICE NO. IWW-M-15.
 SEE SHEETS 2 THROUGH 4 FOR DISPOSAL AREAS



GULF INTRACOASTAL WATERWAY, TEXAS
CHANNEL TO PALACIOS
MAINTENANCE DREDGING
U.S. ARMY ENGINEER DISTRICT, CORPUS CHRISTI, TEXAS
FEBRUARY 1975 SHEET 2 OF 4



GULF INTRACOASTAL WATERWAY, TEXAS
 CHANNEL TO PALACIOS
 MAINTENANCE DREDGING
 U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS
 FEBRUARY 1975 SHEET 3 OF 4



GULF INTRACOASTAL WATERWAY, TEXAS
CHANNEL TO PALACIOS
MAINTENANCE DREDGING
 U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS
 FEBRUARY 1975 SHEET 4 OF 4

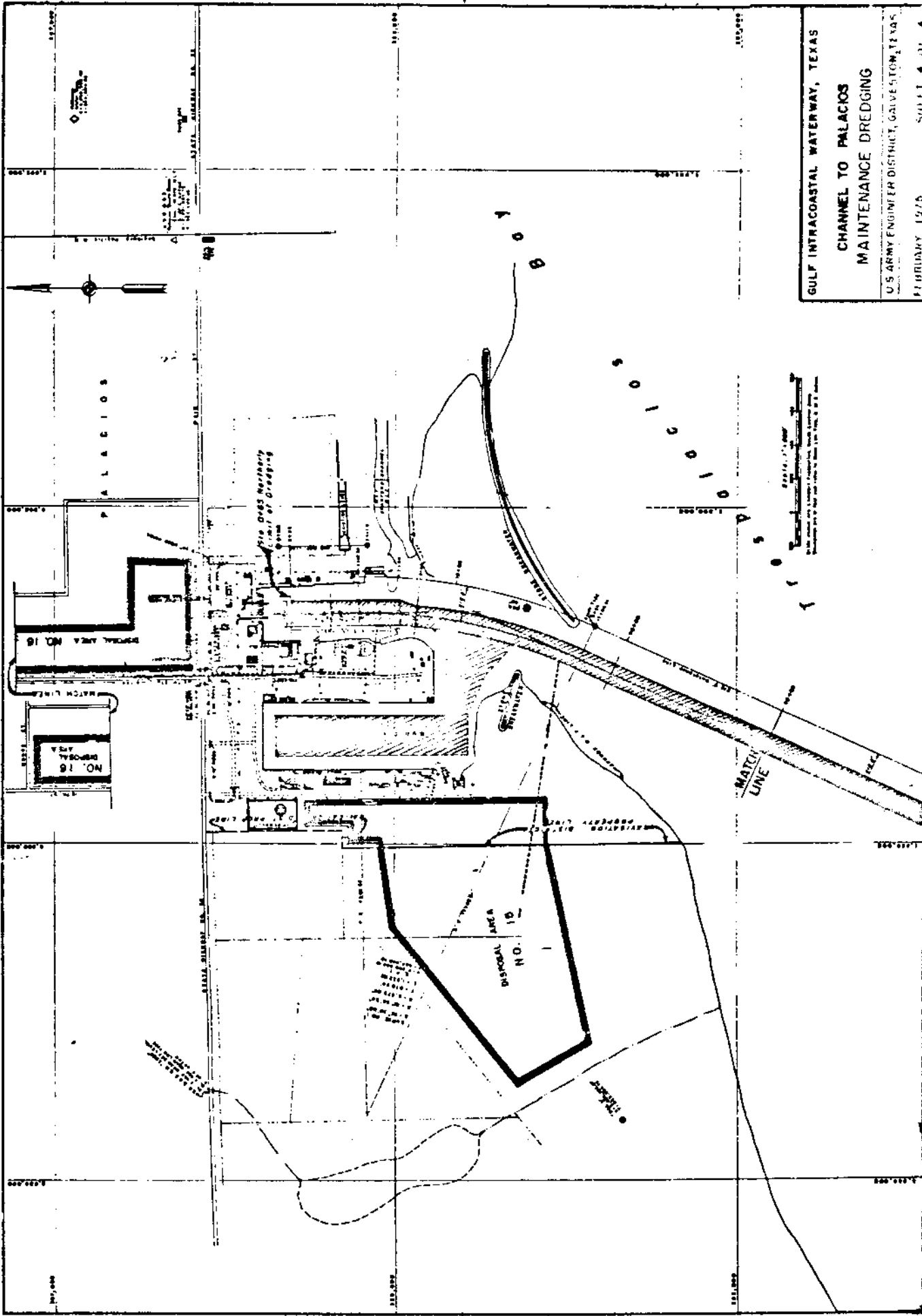


DISPOSAL AREA NO. 10

The Olds Machinery Shop or Dredging Shop

PALACIOS

DISPOSAL AREA NO. 10





IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

March 10, 1975

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice No. IWW-M-15, dated February 10, 1975, pertaining to maintenance dredging of the Gulf Intracoastal Waterway, Channel to Palacios, Texas.

Our comments on the public notice have been prepared under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). They have been informally coordinated with the National Marine Fisheries Service and the Texas Parks and Wildlife Department.

The U. S. Fish and Wildlife Service released a letter report on this maintenance dredging project on July 11, 1972. It is noted that the recommendations contained in that July 1972 report have been incorporated into the project plans as reflected in the public notice. However, we wish to reiterate our concern for the oyster reefs existing in the vicinity of Disposal Areas 12, 13, and 14 by requesting that, within three months prior to commencement of maintenance dredging, your staff biologist conduct an investigation to determine the locations and densities of all oyster reefs within the vicinity of the disposal areas. We also request that, with the data obtained, coordination be carried out with the Federal and State fish and wildlife agencies to designate points of discharge in the disposal areas that would minimize damage to the oyster reefs.

Appreciation is extended for the opportunity to comment on this public notice.

Sincerely yours,

Acting Regional Director

335



Save Energy and You Serve America!

cc:

Executive Director, Texas Parks and Wildlife Department, Austin,
Texas

Regional Director, National Marine Fisheries Service, St. Petersburg,
Florida

Area Supervisor, NMFS, Environmental Assessment Division, Galveston,
Texas

Field Supervisor, FWS, Division of River Basin Studies, Galveston,
Texas

SWGCO-M

15 April 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

This is in reply to Mr. Jerry Stegman's letter dated 10 March 1975 concerning Public Notice No. IWW-M-15 on maintenance dredging of the Gulf Intracoastal Waterway - Channel to Palacios, Texas.

We have initiated plans to make surveys of Disposal Areas Nos. 12, 13, and 14 for the presence of oyster reefs, as you have requested. Based on the findings of our staff biologists, we will make adjustments to our disposal plans on a case by case basis, as determined necessary and feasible. However, we cannot concur in your recommendation that discharge points be predesignated for each contract. While we will make an effort to avoid environmentally sensitive areas in our disposal plan, predesignation of discharge points is not feasible from a contractual standpoint.

Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division

Copy furnished:
Field Supervisor
USFWS, Corpus Christi, Texas 78411



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

March 28, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77500

Dear Colonel McCoy:

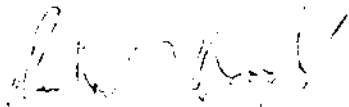
The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-15 Maintenance Dredging Gulf Intracoastal Waterway - Channel to Palacios, Texas, dated February 10, 1975, wherein you presented proposed plans for the disposal of dredged material generated in the maintenance of this Federal project. Fourteen unconfined and two confined disposal areas are to be used. Our comments and recommendations are submitted under the provisions of Section 209.145(e) (4) of Title 33 CFR 209.

By letter dated July 10, 1972, the Bureau of Sport Fisheries and Wildlife (BSFW) submitted comments on previous plans for maintenance of this waterway. We are pleased to find that recommendations contained in the BSFW letter, which was prepared in cooperation with the NMFS and received our concurrence, are reflected in the proposed plans in this Public Notice.

As was noted in the BSFW letter, "The project is located in an area of high-quality habitat used by fishes and crustaceans as feeding, breeding, and nursery grounds. A live oyster reef lies across Tres Palacios Bay in the general vicinity of Stations 135+00 and 175+00." (Disposal Areas No. 12 and 13 in the Public Notice lie partly within that reach.) We have also learned from Texas Parks and Wildlife Department biologists that dense oyster beds have also developed in the vicinity of Disposal Area No. 14. Because the locations of dense oyster beds are subject to some change in subsequent years, the NMFS recommends that within six months prior to commencement of maintenance dredging, the Corps of Engineers should have an investigation conducted to determine if dense beds of oysters have developed in and adjacent to unconfined disposal areas. From these investigations, the Corps, in consultation with Federal and State fish and wildlife agencies, should make the necessary adjustments in disposal plans to protect the oyster beds.

Thank you for the opportunity to comment on this Federal project. Your incorporation of our previous recommendations in the proposed plans is appreciated. Please continue to send detailed plans for each maintenance dredging operation to the Area Supervisor, NMFS, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550.

Sincerely,



William H. Stevenson
Regional Director

SWCCO-M

15 April 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

This is in reply to your letter dated 28 March 1975 concerning Public Notice No. IWW-M-15 on maintenance dredging of the Gulf Intracoastal Waterway - Channel to Palacios, Texas.

We have initiated plans to make surveys of Disposal Areas Nos. 12, 13, and 14 for the presence of oyster reefs, as you have requested. Based on the findings of our staff biologists, we will make adjustments to our disposal plans on a case by case basis, as determined necessary and feasible, to avoid environmentally sensitive areas. However, we cannot concur in your recommendation that discharge points be pre-designated for each contract. Pre-designation of discharge points is not feasible from a contractual standpoint. As requested, we will continue to furnish your local office plans and specifications for review during the advertising period for each contract.

Thank you for your review and comments.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
HMFS, Galveston, Texas 77550



SOUTHERN METHODIST UNIVERSITY

Environmental Law Clinic
Telephone: 214-692-2855

SCHOOL OF LAW
DALLAS, TEXAS 75275
March 5, 1975

Col. Don S. McCoy, C. E.
Department of the Army
Galveston, District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

RE: Public Notice No. IWW-M-15,
Dated 10 February 1975.

Dear Col. McCoy:

The aforementioned Public Notice advises that an area extending from Matagorda Bay to the City of Palacios may be subject to dredging operations within the near future. This same notice states that the Draft Environmental Impact Statement for the entire main channel and tributaries of the G. I. W. W. (Texas Section) covers IWW-M-13.

My first comment pertains to utilizing the Master Environmental Plan without preparing a more specific plan for this particular area. While it is important to have a master plan a problem arises, in that it will have to be broad and general with regards to the environmental impacts occurring within this 16.1 mile area. Therefore, I propose before any action is taken by the Corps of Engineers a specific environmental impact statement should be prepared to acquaint the public with the specific environmental consequences of dredging this area.

Before an "emergency situation" develops, I suggest that the adverse effects of any dredging should be evaluated. Specifically, evaluations should be made regarding:

1. The impact of the project upon the natural physical environment and upon damage to the stream bottom;
2. The loss of habitat to ambient floral, fauna, recreational, and concomitant ecological loss;

3. The vegetation loss which functions as a primary habitat for holding sedentary species within the region, and finally;
4. As the subject area contrasts with surrounding land types it may be viewed as a separate ecosystem. Hence it too must be considered as it would be severely disrupted and permanently altered by the project. Therefore, a more thorough evaluation of this aspect should be made before proceeding.

My next comment pertains to the opening sentence of the paragraph entitled Environmental Statement. Why is it that whenever environmental considerations are discussed the economic and social benefits preclude the discussion of environmental effects? The National Environmental Policy Act of 1969 (P. L. 91-190) speaks toward the environment ^{AL} not social and economic consequences. The economic and social consequences ^{CS} should not be included within an Environmental Statement paragraph. What occurs by doing this is the comparing of social and economic consequences to the environmental effects of the proposed action. Again NEPA was not intended to present a forum for comparing these but rather for assessing the environmental impact. Therefore, I suggest that in the future, the Corps of Engineers refrain from commenting as to the economic and social consequences in the area entitled Environmental Statement. Due to

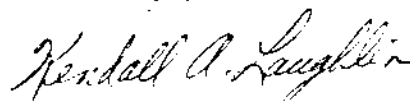
Due to the large number of Disposal areas further information should be given in the Public Notice concerning the environmental impact.

In conjunction with the above, the Final Environmental Impact Statement (GIWW) should cover the impact to the area and the longterm impacts to the environment. The secondary environmental impacts to onshore activities should be considered in order to evaluate the potential, perpetual environmental impacts caused by continued dredging. The secondary problems which should be studied consist of such things as future population, and associated items such as crime, public utilities, education, and streets, which increased population to the area will bring. Throughout the Draft Environmental Impact Statement (GIWW) the economic prosperity associated with continued dredging is stressed but never are the secondary environmental impacts associated with this activity mentioned, much less evaluated.

It is requested that these comments be made a part of the record and all future publications pertaining to the Draft Environmental Impact Statement and all public notices on this project.

Please acknowledge receipt of this letter.

Sincerely yours,



Kendall A. Laughlin

SWGCO-M

19 March 1975

Mr. Kendall A. Laughlin
Student
Southern Methodist University
School of Law
Dallas, Texas 75275

Dear Mr. Laughlin:

Receipt is acknowledged of your letter dated 5 March 1975 pertaining to Public Notice No. IWW-M-15 concerning maintenance dredging of the Gulf Intracoastal Waterway - Channel to Palacios, Texas.

In reference to your comment concerning a Master Environmental Plan, we believe you may be confusing the Draft Environmental Statement with some type of master plan which does not exist. We have prepared and circulated a Draft Environmental Statement for the Gulf Intracoastal Waterway and tributaries and are now in the process of completing the final statement. The final statement is being supplemented by detailed assessments of the various main channel reaches and each tributary channel, including the channel to Palacios. The environmental aspects of each reach and tributary are being evaluated on a case by case basis after extensive coordination with the public and agencies concerned with environmental issues. Our major coordination efforts are directed to the Environmental Protection Agency, the Texas Water Quality Board, the U. S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Texas Parks and Wildlife Department. All feasible actions for mitigation of adverse effects, as recommended by these agencies, are implemented in order to protect and preserve the natural environment to the greatest practicable extent. These coordinated mitigation efforts are addressed in the supplements to the Final Environmental Statement.

We are also concerned that you may be misunderstanding our purpose in issuing the public notices. This is indicated in your comments concerning information you believe the notice should contain. The National Environmental Policy Act of 1969 addresses environmental statements, not public notices. Our purposes in developing the notices, which are not required

19 March 1975

Mr. Kendall A. Laughlin

by NEPA, included provision of a vehicle to make the public more aware of proposed actions, to provide a reasonably accurate description of the areas to be affected, and to solicit responsible comments concerning possible adverse effects and how they might be eliminated or mitigated. The public notice is, therefore, used to gather information for use in environmental planning and in preparation of environmental statements. It is considered necessary to include information concerning the economic and social values of a project in the public notice so that an intelligent evaluation of the need for maintenance can be made by the persons reviewing the notice. As you may know, CEQ guidelines for preparation of environmental statements require that specifics of economic and social benefits of projects be set forth. Otherwise, a weighing and balancing of social, environmental, and economic effects is not possible.

With regard to the four specific evaluations suggested in your letter, review of the information in the draft statement and the public notice reveals the following:

1. There is no stream bottom to be affected, and the U. S. Fish and Wildlife Service in a report prepared in cooperation with the National Fisheries Service and the Texas Parks and Wildlife Department, has stated that "...damage to the environment has been minimal...". We have implemented all the recommendations made by these agencies to assure that "minimal damage" will continue to be the situation on the Channel to Palacios (Page A-180, Draft Environmental Statement).

2. Loss of habitat will be addressed in the Final Environmental Statement. The wildlife habitat to be temporarily lost from productivity is limited to the two small disposal areas near developed areas on shore. These areas are not significantly valuable as wildlife habitat because of their close proximity to human habitation and developments.

3. The temporary vegetation loss will not be significant for the reasons stated in 2 above.

4. The project area contrasts with surrounding areas only in the fact that development and previous deposition of dredged material has occurred, reducing the value to wildlife of the land areas to be affected by future maintenance. For this reason, the disposal areas are considered to be the best available areas from an environmental viewpoint.

SWCCO-M

19 March 1975

Mr. Kendall A. Laughlin

Your comments concerning the environmental statement will be addressed in that document and copies of the letter will be included in the project file and in the final statement. However, since the purpose of issuing future public notices would be to develop information rather than to publicize inapplicable statements, your comments would not be included.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

June 13, 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Colonel Don S. McCoy
District Engineer
Galveston District
Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your plan for maintenance dredging of the GIWW - channel to Palacios, Texas, as covered in Public Notice No. IWW-M-15, dated February 10, 1975. We have also reviewed your Statement of Findings, dated May 19, 1975, in accordance with 33 CFR 209.145.

Your maintenance dredging and dredged material disposal plan is approved for one year provided the following recommendations can be adopted:

1. Disposal Areas 12, 13, and 14 shall not be used. Definition of these areas shall be delayed until the location and density of all oyster reefs within one-half mile of the disposal areas is identified.

2. Your Statement of Findings shall be amended to include your plans for fulfilling conditions as described in proposed Guidelines 40 CFR 230-5(b)(4).

Since, as stated in your public notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council of Environmental Quality.

Sincerely yours,

A handwritten signature in cursive script that reads "John C. White".

John C. White
Acting Regional Administrator

SUPPLEMENT NO. 11

TRIBUTARY CHANNEL TO VICTORIA

SUPPLEMENT NO. 11

TRIBUTARY CHANNEL TO VICTORIA

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SUPPLEMENT NO. 11

TRIBUTARY CHANNEL TO VICTORIA

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Tributary Channel to Victoria. The project provides for a channel 9 feet deep by 100 feet wide and 34.8 miles long extending from its junction with the GIWW (main channel) northwesterly through San Antonio Bay, then a landlocked section lying east of the Guadalupe River and terminating at a turning basin near the City of Victoria. The turning basin is 9 feet deep with an average width of 500 feet and an average length of 800 feet. The Channel to Seadrift is also maintained under this project. This 9-foot deep by 100-foot wide side channel is 2 miles long and has a turning basin at Seadrift 9 feet deep by 200 feet wide and 230 feet long. All depths are referenced to Corps of Engineers mean low tide datum. Contract pipeline dredges are utilized to maintain the channel. The dredging frequency for selected reaches of the Channel to Victoria varies, with the reach from mile 0 to mile 14.0 having a 24-month frequency and the reach from mile 14.0 to mile 34.8 having a 48-month frequency. The frequency of dredging for selected reaches of the Channel to Seadrift is 24 months. The average number of cubic yards excavated per contract on this project is approximately 600,000. Portions of the project were last maintained during the period August - October 1973. Dredging is currently scheduled after March 1976. The disposal areas for this channel are numbered 1 through 24 and are shown on the figure in the attached public notice. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. In 1974 over 3.1 million tons of cargo were carried over the waterway. The principal commodities were basic chemicals, basic chemical products, and marine shells. The economy of the project area is heavily dependent upon continued use of low cost waterborne transportation.

3. ENVIRONMENTAL SETTING.

3.01 From its origin at the GIWW to about Mission Bay, the Channel to Victoria and its tributary Channel to Seadrift lie within or adjacent to estuarine habitat. This reach of the Channel to Victoria lies along the eastern side of San Antonio Bay, Guadalupe Bay, and Mission Lake. The Channel to Seadrift also is located in eastern San Antonio Bay. Above Mission Bay the Channel to Victoria crosses an area of low-lying uplands intermixed with some small bayous and potholes, skirts the eastern and northern edge of Green Lake, and then parallels the Guadalupe River about 0.5 to 1 mile to the east.

3.02 The bay areas adjacent to the channels are shallow (less than four feet deep) and provide productive estuarine habitat. These shallow areas serve as feeding, nursery, or breeding habitat for several species of fishes and crustaceans including red drum, black drum, sand seatrout, spotted seatrout, southern flounder, Atlantic croaker, sheepshead, striped mullet, spot, pinfish, bay anchovy, menhaden, and gafftopsail catfish.

3.03 The shallow bays within the project area are basically of two types - areas vegetated with submerged vegetation, primarily widgeongrass and shoalgrass, and nonvegetated areas.

3.04 Vegetated areas are not widespread in the project area. Distribution is restricted either by excessive turbidity or by unfavorable substrata. However, there are two areas within the project area of influence where important beds of submerged aquatics occur. One area lies in the shallows adjacent to the shoreline between Swan Point and disposal area No. 4. The other area lies in the shallows adjacent to the shoreline between the City of Seadrift and disposal area No. 13. These vegetated sites are major nursery areas, particularly for juvenile fishes and crabs. Also, the adults of several species of fishes valued by sport and commercial fishermen concentrate their feeding activities in these vegetated areas.

3.05 The shallow nonvegetated areas also are valuable feeding and nursery habitat, particularly upper San Antonio

Bay, Guadalupe Bay, and Mission Lake. These areas are strongly influenced by the flows of the Guadalupe River which branches about 1.5 miles from Guadalupe Bay to form two distributaries known as the North Guadalupe River and the South Guadalupe River which in turn empty into northern Guadalupe Bay. The aforementioned bay areas are characterized by low salinities and muddy, detritus - rich bottoms. Consequently, they are valuable nursery habitat for several species of fishes, brown shrimp, and white shrimp. Upper San Antonio Bay, Guadalupe Bay, and Mission Lake comprise about one-half of the shallow bay nursery area regularly used by brown shrimp and white shrimp in the San Antonio Bay estuarine system.

3.06 Several oyster reefs lie within the project area. The largest reef, Mosquito Point Reef, is located west of the Channel to Victoria approximately between Stations 150+00 and 200+00. The reef begins about 2,400 feet from the channel centerline and extends more or less perpendicular to the channel. Other small reefs are scattered west of the Channel to Victoria between Stations 290+00 and 350+00. These reefs are major contributors to the San Antonio Bay oyster harvest which, between 1960 and 1969, averaged nearly 270,000 pounds of shucked meat annually.

3.07 Wildlife habitat within the project area comprises the bays and associated marshes and the upland areas. Wintering waterfowl, shorebirds, and wading birds, are among the most abundant wildlife within the project area. These birds are concentrated in the estuarine areas where the shallow bays and marshes provide feeding, resting, and, for some species, nesting habitat.

3.08 Wintering waterfowl are particularly abundant within Guadalupe Bay, Mission Lake, and the surrounding marshes. Waterfowl also concentrate in the shallow vegetated areas of the bay, as the submerged vegetation is a major food source. The waterfowl carrying capacity of San Antonio Bay is closely related to the quantity of submerged vegetation. The principal species of waterfowl within the project area are the pintail, green-winged teal, blue-winged teal, baldpate, redhead, lesser scaup, canvasback, and snow, blue, and Canada goose.

3.09 The principal species of shorebirds and wading birds within the area are the common egret, cattle egret, snowy egret, great blue heron, Louisiana heron, roseate spoonbill, reddish egret, and white pelican. There is a large rookery on Kenyon Island (located between the North Guadalupe River and the South Guadalupe River) and a smaller rookery on a small island in Mission Lake.

3.10 The marshes adjoining Mission Lake support a population of American alligators.

3.11 The upland portions of the project area provide habitat for several other forms of wildlife. These include the white-tailed deer, fox squirrel, coyote, raccoon, opossum, gray fox, bobwhite quail, mourning dove, and several species of hawks, owls, and songbirds.

3.12 Florida manatee, right whale, sperm whale, blue whale, finback whale, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, whooping crane, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle are endangered species known to range in the project area. One of the five southern bald eagle nests in Texas is located approximately 300 yards north of the channel. Dredging activities will be prohibited within one-half mile either side of the nest during the months of October through March.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of the Channel to Victoria will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants that may be found in some sediments, instability of the sediments, and frequency of maintenance dredging,

it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods, rather than dredging. Disposal practices along the channel include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, creation of suitable substrate for oysters, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up

the food chain, resulting in fewer organisms available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy silt layer. Some of the more mobile organisms are able to work upward through the silt while the sessile organisms perish.

4.08 Oyster reefs can be severely affected by siltation, depending on their height above the surrounding level bottom. Low profile reefs in the path of a silt flow can be covered, resulting in loss of any existing oysters. In some cases, the silt is not removed by wave action and the reef becomes permanently buried. Higher reefs, generally, will not be covered by silt. As recommended by USF&WS and NMFS, surveys of disposal areas to determine the presence and extent of oyster reefs, submerged seagrasses and tidal marsh will be made prior to dredging. From these surveys, adjustments in disposal plans will be made on a case by case basis as determined necessary and feasible to protect such oyster reefs, submerged seagrasses, and tidal marsh.

4.09 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.10 Disposal of dredged materials in open water will cover any vegetation that exists in the disposal area. All areas that will be used for deposition of sediments have previously been used for this purpose, and, therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.11 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous

disposal areas blocking or changing the normal current patterns in bay areas. Past dredging in the channel is not known to have caused any significant adverse effects on circulation patterns.

4.12 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.13 Fish kills along this reach as a result of resuspended pollutants are considered unlikely. Past dredging is not known to have caused any fish kills; and, since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.14 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.15 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.16 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.17 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type, as a result of disposal operations in this channel, will be minimal, since the areas to be used for disposal have been used previously, and the changes have already occurred.

4.18 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands as primary food source areas, dredging practices in the channel have been changed to avoid disposal in marsh areas wherever practicable.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the

alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice describing the proposed action and soliciting comments was issued 1 November 1974 as required by Federal dredging regulations (33 CFR 209.145). Five (5) responses to the public notice have been received. Two (2) responses were from pipeline companies addressing the locations of pipelines crossing the channel. These and all other pipelines which cross the channel are installed and maintained in accordance with permits issued by the Corps of Engineers. Responses from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service requested that the nine (9) recommendations in the USF&WS report dated 8 May 1974 be implemented. Five (5) of the recommendations are being adopted. Four (4) of the recommendations concerned the construction of toe levees at distances less than 1,000 feet from the channel centerline. These recommendations are considered to be too restrictive because after depositing material on the far side of the crest of the disposal area, the remaining area will be too small to be practicable or economically justifiable for use. Present plans call for construction of toe levees, as described in recommendation No. 3, along the ends and backsides at 1,350 feet from the centerline of the channel when the areas become emergent and stabilized above Mean High Water. The National Marine Fisheries Service also recommended that surveys of disposal areas be conducted to determine the presence of oyster beds, submerged seagrasses, and tidal marsh, and that plans and specifications be prepared designating specific discharge locations to avoid affecting such resources. Surveys of selected disposal sites will be accomplished within six months prior to beginning any dredging. While predesignation of discharge points is not considered practicable from a contractual standpoint, the intent of that recommendation will be met by adjusting disposal areas on a case by case basis to permit maximum feasible mitigation of adverse effects on oysters and submerged and marsh vegetation. The National Audubon Society concurred with the recommendations of the USF&WS and NMFS.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 7 October 1975, EPA approved the dredging and dredged material disposal plans under 33 CFR 209.145 for one year. Long-term approval was deferred until the final Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-7

1 November 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY - TRIBUTARY CHANNEL TO VICTORIA

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 2 December 1974.

Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway - Tributary Channel to Victoria

PROJECT LOCATION: Near the Cities of Seadrift and Victoria in Calhoun and Victoria Counties, Texas.

PROJECT DESCRIPTION: This Federally maintained project provides for a channel 9 feet deep by 100 feet wide, and 34.8 miles long extending from its junction with the GIWW (main channel) northwesterly through San Antonio Bay, then a landlocked section lying east of the Guadalupe River and terminating at a turning basin near the City of Victoria. The turning basin is 9 feet deep with an average width of 500 feet and an average length of 800 feet. The Channel to Seadrift is also maintained under this project. This 9-foot deep by 100-foot wide side channel is 2 miles long and has a turning basin at Seadrift 9 feet deep by 200 feet wide and 230 feet long. All depths are referenced to Corps of Engineers mean low tide datum.

DISPOSAL AREA: There are 24 disposal areas for the project (see attached drawing). The West Side Calhoun County Navigation District and the Victoria County Navigation Commission are the sponsoring agencies and are required to furnish the necessary rights-of-way and disposal areas for maintenance of the project.

Disposal Areas Nos. 1 - 3 and 5 - 14 are open water areas located adjacent to the waterways in San Antonio Bay. Material will be placed over the crest of previous deposits, where they exist, to raise and enlarge the areas.

Disposal Area No. 4 is located east of the channel in the vicinity of Mosquito Point. The area will be leveed when utilized.

Disposal Area No. 15 is a partially leveed area located west of the channel in Guadalupe Bay. Material will be placed over the crest of existing deposits to raise and enlarge the area.

Disposal Area No. 16 is a partially leveed area located west of the channel in Mission Bay and on land north of Mission Bay. Material will be placed over the crest of existing deposits to raise and enlarge the area.

Disposal Areas Nos. 17 - 24 are located adjacent to the channel and are all confined areas.

Methods of disposal in the 15 disposal areas located in either San Antonio, Guadalupe, or Mission Bays will be similar. Dredged materials will be deposited uniformly along these areas and toe levees will be constructed at some future date when the emergent areas become large enough to contain dredge material within a perimeter levee system and the levees will not erode away.

COMPOSITION AND QUANTITY OF MATERIALS: Materials excavated from the Channel to Victoria consist of fine grained sands, silts, and clays. Shoaling in the channel is generally a result of tidal actions in the bay reach and bank erosion along the landlocked portion. The annual shoaling rate for the entire project is approximately 600,000 cubic yards.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain the channel. The dredging frequency for selected reaches of the Channel to Victoria varies, with the reach from Mile 0 to Mile 14.0 having a 24-month frequency, and the reach from Mile 14.0 to Mile 34.8 having a 48-month frequency. The frequency of dredging for selected reaches of the Channel to Seadrift is 24 months. The average number of cubic yards excavated per contract on this project is approximately 600,000. Portions of the project were last maintained during the period August - October 1973. Dredging is currently scheduled for March 1975.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 1 - 3 and 5 - 14 are located in San Antonio Bay at Latitudes, Longitudes 28°19'15", 96°40'30";

28°19'00", 96°41'00"; 28°20'05", 96°41'50"; 28°21'50", 96°42'40"; 28°21'55", 96°43'15"; 28°22'30", 96°43'05"; 28°22'40", 96°43'40"; 28°23'10", 96°43'30"; 28°23'35", 96°42'45"; 28°23'15", 96°44'05"; 28°23'40", 96°43'45"; 28°23'50", 96°44'25"; and 28°24'20", 96°44'15". The adjacent waters are used for sport and commercial fishing.

Disposal Area No. 4 is located on land, east of the channel and north of Mosquito Point. The area is bound by a road to the south and east, and waters of San Antonio Bay to the north and west.

Disposal Area No. 15 is located west of the Channel to Victoria. The area is bound by the channel to the east, and waters of Guadalupe Bay in the other directions.

Disposal Area No. 16 is located west of the channel in the vicinity of Long Mott, Texas. The area is bound by the channel to the east and north, Mission Bay to the south, and undeveloped lowlands and waters of Mission Bay to the west.

Disposal Area No. 17 is located west of the channel in the vicinity of State Highway 35. It is bound by the channel to the east, with Goff Bayou to the south and west, and undeveloped, sparsely wooded land to the north.

Disposal Area No. 18 is located west of the channel between State Highway 35 and Green Lake. It is bound by the channel to the east, State Highway 35 to the south, undeveloped land to the west, and Green Lake to the north.

Disposal Areas Nos. 19 - 21 are located adjacent to the channel in the vicinity of Green Lake. In each case, the areas are bound by the channel on the front sides, Green Lake on the backsides, and the banks of Green Lake adjacent to the end areas.

Disposal Area No. 22 is located south and west of the channel, extending from Green Lake to the vicinity of the Missouri Pacific Railroad. The area is bound by the channel to the north and east, Green Lake to the south, and with the exception of some oil wells, undeveloped land to the west.

Disposal Area No. 23 is located west of the channel and north of the Missouri Pacific Railroad. It is bound by the channel to the east and north, and undeveloped lands to the west and south.

Disposal Area No. 24 is located adjacent to the channel near its upstream limit. The area is bound by the channel to the east, wooded areas to the north and west, and the Guadalupe River to the south.

DREDGING BY OTHERS: Two companies, The Fordyce Company and Texas Concrete Company, are principal organizations performing non-Federal dredging in the vicinity of the Channel to Victoria. Additional dredging operations are performed near the channel in maintaining private slips. The estimated quantity of materials dredged annually by the principal organizations and individuals is about 100,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Regional VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Calhoun County
Commissioners' Court of Victoria County
City of Victoria
City of Seadrift

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of the Channel to Victoria and the side channel to Seadrift will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). An Environmental Statement will not be prepared for this tributary channel; however, an Environmental Statement for the GIWW - Texas Section including tributary channels is being prepared and is expected to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies.

The shoaling rates in the Channel to Victoria project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

1 November 1974

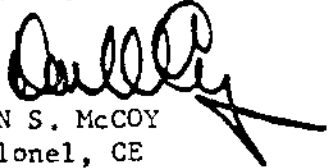
Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator, EPA, in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan will also be considered.

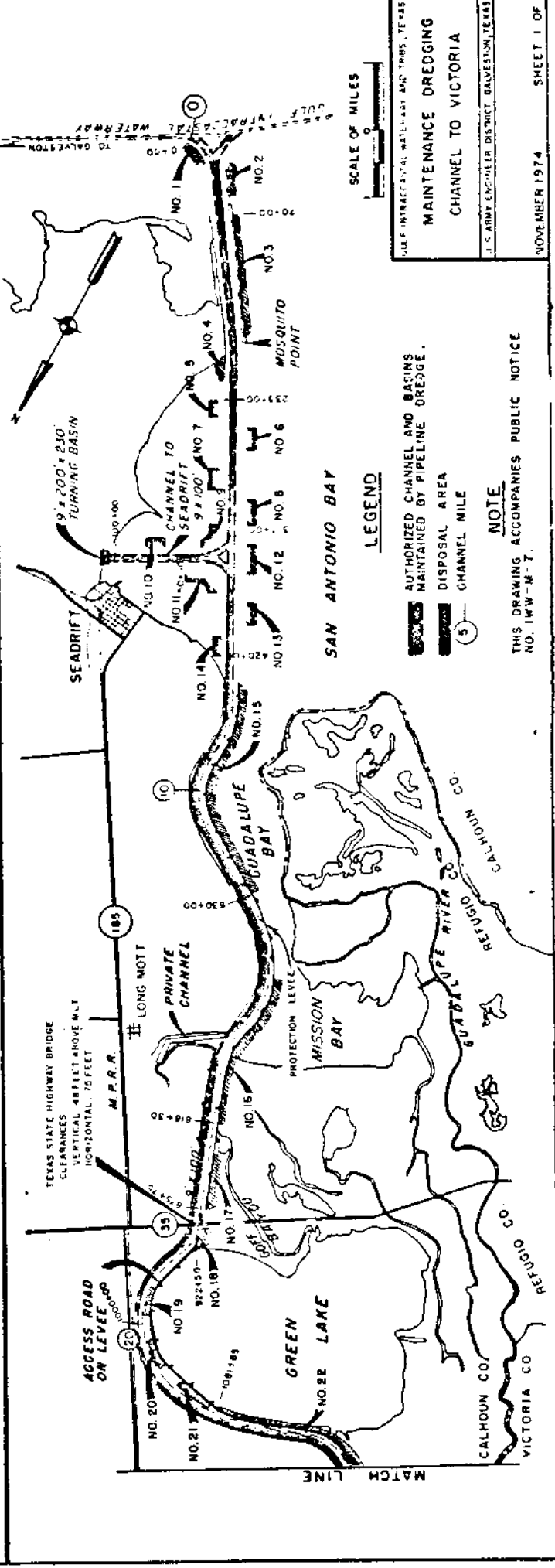
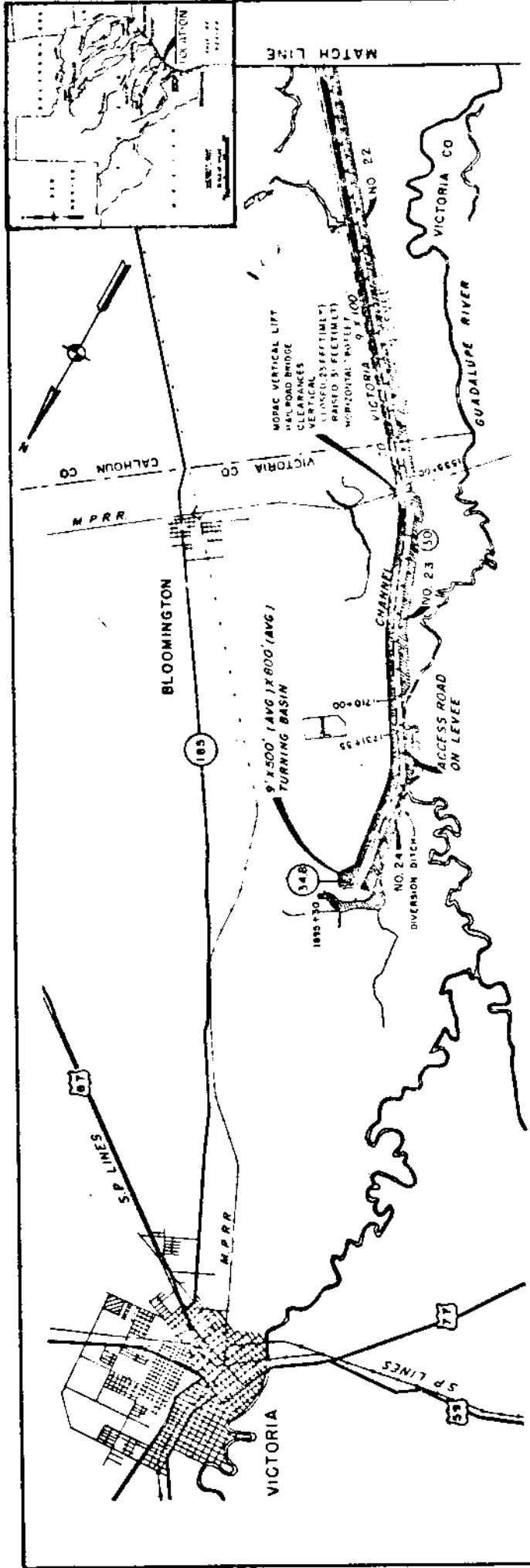
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-7 dated 1 November 1974.

1 Incl
Dwg, Nov 74


DON S. McCOY
Colonel, CE
District Engineer





UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

December 13, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice No. IWW-M-7, dated November 1, 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Victoria, Texas.

The U. S. Fish and Wildlife Service transmitted a report on this maintenance dredging project to the Corps of Engineers on May 8, 1974. Based on a review of that report and on the information presented in the public notice, we have determined that the conclusions and recommendations cited in that May 1974 report are still applicable.

It is noted that the spoil area numbering system shown in the public notice differs from the one used in our 1974 report. This should present no difficulty since, in both cases, the spoil areas are identified also by station numbers.

A number of the spoil areas are located in fragile estuarine habitat where spoil deposition could be unnecessarily damaging unless adequately controlled. Our 1974 report contains recommended measures for minimizing such adverse effects. Nevertheless, we anticipate that similar problems will arise in future dredging operations, and we request an opportunity for further study and reporting on this project in advance of future maintenance dredging schedules.

Sincerely yours,

Joseph R. Stegman
Acting Regional Director

cc:

Executive Director, Texas Parks and Wildlife Department, Austin, Texas
Reg. Dir., National Marine Fisheries Service, St. Petersburg, Florida
Area Supv., Environmental Assessment Division, NMFS, Galveston, Texas
CONSERVE
AMERICA'S
ENERGY Reg. Administrator, Environmental Protection Agency, Dallas, Tex.
Field Supv., FWS, Div. of River Basin Studies, Fort Worth, Tex.



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Save Energy and You Serve America!

24 April 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference is made to Mr. Jerry Stegman's letter dated 13 December 1974 concerning Public Notice No. IWW-M-7 on maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Victoria, Texas. We note that the review of our public notice was based on your 8 May 1974 report on the Tributary Channel to Victoria. Correspondingly, the following comments are made to the recommendations contained in your 8 May 1974 report:

Recommendation No. 1 - Leveeing Disposal Areas Nos. 1, 2, and 3 at 1,000 feet from the centerline of the channel is considered too restrictive, as the existing crest of disposal is approximately 400 feet from the centerline of the channel. We, therefore, plan to levee the areas at 1,350 feet from the channel's centerline, which will make these areas 950 feet wide from the existing crests to the back limit of the areas.

Recommendation No. 2 - The emergent portion of Disposal Area No. 4 will be leveed prior to its next use.

Recommendation No. 3 - As requested, Disposal Areas Nos. 5, 6, 7, 8, 9, 10, (same as Public Notice Disposal Area No. 12) 11, and 12 (same as Public Notice Disposal Area No. 13) will be leveed. The toe levees will be constructed when the areas become emergent and stabilized above Mean High Water along their ends and backsides at 1,350 feet from the centerline of the channel.

Recommendation No. 4 - We cannot comply with this recommendation as written. Disposal Area No. 13 (same as Public Notice Disposal Area No. 14) does not presently have enough emergent land within its limits to construct levees in the manner you have described. We therefore plan to levee this area in a manner similar to your Recommendation No. 3.

EWGCO-M

24 April 1975

Mr. W. O. Nelson, Jr.

Recommendation No. 5 - Precautions will be taken to prevent material from being placed in or allowed to enter the bay from that portion of Disposal Area No. 14 (same as Public Notice Disposal Areas Nos. 15 and 16) lying between Stations 630+00 and 700+00.

Recommendation No. 6 - In order that we may eliminate that portion of Disposal Area No. 14 (same as Public Notice Disposal Areas Nos. 15 and 16) between Stations 630+00 and 700+00, we cannot be limited to an area 750 feet from the channel's centerline for the remainder of the area. Therefore, we plan to levee the reaches between Stations 432+00 and 630+00 and 700+00 and 771+75 when they become emergent above Mean High Water at 1,350 feet from the centerline of the channel. Leveeing at 1,350 feet will allow us to eliminate that portion of the area between Stations 630+00 and 700+00, as you requested in Recommendation No. 5, and still retain the disposal area capacity needed for future maintenance along this reach of the channel.

Recommendation No. 7 - Until toe levees are constructed in the disposal areas mentioned in Recommendations Nos. 1, 3, 4 and 6, the points of discharge will be relocated as frequently as practical to permit the uniform buildup of material equidistant from the channel centerline.

Recommendation No. 8 - We cannot comply with this recommendation as written. Disposal Area No. 23 (same as Public Notice Disposal Area No. 10) was surveyed last year and was found to be only 300 feet wide and 1,000 feet long. An area of this size is considered much too small to be practical or economically feasible for use as a disposal area. We will, therefore, levee this area in a manner similar to your Recommendation No. 3.

Recommendation No. 9 - As has been our policy in the past, we will furnish the suggested agencies plans and specifications for review during the advertising period for each contract.

Thank you for your review and comments.

Sincerely yours,

J. D. BISSELL
Acting Chief,
Construction-Operations Division

Copy furnished:
Field Supervisor
USFWS, Corpus Christi, Texas 78411

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

December 24, 1974

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

Public Notice No. IWW-M-7 dated November 1, 1974, notified the National Marine Fisheries Service (NMFS) of the Corps of Engineers' policy, practice, and procedures to be followed in connection with the deposition of dredged material in ocean waters associated with the maintenance dredging operations of the Gulf Intracoastal Waterway - Tributary Channel to Victoria, Texas.

The U.S. Fish and Wildlife Service issued a report to your office on the above cited segment of the Texas GIWW on May 8, 1974, a draft of which received the concurrence of the NMFS. We hereby request that all recommendations in that report be implemented in your present plans. Additionally, we recommend that you have the proposed spoil disposal locations investigated within six months prior to commencement of maintenance dredging to determine the locations and density of submerged seagrasses, tidal marsh, and oyster beds that may have developed. From these investigations, the Corps, in consultation with the Federal and State fish and wildlife agencies, should designate locations for pipeline discharge within the disposal areas that would cause the least damage to the submerged grasses, oyster beds, and tidal marsh.

Thank you for the opportunity to comment on this Federal project.

Sincerely,

for *Edgar L. Arnold, Jr.*
William H. Stevenson
Regional Director

25 April 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

This is in reply to your letter dated 24 December 1974 concerning Public Notice No. IWW-M-7 on maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Victoria, Texas.

We received comments from the U. S. Fish and Wildlife Service concerning the public notice on this channel by a letter dated 13 December 1974. In their letter, they referred to their 8 May 1974 report. Since this is the same report you have referenced, we have inclosed a copy of our response to their letter, as it includes our comments to the recommendations contained in their report.

Concerning your recommendation for investigation of disposal areas, we have initiated plans to make surveys for the presence of oyster beds, submerged seagrasses, and tidal marsh as you have suggested and as determined necessary by our staff biologists. Based on their findings, we will make adjustments to our disposal plans on a case by case basis. However, we cannot concur in your suggestion that discharge points be predesignated for each contract. Predesignation of discharge points is not feasible from a contractual standpoint.

Thank you for your review and comments.

Sincerely yours,

1 Incl
As stated

Copy furnished: w/Incl
Area Supervisor
NMFS, Galveston, Texas 77550
Info cys furn: w/Incl
C, Engr Div., AE, CCAO

E. D. McGENEE
Chief, Construction-
Operations Division

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SUN PIPE LINE COMPANY

SOUTHWEST REGION

P. O. BOX 417

CORPUS CHRISTI, TEXAS 78403

November 18, 1974

J. NEILL FUQUAY
VICE PRESIDENT
REGIONAL MANAGER

CHARLES W. GIBSON
AREA SUPERINTENDENT

Department of The Army
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Re: Gulf Intracoastal Waterway
Victoria Channel

Sun Pipe Line Company has received your public Notice No. IWW-M-7, dated 1 November 1974, outlining proposed work on the Victoria Tributary Channel.

Two of our pipelines, one three inch and one six inch, cross the channel as indicated in red on your plat attached to the notice.

Our interpretation of the plans is that there will be no deepening or widening of the channel which would be a danger to the pipelines. If such hazard should be involved, we would wish to take exception to the proposed project.

A. C. Seidemann
A. C. Seidemann, P.E.
Senior Staff Engineer

ACS/eb

Attachment

cc: Mr. Chas. W. Gibson
Swinney-Hughes File
Heyser-Tivoli 6" Trunk Line File

SWCCO-M

3 December 1974

Mr. A. C. Seidenmann
Sun Pipe Line Company
Southwest Region
P. O. Box 417
Corpus Christi, Texas 78403

Dear Mr. Seidenmann:

Receipt is acknowledged of your comments concerning Public Notice No. IWW-M-7, dated 1 November 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway-Channel to Victoria. The location of your 3" and 6" pipelines are noted and will be shown on future advertised drawings. The public notice only includes maintenance dredging and not any new deepening or widening of the channel. If your pipelines are installed and maintained in accordance with Permit Nos. H-S-243-41-PERMIT-5535 and H-S-243-41-PERMIT-4772, there should be no danger.

Thank you for your comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operation Division

EXXON PIPELINE COMPANY

P. O. Box 4916
Corpus Christi, Texas 78408
November 13, 1974

7.6 Public Notice No. IWW-M-7
Maintenance Dredging, Gulf
Intracoastal Waterway-Tributary
Channel to Victoria

Department of the Army
Galveston District
Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Attention: Don S. McCoy
Colonel, CE, District Engineer

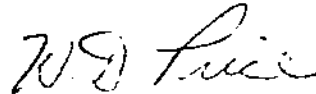
Dear Sir:

In reference to the Public Notice captioned above, we wish to bring to your attention the location of five pipelines crossing the Victoria channel as listed below:

<u>SIZE & TYPE PIPELINE</u>	<u>OWNER</u>	<u>APPROX. U.S.C.E. STATION</u>
16" Crude	Exxon Pipeline Co.	1215+57
Gas	Florida Gas Pipeline Co.	1216+89
30" Gas	Exxon Company U.S.A.	1228+10
36" Gas	Exxon Company U.S.A.	1228+60
8" Ethane	Exxon Pipeline Co.	1229+60

We understand that the proposed maintenance dredging should not affect the depth or location of these pipeline crossings; however, we request that Mr. W. D. Price, District Manager, Exxon Pipeline Company, P. O. Box 4916, Corpus Christi, Texas 78408, Telephone No. 512-883-1818, be notified at least 24 hours prior to dredging over Exxon Pipeline Company pipelines.

Yours very truly,



W. D. PRICE
District Manager

AGN/cw

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cc - R. B. Long
J. H. Kinsey, Exxon Company U.S.A.

SWGCO-M

21 November 1974

Mr. W. D. Price
District Manager
Exxon Pipeline Company
P. O. Box 4916
Corpus Christi, Texas 78408

Dear Mr. Price:

Receipt is acknowledged of your comments concerning Public Notice No. IWW-M-7, dated 1 November 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Victoria. The five pipelines you referenced are duly noted. Our Corpus Christi Area Office will be sent a copy of your letter and will notify you by letter, as is our usual practice, when we will be dredging in the vicinity of the pipelines.

Thank you for your review and comments.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division

SOUTHWESTERN REGIONAL OFFICE
John L. Franson, Representative
Louisiana
New Mexico
Texas
(Mexico)



NATIONAL AUDUBON SOCIETY

2507 ROGGE LANE, AUSTIN, TEXAS 78723 - PHONE (512) 928-2047

June 30, 1975

Colonel Don S. McCoy
District Engineer
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

RE: PUBLIC NOTICE NO. IWW-M-7, MAINTENANCE DREDGING OPERATIONS OF
GULF INTRACOASTAL WATERWAY -TRIBUTARY CHANNEL TO VICTORIA, TEXAS

Dear Colonel McCoy:

It is our understanding that the U.S. Fish and Wildlife Service issued a report to your office on the above public notice in May 1974. The National Marine Fisheries Service concurred in this report and in talking with these agencies, it is the position of the National Audubon Society that their recommendations be concurred with.

In addition, we suggest that the project proceed in close coordination and consultation with these agencies and with the State Parks and Wildlife agency, all of who could suggest appropriate locations for pipeline discharge within disposal areas that would cause the least damage to the submerged grasses, oyster beds and tidal marsh.

We hope that you will consider our emphasis on this matter and include it in future plans.

Sincerely,

John L. Franson
Southwest Regional Representative

cc: Council on Environmental Quality
Environmental Protection Agency, Dallas
U.S. Department of the Interior
National Marine Fisheries Service, NOAA
U.S. Fish and Wildlife Service, Albuquerque
Texas Parks and Wildlife Department
Texas General Land Office 372
National Audubon Society - Messrs. Callison, Blankinship, Paul

SWG00-M

12 September 1975

Mr. John L. Franson
Southwest Regional Representative
National Audubon Society
2507 Rogge Lane
Austin, Texas 78723

Dear Mr. Franson:

This is in reply to your letter dated 30 June 1975 concerning Public Notice No. INW-M-7 on maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Victoria, Texas.

We have completed our review of the May 1974 U. S. Fish and Wildlife Service report referenced in your letter. On 24 April 1975, the Corps issued its response to the report, stating our intentions to comply with their recommendations where possible, based on what is considered in the best overall public interest.

Your letter has been placed in our permanent records file for the GINW - Tributary Channel to Victoria public notice, and it will be given full consideration in any future documentations.

Thank you for your review and comments.

Sincerely yours,

K. D. McGEHEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

October 7, 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (762638)

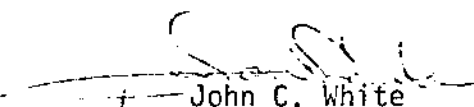
Colonel Don S. McCoy
District Engineer
Galveston District
U. S. Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

We have completed our review of your plan for maintenance dredging of the Gulf Intracoastal Waterway-Tributary Channel to Victoria, Texas as covered in Public Notice No. IWW-M-7 dated November 1, 1974. We have also reviewed your Statement of Findings dated September 22, 1975, concerning this project.

Your maintenance dredging and dredged material disposal plan is approved for one year. Since, as stated in your Public Notice, an Environmental Impact Statement has not been prepared for this project, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement for the GIWW-Texas Section has been filed with the Council on Environmental Quality.

Sincerely Yours,


John C. White
Regional Administrator

SUPPLEMENT NO. 12

MATAGORDA BAY TO SAN ANTONIO BAY

SUPPLEMENT NO. 12

MATAGORDA BAY TO SAN ANTONIO BAY

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SUPPLEMENT NO. 12

MATAGORDA BAY TO SAN ANTONIO BAY

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intracoastal Waterway (GIWW) main channel section between Matagorda Bay and San Antonio Bay. This portion of the federally maintained 12-foot deep by 125-foot wide Gulf Intracoastal Waterway (GIWW) extends from deep water in Matagorda Bay and south of Palacios Point southwesterly to the vicinity of Live Oak Point in San Antonio Bay. The GIWW crosses Matagorda Bay and exits the bay by way of the Port O'Connor jetties. A barge mooring basin 12 feet deep by 50 feet wide and 5,000 feet long is maintained south of the main channel near Port O'Connor. Proceeding southwesterly from the basin, The GIWW follows a land cut along the northeast side of Barroom, Espiritu Santo, and Shoalwater Bays through grassed areas, tidal flats, and mud flats before entering San Antonio Bay. A barge mooring basin 12 feet deep by 110 feet wide and 2,150 feet long is maintained where the channel enters San Antonio Bay. The GIWW continues across San Antonio Bay to the vicinity of Live Oak Point. All depths are measured below Mean Low Tide (Coros of Engineers datum). Contract pipeline dredges are utilized to maintain this section of the waterway. The frequency of dredging in selected reaches is about every 24 to 30 months. The excavated material is transported by pipeline and placed in the various disposal areas. The average quantity of materials dredged per contract is about 1.3 million cubic yards. Selected sections of this reach of the waterway were last maintained during the period November 1973 - May 1974. The next maintenance work is scheduled after June 1976. Dredging will be accomplished sooner should unexpected severe shoaling occur. This 40-mile reach of the GIWW from the vicinity of Palacios Point in Matagorda Bay to the vicinity of Live Oak Point in San Antonio Bay utilizes eleven (11) disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 116-A through 125 on figures 2 through 9 in the attached public notice. The proposed action will comply with Federal dredging regulations (33 CFR 209.145) and Discharge of Dredged or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. The recorded tonnage handled by ports and moved on the GIWW between Galveston Bay and Corpus Christi Bay was approximately 20.7 million tons in 1974 and included such commodities as crude petroleum, gasoline, other petroleum products, chemicals, marine shells, minerals, and iron and steel products. The GIWW has grown consistently and has contributed substantially to the regional and national economy. A recent study by Texas A&M University has placed the value of the channel to the State of Texas at a total of more than \$19 billion per year.

3. ENVIRONMENTAL SETTING.

3.01 This reach of the GIWW traverses important fish and wildlife habitat in Barroom, Espiritu Santo, Shoalwater, and San Antonio Bays, as well as in adjoining tidal flats and marshes and low-lying uplands.

3.02 The greater portion of the bay lies to the south of the waterway. A large part of the tidal flats, marshes, and coastal plains in the project area is north of the channel.

3.03 Barroom, Espiritu Santo, and Shoalwater Bays are shallow in depth, varying from a few inches to about 4 feet in the project area. Shoalwater Bay is especially suited as nursery habitat for fish and crustaceans. Dense growths of submerged and emergent vegetation occupy much of these shallow areas. Oyster reefs occur in the western parts of Barroom and Shoalwater Bays. The San Antonio Bay reach of the waterway is in deeper water, varying from 3 to 6 feet. Vegetation in this area is sparse. Some oyster reefs are present near Turnstake Island and in the far western portion of the bay.

3.04 The coastal plain is flat and interspersed with numerous shallow, water-filled depressions. These depressions

are frequently fringed with growths of cordgrass. Some of these depressions have fresh water, others are brackish, and still others are tidal.

3.05 Fishes and crustaceans use the shallow bay areas and tidal marshes as breeding, feeding, and nursery grounds. The deeper bay areas, especially around oyster reefs, are used primarily as feeding grounds. Such estuarine-dependent species as red drum, black drum, spotted seatrout, sand seatrout, flounder, Atlantic croaker, striped mullet, sheepshead, gafftopsail catfish, blue crab, and brown and white shrimp use this habitat during periods throughout their life cycle. The production of about 900 pounds of catchable-sized fishes and crustaceans per acre annually can be attributed to the bays and tidal marshes of the proposed work area.

3.06 Wildlife habitat in the project area consists of bay areas, tidal flats, tidal marshes, and coastal plains and their shallow, water-filled depressions.

3.07 The coastal plains support populations of white-tailed deer, bobwhites, mourning doves, waterfowl, wading birds, and shorebirds. The tidal flats and marshes and the bay areas support primarily populations of waterfowl, wading birds, and shorebirds.

3.08 Important species of waterfowl in the project area are pintail, mallard, American widgeon, blue-winged teal, green-winged teal, lesser scaup, redhead, canvasback, bufflehead, mottled duck, Canada goose, snow goose, blue goose, and American coot. Mottled duck and blue-winged teal are resident species and use the water-filled depressions and the surrounding coastal plains areas for nesting. About 3,000,000 waterfowl use-days occur in the project area annually. About one-third of this use occurs north of the waterway.

3.09 Hunting is light for all game species in the project area north of the waterway. Much of this area is in private ownership and hunting is restricted by landowners to their friends. South of the waterway, hunting is for waterfowl only and occurs in moderate to heavy

amounts. With or without the project, hunting is expected to continue.

3.10 The project area supports many shorebirds and wading birds, including ibis, egret, heron, gull, tern, pelican, stilt, and the roseate spoonbill. The birds use the shallow vegetated portions of the bays, the tidal marshes, and the shallow water-filled depressions for feeding. Some of these birds nest in the area.

3.11 Florida manatee, right whale, sperm whale, blue whale, finback whale, Attwater's prairie chicken, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, whooping crane, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle are endangered species known to range in the project area.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants that may be found in some sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced

sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, creation of suitable substrate for oysters, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up the food chain, resulting in fewer organisms available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy silt layer. Some of the more mobile organisms are able to work upward through the silt while the sessile organisms perish.

4.08 Oyster reefs can be severely affected by siltation, depending on their height above the surrounding level

bottom. Low profile reefs in the path of a mud flow can be covered, resulting in loss of any existing oysters. In some cases, the silt is not removed by wave action and the reef becomes permanently buried. Higher reefs generally will not be covered by silt.

4.09 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.10 Disposal of dredged materials in open water will cover any vegetation that exists in the disposal area. In nearly all cases, areas that will be used for deposition of sediments have previously been used for this purpose. Therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.11 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous disposal areas blocking or changing the normal current patterns in bay areas. Past dredging in this reach is not known to have caused any significant adverse effects.

4.12 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.13 Fish kills along this reach as a result of resuspended pollutants are considered possible but unlikely. Past dredging is not known to have caused any fish kills;

and, since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.14 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.15 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.16 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.17 The primary significant long term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. This time period is highly variable, running from two to ten years for most areas. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in

vegetation type will be minimal, as most areas to be used for disposal have been used previously, and the changes have already occurred.

4.18 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands as primary food source areas, dredging practices have been changed to avoid disposal in marsh areas wherever practicable.

4.19 Out of 10,400 acres of marsh adjacent to this reach of the GIWW, approximately 114 acres or 1.1 percent may be affected by future disposal operations. The 10,400 acres of marsh adjacent to the GIWW do not include marsh areas surrounding the major bays and river inlets. The estimate was prepared by Corps of Engineers personnel from the most recent coast charts available. It has not been practicable to make surveys of each area to determine the exact extent of marsh land within the disposal area limits. The estimates are, therefore, based primarily on vegetation cover shown on the coast charts. It is considered that much of the acreage included as marsh to be covered has been covered by past dredging and is no longer marsh. It is believed that reduction of marsh areas caused by dredging of this reach will be minimal.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSE TO THE PUBLIC NOTICE. A public notice describing the proposed action and soliciting comments was issued 29 November 1974 as required by Federal dredging regulations (33 CFR 209.145). Three responses to the public notice have been received. The U.S. Fish and Wildlife Service (USF&WS) noted that its previous recommendations had been adopted and made the additional request that the drainage spillway at disposal area No. 117 be relocated and that dredged materials be confined to emergent land along the southern limits of disposal areas Nos. 118, 119, 120, and 121. USF&WS also requested notification well in advance of the next scheduled maintenance dredging in order to have adequate time for field examination and the preparation of another report. The National Marine Fisheries Service (NMFS) noted that its previous recommendations had been adopted and made several additional recommendations. These included the construction of levees at or above mean high water to completely confine disposal areas Nos. 118, 119, and 120 prior to the next maintenance dredging of the reach; relocation of the spillway in disposal area No. 117 to direct the effluent into the GIWW; maintenance of all containment levees; investigation of the bay bottom in and adjacent to the disposal areas within 6 months prior to dredging; and predesignation of pipeline discharge points within the disposal areas in such a manner as to cause the least damage to any significant areas of submerged grasses, oyster beds, and tidal marshes. As recommended by both agencies, the spillway on disposal area No. 117 will be relocated. The local sponsor has been requested to furnish alternate disposal areas for those which have been recommended for deletion or reduction to sizes not feasible for use. Should the local sponsor be unable to obtain alternate disposal the recommended levees will be constructed. Plans and specifications will be furnished to the USF&WS, as requested, prior to the next scheduled maintenance dredging. The surveys recommended by NMFS will be conducted by Corps of Engineers' staff biologists to determine the locations and density of significant areas of submerged grasses, oyster beds, and tidal marshes. However, the recommendation to predesignate discharge points in the disposal areas is not feasible from a contractual standpoint. This recommendation will be met by adjusting the disposal plans on a case by case basis to protect the areas.

A response from the National Audubon Society supported recommendations made by the NMFS.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. A request for approval by EPA of dredging and dredged material disposal plans under 33 CFR 209.145 will be made in the near future.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-10

29 November 1974

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL) - MATAGORDA BAY TO SAN ANTONIO BAY

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 30 December 1974.

Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel) - Matagorda Bay to San Antonio Bay.

PROJECT LOCATION: From south of Palacios Point in Matagorda Bay to the vicinity of Live Oak Point in Matagorda and Calhoun Counties, Texas, respectively.

PROJECT DESCRIPTION: This portion of the Federally maintained 12-foot deep by 125-foot wide Gulf Intracoastal Waterway (GIWW) extends from deep water in Matagorda Bay and south of Palacios Point, southwesterly to the vicinity of Live Oak Point in San Antonio Bay. The GIWW crosses Matagorda Bay and exits the bay by way of the Port O'Connor jetties. A barge mooring basin 12 feet deep by 50 feet wide and 5,000 feet long is maintained south of the main channel near Port O'Connor. Proceeding southwesterly from the basin, the GIWW follows a land cut along the northeast side of Barroom, Espiritu

Santo, and Shoalwater Bays through grassed areas, tidal flats, and mud flats before entering San Antonio Bay. A barge mooring basin 12 feet deep by 110 feet wide and 2,150 feet long is maintained where the channel enters San Antonio Bay. The GIWW continues across San Antonio Bay to the vicinity of Live Oak Point. All depths are measured below Mean Low Tide (Corps of Engineers datum).

DISPOSAL AREA: This 40-mile reach of the GIWW from the vicinity of Palacios Point in Matagorda Bay to the vicinity of Live Oak Point in San Antonio Bay utilizes eleven (11) disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 116-A through 125 (see attached drawings).

Disposal Areas Nos. 116-A and 116-B are open water areas located south and north of the waterway, respectively, in Matagorda Bay. The areas are also used during maintenance dredging of the Matagorda Ship Channel, and are designated as Disposal Areas Nos. 3 and 4 in the public notice of dredging for the Matagorda Ship Channel (GUAD-M-1), dated 23 September 1974.

Disposal Area No. 117 is a confined disposal area located on the southeastern bank of the GIWW near Port O'Connor.

Disposal Areas Nos. 118 - 120 are partially leveed areas located along the southeastern bank of the GIWW in the vicinity of Barroom, Espiritu Santo, and Shoalwater Bays, respectively.

Disposal Area No. 121 is a partially leveed area located partially along the southeastern bank of the GIWW in the vicinity of Shoalwater Bay, and partially in San Antonio Bay.

Disposal Areas Nos. 122 - 125 are open water areas located northwest of the GIWW in San Antonio Bay.

Disposal Area No. 117 is presently leveed and areas 118 through 125 will be completely leveed at some future date when the emergent areas become large enough to contain dredge materials within a perimeter levee system and the levees will not erode away.

COMPOSITION AND QUANTITY OF MATERIALS: Materials dredged from the waterway consist of sands, silts, and clays. The shoaling in the waterway is a result of deposits occurring from wind-driven waves, bank erosion, and tidal actions from the Gulf and in the related bays. The shoaling rate of this section of the waterway is approximately 1.3 million cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are utilized to maintain this section of the waterway. The frequency of dredging in selected reaches is about every 24 to 30 months. The excavated material is transported by pipeline and placed in the various disposal areas. The average quantity of materials dredged per contract is about 1.3 million cubic yards. Selected

sections of this reach of the waterway were last maintained during the period November 1973 - May 1974. The next maintenance work is scheduled after 30 June 1975. Dredging will be accomplished sooner should inconsistent shoaling rates occur.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Areas Nos. 116-A and 116-B are located adjacent to the waterway in Matagorda Bay, near its junction with the Matagorda Ship Channel. Waters adjacent to the areas are used for commercial and sport fishing.

Disposal Area No. 117 is located southeast of the waterway in the vicinity of Port O'Connor, Texas. The area is bound by the waterway to the northwest, Matagorda Bay to the northeast, marsh areas to the southeast, and Barroom Bay Cut to the southwest.

Disposal Area No. 118 is located southeast of the waterway between Barroom Bay Cut and the Air Force Ferry Channel. The area is bound by the waterway on the northwest, Barroom Bay Cut on the northeast, Barroom and Espiritu Santo Bays on the southeast, and the Air Force Ferry Channel on the southwest.

Disposal Area No. 119 is located southeast of the waterway between the Air Force Ferry Channel and the Alcoa Mining Company Channel. The area is bound on the northwest by the waterway, the Air Force Ferry Channel on the northeast, Shoalwater Bay on the southeast, and the Alcoa Mining Company Channel on the southwest.

Disposal Area No. 120 is located southeast of the waterway between the Alcoa Mining Company Channel and an unnamed private channel. The area is bound by the waterway on the northwest, the Alcoa Mining Company Channel on the northeast, Shoalwater Bay on the southeast, and an unnamed private channel on the southwest.

Disposal Area No. 121 is located southeast of the waterway, in the vicinity of the Channel to Victoria. The area is bound by the waterway on the northwest, and unnamed private channel on the northeast, Shoalwater and San Antonio Bays on the southeast, and San Antonio Bay on the southwest.

Disposal Areas Nos. 122 - 125 are located northwest of the waterway in San Antonio Bay. The areas end points are located at Stations 732+00, 741+200; 743+200, 749+500; 751+500, 758+500; and 760+500, 766+000, respectively. The disposal areas and adjacent waters are used for commercial and sport fishing.

DREDGING BY OTHERS: There is a small amount of non-Federal dredging in the vicinity of the waterway, with the majority of this being for maintenance of private boat slips. The estimated quantity of material removed annually is about 20,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL AREAS: The proposed disposal sites have not been

previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA, with the exception of areas 116-A and 116-B. These areas were coordinated under the Matagorda Ship Channel project.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioners' Court of Matagorda County
Commissioners' Court of Calhoun County

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A separate Environmental Statement will not be prepared for this reach of the GIWW. An Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) is being prepared and is scheduled to be placed on file with Council on Environmental Quality about mid-1975, having been coordinated with the above mentioned agencies.

In the event an emergency situation occurs, the shoaling in the Gulf Intracoastal Waterway project will not permit postponement of maintenance of the channel until after an environmental statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

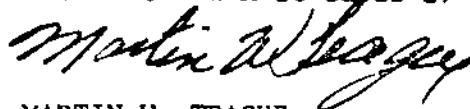
Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator, EPA, in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

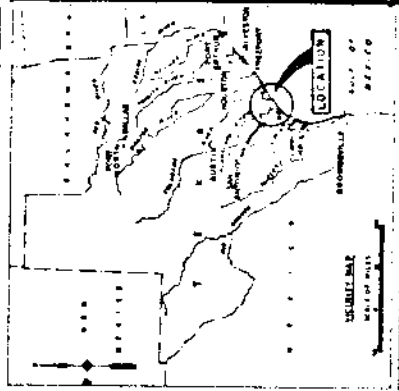
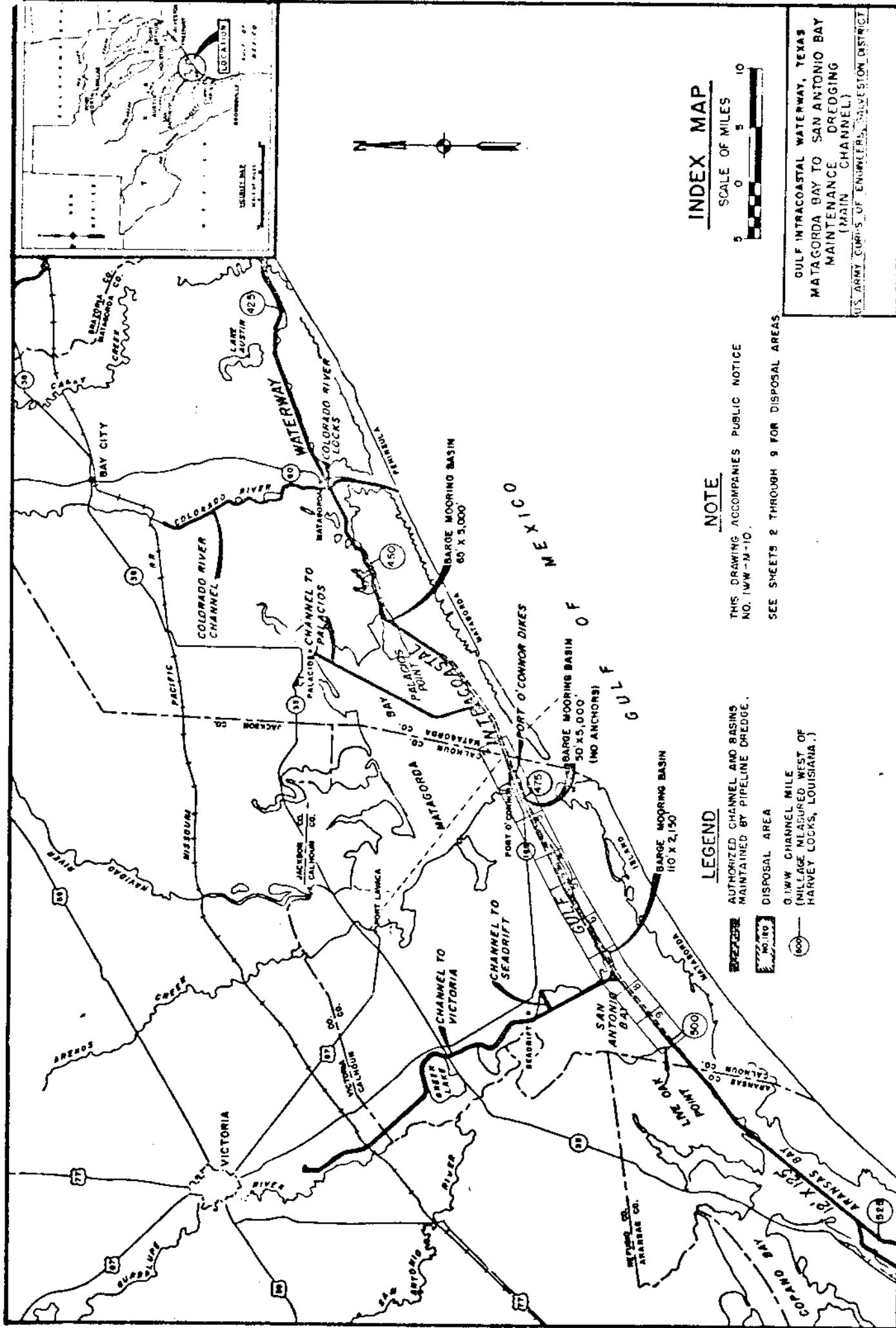
District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-10 dated 27 November 1974.

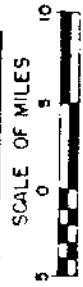


MARTIN W. TEAGUE
Lieutenant Colonel, CE
Deputy District Engineer

1 Incl
Drawing, Nov 1974



INDEX MAP



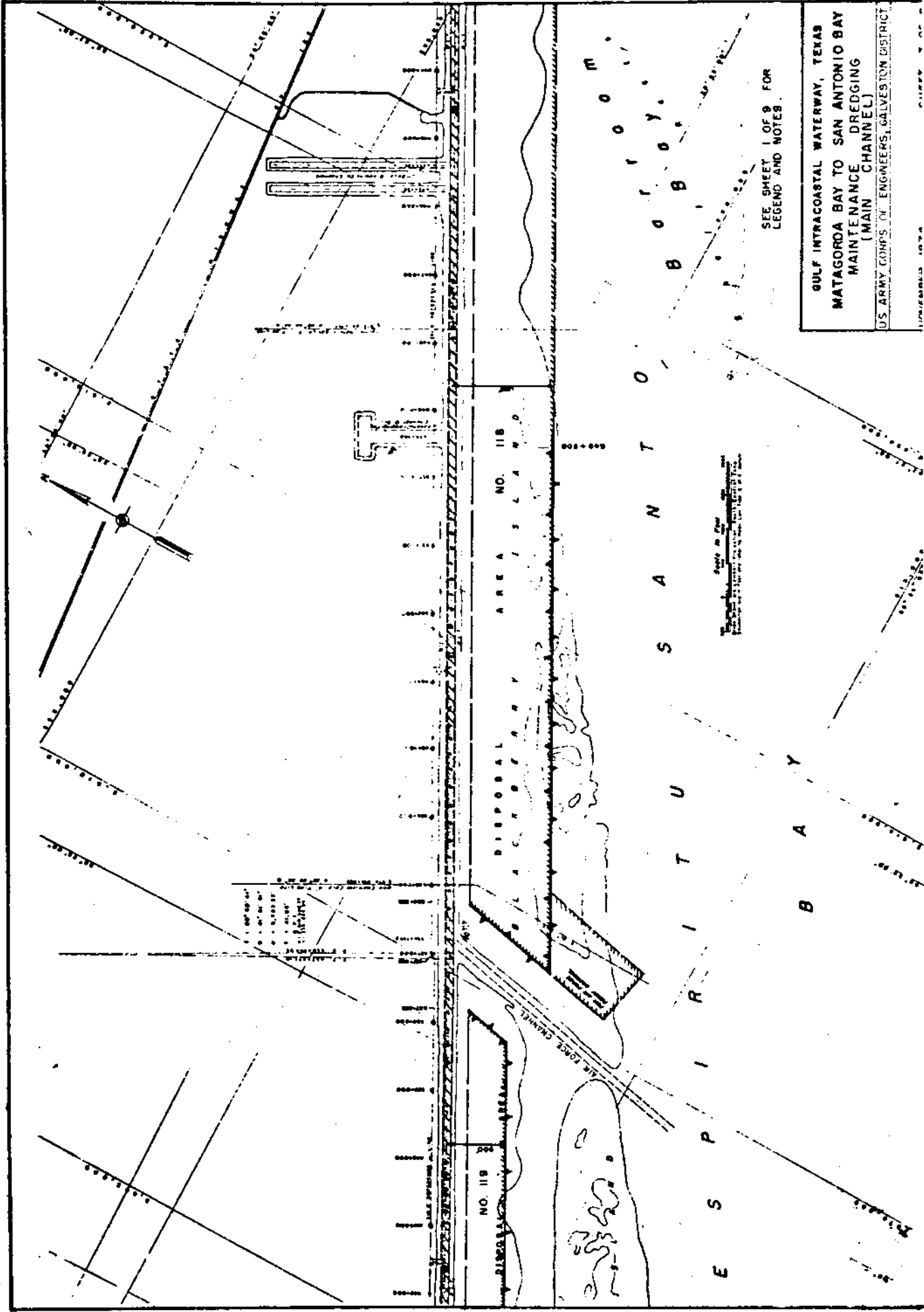
NOTE

THIS DRAWING ACCOMPANIES PUBLIC NOTICE
NO. 14W-M-10.
SEE SHEETS 2 THROUGH 9 FOR DISPOSAL AREAS.

LEGEND

- AUTHORIZED CHANNEL AND BASINS MAINTAINED BY PIPELINE DREDGE.
- DISPOSAL AREA
- G.I.W. CHANNEL MILE (MILEAGE MEASURED WEST OF HARVEY LOCKS, LOUISIANA.)

GULF INTRACOASTAL WATERWAY, TEXAS
MATA GORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)
U.S. ARMY CORPUS OF ENGINEERS, GALVESTON DISTRICT

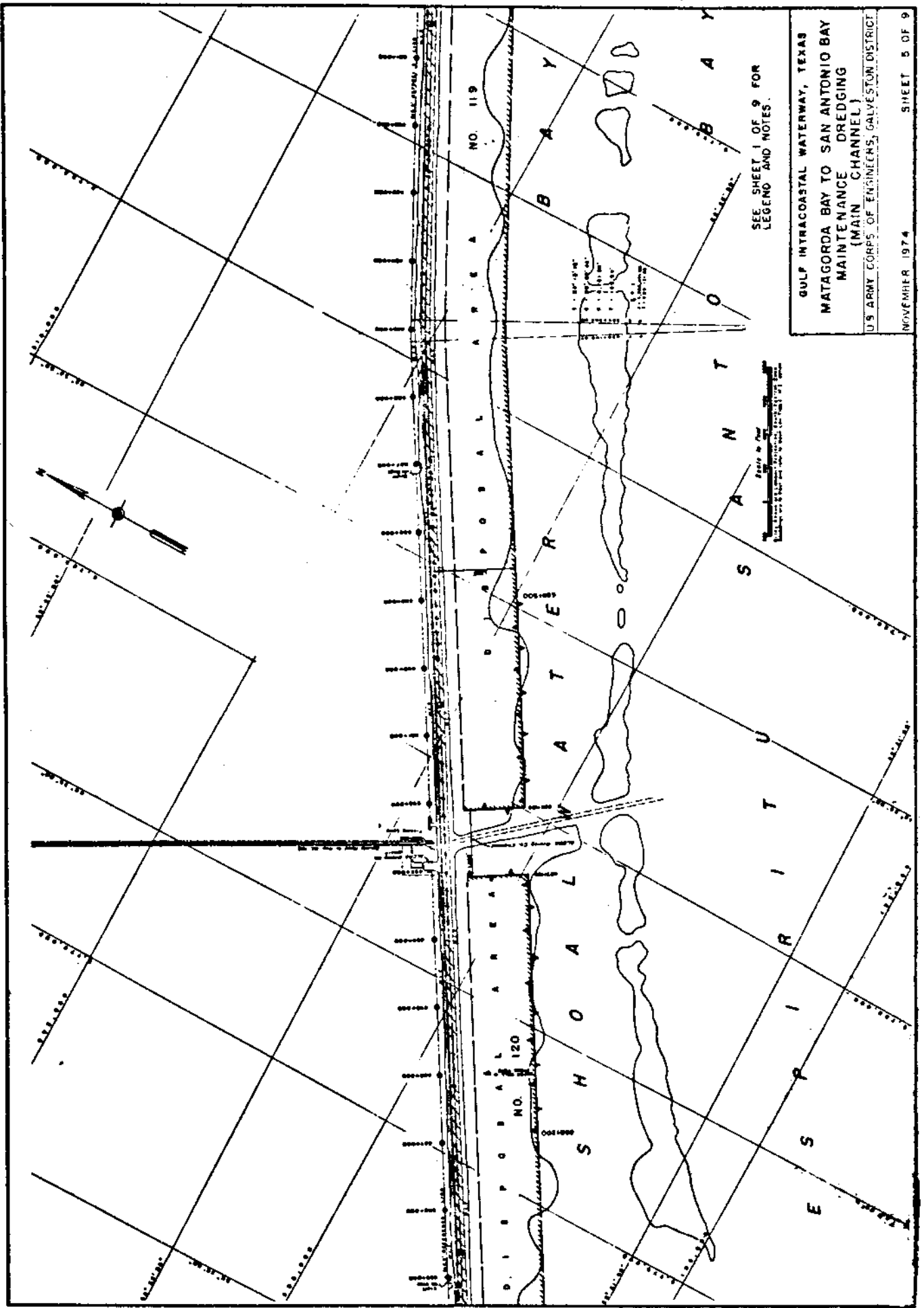


SEE SHEET 1 OF 9 FOR
LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY, TEXAS
MATAGORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)

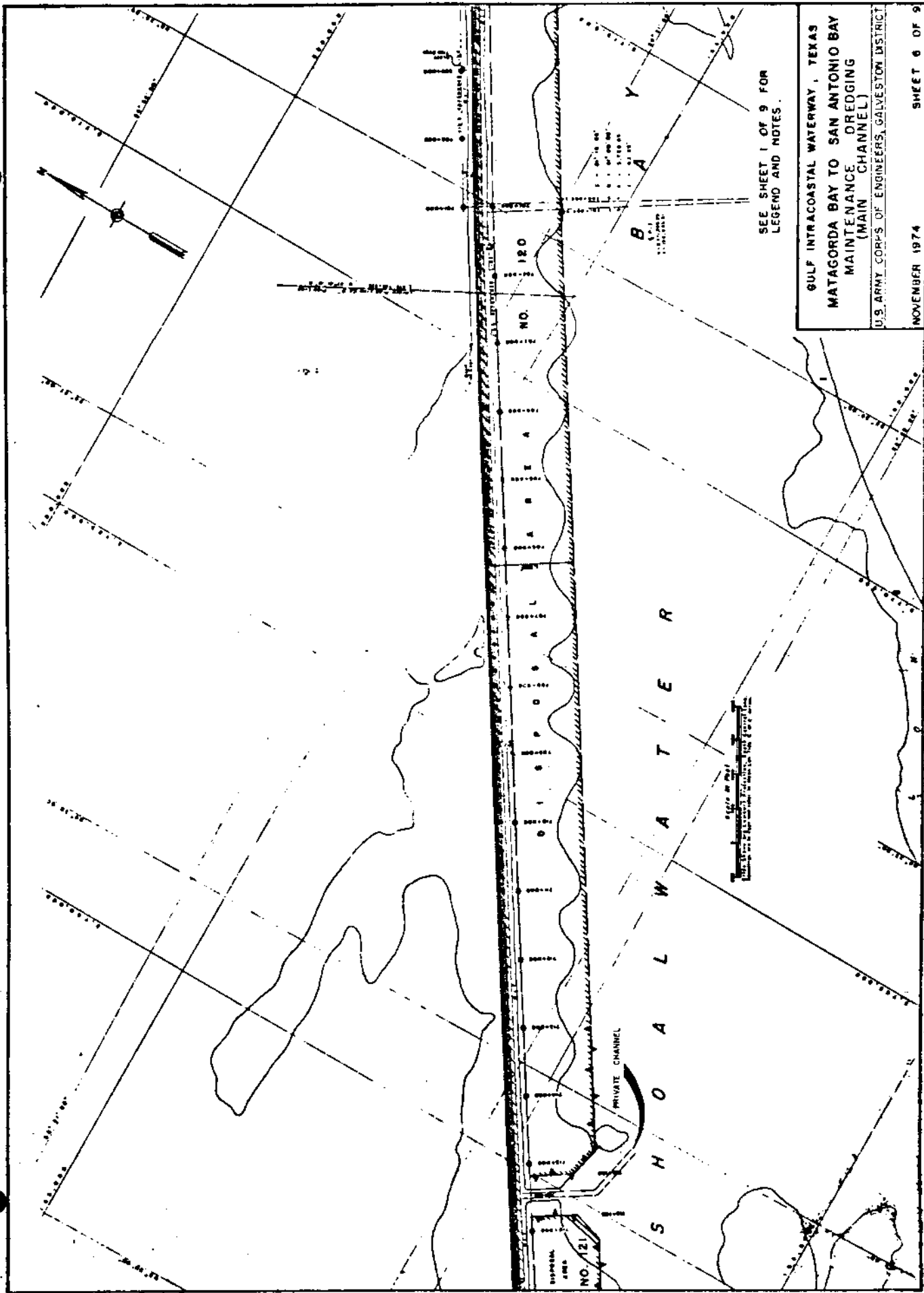
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

10/15/54



SEE SHEET 1 OF 9 FOR
LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY, TEXAS
MATAGORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT



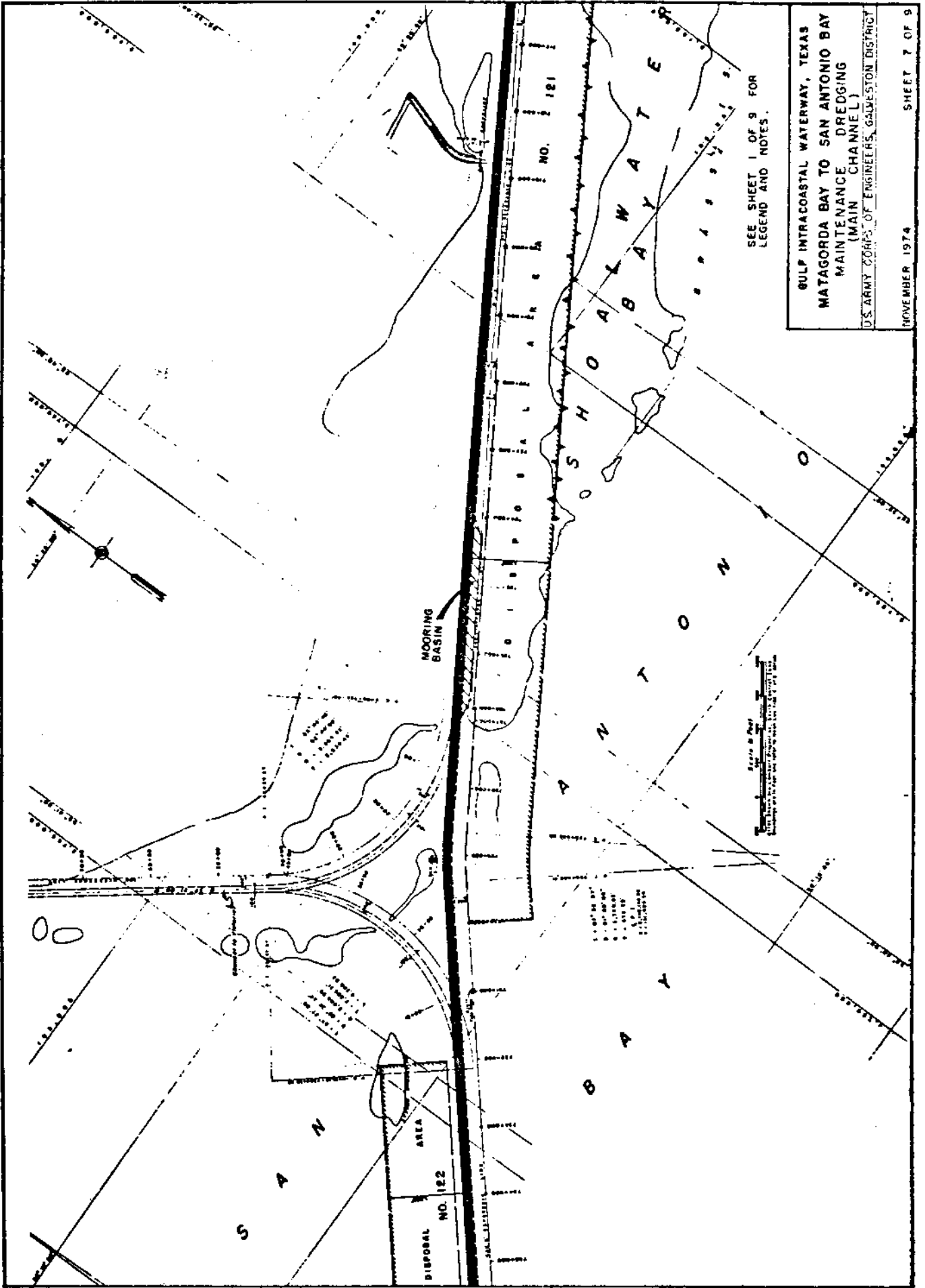
SEE SHEET 1 OF 9 FOR
LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY, TEXAS
MATAGORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)

U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

NOVEMBER 1974

SHEET 6 OF 9



SEE SHEET 1 OF 9 FOR
LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY, TEXAS
MATAGORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

NOVEMBER 1974 SHEET 7 OF 9

MOORING
BASIN

DISPOSAL
AREA
NO. 122

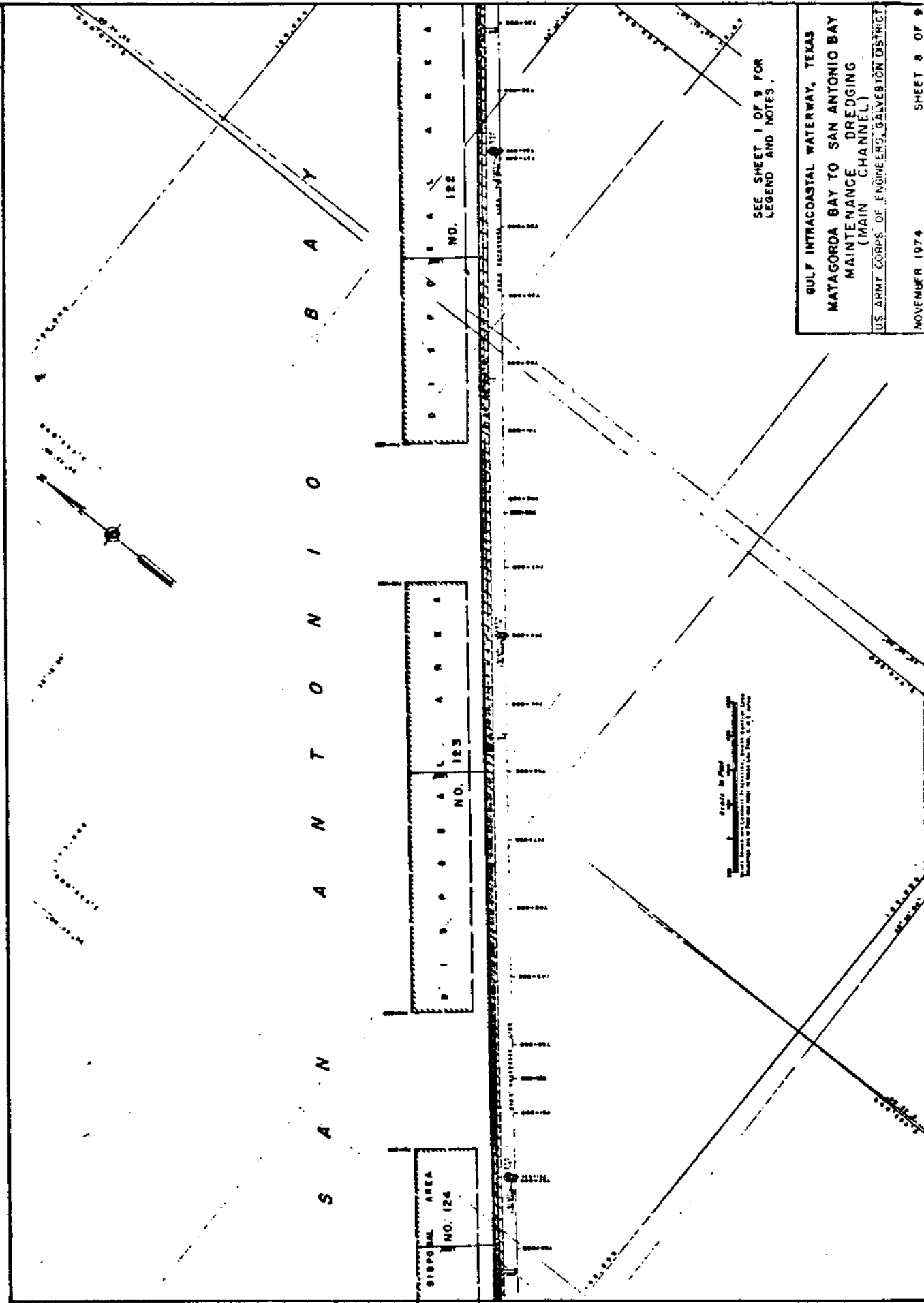
NO. 121

S H O A L W A Y A T E

S A N A N T O N I O B A Y



- 1. 10 FT OR DEEPER
- 2. 5 FT OR DEEPER
- 3. 2 FT OR DEEPER
- 4. 1 FT OR DEEPER
- 5. SHALLOWER

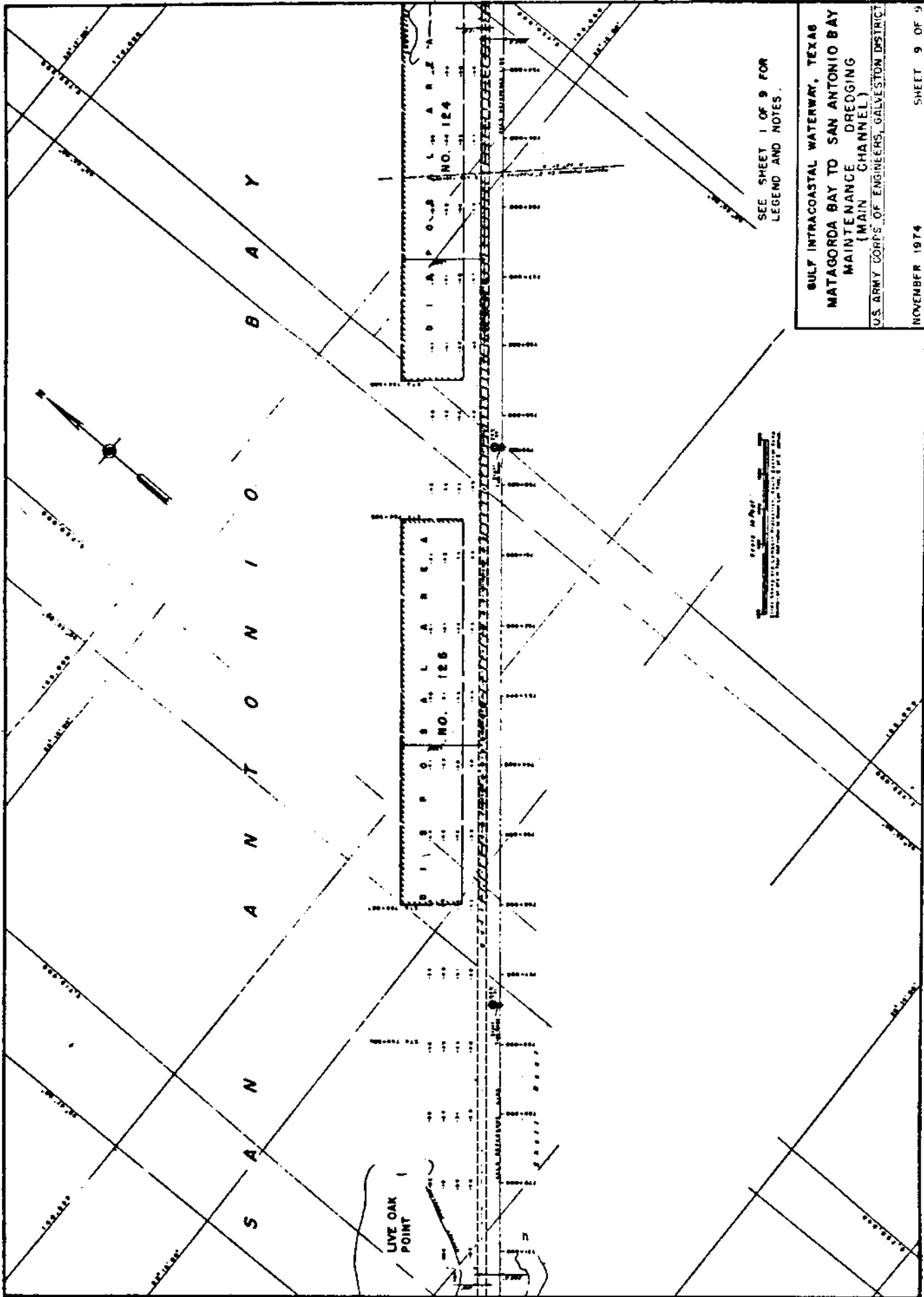


SEE SHEET 1 OF 9 FOR
LEGEND AND NOTES.

GULF INTRACOASTAL WATERWAY, TEXAS
MATAGORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

NOVEMBER 1974

SHEET 8 OF 9



SEE SHEET 1 OF 9 FOR
LEGEND AND NOTES.

BULF INTRACOASTAL WATERWAY, TEXAS
MATAGORDA BAY TO SAN ANTONIO BAY
MAINTENANCE DREDGING
(MAIN CHANNEL)

U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT

NOVEMBER 1974

SHEET 9 OF 9



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

January 6, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-10 dated November 29, 1974, wherein the Corps of Engineers requested comments on proposed plans for spoil disposal associated with maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - Matagorda Bay to San Antonio Bay.

On July 29, 1970, the U.S. Fish and Wildlife Service (FWS) issued a report on the subject referenced above. The Bureau of Commercial Fisheries (now NMFS) concurred in that report. Examination of your present plans for maintenance dredging of the GIWW - Matagorda Bay to San Antonio Bay reveals that, in general, the recommendations suggested in the report were incorporated.

Representatives of the Texas Parks and Wildlife Department, FWS, and NMFS conducted an aerial inspection of the project site on December 12, 1974, and noted that many of the unconfined spoil disposal areas are emergent and generally wider than they were more than four years ago. Also, numerous breaks were observed in the levees of previously confined disposal areas. At several of the levee breaks, large amounts of sediment had escaped and become deposited in the shallows outside the disposal area. This can adversely affect fishery resources in the area because, as noted in the FWS report of July 29, 1970, "Barroom, Espirito Santo, and Shoalwater Bays are shallow in depth, varying from a few inches to about 4 feet in the project area. Shoalwater Bay is especially suited as a nursery habitat for fishes and crustaceans. Dense growths of submerged and emergent vegetation occupy much of these shallow areas. Oyster reefs occur in the western parts of Barroom and Shoalwater Bays."

Likewise, vegetation and oyster beds around the unconfined disposal areas in Matagorda and San Antonio Bays are subject to frequent change as the banks emerge and subsequently erode into the open bays that are subject to considerable wave action.

In view of the above, we offer the following recommendations in addition to those contained in the FWS report:

1. Disposal Areas No. 118, 119, and 120 should be completely confined prior to the next maintenance of this reach. Levees should be constructed along the backsides of the emergent spoil banks at or above the mean high water shoreline.

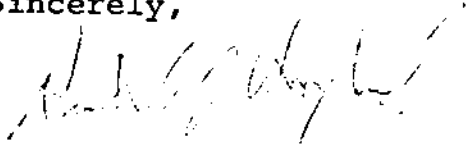
2. Effluent from these confined disposal areas should be directed into the Gulf Intracoastal Waterway through appropriately placed weirs, sluice gates, or other water drainage structures. Also, the structures in Disposal Area No. 117 that presently direct effluent into the channel between Matagorda and Barroom Bays should be relocated, or restructured, to allow effluent to drain directly into the GIWW.

3. All backside and end levees should be sufficiently and frequently maintained to preclude the flow or erosion of dredged materials into Barroom, Espiritu Santo, and Shoalwater Bays and their tributary channels.

4. Within six months prior to commencement of maintenance dredging, the Corps of Engineers should have an investigation conducted to determine the locations and density of submerged grasses, tidal marsh, and oyster beds that may have developed in and adjacent to unconfined disposal areas. From these investigations, the Corps, in consultation with the Federal and State fish and wildlife agencies, should designate locations for pipeline discharge points within the disposal areas that would cause the least damage to the submerged grasses, oyster beds, and tidal marsh.

Thank you for the opportunity to comment on this Federal project. Please send detailed plans for each maintenance dredging operation to the Area Supervisor, NMFS, 4700 Avenue U, Galveston, Texas 77550.

Sincerely,



William H. Stevenson
Regional Director

30 April 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference is made to your letter dated 6 January 1975 concerning Public Notice No. INW-M-10 on maintenance dredging of the Gulf Intracoastal Waterway from Matagorda Bay to San Antonio Bay, Texas.

We have reviewed your recommendations and feel we can comply as follows:

Recommendation No. 1 - Portions of Disposal Areas Nos. 118, 119, and 120 are presently leveed. Dredge material will be deposited over the existing crest within the disposal areas. Toe levees will be constructed along the specified back limits and ends as the areas become emergent above Mean High Water and are large enough to contain the dredged material within a perimeter levee system.

Recommendation No. 2 - When Disposal Areas Nos. 118, 119, and 120 are totally confined, we will place spillways in such a location that discharge will be directed into the GIWW. We will relocate the spillway on Disposal Area No. 117 as you have recommended.

Recommendation No. 3 - All existing levees will be repaired, as necessary, prior to each maintenance dredging job.

Recommendation No. 4 - We have initiated plans to make a survey of the unconfined disposal areas for the presence of submerged grasses, tidal marsh, and oyster beds. Based on the findings of our staff biologists, we will make adjustments to our disposal plans as determined necessary and feasible. However, we cannot concur in your suggestion that discharge points be

SWCCO-M

30 April 1975

Mr. William H. Stevenson

predesignated for each contract. While an effort will be made to avoid environmentally sensitive areas, predesignation of discharge points is not feasible from a contractual standpoint.

Thank you for your review and comments.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
NMFS, Galveston, Texas 77550



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

December 27, 1974

AIRMAIL

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
Post Office Box 1229
Galveston, Texas 77550

Dear Sir:

Reference is made to your Public Notice No. IWW-M-10, dated November 29, 1974, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) from Matagorda Bay to San Antonio Bay, Texas.

The U. S. Fish and Wildlife Service transmitted a letter report on this maintenance dredging project to the Corps of Engineers on July 29, 1970. It is noted that the recommendations offered in that July 1970 report have been incorporated into the project plans as reflected in the public notice.

A recent (December 12, 1974) aerial reconnaissance of the general project area was conducted by representatives of the Texas Parks and Wildlife Department, the National Marine Fisheries Service, and the U. S. Fish and Wildlife Service. Extensive beds of submerged vegetation were found to lie adjacent to or, in some instances, just within the aquatic limits of all of the disposal areas in Barroom, Espiritu Santo, and Shoalwater Bays. Submerged vegetation is extremely valuable as fish and wildlife habitat and greatly enhances the total productivity of an entire estuarine ecosystem. In addition, it was observed that the small channel which provides an important connection between Barroom and Matagorda Bays is progressively being filled in. The flow of previous spoil effluent into the channel from the water release structure of Disposal Area No. 117, located on the northern edge of the channel, appears to be the cause. Further blockage of the channel would cut off a natural circulation pattern between the two bays. Additionally, shoals would be created that would impinge upon the submerged vegetation and, hence, would significantly reduce the productivity of the eastern part of Barroom Bay.



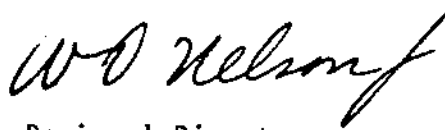
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Save Energy and You Serve America!

As a result of the observations made during the aerial survey it is evident that additional modifications are needed at certain spoil sites to provide better protection to the prime areas of aquatic habitat. Our observations have indicated that the drainage spillway at Disposal Area No. 117 should be relocated to eliminate the flow of spoil effluent into Barroom Bay. Furthermore, we noted a need to confine dredged materials to emergent land along the southern limits of Disposal Areas Nos. 118, 119, 120, and 121. We propose to recommend these modifications in a future report on this project segment. Therefore, we request notification well in advance of the next scheduled maintenance dredging so that we may have adequate time for field examinations and the preparation of another report.

Appreciation is extended for the opportunity to comment on this public notice.

Sincerely yours,



Regional Director

cc:

Executive Director, Texas Parks and Wild. Dept., Austin, Tex.
Regional Director, Nat'l Mar. Fish. Serv., St. Petersburg, Fla.
Area Suprv., NMFS, Envr. Assmt. Div., Galveston, Tex.
Regional Administrator, EPA, Reg. VI, Dallas, Tex.
Field Suprv., FWS, Div. of River Basin Studies, Galveston, Tex.

SWGCO-M

30 April 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference is made to your letter dated 27 December 1974 concerning Public Notice No. IWW-M-10 on maintenance dredging of the Gulf Intracoastal Waterway from Matagorda Bay to San Antonio Bay, Texas.

Concerning Disposal Area No. 117, we will relocate the spillway as you have recommended. Portions of Disposal Area Nos. 118, 119, and 120 and 121 are presently leveed. Dredge material will be deposited over existing crest within these disposal areas. Toe levees will be constructed along the specified back limits and ends as the areas become emergent above Mean High Water and are large enough to obtain the dredged material within a perimeter levee system. As requested, we will continue to furnish your local office plans and specifications for review during the advertising period for each contract.

Thank you for your review and comments.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Copy furnished:
Field Supervisor
USFWS, Corpus Christi, Texas 78411

SOUTHWESTERN REGIONAL OFFICE
John L. Franson, Representative
Louisiana
New Mexico
Texas
(Mexico)



NATIONAL AUDUBON SOCIETY

2507 ROGGE LANE, AUSTIN, TEXAS 78723 — PHONE (512) 928-2047

June 30, 1975

Colonel Don S. McCoy
District Engineer
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

RE: PUBLIC NOTICE NO. IWW-M-10 - MAINTENANCE DREDGING OF GULF
INTRACOASTAL WATERWAY (MAIN CHANNEL) - MATAGORDA BAY
TO SAN ANTONIO BAY

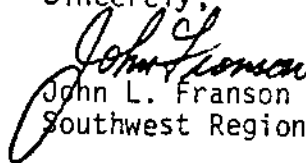
Dear Colonel Mc Coy:

In regard to the proposed plans for spoil disposal associated with maintenance dredging of the above mentioned area, we have reviewed correspondence from your office and that of the National Marine Fisheries Service and we have inquired from various members familiar with the area.

Our reservations in regard to the project are adequately expressed in the correspondence that your office has received from the National Marine Fisheries Service, dated January 6, 1975.

Please register our support of this letter which reflects our reservations in any future documentations.

Sincerely,



John L. Franson
Southwest Regional Representative

cc: Council on Environmental Quality
Environmental Protection Agency, Regional Office
U.S. Department of the Interior
National Marine Fisheries Service, NOAA
U.S. Fish and Wildlife Service, Albuquerque
Texas Parks and Wildlife Department
Texas General Land Office
National Audubon Society - Messrs. Callison, Blankinship, Paul
Houston Audubon Society

SWGCO-M

18 August 1975

Mr. John L. Franson
Southwest Regional Representative
National Audubon Society
2507 Rogge Lane
Austin, Texas 78723

Dear Mr. Franson:

This is in reply to your letter dated 30 June 1975 concerning Public Notice No. IWW-M-10 on maintenance dredging of the Gulf Intracoastal Waterway from Matagorda Bay to San Antonio Bay, Texas.

We have completed our review of the 6 January 1975 National Marine Fisheries Service letter referenced in your letter. On 30 April 1975, the Corps issued its response to the National Marine Fisheries Service, stating our intentions to comply with their recommendations where possible, based on what is considered in the best overall public interest.

Your letter has been placed in our permanent records file for the GIWW-Matagorda Bay to San Antonio Bay public notice, and it will be given full consideration in any future documentations.

Thank you for your review and comments.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

SUPPLEMENT NO. 13

SAN ANTONIO BAY TO CORPUS CHRISTI BAY

SUPPLEMENT NO. 13

SAN ANTONIO BAY TO CORPUS CHRISTI BAY

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SUPPLEMENT NO. 13

SAN ANTONIO BAY TO CORPUS CHRISTI BAY

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Gulf Intracoastal Waterway (GIWW) main channel section between San Antonio Bay and Corpus Christi Bay. This portion of the federally maintained 12-foot deep by 125-foot wide Gulf Intracoastal Waterway extends from San Antonio Bay, in the vicinity of Live Oak Point, southwesterly through Aransas Bay to Corpus Christi Bay. Exiting San Antonio Bay, the channel passes through Bludworth Island on the north shore of Mesquite Bay and enters Aransas Bay. It then crosses Aransas Bay and turns toward the mainland, passing near the Channel to Rockport and branches to the modified GIWW route and the Lydia Ann Channel. The modified route follows a land cut along the northwest shore of Redfish Bay to near the City of Aransas Pass, Texas, intersecting the Channel to Aransas Pass. Leaving the Channel to Aransas Pass, the GIWW continues to follow the northwest shore of Redfish Bay passing the Ransom Island Channel and intersecting the deep water Corpus Christi Ship Channel at Port Ingleside. The GIWW follows the Corpus Christi Ship Channel inland and turns into Corpus Christi Bay following the Channel to Encinal Peninsula. It then heads southwestward, crossing Corpus Christi Bay which has natural depths of 12 to 13 feet and is, therefore, not normally maintained. The channel exits the bay between Mustang Island and the mainland at Encinal Peninsula.

1.01 The Lydia Ann Channel is also maintained along this reach of the GIWW. This original route of the GIWW branches with the modified route near the Channel to Rockport and extends across Aransas Bay to Harbor Island and a junction with the Corpus Christi Ship Channel near Port Aransas, Texas. Additionally, there is a barge mooring basin 100 feet wide and 2,500 feet long which is maintained on the south side of the Corpus Christi Ship Channel across from Port Ingleside. All depths are measured below Mean Low Tide (Corps of Engineers datum). Contract pipeline dredges are used to maintain the channel.

The dredging frequency for selected reaches of this channel varies from 24 - 60 months. The quantity of material removed per contract is about 1.6 million cubic yards. Portions of the project were last maintained during the period of May-August 1974. The portion of the GIWW from San Antonio Bay to Corpus Christi Bay utilizes 37 disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 126 through 163 on Figures 2 through 14 in the attached public notice.

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. The recorded tonnage handled by ports and moved on the GIWW between Galveston Bay and Corpus Christi Bay in 1974 was 20.7 million tons and included such commodities as crude petroleum, gasoline, other petroleum products, chemicals, marine shells, minerals, and iron and steel products. The GIWW has grown consistently and has contributed substantially to the regional and national economy. A recent study by Texas A&M University has placed the value of the channel to the State of Texas at a total of more than \$19 billion per year.

3. ENVIRONMENTAL SETTING.

3.01 Fish and wildlife habitat which would be affected by the project includes portions of San Antonio Bay, Ayres Bay, Mesquite Bay, Carlos Bay, Aransas Bay, Redfish Bay, and Corpus Christi Bay, as well as the tidal flats, disposal islands, and tidal marshes which border or subdivide these bays.

3.02 The bay waters are relatively clear and support large beds of shoalgrass, turtlegrass, and associated flora. They provide brackish-water habitat for spotted seatrout, red drum, black drum, sheepshead, flounder,

croaker, bay anchovy, menhaden, shrimp, and blue crab. Numerous oyster reefs occur adjacent to the main channel of the waterway, primarily in Aransas Bay. Most of these reefs are productive in years of abundant rainfall. Sport and commercial fishing is intensive in the project area.

3.03 The tidal flats are sparsely vegetated with patches of glasswort, saltgrass, and saltflat grass. Disposal islands also may be vegetated, but many have a barren surface of sand and shell. There are a few tidal marshes fringing the barrier islands and the shores of the bays. Needlerush and cordgrass are common here. The flats and marshes and the shallower portions of the bays are important as breeding and nursery habitat for fishes and crustaceans.

3.04 Many species of shore and wading birds inhabit the project area. Herons, egrets, pelicans, ibises, cranes, and the roseate spoonbill use the area for resting, feeding, and nesting. Endangered species known to range in the project area include Florida manatee, right whale, sperm whale, blue whale, finback whale, Attwater's prairie chicken, southern bald eagle, brown pelican, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, whooping crane, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle. The world's only population of wild whooping cranes winter on the Aransas National Wildlife Refuge and adjacent islands.

3.05 Waterfowl are seasonally abundant. Important species include the redhead, pintail, widgeon, scaup, teals, shoveler, baldpate, canvasback, and Canada, snow, and blue geese. Large numbers of redheads and pintails feed on the submerged grass beds. The mottled duck, a resident species, is known to nest on densely vegetated islands in the bays adjoining and south of the Aransas National Wildlife Refuge. The numerous duck blinds which dot the bays and flats are evidence of the intensive hunting which the area receives.

3.06 A section of the main channel between Stations 772+000 and 830+000 cuts through the southern margin

of the Aransas National Wildlife Refuge creating several narrow islands south of the channel. The world's only population of wild whooping cranes winters on the refuge and on the islands. These birds are of great economic importance to this coastal area by virtue of the tourism which they engender. Their aesthetic value is considered priceless by many people.

3.07 Dredging operations will be carried out near two bird sanctuaries administered by the National Audubon Society. One is located on the Second Chain of Islands in Ayres Bay below Station 791+000 of the main channel; the other is located on Harbor Island southwest of the Lydia Ann Channel at about Station 937+000.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the GIWW will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants that may be found in some sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottoms. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach include both open water and land disposal.

4.05 Open Water Disposal. Open water disposal of dredged materials is often considered to be more environmentally detrimental than land disposal because of the effects of highly visible localized turbidity, burial of bottom dwelling organisms, compartmentalization of bay areas, resuspension of pollutants, and burial of submerged aquatic vegetation. Open water disposal is not entirely detrimental. A number of beneficial aspects are known, including formation of bird nesting areas where islands develop, creation of suitable substrate for oysters, resuspension of nutrients, and provision of public recreational areas.

4.06 Turbidities. Turbidities associated with open water disposal have some damaging effects on productivity of the bay ecosystem. High turbidities reduce photosynthetic activity and could cause suffocation of small fish and other marine animals by coating gill tissues with sediment particles. Reduction of photosynthetic activity results in a corresponding reduction at the base of the aquatic food chain. This loss will be projected up the food chain, resulting in fewer organisms available for man's use. That loss which does occur may be in part compensated for by increases in productivity following resuspension of nutrients and aeration of sediments and organic matter.

4.07 Bottom animal populations are reduced when their habitats are covered with a heavy silt layer. Some of the more mobile organisms are able to work upward through the silt while the sessile organisms perish.

4.08 Oyster reefs can be severely affected by siltation, depending on their height above the surrounding level bottom. Low profile reefs in the path of a silt flow can be covered, resulting in loss of any existing oysters. In some cases, the silt is not removed by wave action and the reef becomes permanently buried. Higher reefs generally will not be covered by silt.

4.09 Swimming animals are the least severely affected by siltation from dredging. Because of their motility, they are able to leave an affected area.

4.10 Disposal of dredged materials in open water will cover any submerged aquatic vegetation that exists in the disposal area. In nearly all cases, areas that will be used for deposition of sediments have previously been used for this purpose. Therefore, that vegetation which will be covered has developed on sediments deposited during previous dredging. It can be assumed that past development will be repeated and that the areas of freshly deposited sediment will be covered with new growth of vegetation.

4.11 Another important possibility for dredging related adverse environmental effects is that of compartmentalization of bay areas. This can result from long continuous disposal areas blocking or changing the normal current patterns in bay areas. Past dredging in this reach is not known to have caused any significant adverse effects of this type.

4.12 Open water disposal of polluted sediments is of much greater concern and presents more problems than land disposal. The main concern results from the possibility that pollutants resuspended by dredging may enter the marine food chain, causing high concentrations of toxic materials in sport and commercial species. Other possible effects include fish kills, lowered phytoplankton productivity, and exclusion of desirable species of benthic organisms from the disposal areas. There is also the possibility of adverse effects on marine life such as impairment of reproductive capacity and increased susceptibility to disease, parasites, and predation.

4.13 Fish kills along this reach as a result of resuspended pollutants are considered possible but unlikely. Past dredging is not known to have caused any fish kills; and since sediments dredged in the past were in all probability at least as polluted as those that will be dredged in the future, fish kills are not anticipated.

4.14 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.15 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.16 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.17 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. This time period is highly variable, running from two to ten years for most areas. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. Changes in vegetation type will be minimal, as most areas to be used for disposal have been used previously, and the changes have already occurred.

4.18 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands as primary food source areas, dredging practices have been changed to avoid disposal in marsh areas wherever practicable.

4.19 Out of 51,700 acres of marsh adjacent to this reach of the GIWW, approximately 375 acres or 0.7 percent may be affected by future disposal operations. The 51,700 acres of marsh adjacent to the GIWW do not include marsh areas surrounding the major bays and river inlets. The estimate was prepared by Corps of Engineers personnel from the most recent coast charts available. It has not been practicable to make surveys of each area to determine the exact extent of marsh land within the disposal area limits. The estimates are, therefore, based primarily on vegetation cover shown on the coast charts. It is considered that much of the acreage included as marsh to be covered has been covered by past dredging and is no longer marsh. It is believed that reduction of marsh areas caused by dredging of this reach will be minimal.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice describing the proposed action and soliciting comments

was issued 21 January 1975 as required by Federal dredging regulations (33 CFR 209.145). Six responses to public notice No. IWW-M-13 for this reach of the channel have been received. One favorable response was received from the city of Corpus Christi, Texas; and Mr. Raulie L. Irwin, Jr. offered dry land-disposal areas to replace open water disposal areas No. 147, 148, 149, and 150. Further investigation of these alternate disposal sites is being made, and, if found to be acceptable, they will be used. The Rockport Conservation Association, Inc. strongly opposed the project and requested that all dredged material be deposited in a manner that will not jeopardize the nursery, rearing grounds, and harvest areas essential to sport and commercial fisheries of the area. The association also urged full cooperation with State and Federal fish and wildlife agencies. A copy of the draft Environmental Statement was sent to the Rockport Conservation Association in an effort to show the coordination efforts underway with the various conservation agencies and the measures being taken to reduce adverse environmental effects that could result from the project. J. Rochelle, Student, SMU Environmental Law Clinic, requested that specific evaluations of the adverse effects of the project on the environment be made and suggested that a public notice concerning the relative environmental effects of this project be issued. J. Rochelle was advised to refer to 33 CFR 209.145 for the policies, practices, and procedures followed by the Corps of Engineers in Federal projects which involve the disposal of dredged material and to refer to the Environmental Statement for information on environmental effects of this project. The USF&WS and NMFS reiterated the comments made in a final coordination report dated 11 October 1974. Additionally, the NMFS requested field investigation to determine the existence of submerged and intertidal vegetation and oysters in unconfined disposal areas and that necessary adjustments in disposal plans be made to protect these areas. The USF&WS also suggested the discontinuation of the Redfish Bay cutoff and use of the Lydia Ann Channel to Port Aransas as an alternate route to prevent the "potentially severe ecological damage to Redfish Bay" that could result from continued disposal operations as proposed. The Corps of Engineers is

directed to maintain the authorized channel. However, since the State of Texas has assumed local sponsor responsibilities for the CIKW, it is now possible to obtain new disposal areas on environmentally acceptable high ground areas. The final coordination report also recommended that certain disposal areas be deleted or reduced to sizes not feasible for use. The areas recommended for deletion include disposal areas Nos. 128, 147, 152, 156, 158-159, and 162, and those recommended for reduction to sizes not feasible for use include disposal areas 129, 153, 154, and 157. The local sponsor will be requested to furnish new areas to replace these areas. As requested, surveys to determine the existance of submerged and intertidal vegetation and oysters in unconfined disposal areas will be made. Adjustments in disposal plans, as determined by these surveys will be made. Additionally, several of the disposal areas in this reach are located within the Arkansas National wildlife Refuge. The disposal sites in this refuge are coordinated each time dredging is required in order to prevent damages to or enhance the environment for the rare and endangered whooping cranes. Disposal sites are subject to change on short notice in order to protect the crane's habitat. Such changes are made to protect the natural environment to the maximum practicable extent and are fully coordinated with the U.S. Fish and Wildlife Service.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. A request for approval, by EPA, of dredging and dredged material disposal plans under 33 CFR 209.145 will be made in the near future.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

57300-M

PUBLIC NOTICE NO. IWW-M-13

21 January 1975

MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY (MAIN CHANNEL) - SAN ANTONIO BAY
TO CORPUS CHRISTI BAY

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 21 February 1975.

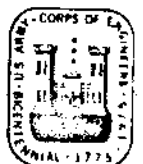
Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway (Main Channel) - San Antonio Bay to Corpus Christi Bay.

PROJECT LOCATION: Near the Aransas National Wildlife Refuge, and the Cities of Rockport, Aransas Pass, and Corpus Christi, in Calhoun, Aransas, and Nueces Counties, Texas, respectively.

PROJECT DESCRIPTION: This portion of the Federally maintained 12-foot deep by 125-foot wide Gulf Intracoastal Waterway (GIWW) extends from San Antonio Bay, in the vicinity of Live Oak Point, southwesterly through Aransas Bay to Corpus Christi Bay. Exiting San Antonio Bay the channel passes through Bludworth Island on the north shore of Mesquite Bay and enters Aransas Bay. It then crosses Aransas Bay and turns toward the mainland, passing near



the Channel to Rockport and branches to the modified GIWW route and the Lydia Ann Channel. The modified route follows a land cut along the northwest shore of Redfish Bay to near the city of Aransas Pass, Texas, intersecting the Channel to Aransas Pass. Leaving the Channel to Aransas Pass, the GIWW continues to follow the northwest shore of Redfish Bay passing the Ransom Island Channel and intersecting the deep water Corpus Christi Ship Channel at Port Ingleside. The GIWW follows the Corpus Christi Ship Channel inland and turns into Corpus Christi Bay following the Encinal Channel. It then heads southwestward, crossing Corpus Christi Bay which has natural depths of 12 to 13 feet and is therefore not normally maintained. The channel exits the bay between Mustang Island and the mainland at Encinal Peninsula.

The Lydia Ann Channel is also maintained along this reach of the GIWW. This original route of the GIWW branches with the modified route near the Channel to Rockport and extends across Aransas Bay to Harbor Island and a junction with the Corpus Christi Ship Channel near Port Aransas, Texas. Additionally, there is a barge mooring basin 100 feet wide and 2,500 feet long which is maintained on the south side of the Corpus Christi Ship Channel across from Port Ingleside. All depths are measured below Mean Low Tide (Corps of Engineers datum).

DISPOSAL AREAS: The portion of the GIWW from San Antonio Bay to Corpus Christi Bay utilizes 37 disposal areas for contract pipeline disposal operations. Disposal areas for the entire Texas section of the GIWW main channel are numbered sequentially from Port Arthur to Port Isabel. The disposal areas in this reach are numbered 126 through 163 (see attached drawings).

Disposal Area No. 126 is an unleveed area located north of the channel and east of Mustang Lake.

Disposal Area No. 127 is a confined area located south of the channel opposite Mustang Lake.

Disposal Area No. 128 is an unleveed area located south of the channel and west of the Humble Oil and Rig Company Channel.

Disposal Area No. 129 is divided with approximately one-half being confined and one-half unconfined. The area is located in the vicinity of Ayres Bay.

Disposal Areas Nos. 130 and 131 are confined areas located southeast of the waterway in the vicinity of Mesquite and Carlos Bays.

Disposal Areas Nos. 132 - 144 are all open water areas located north and east of the channel in Aransas Bay.

Disposal Area No. 145 is an unleveed area located east of the Lydia Ann Channel near its junction with the Corpus Christi Ship Channel. Since the GIWW was rerouted in 1960 to pass along upper Redfish Bay, only one small section of

the Lydia Ann Channel has been maintained. Based on this past history, use of the area for maintenance of the Lydia Ann Channel is expected to be minimal.

Disposal Area No. 146 is an unleveed area located south of the channel in the vicinity of the Cove.

Disposal Areas Nos. 147 - 154 are open water and unleveed areas located in Redfish Bay.

Disposal Area No. 155 is a leveed area located south of the waterway in the vicinity of the Channel to Aransas Pass.

Disposal Areas Nos. 156 - 159 are open water areas and Disposal Areas Nos. 160 - 162 are unleveed areas located adjacent to the channel along Redfish Bay.

Disposal Area No. 163 is a partially leveed area located adjacent to the channel near its junction with the Corpus Christi Ship Channel.

COMPOSITION AND QUANTITY OF MATERIALS: Materials to be excavated consist of fine grained sand, silts, and clays. Shoaling in the channel is a result of tidal action and wind driven waves and currents in the bays associated with this reach of the waterway. The shoaling rate for this section of the waterway is approximately 500,000 cubic yards annually.

METHOD OF DREDGING: Contract pipeline dredges are used to maintain the channel. The dredging frequency for selected reaches of this channel varies from 24 - 60 months. The quantity of material removed per contract is about 1.6 million cubic yards. Portions of the project were last maintained during the period of May - August 1974.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 126 is bound on the southeast by the channel and on all other sides by waters of San Antonio Bay.

Disposal Areas Nos. 127 and 128 are bound by the channel on the north and on all other sides by waters of San Antonio Bay.

Disposal Area No. 129 is bound by the channel on the north and on all other sides by waters of Ayres Bay.

Disposal Areas Nos. 130 and 131 are bound by the channel on the northwest and on all other sides by waters of Mesquite, Carlos, and Aransas Bays.

Disposal Areas Nos. 132 - 144 are all located adjacent to the main channel or the Lydia Ann Channel and bound by these channels on one side. The areas are bound by waters of Aransas Bay on all other sides. These waters are used primarily for sport and commercial fishing.

Disposal Area No. 145 is located on the southeast corner of St. Joseph Island. The area is bound on the east by the Gulf of Mexico, and in the other directions by undeveloped lands covered with sand dunes and grasses.

Disposal Area No. 146 is bound by the channel on the north and west and by lowlands on the south and east.

Disposal Areas Nos. 147 - 154 are all located southeast of the channel and bound by it on the northwest. The areas are surrounded by waters of Redfish Bay on all other sides. These waters are used primarily for sport and commercial fishing.

Disposal Area No. 155 is bound by the GIW on the west, waters of Redfish Bay on the north and east, and the Channel to Aransas Pass on the south.

Disposal Areas Nos. 156 - 159 are open water areas containing some emergent land. The surrounding waters are used for sport and commercial fishing.

Disposal Area No. 160 is an unleveed area located west of the waterway. The area is bound by the channel on the east, wetlands to the south and west, and by a private slip on the north.

Disposal Area No. 161 is an unleveed area located west of the waterway. The area is bound by the channel on the east, and lowlands and previous disposal mounds on all other sides.

Disposal Area No. 162 is an unleveed area located east of the waterway. The area is bound by the channel on the west, and by waters of Redfish Bay on the remaining sides. These waters are used not only for sport and commercial fishing, but also for access to local oil wells.

Disposal Area No. 163 is a partially leveed area located west of the waterway. The area is bound by the channel on the east, low sandy land on the south and west, and an unnamed road on the north.

DREDGING BY OTHERS: The Canoe Lake Corporation, City of Aransas Pass, Aransas County Navigation District, and several oil companies are the principal organizations which have performed dredging operations in the vicinity of the Federal project in recent years. The estimated quantity of materials dredged annually by non-Federal agencies is approximately 170,000 cubic yards. Non-Federal dredging activities are regulated by the Department of the Army Permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency. However, the use of these sites has been previously coordinated with EPA.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency

U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Commissioner's Court of Calhoun County
Commissioner's Court of Aransas County
Commissioner's Court of Nueces County

ENVIRONMENTAL STATEMENT: Continued maintenance dredging of Gulf Intracoastal Waterway will significantly benefit the economic and social well-being of the public. The adverse and beneficial effects of dredging and disposal of dredged material on navigation, fish and wildlife, water quality, aesthetics, ecology, land use, etc., will be evaluated in accordance with the National Environmental Policy Act of 1969 (P.L. 91-190). A Draft Environmental Statement for the entire main channel and tributaries of the GIWW (Texas section) has been prepared and was filed with the Council on Environmental Quality on 30 October 1974. This reach of the GIWW from San Antonio Bay to Corpus Christi Bay, including the Lydia Ann Channel, is covered in the GIWW Environmental Statement. The final statement is scheduled to be placed on file with Council on Environmental Quality about mid-1975 after having been coordinated with the above mentioned agencies. The draft statement is currently being reviewed by these agencies and the public, and single copies are available upon request to the District Engineer, ATTN: SWGED-E.

No dredging is presently scheduled for this reach of the GIWW, and a Final Environmental Statement should be on file before the next dredging occurs. However, should an abnormal shoaling rate cause an emergency situation, the importance of the Gulf Intracoastal Waterway to coastal navigation will not permit postponement of maintenance of the channel until after an Environmental Statement is filed with Council on Environmental Quality without serious impairment to the navigability of this project.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan will also be considered.

SWGCO-M

PUBLIC NOTICE NO. IWW-M-13

21 January 1975

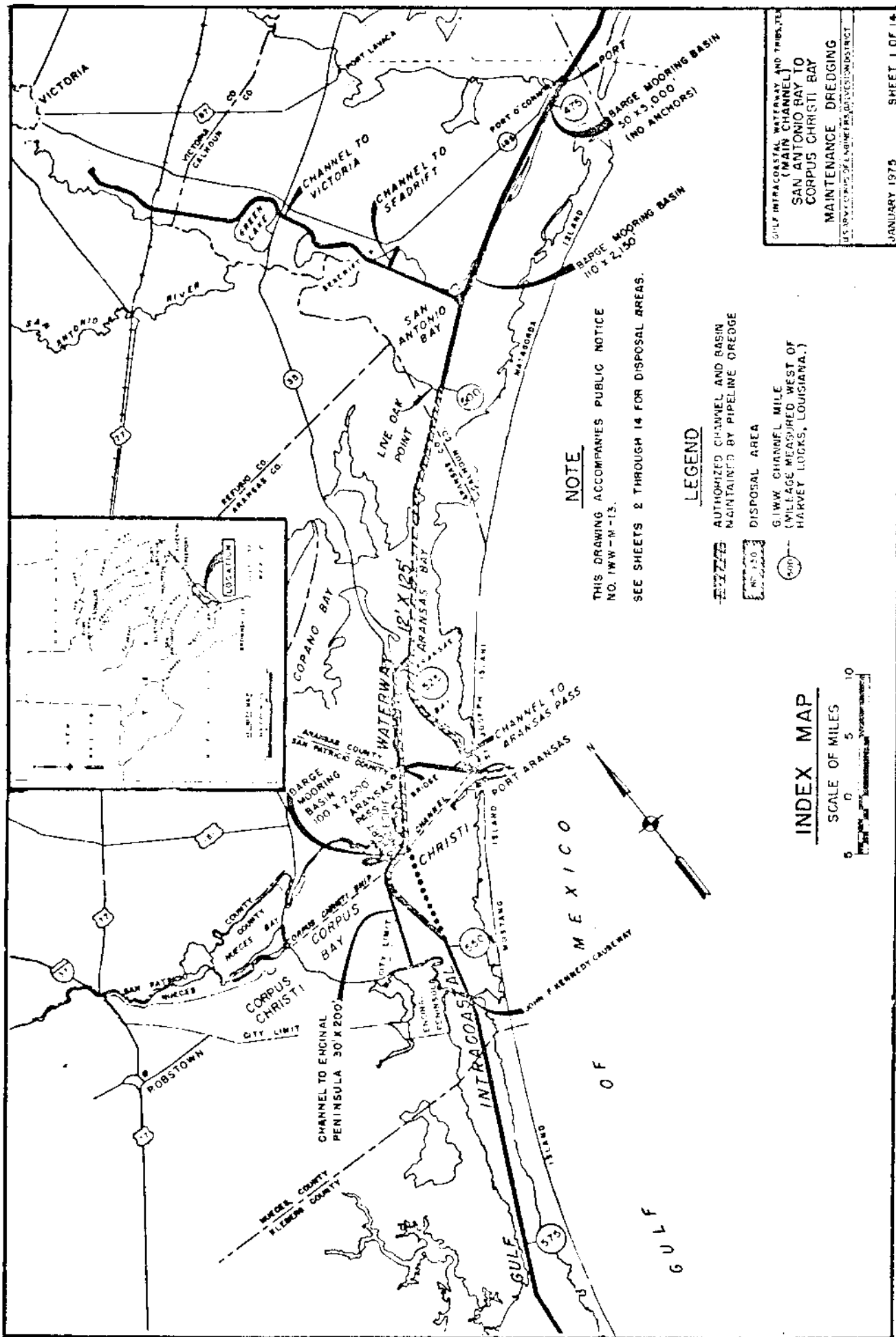
COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of continued maintenance dredging are requested to mail their comments to:

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-13 dated 21 January 1975.

1 Incl
Drawing, Jan 75

Don S. McCoy
DON S. McCOY
Colonel, CE
District Engineer



GULF INTRACOASTAL WATERWAY AND TRIBUTARIES
 (MAIN CHANNEL AND TRIBUTARIES)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. NAVY DISTRICT ENGINEERS DISTRICT

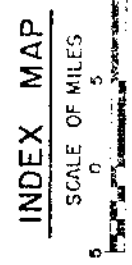
JANUARY 1975 SHEET 1 OF 14

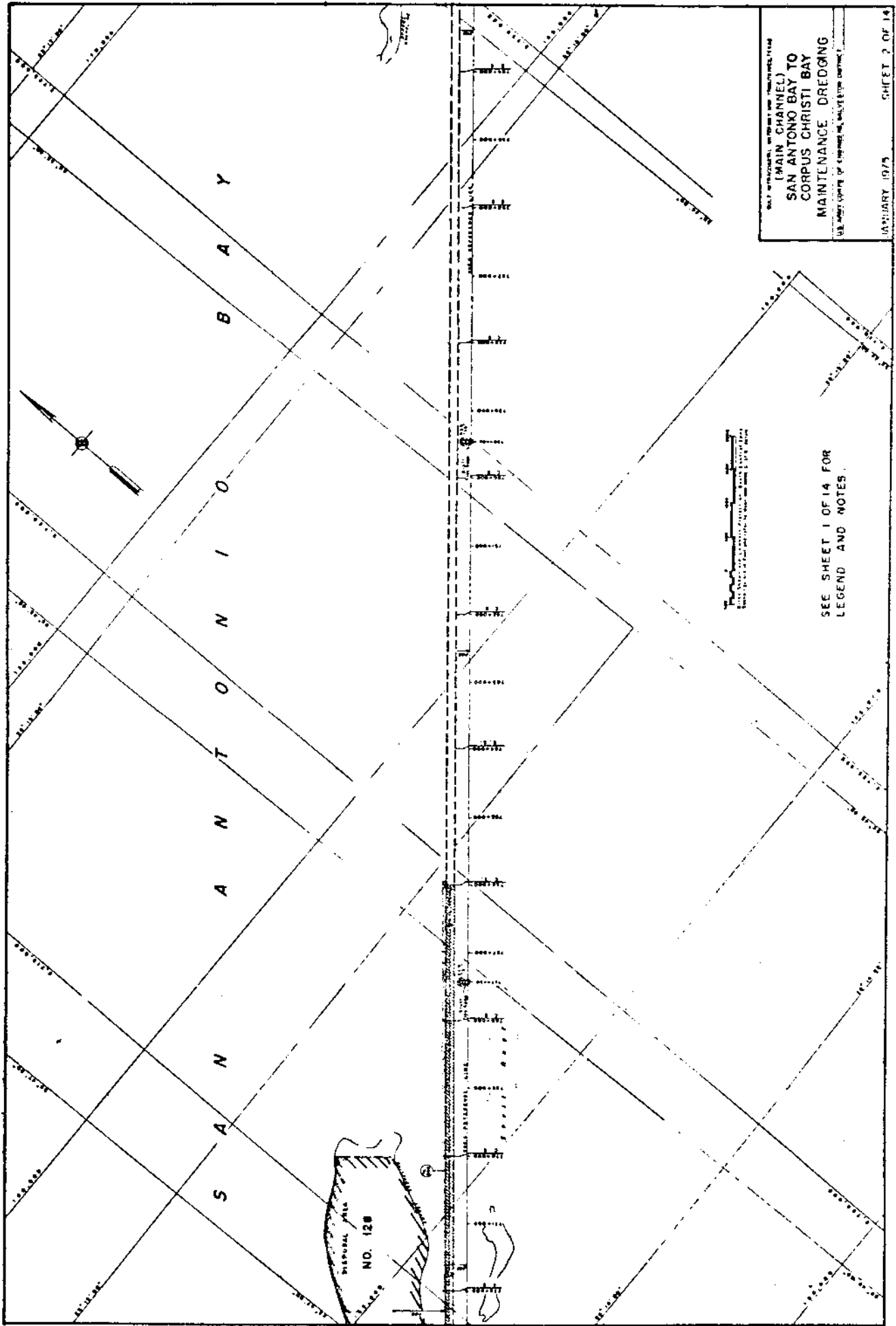
NOTE

THIS DRAWING ACCOMPANIES PUBLIC NOTICE
 NO. 14W-N-13.
 SEE SHEETS 2 THROUGH 14 FOR DISPOSAL AREAS.

LEGEND

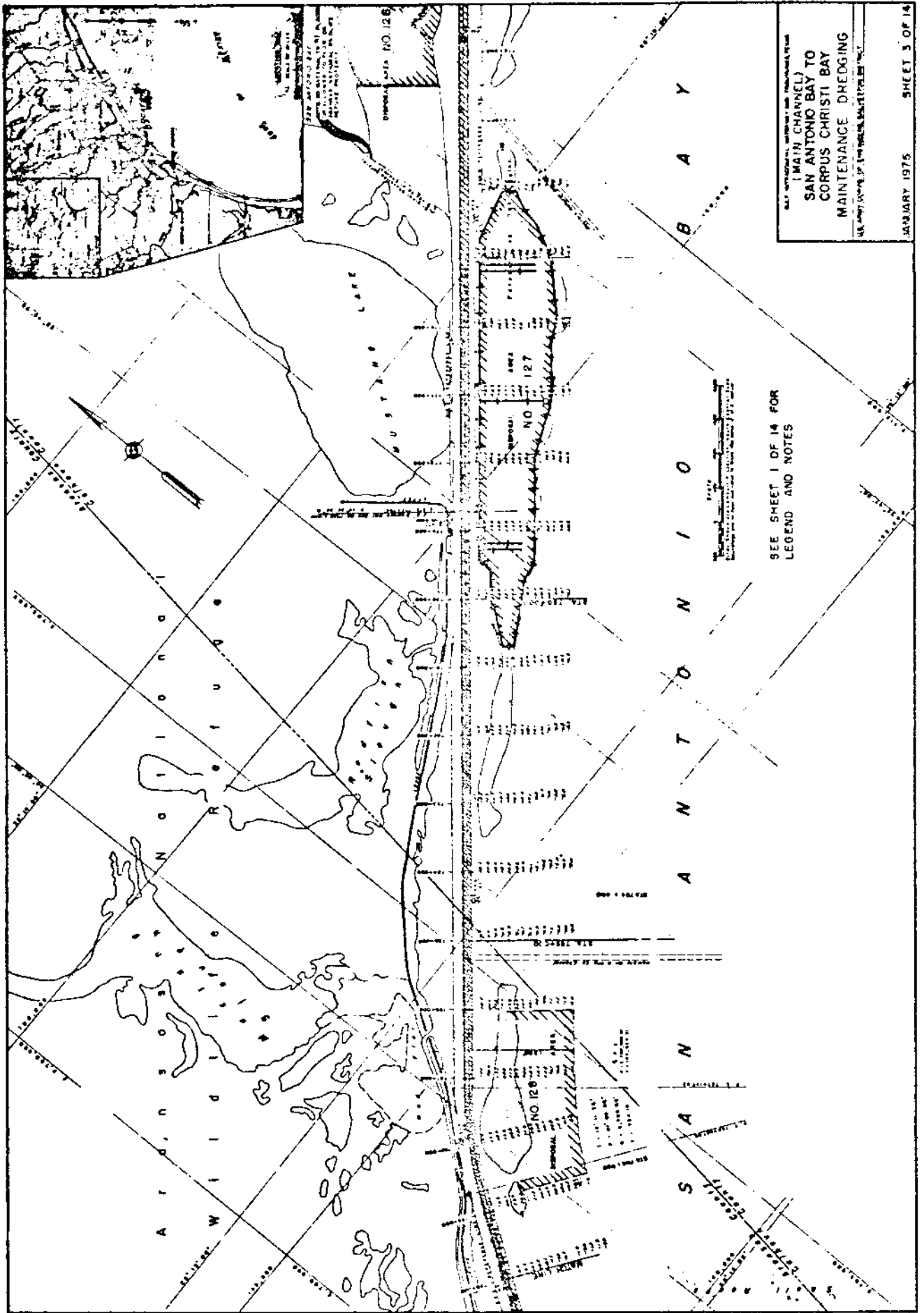
- AUTHORIZED CHANNEL AND BASIN MAINTAINED BY PIPELINE DREDGE
- DISPOSAL AREA
- 6.1 MW CHANNEL MILE (MILEAGE MEASURED WEST OF HARVEY LOCKS, LOUISIANA.)





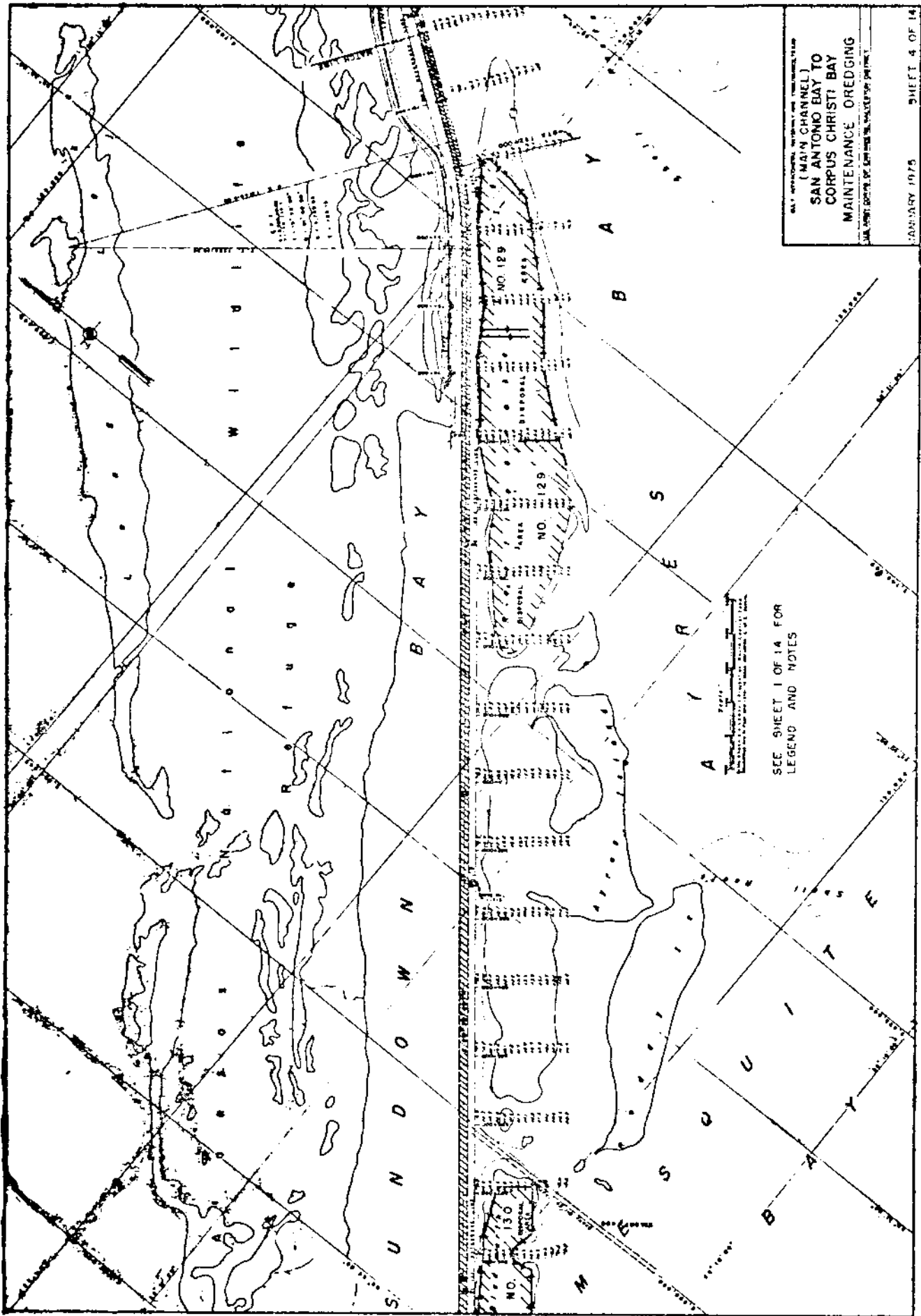
(MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, San Antonio District

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES



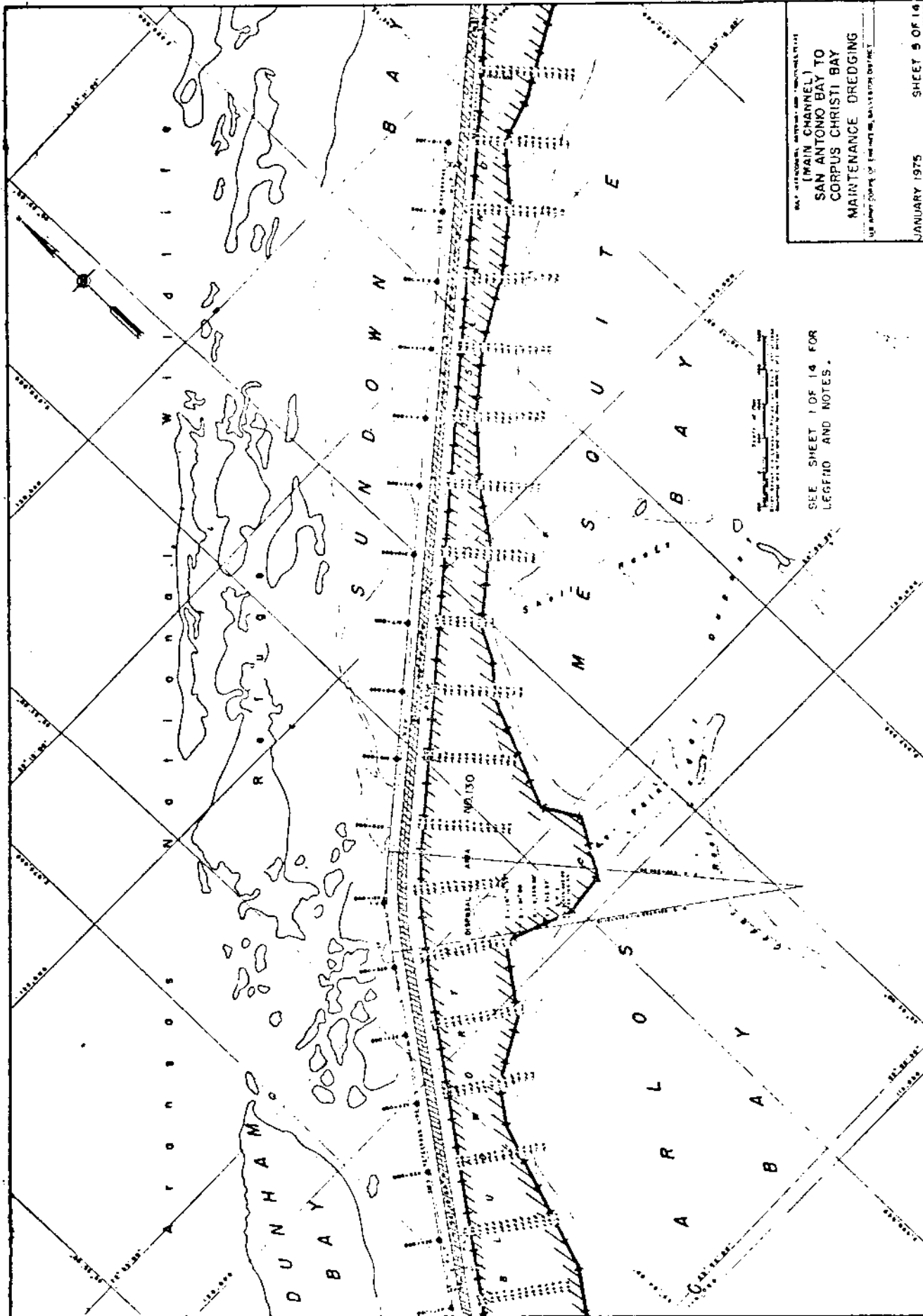
SEE SHEET 1 OF 14 FOR
LEGEND AND NOTES

U.S. NAVY CHART NO. 126
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. NAVY CHART NO. 126
 JANUARY 1975 SHEET 3 OF 14



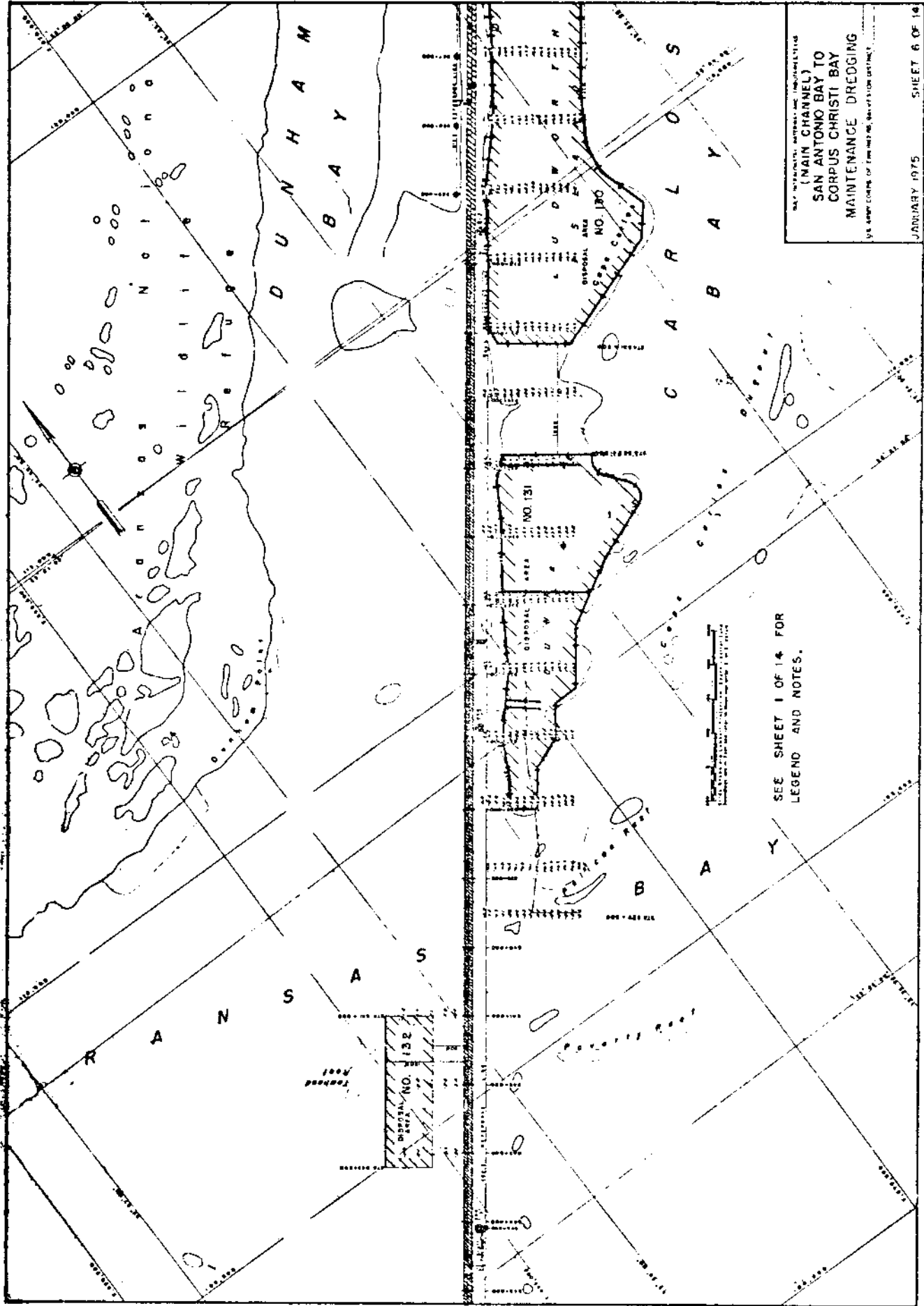
SEE SHEET 1 OF 14 FOR
LEGEND AND NOTES

ONLY APPROVED FOR CONSTRUCTION AND MAINTENANCE OF
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 JANUARY 1975 SHEET 4 OF 14



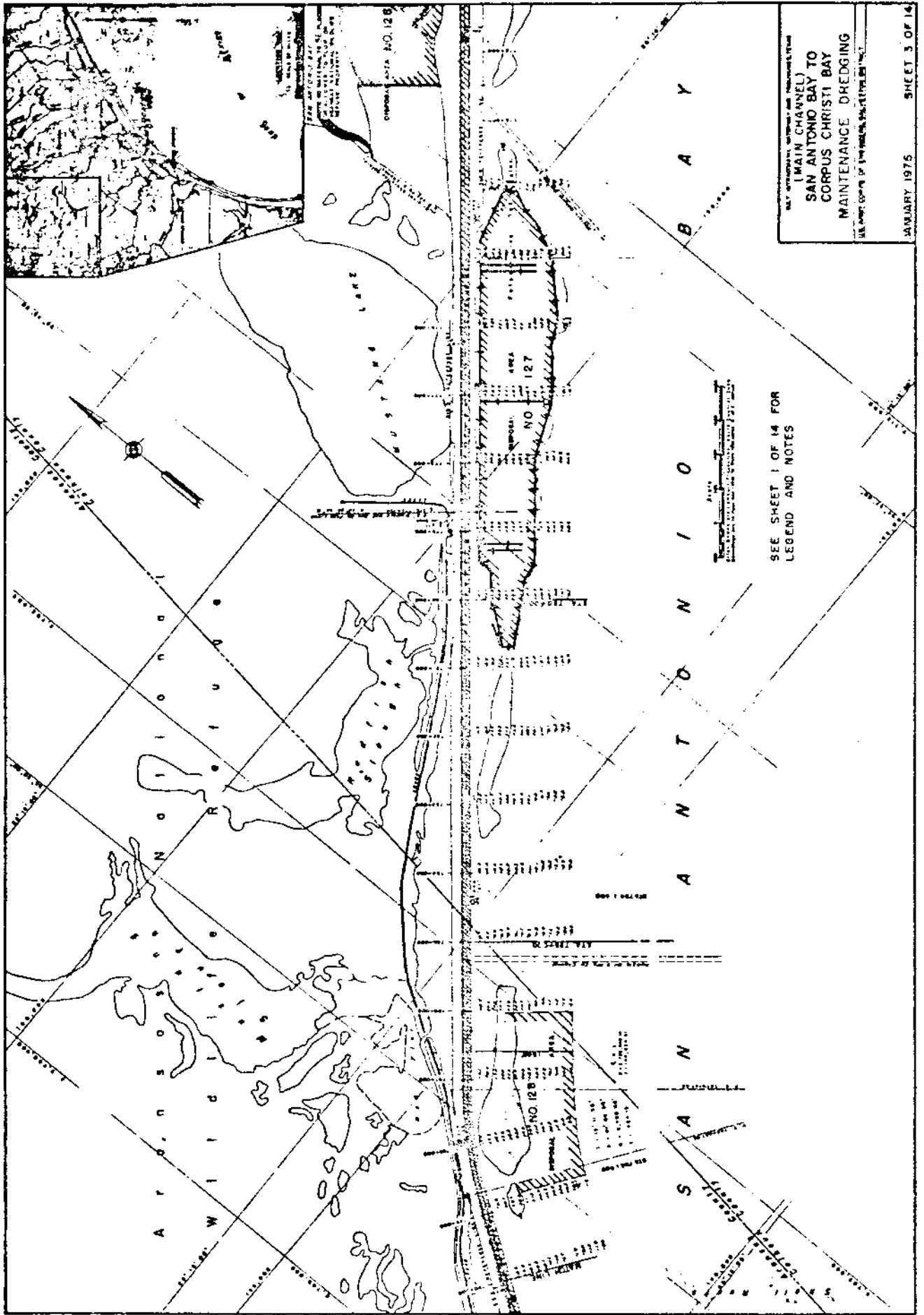
SAN ANTONIO BAY TO CORPUS CHRISTI BAY
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 US Army Corps of Engineers, Galveston District

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES.



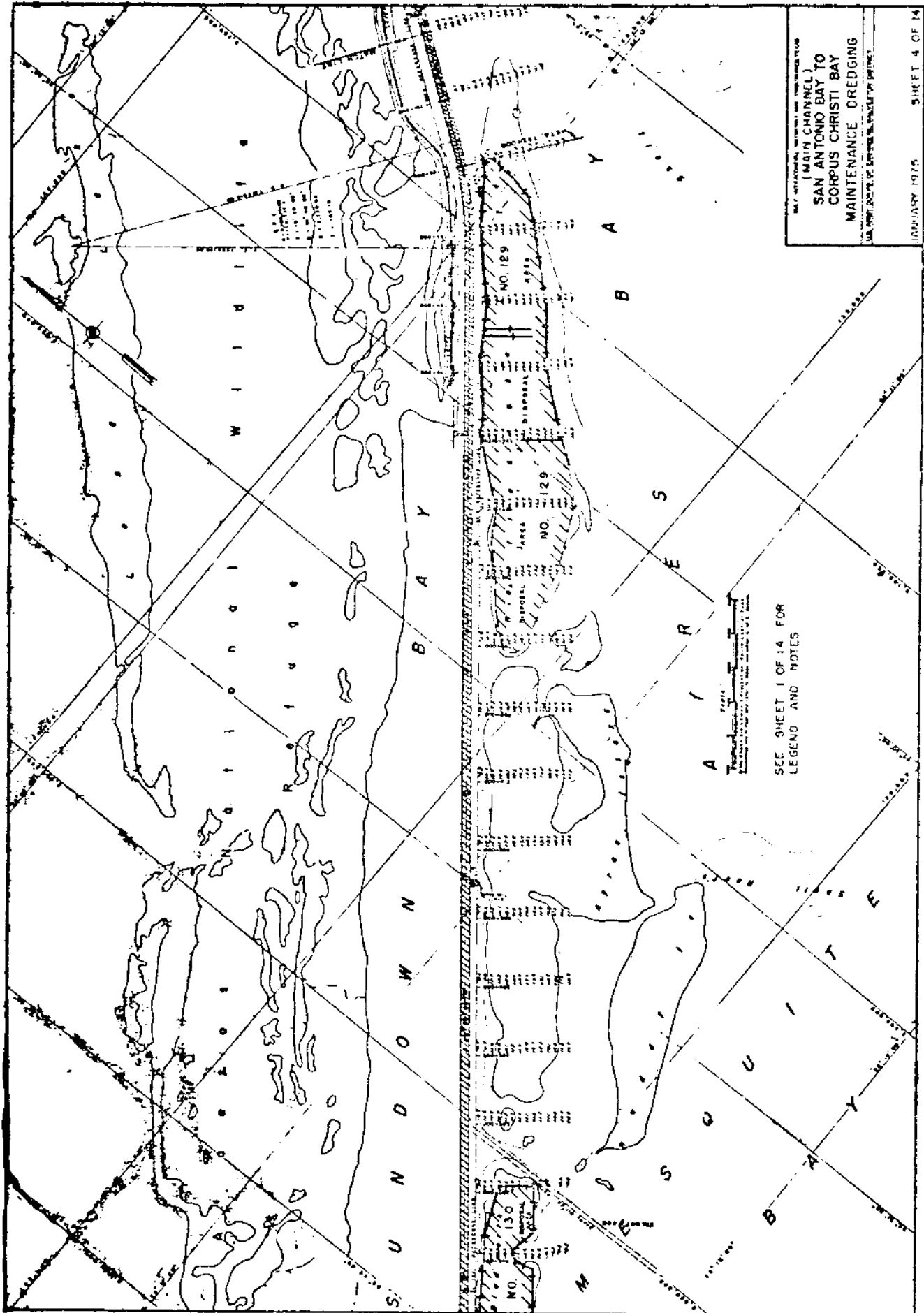
SEE SHEET 1 OF 14 FOR
LEGEND AND NOTES.

NAVY DEPARTMENT, BUREAU OF HYDROGRAPHY
(MAIN CHANNEL)
SAN ANTONIO BAY TO
CORPUS CHRISTI BAY
MAINTENANCE DREDGING
U.S. DEPARTMENT OF COMMERCE, BUREAU OF COAST AND GEODETIC SURVEY



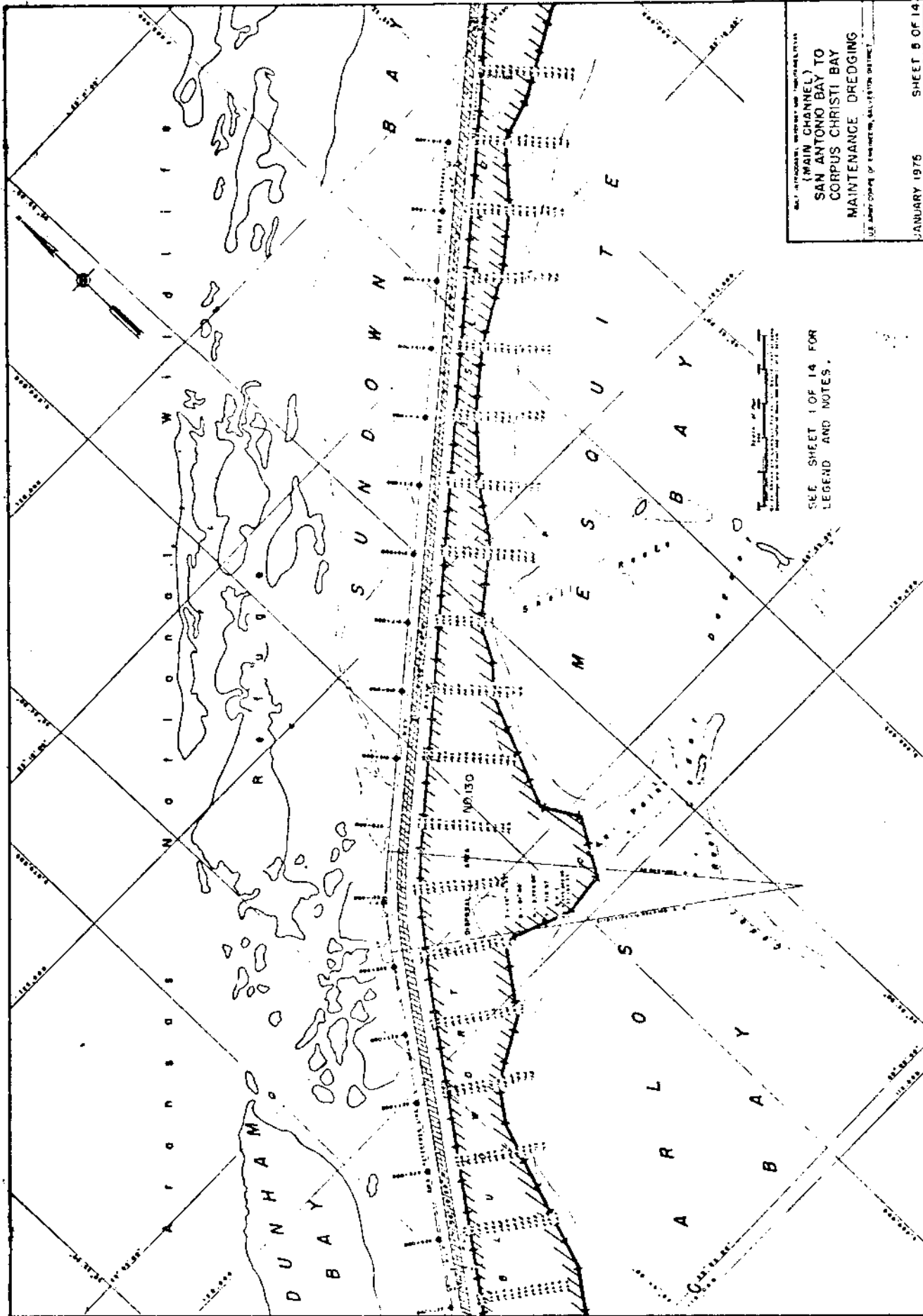
U.S. GOVERNMENT PRINTING OFFICE: 1975
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, District Office, Houston, Texas

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES



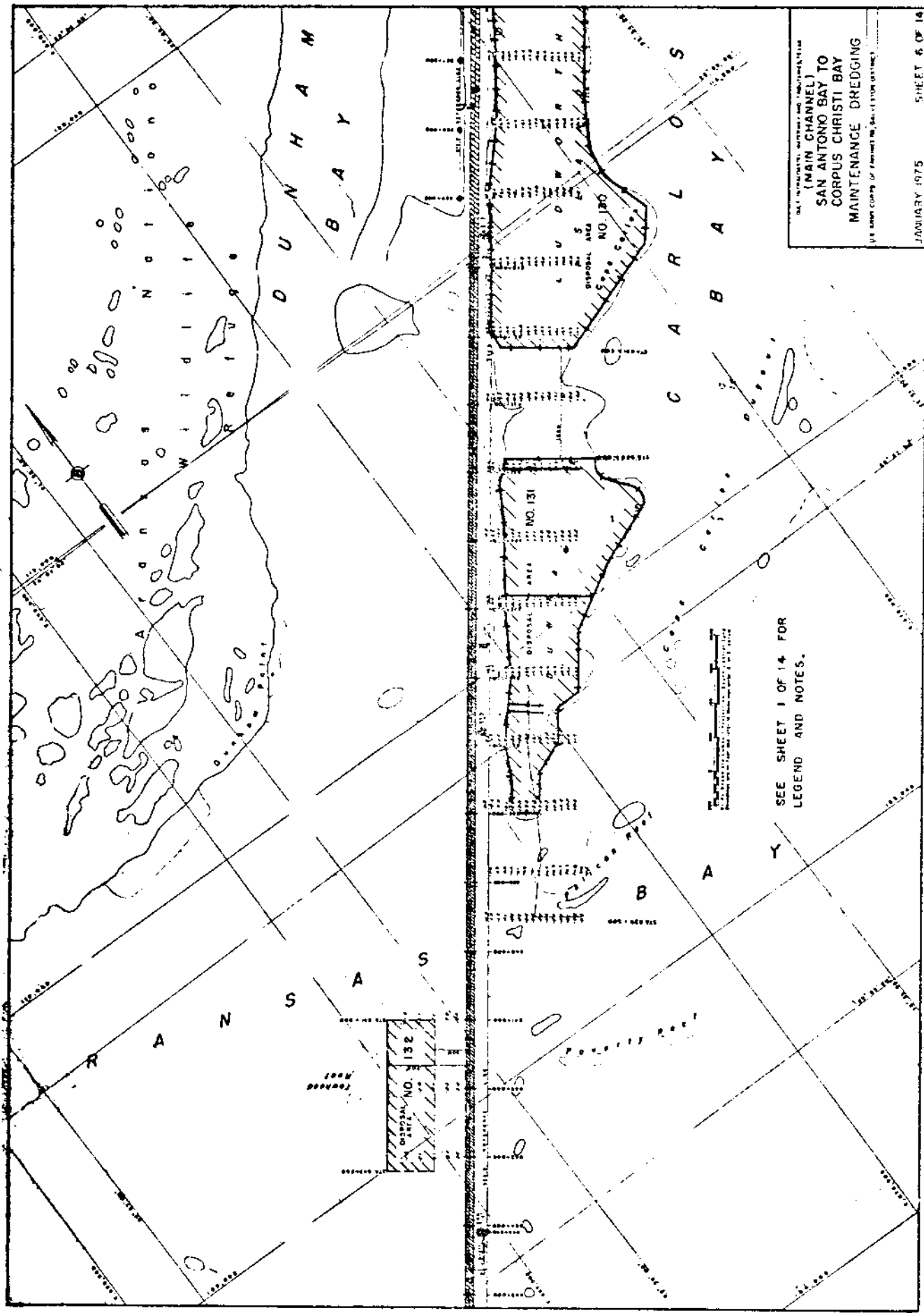
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 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. DEPARTMENT OF ARMY, CORPUS OF ENGINEERS

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES



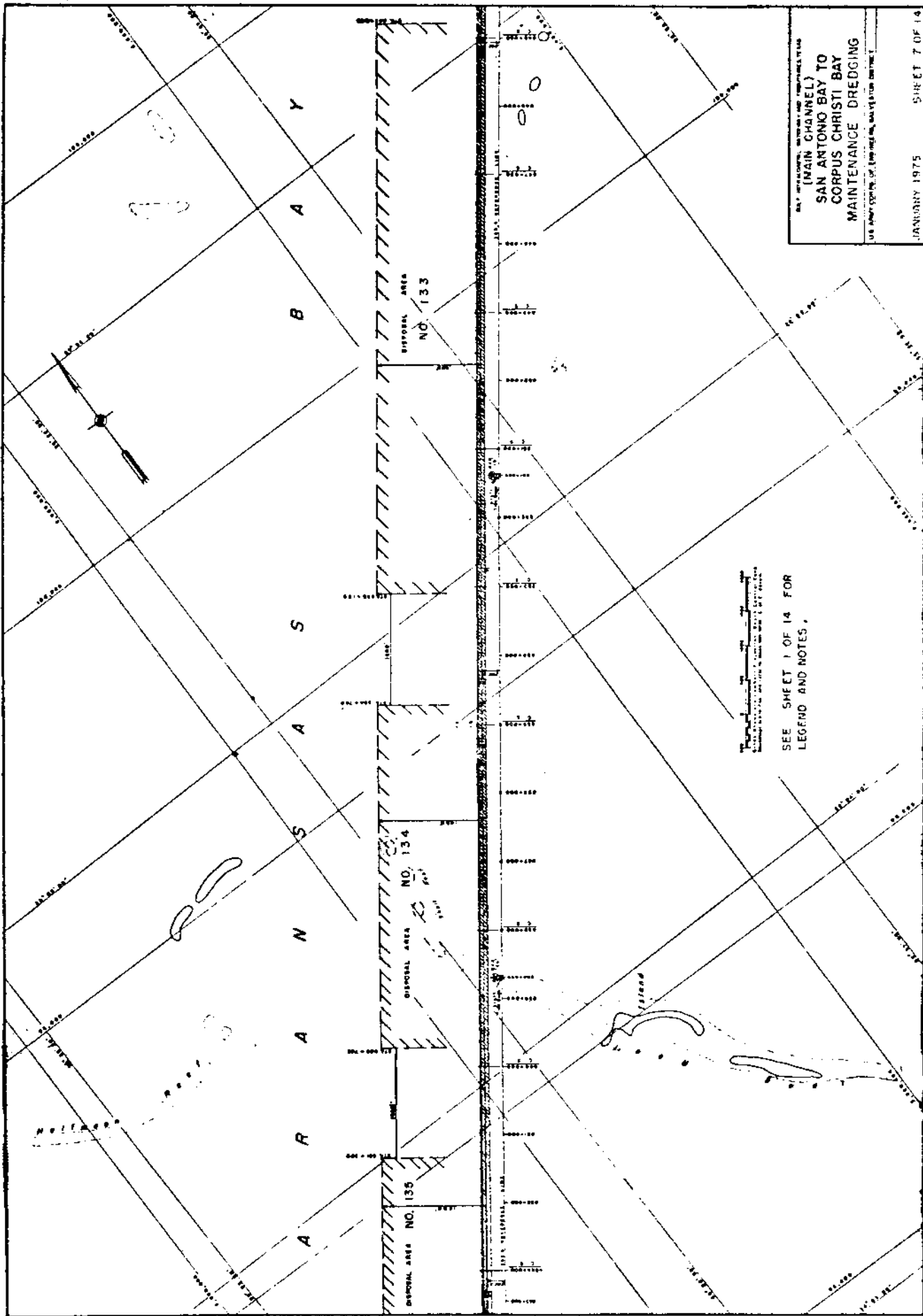
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 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. DEPARTMENT OF COMMERCE, BUREAU OF MARINE CHARTS

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES.

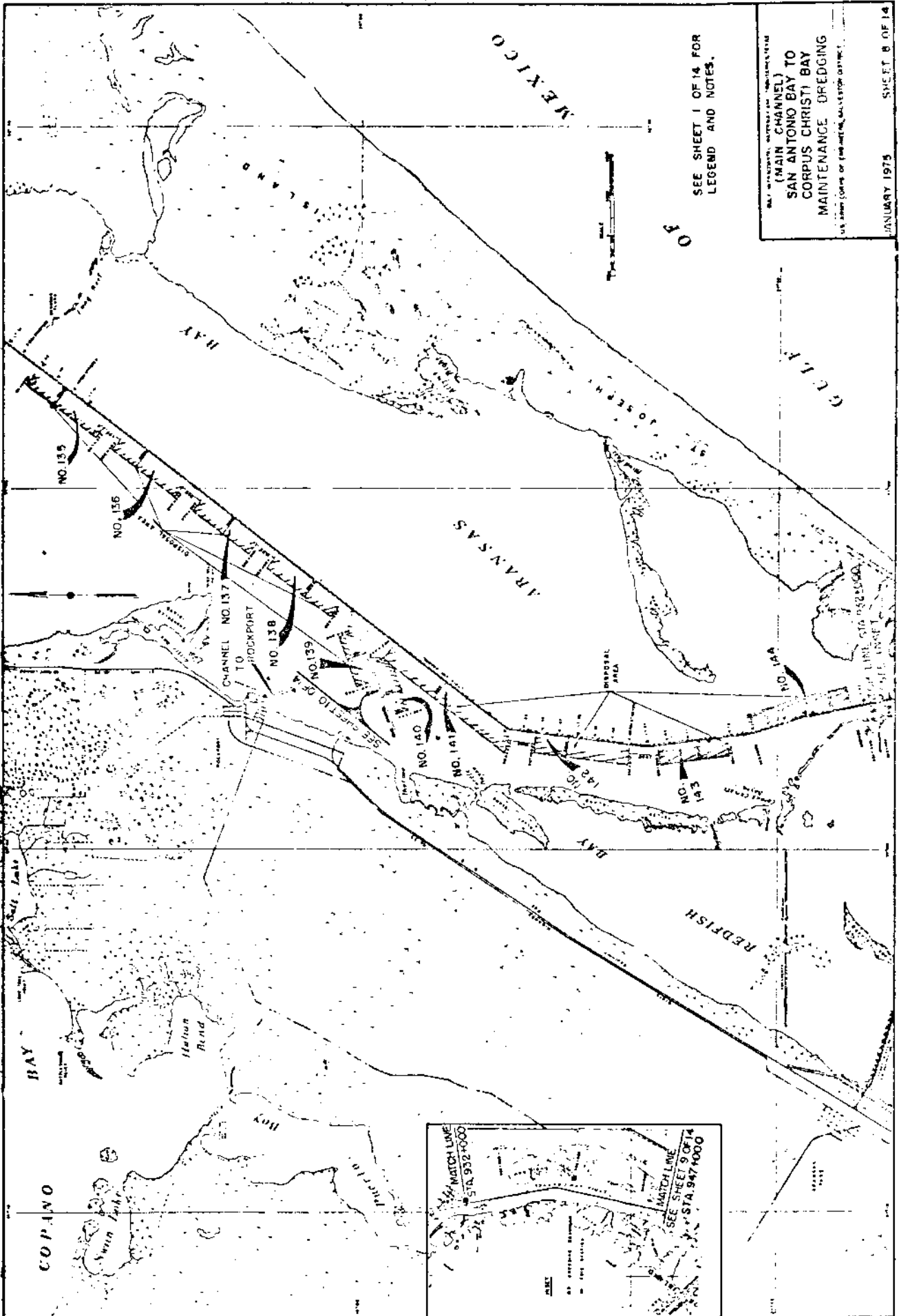


U.S. NAUTICAL CHARTS AND INFORMATION SYSTEM
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. NAUTICAL CHARTS OF SAN ANTONIO BAY (1:50,000)
 JANUARY 1975 SHEET 6 OF 14

SEE SHEET 1 OF 14 FOR
LEGEND AND NOTES.



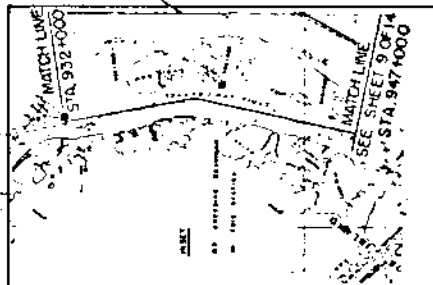
U.S. HYDROGRAPHIC SURVEY AND NAVIGATION SERVICE
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. ARMY CORP. OF ENGINEERS, NAVIGATION DISTRICT

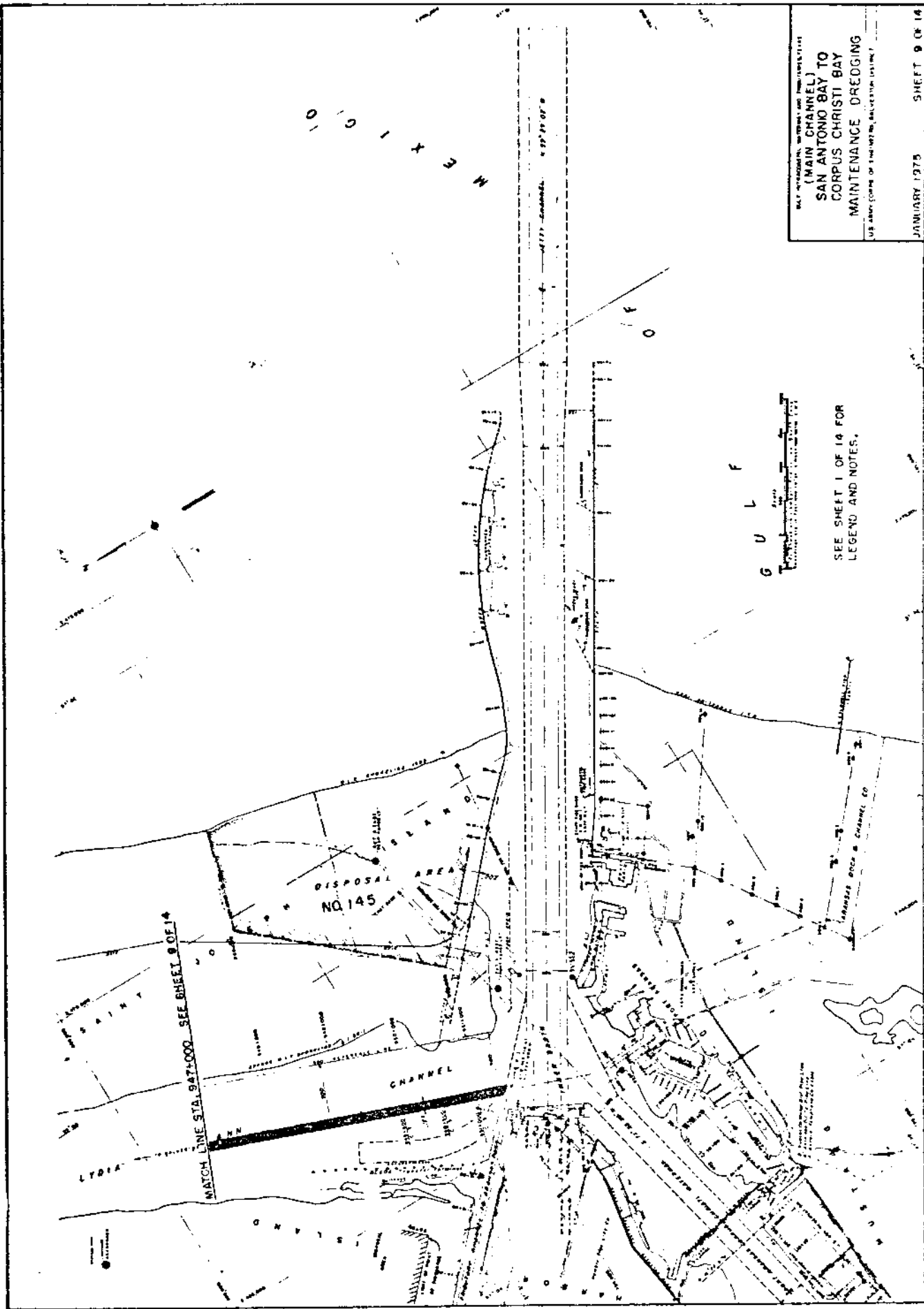


SEE SHEET 1 OF 14 FOR
LEGEND AND NOTES.

U.S. NAVY (MAIN CHANNEL)
SAN ANTONIO BAY TO
CORPUS CHRISTI BAY
MAINTENANCE DREDGING
U.S. NAVY (COPY OF PLAN) (NO. 135-144) (1:50,000)

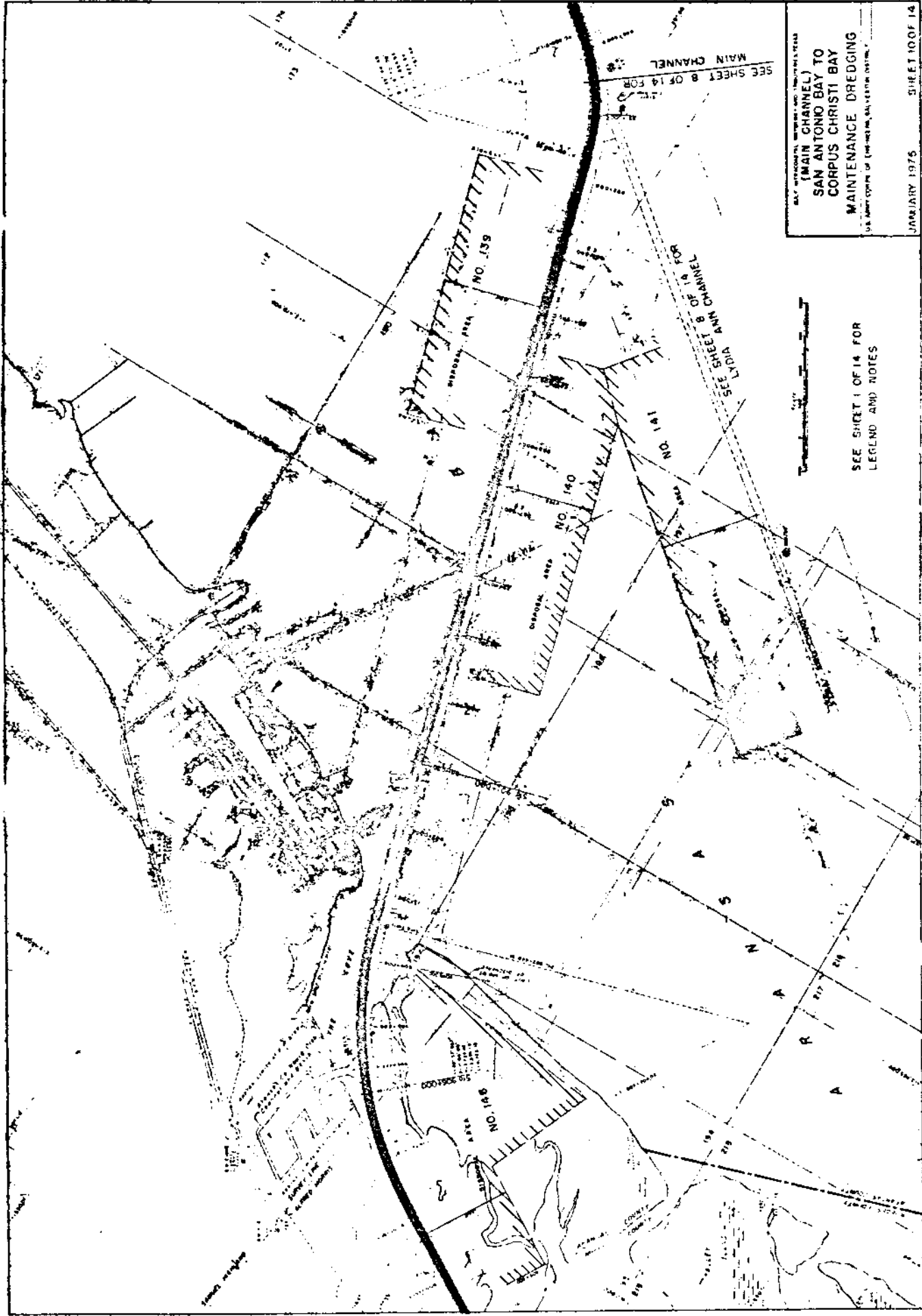
JANUARY 1975 SHEET 8 OF 14



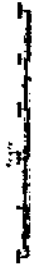


U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 JANUARY 1975 SHEET 9 OF 14

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES.



U.S. GOVERNMENT PRINTING OFFICE: 1975
 JANUARY 1975 SHEET 100 OF 14
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. Army Corps of Engineers, San Antonio District



SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES

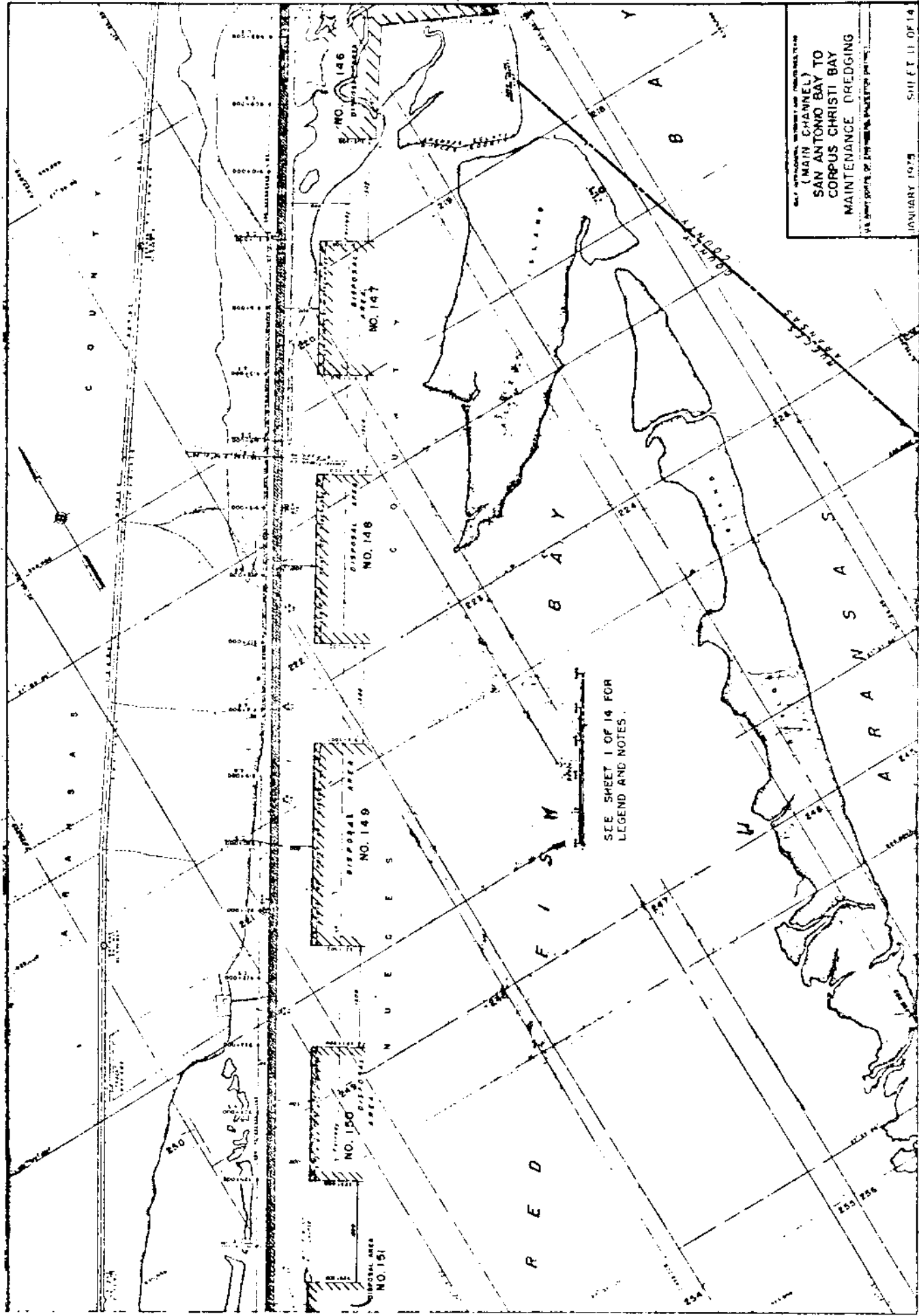
SEE SHEET B OF 14 FOR
MAIN CHANNEL

SEE SHEET B OF 14 FOR
LATIDIA MAIN CHANNEL

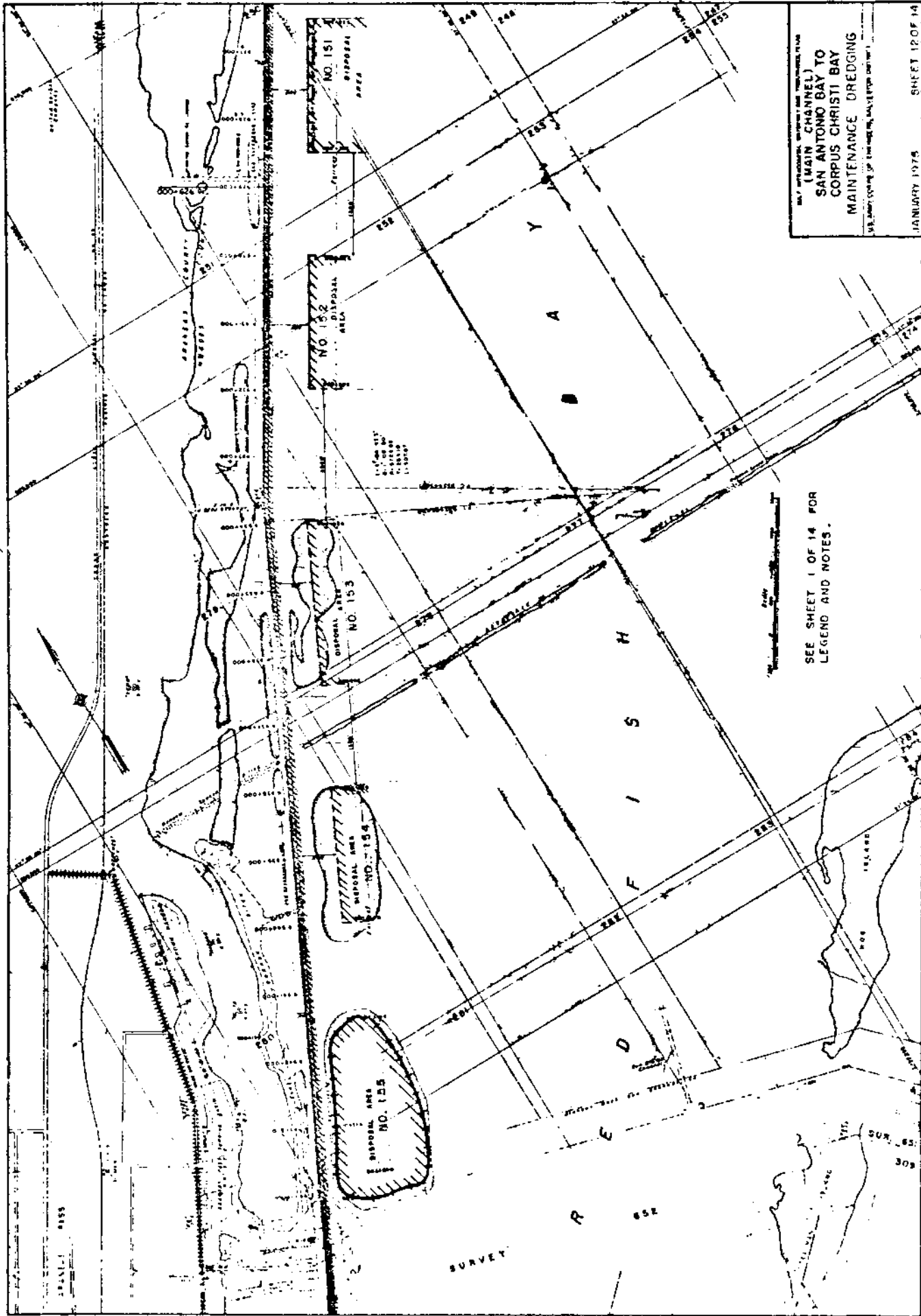
DISPOSAL AREA
NO. 139

DISPOSAL AREA
NO. 140

STATION



U.S. GOVERNMENT PRINTING OFFICE: 1967 O 314-114
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. Department of Army, Waterways Experiment Station
 JANUARY 1975 SHEET 11 OF 14



U.S. Army Corps of Engineers, San Antonio Bay, Texas
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 JANUARY 1975 SHEET 12 OF 14

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES.

1955

SURVEY

REEF

ISLAND

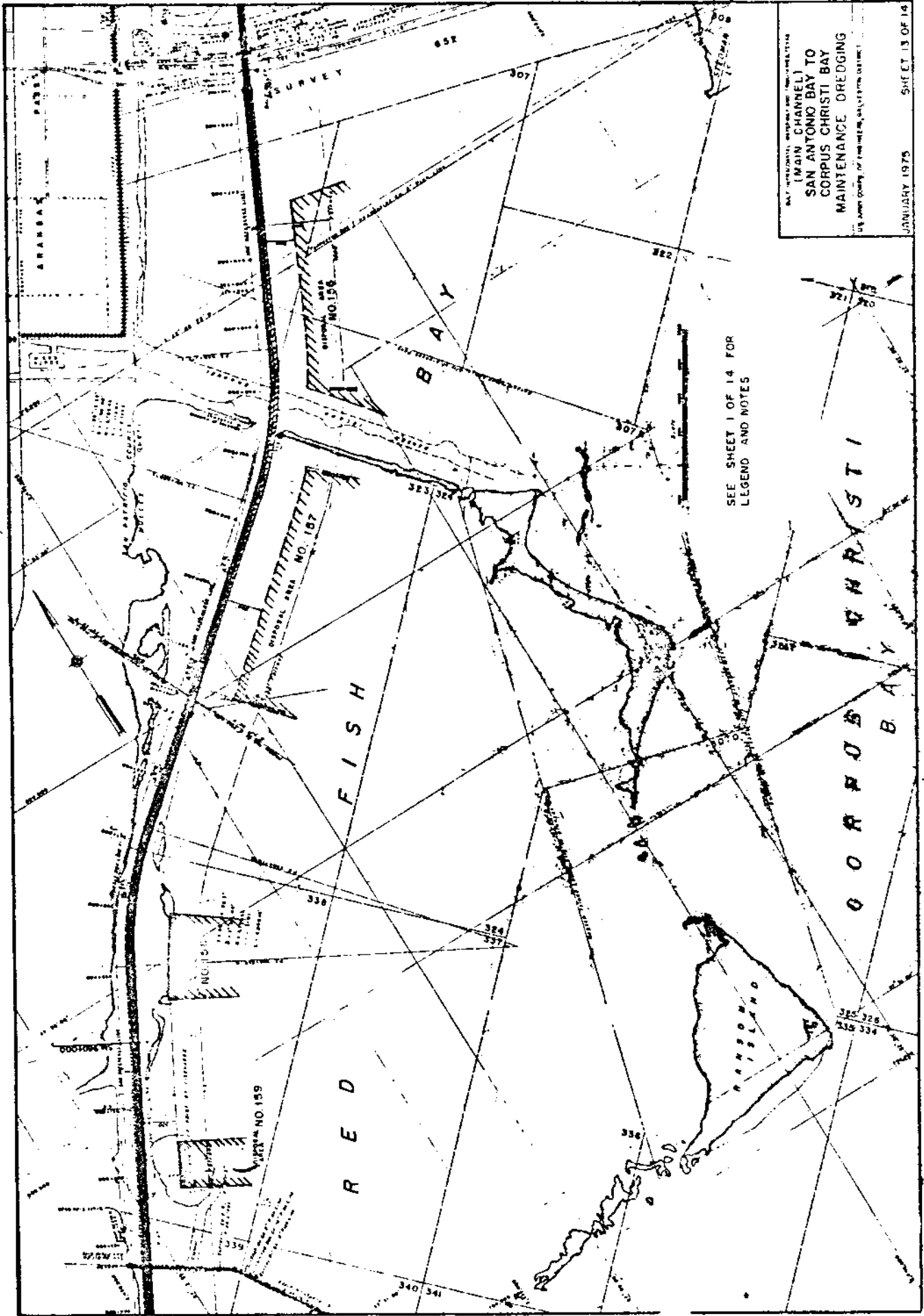
DISPOSAL AREA
 NO. 153

DISPOSAL AREA
 NO. 154

DISPOSAL AREA
 NO. 155

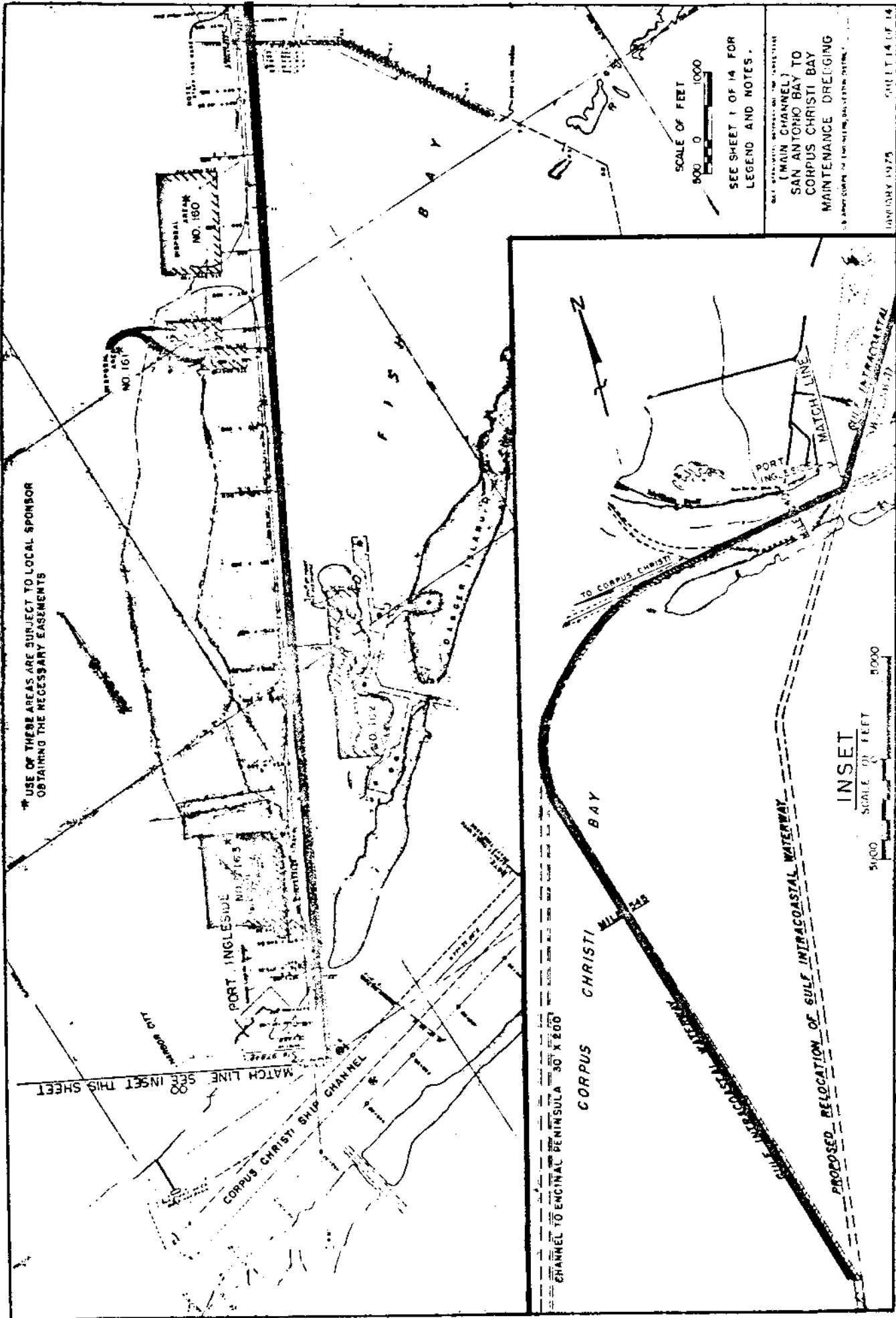
DISPOSAL AREA
 NO. 152

DISPOSAL AREA
 NO. 151



NAVY HYDROGRAPHIC SURVEY AND CHART DEPARTMENT
 (MAIN CHANNEL)
 SAN ANTONIO BAY TO
 CORPUS CHRISTI BAY
 MAINTENANCE DREDGING
 U.S. NAVY OFFICE OF CHIEF OF NAUTICAL SURVEYS, WASHINGTON, D.C.

SEE SHEET 1 OF 14 FOR
 LEGEND AND NOTES



USE OF THESE AREAS ARE SUBJECT TO LOCAL SPONSOR OBTAINING THE NECESSARY EASEMENTS

SCALE OF FEET
0 500 1000

SEE SHEET 1 OF 14 FOR LEGEND AND NOTES.

U.S. ARMY CORPS OF ENGINEERS
SAN ANTONIO BAY TO CORPUS CHRISTI BAY
MAINTENANCE DREDGING

MATCH LINE SEE INSET THIS SHEET

INSET
SCALE OF FEET
0 5000

CHANNEL TO ENCINAL PENINSULA 30 X 200

CORPUS CHRISTI MILLS

CORPUS CHRISTI BAY

PROPOSED RELOCATION OF GULF INTRACOASTAL WATERWAY

PORT INGLESIDE

MATCH LINE

GULF INTRACOASTAL WATERWAY

N

SEWERAGE TREATMENT PLANT NO. 180

SEWERAGE TREATMENT PLANT NO. 161

PORT INGLESIDE NO. 165

NO. 112

DOLGER ISLAND

ENCINAL PENINSULA

CORPUS CHRISTI SHIP CHANNEL

SAN ANTONIO BAY



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

March 7, 1975

FSE21/DM

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, TX 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-13 dated January 21, 1975, wherein the Corps of Engineers requested comments on spoil disposal plans associated with maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - San Antonio Bay to Corpus Christi Bay.

By letter dated October 11, 1974, the Fish and Wildlife Service (FWS) submitted a report to the Galveston District Engineer regarding a plan for spoil disposal in the reach of the waterway addressed in this public notice. As indicated in the FWS letter, the NMFS assisted in preparation of the report and concurred in the recommendations. In a subsequent letter dated December 3, 1974, the FWS made several revisions to the October 11, 1974, report.

We note that the present maintenance dredging plans do not incorporate many of the recommendations presented in the revised FWS report. Therefore, we offer the following ten recommendations. Except for slight modification, the first nine were contained in the revised FWS report. The last recommendation is submitted to protect vegetation and oyster beds that may develop during the next several years:

1. Disposal in Area No. 129 should be modified to coincide with the emergent land on Rattlesnake Island southeast of the main channel between Stations 790+400 and 796+000. Sheet 4 of the public notice indicates the western boundary of this Disposal Area is at Station 799+000. It also indicates that spoil placed between Stations 796+000 and 799+000 will not be confined. The western portion of Rattlesnake Island lies alongside valuable marine fisheries habitat and many parts of this end of the island are subject to periodic tidal inundation. In addition, circulation patterns between Ayers Island and Rattlesnake Island could be impaired if spoil were placed unconfined on the western third

of Rattlesnake Island. Even if this end of the area were leveed, the levee would likely erode onto good habitat due to the previously mentioned current patterns. We, therefore, request that the portion of Rattlesnake Island between Corps of Engineers Stations 796+000 and 799+000 not be used for spoil disposal.

2. Spoil deposited in Disposal Areas Nos. 126 and 129 should be confined with toe levees that are constructed and refurbished prior to each dredging operation to minimize spillage of large amounts of silt into the bays. Waste water should drain over a spillway constructed on the channel side of the island.

3. When spoil material in Disposal Areas Nos. 132, 153, and 154, emerges above mean high water along lines defining the lateral limits of the spoil areas, or along a line no more than 1,200 feet from the centerline of the channel, toe levees should be constructed along these lines to contain all additional spoil.

4. When spoil material in Disposal Areas Nos. 133 through 139, and 141 through 144, emerges above mean high water along lines defining the lateral limits of the spoil or along a line no more than 1,500 feet from the centerline of the channel, toe levees should be constructed along these lines to contain all additional spoil.

5. When spoil material in Disposal Area No. 157 emerges above mean high water along lines defining the lateral limits of the spoil area, or along a line no more than 1,000 feet from the centerline of the channel, toe levees should be constructed on the ends and along the east side to contain all additional spoil.

6. Disposal Area No. 146 should be back-leveed to prevent spillage of spoil into Aransas and Redfish Bays.

7. Spoil should no longer be placed in Disposal Area 128. Openings at Stations 785+300 and 789+600, which permit circulation between the open-water areas of San Antonio Bay and interconnecting tidal sloughs in the Aransas National Wildlife Refuge, could become blocked by spillage or erosion of unconfined spoil from Disposal Area No. 128.

8. Disposal Areas Nos. 147-152, 156, 158-159 and 162 located south of the channel in Redfish Bay should no longer be used. The FWS report noted that, "In some areas, such as Redfish Bay, spoil from previous dredging operations has resulted in deterioration of the bay as nursery habitat for fishes and crustaceans.

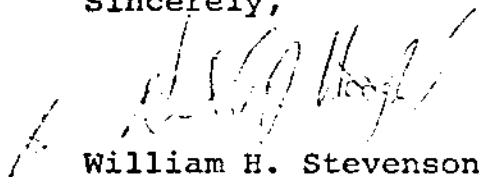
To prevent further damage, ...spoil from any further dredging in Redfish Bay should be placed on land rather than in the bay." Since Redfish Bay is excellent habitat for marine fishes and crustaceans, and the Corps has previously disposed of spoil on the mainland side of the channel, we strongly recommend that this practice be re-instituted.

9. All future dredging plans should be formulated to phase out within the next six years the practice of depositing unrestrained spoil in waters having a natural depth of -4 feet MLW or less. Accordingly, plans should provide for complete leveeing of all disposal areas by December 1981, regardless of the size of the emergent banks.

10. Within six months prior to commencement of maintenance dredging, the Corps of Engineers should have an investigation conducted to determine if beds of submerged and intertidal vegetation and oysters have developed in and adjacent to unconfined disposal areas. From these investigations, the Corps and the Federal and State fish and wildlife agencies can make necessary adjustments in disposal plans to protect these resources.

Thank you for the opportunity to comment on this Federal project. Please send detailed plans for each maintenance dredging operation to the Area Supervisor, National Marine Fisheries Service, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550.

Sincerely,



William H. Stevenson
Regional Director

225 June 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

Reference is made to your letter dated 7 March 1975 concerning Public Notice No. IWW-M-13 on maintenance dredging of the Gulf Intracoastal Waterway from San Antonio Bay to Corpus Christi Bay, Texas.

We have reviewed your recommendations and feel we can comply as follows:

Recommendation No. 1 - The next time Disposal Area No. 129 is used, toe levees will be constructed to coincide with the shoreline of the presently unleveed western portion of the island. The importance of the flow exchange and aquatic life passage located west of the island is recognized. Further, all reasonable precautions will be taken to insure that the marine fisheries habitat will not be jeopardized by the Corps of Engineers dredge disposal operations. However, the area you want eliminated is of such size and location that an area of comparable size and location will have to be made available prior to our eliminating the present area.

Recommendation No. 2 - When Disposal Areas Nos. 126 and 129 are used, toe levees will be constructed or refurbished as necessary. Effluent from the areas will be directed toward the channel.

Recommendation No. 3 - Disposal Area No. 132 will be leveed at the 1200-foot back limit. However, Disposal Areas Nos. 153 and 154 will require as a minimum approximately 1500 feet depth from the centerline of the channel, as depicted on the public notice map.

Recommendation No. 4 - The disposal areas listed will be leveed, as recommended, as they become emergent and stabilized above Mean High Water.

Mr. William H. Stevenson

Recommendation No. 5 - Leveeing Disposal Area No. 157 at no more than 1,000 feet from the centerline of the channel is not acceptable, as this would limit the actual width of the area to less than 500 feet. Additional area will be needed to confine the material dredged from the reach of channel associated with this disposal area. The back limit of this area was therefore set at 1,500 feet from the centerline of the channel, which is identical to similar areas in the vicinity.

Recommendation No. 6- Disposal Area No. 146 will be toe leveed along the limits shown in the public notice when the base elevation of those limits, following stabilization, is emergent above Mean High Water.

Recommendation No. 7 - Deletion of Disposal Area No. 128 is not acceptable because no alternative area exists within a reasonable pumping distance. During the last maintenance dredging of this reach of the GIWW, we omitted use of this area in compliance with a U. S. Fish and Wildlife Service recommendation. As a result, we have depleted practically all of the available capacity in the adjacent disposal areas. Since your concern relates to water circulation between the refuge and San Antonio Bay, two possible solutions exist. Either comparable alternate areas be provided on the north side of the channel, or the Corps utilize an area of larger extent than the existing No. 128 and make other design provisions to maintain waterflow.

Recommendation No. 8 - This recommendation which eliminates all disposal areas over a length of about 8 miles of channel is unacceptable because we have no alternative areas which can be relied upon for use. You are correct in that we have in the past been able to obtain one-time permission to use private land to the northwest for disposal. However, this was only for that reach of the GIWW between Station 963+000 and Station 978+450. Furthermore, as you may note, the private lands we have utilized are included for use in our current disposal plan as depicted in the public notice. As long as these private lands remain available, we plan to continue to use them. The Texas Legislature recently passed Senate Bill 472 authorizing State sponsorship of the GIWW. We will strive to get the State to provide alternate disposal areas on the mainland. However, in the meantime, since we are directed to maintain the authorized channel, we have no alternative but to utilize areas which have been used since the 1950's.

Recommendation No. 9 - Agreement to phase out all unconfined disposal in shallow water by 1981 is not feasible. The Corps of Engineers initiated in fiscal year 1972, research programs aimed at solving this and other problems related to disposal of dredged material. The programs are being carried out by the Corps of Engineers Waterways Experiment Station in Vicksburg, Mississippi. The fiscal year 1975 budget included \$8.2 million for this research. It is anticipated that these research efforts will provide the information necessary for developing more environmentally desirable methods of disposal. When the

SWCCO-M

25 June 1975

Mr. William H. Stevenson

disposal plan for this reach of the GIWW is re-coordinated we hope these research programs will provide enough information that a plan of disposal that is mutually agreeable can be developed.

Recommendation No. 10 - We have initiated plans to make a survey of the unconfined disposal areas for the presence of submerged and intertidal vegetation and oyster beds. Based on the findings of our staff biologists, we will make adjustments to our disposal plans as determined necessary and feasible.

As requested, we will continue to furnish your local office plans and specifications for review during the advertising period for each contract. Thank you for your comments.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Copy furnished:
Area Supervisor
NIMS, Galveston, Texas 77550



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

February 21, 1975

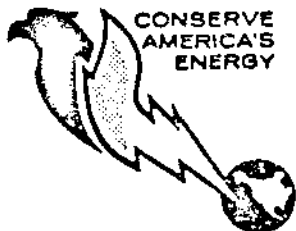
District Engineer
Corps of Engineers, U. S. Army
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

By Public Notice No. IWW-M-13, dated January 31, 1975, the U. S. Fish and Wildlife Service was notified of the Corps of Engineers' plans and procedures for dredged spoil disposal during maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - San Antonio Bay to Corpus Christi Bay. The following comments on these plans have been prepared with the assistance of the Texas Parks and Wildlife Department and the National Marine Fisheries Service.

The Fish and Wildlife Service released a report on the referenced maintenance dredging project on October 11, 1974. We note that numerous spoil disposal areas in the public notice do not conform to the recommendations in that report. Recommendations Nos. 8 and 15 of our report requested that toe levees be constructed prior to dredging operations on Disposal Areas 126, 129, and 146 to minimize spillage of large amounts of spoil material into prime estuarine habitat. In addition, Recommendations Nos. 10, 11, and 12 of our report requested that toe levees be constructed at specified limits of Disposal Areas 132 through 139, 141 through 144, 153, 154, and 157 in Aransas and Redfish Bays when spoil emerges above mean high water. The public notice indicates that these disposal areas are unleveed and gives no indication of when levees are to be constructed.

Our report also points out the necessity of maintaining the integrity of the open water area between Rattlesnake Island (Disposal Area 129) and Ayres Island. This opening centered at Station 799+500 promotes water exchange and freshwater flushing between Sundown Bay and Ayres Bay and provides passage for aquatic life utilizing nursery areas north of the main channel. Unless a levee is constructed on the southwest end of Rattlesnake Island, this opening could be obstructed by flowing spoil. A request for retention of the opening is included in Recommendation No. 16 of our report.



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Recommendation No. 17 of our report requested that Disposal Area 128 no longer be used. However, the public notice includes the area as a planned disposal site. Unconfined spoil in this area may block important openings centered at Stations 785+300 and 789+600, respectively. These openings are essential in maintaining water circulation between the interconnecting sloughs of the Aransas National Wildlife Refuge and the open-water areas of San Antonio Bay.

In Recommendation No. 18 of our report we request that Disposal Areas 147-152, 156, 158-159, and 162 south of the waterway in Redfish Bay no longer be used. We note that they are still included in the disposal plan. We strongly believe that continued use of these areas is an environmentally unacceptable means of dredged spoil disposal. Redfish Bay is one of the prime brackish-water areas along the entire Texas coast and supports an intensive sport and commercial fishery. Large beds of turtlegrass and shoalgrass occur in the shallow, clear bay waters providing habitat for marine life and forage for seasonally abundant waterfowl. Placement of spoil in these areas would greatly alter the natural productivity of Redfish Bay and would be one more step toward the ultimate destruction of this estuary which has been seriously damaged by dredging in the past.

Previously, the Corps of Engineers has recognized the ecological significance of Redfish Bay and modified dredging contracts to include land-based disposal sites north of the waterway. We see no reason why this practice should not be continued, since we believe many of the landowners in this area would permit spoil to be placed on their property.

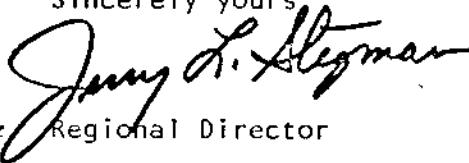
Presently, the majority of barge traffic on the Gulf Intracoastal Waterway is using the Lydia Ann Channel to Port Aransas rather than the Redfish Bay Cutoff. Therefore, we wonder if discontinuation of the Redfish Bay channel should not be considered as an alternative to potentially severe ecological damage to Redfish Bay with maintenance dredging operations.

Other conclusions and recommendations in our October 1974 report are still applicable. We wish to reiterate Recommendations Nos. 25 and 26 to the effect that appropriate representatives of the Texas Parks and Wildlife Department, U. S. Fish and Wildlife Service, and the National Marine Fisheries Service be notified prior to the issuance of contracts for maintenance dredging in the project area. The Aransas National Wildlife Refuge and Redfish Bay are areas of particular concern. In some cases limited placement of spoil in an area could be

beneficial whereas continued use of the same area would be detrimental. It may thus be appropriate to hold field level meetings of interested parties to resolve any problems involving the Aransas Refuge and Redfish Bay just prior to maintenance dredging of those segments.

However, we urge the Corps of Engineers to take immediate action in the selection of disposal sites which will comply with our report recommendations and result in less damage to the fish and wildlife resources of Aransas and Redfish Bays.

Sincerely yours


Acting Regional Director

cc:

Executive Director, Texas Parks and Wildlife Dept., Austin, Texas
Area Supv., National Marine Fisheries Service, Environmental Assessment Division, Galveston, Texas
Southwest Regional Representative, National Audubon Society, Austin, Tx.
Field Supervisor, FWS, Div. of River Basin Studies, Fort Worth, Texas

25 April 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
Department of the Interior
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Sir:

Reference your letter of 21 February 1975 concerning comments and recommendations on Public Notice No. IWW-M-13, Maintenance Dredging, GIWW (Main Channel) San Antonio Bay to Corpus Christi Bay.

This letter replies to your comments and requests specific information required for a Corps of Engineers decision on portions of your recommendations. The following comments are sequenced in the order of the comments in your 21 February 1975 letter.

Toe levees for Disposal Areas Nos. 126 and 129 will be constructed to coincide with the shoreline of each island. However, this will provide only limited capacity and additional disposal areas will be required in the near future. Disposal Area No. 146 will be toe leveed along the limits shown in the public notice when the base elevation of those limits, following stabilization, is emergent above Mean High Water. The practical reasons for this arrangement have been discussed on numerous occasions with representatives of your agency and are totally in accordance with previous recommendations related to your October 1974 report.

Similar comments apply to Disposal Areas Nos. 132-139, 141-144, 153, 154 and 157. Public notices distributed by us have not, as a usual practice, provided details concerning exact locations of levees because this degree of detail tends to confuse the general public and constrains substantive comments.

The importance of a flow exchange and aquatic life passage near Station 799+500 is recognized. The opening desired between Rattlesnake and Ayres Islands will not be jeopardized by Corps of Engineers dredge disposal

SWGCO-M

25 April 1975

Mr. W. O. Nelson, Jr.

operations. However, the methodology used is a matter of engineering and dredging techniques, neither of which is within your purview of responsibility or authority. Therefore, the methods used may or may not include levees.

Your recommendation No. 17 concerning deletion of Disposal Area No. 128 is not acceptable because no alternative area exists within a reasonable pumping distance. As you will recall, we omitted use of Disposal Area No. 128 in compliance with your recommendation during the last maintenance of this reach of the project. As a result, we have depleted practically all of the available capacity in the adjacent disposal areas. Since your concern relates to water circulation between the refuge and San Antonio Bay, two possible solutions exist. Either the Department of the Interior provides alternate disposal areas by formal agreement on the north side of the channel, or the Corps utilizes an area of larger extent than the existing No. 128 and makes other design provisions to maintain water flow.

Should be 536.5
Your recommendation No. 18 which eliminates all disposal areas over a length of about 8 miles of channel is unacceptable primarily because we have no alternative areas which can be relied upon and no existing method by which to obtain fee title or permanent easements for disposal. You are partially correct in your conclusion that we have in the past been able to obtain one-time permission to use private land to the northwest for disposal. However, as you will recall, this was only for that reach of the GIWW between Mile 535.5 and Mile 539.5. Furthermore, as you may note, the private lands we utilized to accommodate your request are now being included for use in our current disposal plan as depicted in the public notice. As long as these private lands remain available, we plan to continue to use them. However, since we are directed to maintain the authorized channel, we have no alternative but to utilize areas which have been used since the 1950's. If you feel this is totally unacceptable, then we must appeal your advice to a higher level. However, before resorting to this action or contemplating abandonment of the channel, it is requested that you provide any data or studies which clearly identify the adverse effects by area and extent along with fish losses and monetary values.

In order that we may meet our schedule of compliance with the provisions of Federal regulations, Title 33 CFR 209.145, it is requested that you respond to this letter by 23 May 1975. If you have any questions, you may contact Mr. George Rothen, telephone 713 763-1211, Ext 315, at your convenience.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

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IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

May 23, 1975

District Engineer
Corps of Engineers, U. S. Army
Post Office Box 1229
Galveston, Texas 77550

Attn: SWGCO-M

Dear Sir:

This letter responds to Mr. E. D. McGehee's request of April 25, 1975, for additional information relative to Public Notice No. 1W-M-13, Maintenance Dredging, GIWW (Main Channel) San Antonio Bay to Corpus Christi Bay. The following comments have been coordinated with representatives of the Texas Parks and Wildlife Department and the National Marine Fisheries Service.

We reiterate our concern for spoil disposal in areas adjacent to the Aransas National Wildlife Refuge and in Redfish Bay. The recommendation in our report of October 11, 1974, that Disposal Area No. 128 no longer be used, was partially based upon the ecological need for maintaining water circulation between the inter-connecting sloughs of the refuge and the open-water areas of San Antonio Bay. Dredged spoil disposal in this area also would contribute to the loss of valuable estuarine habitat in San Antonio Bay. In addition, we are greatly concerned with spoil disposal on areas along the southern margin of the Aransas National Wildlife Refuge because of the threat it poses to endangered whooping cranes and brown pelicans which rely heavily upon tidal marsh habitat within the refuge and environs.

The areas surrounding existing islands of emergent spoil constitute habitat for both of these endangered species. It is thus imperative that further spoil disposal on sites in the refuge be confined to emergent lands that previously have been used for this purpose. Appropriate action is mandated by Section 7 of the endangered Species Act of 1973 (P.L. 93-205) which states in part, "all other federal departments or agencies shall utilize their authorities - by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeopardize



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the continued existence of such endangered species or threatened species or result in destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected states, to be critical."

Our report of October 11, 1974, and letter of February 21, 1975, also requested elimination of Disposal Areas 147-152, 156, 158-159, and 162 south of the waterway in Redfish Bay. This recommendation was based upon our concern for preserving the high natural productivity of the bay and its importance as a nursery area for marine fish and crustaceans. Mr. McGehee requested that we provide additional data or studies which identify the adverse effects of dredging operations in Redfish Bay and the value of resources which would be lost.

Hoese and Jones indicated that the turtlegrass community in Redfish Bay is one of the largest distinct grass communities of its type on the Texas coast. 1/ These inshore nursery grounds provide excellent habitat for many marine organisms, especially pink shrimp which exhibit a remarkable habitat specificity for Redfish Bay. Analysis of commercial catches indicate that about two-thirds of the Texas pink shrimp production in 1956-1959 came from the Gulf opposite Redfish Bay. 2/

In 1965, Martinez reported that over 364 acres of nursery habitat were lost to dredging operations within the Aransas Bay System. Much of this resulted from dredging of the Rockport-Aransas Pass Intracoastal Waterway. 3/ Redredging of the Intracoastal Waterway in Redfish Bay the following year (1966) again resulted in the silting up of several small but important nursery areas. 4/

One comprehensive study by Hellier and Kornicker on maintenance dredging of the GIWW in Redfish Bay indicated that unconfined sediment in depths of 22 to 27 centimeters was deposited more than 0.5 mile from the spoil area. 5/ From these data it can be calculated that approximately 2,500 acres of estuarine habitat are subject to damage from maintenance dredging of an 8-mile reach of Redfish Bay.

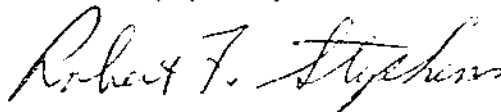
At present, no standardized methodology exists for translating the value of marsh-estuarine habitat into monetary terms. In some cases the value of the commercial fishery catch of estuarine-dependent species can be isolated for a particular area. However, this relates to only one function of the estuarine ecosystem. The overall value of marsh-estuarine habitat can be more nearly

equated to its intrinsic "life support" value. In a recent study by a team of eminent scientists, the income - capitalized value of tidal marsh on a life support basis was assessed at almost \$83,000 per acre. 6/ A related or perhaps lesser value could be attributed to the shallow, grass-laden areas of Redfish Bay since their primary productivity probably would be slightly less than that of tidal marsh.

The Texas Parks and Wildlife Department also is very interested in preserving the natural resources of Redfish Bay. One dredging operation within the bay was halted by the Texas Parks and Wildlife Department during the summer of 1974. This action was subsequently upheld by Court decision (Horton and Horton vs. State of Texas). Other instances of damage to Redfish Bay through dredging operations have been reported throughout the literature. However, time and manpower constraints prohibit a complete accounting at this time.

In conclusion, it is our firm belief that the Corps of Engineers should continue to seek upland disposal sites north of the waterway along Redfish Bay as recommended in our October 11, 1974 report. This or other acceptable alternatives to spoil disposal in Redfish Bay are considered necessary to protect the fish and wildlife resources of this important estuarine area. In the event that consideration of the additional justification we have presented still results in objection to our recommendations, and the matter is remanded to higher authority, please keep us advised so that, if necessary, further attempts can be made to find an acceptable solution.

Sincerely yours,



Acting Regional Director

cc:

Executive Director, Texas Parks and Wild. Dept., Austin, Tex.
 Area Suprv., NMFS, Envr. Assessment Div., Galveston, Tex.
 SW Regional Representative, Nat'l Audubon Soc., Austin, Tex.
 Regional Director of Coastal Fisheries, Region V, Texas Parks
 and Wild. Dept., Rockport, Tex.
 Field Suprv., FWS, Div. of River Basin Studies, Galveston, Tex.
 Field Suprv., FWS, Div. of River Basin Studies, Fort Worth, Tex.

- 1/ Hoese, H. D. and R.S. Jones, 1963. Seasonality of larger animals in a Texas turtle grass community. Publ. Inst. Mar. Sci. Univ. Tex. 9:37-46.
- 2/ Gunter, G. 1962. Shrimp landings and production of the State of Texas for the period 1956-1959, with a comparison with other Gulf States. Publ. Inst. Mar. Sci. Univ. Tex. 8:216-226.
- 3/ Martinez, R. 1965. Coastal hydrographic and meteorological study. Texas Parks and Wildlife Dept. Coastal Fish. Proj. Rpts, Proj. No. MH-R-1, (Job No. 8).
- 4/ Martinez, R. 1966. Coastal hydrographic and meteorological study. Texas Parks and Wildlife Dpt. Coastal Fish. Proj. Rpts., Proj. No. MH-R-2, (Job. No. 8).
- 5/ Hellier, T. R. Jr. and L. S. Kornicker, 1962. Sedimentation from a hydraulic dredge in a bay. Publ. Inst. Mar. Sci. Univ. of Tx. 8: 212-215.
- 6/ Gosselink, J.G., E.P. Odum, and R.M.Pope. 1974. The value of the tidal marsh. Louisiana State Univ. Center for Wetland Resources, Rpt. No. LSU-SG-74-03.

9 October 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Department of the Interior
Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference is made to your letter dated 12 November 1974 concerning Public Notice HW-M-3 and your letters dated 21 February 1975 and 23 May 1975 concerning Public Notice HW-M-13, all regarding maintenance dredging of the main channel of the Gulf Intracoastal Waterway. Copies of your letters and our replies thereto are attached for your ready reference.

Copies of the Department of Commerce, National Marine Fisheries Service letters dated 18 November 1974 and 7 March 1975 with copies of our replies are also attached for your information. All of the correspondence contains recommendations and/or comments relating to the elimination of disposal areas or portions of disposal areas along the GIW, between Galveston and Corpus Christi Bay.

This letter pertains to those areas where property adjoining the GIW is under the control of the Department of the Interior, Fish and Wildlife Service. Your agency along with the National Marine Fisheries Service recommended that portions of disposal areas 75, 94, 95 and 96 be eliminated and that an acceptable alternative would be to place and confine the dredged material within levees on the north side of the channel. It is assumed you are agreeable to making the alternative areas available for our use. Since confining the material within levees establishes a finite useful life for a disposal area, it is necessary for us to seek permits for the entire portion of the area to be relocated. Therefore, it is requested that you issue permits per your recommendations for a strip of land adjacent to our existing north right-of-way line and extending 1350 feet from the channel centerline between Stations 165+000 and 169+000, Stations 277+500 and 278+000, Stations 278+800 and 284+000, Stations 285+750 and 294+500, and Stations 302+000 and 310+000.

SWGCO-M

9 October 1975

Mr. W. O. Nelson, Jr.

In addition to the above, the Fish and Wildlife Service and the National Marine Fisheries Service recommended that disposal area 128 be eliminated and that areas 127 and 129 be confined within levees. This recommendation was made prior to the last maintenance dredging of this reach of the channel. In accordance with the recommendation, area 128 was not used and areas 127 and 129 were leveed, resulting in depletion of practically all available capacities between Stations 775+500 and 804+000.

In order for us to continue to comply with the intent of the recommendations, replacement disposal areas are required. We have reviewed our long-term requirements in this area and for the reach of channel between Stations 775+000 and 804+000 a minimum of 300 acres are required. It is not necessary that the acreage be in one tract. It would be preferable if four areas about equally spaced along the channel and no more than 1,000 feet from the channel could be made available. However, each area should have a minimum size of 50 acres.

Please review this matter and advise me as to your intentions concerning the permits. If you know of other alternatives, we would be interested in discussing them. If you have any questions or need additional information, please call J. D. Bissell, AC 713-763-1211, Ext. 315.

Sincerely yours,

5 Incl

1. USF&WS ltr, 12 Nov 74
w/reply 6 Feb 75
2. USF&WS ltr, 21 Feb 75
w/reply 25 Apr 75
3. USF&WS ltr, 23 May 75
4. NMFS ltr, 18 Nov 74
w/reply 18 Feb 75
5. NMFS ltr, 7 Mar 75
w/reply 25 Jun 75

DON S. McCOY
Colonel, Corps of Engineers
District Engineer

Rockport Conservation Association, Inc.

OFFICERS

For 25 Years A Non-Profit Corporation

DIRECTORS

TENGG
President

N. FIELDS
Vice Pres. & Sec'y.

W. COCHRAN
Treasurer

P. O. Box 721
ROCKPORT, TEXAS 78382
February 14, 1974

CAPT. BROWN
Whooping Crane

COL. Wm. M. BROWN
Ret. U.S.A.F.
ANTOINE GRAYIB, M.D.
W. E. HAYNES
R. L. IRWIN

Col. Don S. McCoy
Galveston District Engineer
Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

Dear Col. McCoy:

Reference is made to public notice No. I WW-M-13, dated January 21, 1975, Maintenance Dredging, Gulf Intracoastal Waterway (Main Channel) San Antonio Bay to Corpus Christi Bay. The project as described in this public notice is inimical to the fish and wildlife interests of The Texas Coastal Waters.

The value of the waters traversed by the IWW to Fish and wildlife resources is well documented. The nursery, rearing ground and harvest areas are essential to the survival of the sport and commercial fisheries. Waterfowl and numerous shore birds are dependent on these waters and associated marshes.

We believe it is evident, and adequately documented, that turbidity and sedimentation are major adverse factors affecting the productivity of these waters. Dredging, along with current methods of spoil disposal have in the past, are presently, and portend for the future, to be major destroyers of fish and wildlife resources in this area.

Installation of the project in the manner described in the public notice will aggravate the conditions that most need to be abated if productivity of the Texas Coastal waters is to be maintained. Overboard disposal of spoil will be highly detrimental. We also believe that as an engineering practice open water spoil disposal has proved undesirable as the dredged materials frequently wash back into the dug channels. It is a good way to ensure that maintenance dredging will soon be needed again.

The Environmental Statement on Page 5 of the public notice starts with the premise that the proposed work will significantly benefit the economic and social well-being of the public. This is a biased approach.

Col. Don S. McCoy
Galveston District Engineer

The beneficial and adverse effects of the project, both tangible and intangible, should be thoroughly analyzed and clearly set forth so that those concerned with the project can determine for themselves its impact. How will destruction of a resource that attracts visitors to the area be economic benefit to those who derive their livelihood from tourism? How will destruction of nursery and rearing grounds, essential to perpetuation of the fisheries be of economic benefit to the commercial fisheries industry? How will the social well-being of the people who derive a substantial part of their recreation from fishing these waters be benefitted?

It is difficult to derive anything meaningful from the last paragraph page 5 of the public notice. Our understanding of the last sentence is that modification in the proposed spoil disposal plan will be made only if there is no adverse impact on navigation interests. We recognize the importance of navigation to our national and local economy but cannot condone destruction of valuable natural resources to achieve an equivocal benefit.

The Rockport Conservation Association is strongly opposed to the project as now proposed. All dredged material must be disposed of in a manner that will not jeopardize the nursery, rearing grounds and harvest areas so essential to the sport and commercial fisheries. We urge you to cooperate fully with State and Federal Fish and Wildlife agencies to achieve this end.

Very Truly Yours,


Ed Tengg, President

ET/m

27 March 1975

Mr. Ed Tengg
President
Rockport Conservation Association, Inc.
P. O. Box 721
Rockport, Texas 78382

Dear Mr. Tengg:

This is in reply to your letter of 14 February 1975 addressing Public Notice No. IWW-M-13. The public notice addressed maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) - San Antonio Bay to Corpus Christi Bay.

It is apparent from your letter that you have not had the opportunity to review the Draft Environmental Statement for maintenance of the GIWW. A copy is inclosed for your information. We are in the process of completing the final statement and finalizing our coordination with the various agencies responsible for protection of fish and wildlife resources.

Although the Corps of Engineers is charged primarily with maintenance of navigation, we are also obligated to take all reasonable measures to reduce adverse environmental effects that could result from our projects. To this end, we adopt recommendations made by the U. S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Texas Parks and Wildlife Department to the maximum extent practicable. Special efforts are made to protect valuable habitat such as nursery grounds.

We believe that the inclosed Environmental Statement, Volumes I and II, will answer the questions contained in your letter.

Sincerely yours,

1 Incl
As stated

E. D. McGEREE
Chief, Construction-
Operations Division

Rockport Conservation Association, Inc.

For 25 Years A Non-Profit Corporation

OFFICERS

DIRECTORS

TENGG
President

P. O. Box 721
ROCKPORT, TEXAS 78382

JAN FIELDS
Vice Pres. & Sec'y.

May 30, 1975

W. COCHRAN
Treasurer

CAPT. BROWN
Whooping Crane
COL. Wm. M. BROWN
Ret. U.S.A.F.
ANTOINE GRAYIB, M.D.
W. E. HAYNES
R. L. IRWIN

District Engineer
Corps of Engineers, Galveston District
P.O. Box 1229
Galveston, Texas 77550

Dear Sir:

We are in receipt of Mr. McGehee's letter of March 27th enclosing a draft copy of the Environmental Impact Statement on Maintenance Dredging, GIWW, Texas Section. We object to the project as now proposed because of the unwarranted environmental damages it would cause by destroying substantial areas of valuable aquatic habitat.

Mr. McGehee's letter states that you have adopted recommendations made by the U.S. Fish and Wildlife Service, The National Marine Fisheries Service, and the Texas Parks and Wildlife Dept. to the maximum extent practicable. We have not read the material provided in its entirety, but have reviewed those portions where our greater interest lies. We are not satisfied with the extent to which favorable consideration has been given to interests other than navigation.

We have also had the opportunity to review a copy of Mr. Mc Gehee's letter of April 25th to Mr. W. O. Nelson, Regional Director, Alburquerque, New Mexico. This letter indicates you have rejected the most vital recommendations of the fish and wildlife agencies. Your excuse seems to be that you have not made adequate provision for spoil disposal at such sites and in such a manner that serious environmental damage would not occur. You would pass this responsibility off to others. We feel the onus is on the Corps. This is a Corps project including spoil disposal.

The approach to fish and wildlife damages in The Draft environmental statement borders on offhand dismissal of important matters. No serious

Rockport Conservation Association, Inc.

(For 25 Years A Non-Profit Corporation)

OFFICERS

DIRECTORS

P. O. Box 721

ROCKPORT, TEXAS 78382

CAPT. BROWN
Whooping Crane
COL. Wm. M. BROWN
Ret. U.S.A.F.
ANTOINE GRAYIB, M.D.
W. E. HAYNES
R. L. IRWIN

TENGG
President
AN FIELDS
Vice Pres. & Sec'y.
W. COCHRAN
Treasurer

District Engineer
May 30, 1975

consideration is given to protecting these resources. The greatest effort is in devising means of avoiding responsibility in this direction. The attitude expressed in discussing adverse environmental damages which cannot be avoided is anything but constructive. Segments subject to damage are shrugged off by describing them as fractional percentages of total bay bottoms along the Texas coast. I wonder what fraction of a percent of Texas marine tonnage is served by these same segments. I'm sure such a process of minimization would be offensive to you.

The federal and state fish and wildlife agencies have the expertise to prescribe specific measures to protect these interests. Therefore we will not attempt to review these needs. However, there is an area of great concern on which we would comment. Overboard spoil disposal along the cut through Red Fish Bay would cause great damage to high value nursery area. If the spoil cannot be contained on high ground to the west or otherwise disposed of in a manner that would not damage Red Fish Bay, we believe the losses outweigh any benefit that could be derived from the channel.

It is understood that you have to follow the laws and statutes wherein you are directed, as your primary function in this instance, to provide for navigation. You are also directed to give consideration to other matters in the national interest. We believe this means a diligent effort to protect and perpetuate these resources.

Your Orders and Regulations and Engineering Manual contain procedural detail, but even within these guidelines much latitude still remains for the individual to determine how much or how little will be done in the matter of environmental protection. We sincerely hope that instead of the pattern set in the draft environmental statement you will make every effort to do as little harm as possible in the pursuit of your navigation project.

Very truly yours,

458

Ed Tengg

E. N. Tengg
Natural Resources Are Never Appreciated Until We Lose Them — SO LET'S DON'T

26 June 1975

Mr. Ed Tengg
President
Rockport Conservation Association, Inc.
P. O. Box 721
Rockport, Texas 78382

Dear Mr. Tengg:

This is to acknowledge receipt of your 30 May 1975 letter commenting in general on the Draft Environmental Statement for maintenance of the Gulf Intracoastal Waterway (GIWW) and on our letter of 25 April 1975 to the U. S. Fish and Wildlife Service concerning Public Notice No. IWW-M-13, Maintenance Dredging, GIWW (Main Channel) San Antonio Bay to Corpus Christi Bay.

We regret that your organization is not satisfied with the measures proposed to reduce adverse environmental effects on this project. The Corps has expended considerable effort coordinating acceptable disposal plans with various fish and wildlife agencies. Numerous revisions have been incorporated in the plans to make the project as environmentally acceptable as possible within reasonable monetary constraints. I am sure that you recognize the difficulty in achieving total agreement in all matters when coordinating diverse interests.

Much of our difficulty in coordinating an acceptable disposal plan on the GIWW stems from the fact that until recently we did not have a sponsor for most of this project. Under the existing project authorization we do not have authority to expend Federal funds to acquire additional or alternate disposal areas. As you are probably aware, the last session of the Texas Legislature passed Senate Bill 472 authorizing the State of Texas to sponsor the GIWW. As appropriations become available, we will work with the State for alternate disposal areas to enable us to cease use of those areas that are environmentally sensitive. However, in the interim, should dredging be required, we must continue to utilize those areas we have used over the years.

Inasmuch as your letter recognizes the expertise of the various Federal and State fish and wildlife agencies, please be assured that we are continuing to coordinate our maintenance program with those agencies to make our navigation projects more compatible with the environment. Your letter will be placed in our permanent file and your views and comments on this matter are appreciated.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

Rockport Conservation Association, Inc.

For 25 Years A Non-Profit Corporation

OFFICERS

DIRECTORS

ED TENGG
President

DEAN FIELDS
Vice Pres. & Sec'y.

M. W. COCHRAN
Treasurer

P. O. Box 721
ROCKPORT, TEXAS 78382

CAPT. BROWN
Whooping Crane

COL. Wm. M. BROWN
Ret. U.S.A.F.

ANTOINE GRAYIB, M.D.

W. E. HAYNES

R. L. IRWIN

July 21, 1975

Department of the Army
Galveston District, Corps of Engineers
P.O. Box 1229
Galveston, Texas 77550

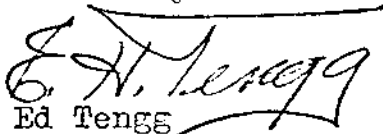
Attention: E. D. McGehee, Chief
Construction Operations Division

Thank you for your letter of June 26, regarding the Public Notice No. IWW-M-13 and my letter of May 30. It is hoped that the State will be able to provide spoil sites under the recently enacted legislation that will be less inimical to the environment.

I am afraid all is not yet clear sailing. The provision of alternative spoil sites in providing funds and on the active concern of the Corps and the State Highway Department in working to obtain the desired sites.

If we can be of any assistance please contact us.

Sincerely


Ed Tengs

ED/fj



SOUTHERN METHODIST UNIVERSITY

Environmental Law Clinic
Telephone: 214-692-2855

SCHOOL OF LAW
DALLAS, TEXAS 75275
February 7, 1975

Col. Don S. McCoy, C. E.
Department of the Army
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

RE: Public Notice No. IWW-M-13

Dear Col. McCoy:

The aforementioned Public Notice advises that an area extending from San Antonio Bay to a point Southwest of Aransas Bay may be subject to dredging operations within the near future. The same notice advises that presently no Environmental Impact Statement has been composed or filed regarding this area. Consequently, the adverse effects of the dredging and disposal operations on water quality, fish and ambient wildlife cannot truly have been fully evaluated.

Therefore, before an "emergency situation" develops I would think it most propitious to evaluate the area to make a comprehensive determination of any possible adverse effects. Specifically, evaluations should be made regarding:

1. The impact of the project upon the natural physical environment and upon damage to the stream bottom;
2. The loss of habitat to ambient floral, fauna, recreational, and concomitant ecological loss;
3. The vegetation loss which functions as a primary habitat for holding sedentary species within the region, and finally;
4. As the subject area contrasts with surrounding land types it may be viewed as a separate ecosystem. Hence it too must be considered as it would be severely disrupted and permanently altered by the project. Therefore, a more through evaluation of this aspect should be made before proceeding.

Consequently, a public notice concerning the relative environmental effects of this project should be scheduled. As an "emergency" may develop

within the immediate schedule please initiate this as quickly as possible.

Thank you for giving this matter your attention.

Sincerely yours,

A handwritten signature in cursive script that reads "J. Rochelle". The signature is written in dark ink and is positioned above the typed name.

J. Rochelle
Student

JR:ef

FEB 25 1975

Mr. J. Rochelle
Southern Methodist University
Environmental Law Clinic
School of Law
Dallas, Texas 75275

Dear Mr. Rochelle:

Receipt is acknowledged of your letter dated 7 February 1975 pertaining to Public Notice No. SW-M-13, dated 21 January 1975, concerning maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) from San Antonio Bay to Corpus Christi Bay.

Your letter noted that an Environmental Impact Statement has not been composed or filed regarding this reach of the Gulf Intracoastal Waterway (GIWW). This is in error as the public notice states a Draft Environmental Statement has been prepared and was filed with the Council on Environmental Quality on 30 October 1974. Comments have been received on the Draft Environmental Statement and the Final Environmental Statement is being completed. We anticipate having the Final Environmental Statement filed with CEQ in the late spring or early summer of 1975.

Current hydrographic surveys show no existing shoals in this reach of the channel. Unless storms or high water conditions accelerate shoaling, we do not anticipate dredging this reach of the GIWW during calendar year 1975.

We would also like to refer you to 33 C.F.R. 209.145, published in the Federal Register on 22 July 1974, which prescribes the policies, practices and procedures to be followed by all Corps of Engineers installations in connection with review of Federal projects which involve the disposal of dredged material. In the regulation, we are required to issue a public notice, make an Environmental Assessment, and prepare a Statement of Findings. The Environmental Assessment evaluates the four specifics you outlined and the procedures and policies outlined in 33 C.F.R. 209.145 are being followed. These documents, as well as comments received from the public notice, are forwarded to the Environmental Protection Agency for review and disposal area designation.

SWGCO-M

Mr. J. Rochelle

Your letter concluded by stating a public notice concerning the relative environmental effects of this project should be scheduled. The referenced public notice was issued as prescribed by the regulation. We do not see any need or benefits to be derived by the issuance of a second Public Notice.

Sincerely yours,

DON S. McCOY
COLONEL, CE
DISTRICT ENGINEER

CITY OF CORPUS CHRISTI, TEXAS

**MAYOR**

JASON LUBY

CITY COUNCIL

JAMES T. AUFF
MAYOR PRO TEM
REV. HAROLD T. BRANCH
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GABE LOZANO, SR.
J. HOWARD STARK

CITY MANAGER

R. MARVIN TOWNSEND

CITY SECRETARY

BILL B. READ

CITY OFFICES

302 SOUTH SHORELINE
POST OFFICE BOX 9277
PHONE (512) 884-3011
ZIP CODE 78408

February 10, 1975

District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

Re: Public Notice No. IWW-M-13 dated January 21, 1975

Dear Sir:

The City of Corpus Christi has reviewed the proposed maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) from San Antonio Bay to Corpus Christi Bay and offers no objection to the proposed project.

The Intracoastal Waterway is vital to the City of Corpus Christi and its maintenance is essential to this City's economic potential. We look forward to seeing the project completed.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. Marvin Townsend".

R. Marvin Townsend
City Manager

RMT/dz

SWGCO-M

19 February 1975

Mr. E. Marvin Townsend
City Manager
City of Corpus Christi
302 South Shoreline
P. O. Box 9277
Corpus Christi, Texas 78403

Dear Mr. Townsend:

Receipt is acknowledged of your letter concerning Public Notice No. IWW-M-13, dated 21 January 1975, concerning maintenance dredging of the Gulf Intracoastal Waterway (Main Channel) from San Antonio Bay to Corpus Christi Bay.

Your review and endorsement of the project were appreciated.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division



IRWIN INDUSTRIES, INC.

GENERAL CONTRACTING - PALM HARBOR HOMES & LOTS - PALM HARBOR TRAVEL PARK - BOAT BARN

PALM HARBOR SUBDIVISION
P. O. BOX 1286
ROCKPORT, TEXAS 78382
PHONE 729-2731
729-5699

March 4, 1975

Department Of The Army
Corps of Engineers, Galveston District
P.O.Box 1229
Galveston, Texas 77550

Re: Public Notice No. IWW-M-13

Dear Sirs:

As an interested party in the preservation of marine and migratory wildlife in Redfish Bay located south of Rockport, I wish to offer assistance in the proposed maintenance dredging of the Gulf Intracoastal Waterway.

I can provide the Corps of Engineers with dry land disposal areas, that could replace offshore disposal sites No. 147, 148, 149, and 150. The spoil from these sites can be placed on shore on my property paralleling the Intracoastal Waterway. The runoff from these disposal areas can be controlled with a minimum amount of leveling. Any site preparation needed would be done by the owner at no expense to the Corps.

Please consider these disposal sites as a alternative to further filling up Redfish Bay. The suggested on shore sites are available for your inspection and study. Please feel free to call upon me for any further information.

Sincerely:


Raulie L. Irwin Jr.

SWCCO-M

12 March 1975

Mr. Raulie L. Irwin, Jr.
Irwin Industries, Inc.
Palm Harbor Subdivision
P. O. Box 1286
Rockport, Texas 78382

Dear Mr. Irwin:

Receipt is acknowledged of your letter concerning Public Notice No. IWW-M-13, dated 21 January 1975, pertaining to the maintenance dredging of the Gulf Intracoastal Waterway.

We are requesting our Corpus Christi Area Engineer to make a site investigation of the alternate disposal sites you have offered.

Thank you for your interest in this area.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

22 April 1975

Mr. Raulie L. Irwin, Jr.
Irwin Industries, Inc.
P. O. Box 1286
Rockport, Texas 78382

Dear Mr. Irwin:

This is in reply to your 5 March 1975 letter and confirms subsequent discussions by Mr. W. A. Sky-Eagle, Jr., concerning your offer of lands for disposal of maintenance materials dredged from the Gulf Intracoastal Waterway.

Pursuant to Mr. Sky-Eagle's meeting with you, we find that your properties are located adjacent to a reach of the main channel (approximate GIWW Mile 525.9 to Mile 528.8) which has required maintenance only one time since the original dredging was performed in 1959. The maintenance dredging was performed as a result of shoals created by "Hurricane Carla" in 1961. Since the normal shoaling rate is minimal and a dredging frequency has not been firmly established for this channel reach, we have not scheduled maintenance and therefore do not foresee an immediate need for the use of your properties.

In the event that an erratic shoaling pattern should develop however, the need to use your lands will become apparent. Accordingly and in order to eliminate possible future delays, we plan to mark-up plans showing your properties and coordinate the use of your lands with the various fish and wildlife and environmental protection agencies prior to initiating any acquisitions for dredge disposal rights from you. As you may know, the use of any lands for dredge disposal operations must be environmentally acceptable and approved for use pursuant to various Federal dredging regulations and laws.

Once we have acquired the approval of the various environmentalist, we will know which areas to request the project sponsor, the City of Aransas Pass, to obtain from you for pipeline routes, flowage easements and/or disposal rights.

SWCCO-M

Mr. Raulie L. Irwin, Jr.

22 April 1975

Thank you for the offer of your lands and should there be a need for further assistance in this matter, please do not hesitate to inquire.

Sincerely yours,

E. D. McGEHEE
Chief, Construction-
Operations Division

SUPPLEMENT NO. 14
TRIBUTARY CHANNEL TO
ARANSAS PASS

SUPPLEMENT NO. 14

TRIBUTARY CHANNEL TO
ARANSAS PASS

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SUPPLEMENT NO. 14

TRIBUTARY CHANNEL TO ARANSAS PASS

1. PROPOSED ACTION. The proposed Federal action is continued periodic maintenance dredging of the Tributary Channel to Aransas Pass. The federally authorized project includes the Tributary Channel to Aransas Pass, the turning basin and connecting channel, and Conn Brown Harbor. Improvements to the existing project involve deepening the waterway from 12 feet to 14 feet below Mean Low Tide (Corps of Engineers datum) and widening the tributary channel, mile 3.5 to mile 4.6, from 125 feet to 175 feet. The tributary channel is 6.1 miles long; the Aransas Pass Turning Basin, 300 feet wide by 2,200 feet long; and Conn Brown Harbor, 300 feet wide by 1,000 feet long. Maintenance of the existing project and the improved project are also included. Currently, the channel requires maintenance dredging once every five years with an annual shoaling rate of approximately 55,000 cubic yards. Maintenance dredging is performed by hydraulic pipeline dredge with dredged materials disposed of in land disposal areas. The disposal areas for this channel are numbered 1 through 6 and are shown on the figure in the attached public notice. The next maintenance dredging of the Tributary Channel to Aransas Pass has not been scheduled. The proposed action will comply with Federal dredging regulations 33 CFR 209.145 and Discharge of Dredge or Fill Material (40 CFR 230).

2. NEED FOR ACTION. Periodic maintenance is required to prevent shoaling from halting or restricting navigation on the channel. Benefits of continued maintenance dredging of the channel are derived almost entirely from commercial navigation, including inland waterway barge tows and service vessels. In 1974 over 16.6 thousand tons of cargo were carried over the waterway. The principal commodities were basic chemicals, basic chemical products, and marine shells. The economy of the project area is heavily dependent upon continued use of low cost waterborne transportation.

3. ENVIRONMENTAL SETTING.

3.01 The project channel traverses high quality fish and wildlife habitat. The bay waters are relatively clear and support large beds of shoalgrass, turtlegrass, and associated flora. They provide brackish-water habitat for spotted seatrout, red drum, black drum, sheepshead, flounder, croaker, bay anchovy, menhaden, shrimp, and blue crab. Oyster reefs occur in the area and are productive in years of abundant rainfall. Sport and commercial fishing is intensive in the project area.

3.02 The tidal flats are sparsely vegetated with patches of glasswort, saltgrass, and saltflat grass. Disposal islands also may be vegetated, but many have a barren surface of sand and shell. There are a few tidal marshes fringing the barrier islands and the shores of the bays. Needlerush and cordgrass are common here. The flats and marshes and the shallower portions of the bays are important as breeding and nursery habitat for fishes and crustaceans.

3.03 Many species of shore and wading birds inhabit the project area. Herons, egrets, pelicans, ibises, cranes, and the roseate spoonbill use the area for resting, feeding, and nesting. Endangered species known to range in the area include Florida manatee, right whale, sperm whale, blue whale, finback whale, southern bald eagle, brown pelican, whooping crane, Eskimo curlew, Arctic peregrine falcon, American peregrine falcon, American alligator, Atlantic ridley, hawksbill turtle, and leatherback turtle. The world's only population of wild whooping cranes winters on the nearby Aransas National Wildlife Refuge and disposal islands. These birds are of great economic importance to this coastal area by virtue of the tourism which they engender. Their aesthetic value is considered priceless by many people.

3.04 Two bird sanctuaries administered by the National Audubon Society located in the project area are the Second Chain of Islands in Ayres Bay and Harbor Island southwest of the Lydia Ann Channel.

3.05 Waterfowl are seasonally abundant. Important species include the redhead, pintail, widgeon, scaup, teal, shoveler, baldpate, and canvasback duck and Canada, snow

and blue geese. Large numbers of redheads and pintails feed on the submerged grass beds. The mottled duck, a resident species, is known to nest on densely vegetated islands in the bays adjoining and south of the Aransas National Wildlife Refuge. The numerous duck blinds which dot the bays and flats are evidence of the intensive hunting which the area receives.

4. ADVERSE ENVIRONMENTAL EFFECTS.

4.01 Maintenance dredging of this reach of the Channel to Aransas Pass will have an adverse effect on the natural environment. The significance of these effects will vary according to location of disposal areas, disposal practices, type of bottom material being dredged, and quantity of similar surrounding habitat.

4.02 Dredging. The removal of shoal materials accumulated in the channel and basin will disturb or remove swimming and benthic organisms. However, because of pollutants found in some sediments, instability of the sediments, and frequency of maintenance dredging, it is expected that populations of bottom dwelling organisms are low in the channel bottom. Other detrimental effects of dredging include turbidity caused by the action of the cutterhead assembly, resuspension of pollutants in that turbid area, and destruction of any fish or crustaceans caught by the cutter or pulled into the pipeline by the pump. These effects are limited to an area immediately surrounding the dredge cutterhead.

4.03 Normally, maintenance dredging does not destroy any submerged vegetation or oysters, as channel depths preclude development of vegetation because of reduced sunlight penetration, and the soft materials constantly accumulating on the channel bottom prevent oysters from developing. Dredging usually has little effect on motile marine species, as they are able to avoid the dredge.

4.04 Disposal. The most significant adverse environmental effects are associated with disposal methods rather than dredging. Disposal practices along this reach are restricted to land disposal.

4.05 Land Disposal. Adverse environmental effects of disposal of dredged material on land include destruction of vegetation; loss of foraging, feeding, nesting, and resting areas for birds, mammals, and reptiles; temporary reduction of air quality in the immediate vicinity; and long-term partial suppression of the productivity of the disposal area.

4.06 When a land area is used for disposal of dredged materials, most of the vegetation is covered or destroyed, particularly where containment levees are used. This loss of vegetation forces birds, mammals, and reptiles to leave the area until the vegetation recovers. Recovery of the vegetation usually begins within 6 months to a year. Considering the very small relative size of the total area used for disposal when compared to the thousands of square miles of similar habitat in the surrounding coastal area, it is doubted that such effects are significant.

4.07 In some instances, the disposal of dredged materials on land results in the degradation of air quality as a result of the release of odors. These odors are caused by the decay of organic materials that had collected on the channel bottom and decay of vegetation in the disposal area. If necessary, these odors can be controlled by chemically treating with a proprietary product containing essential oils and deodorized kerosene.

4.08 The primary significant long-term adverse environmental effect that results from land disposal of maintenance dredged materials is the suppression of productivity in the disposal areas. Because of repeated disposal of materials, the vegetation is not in a constant state of maximum productivity. Maximum productivity occurs only between the time of full recovery and the next deposition of sediments. Where a disposal area is used for the first time, the vegetation will normally change to a lower quality type. This may permanently lower the productivity of an area. For this channel reach, changes in vegetation type will be minimal, since the areas to be used for disposal have been used previously, and the changes have already occurred.

4.09 Disposal of dredged materials in marshes is significantly detrimental to the ecology of the surrounding bay systems. Such disposal has the effect of converting the highly productive marsh area to a high ground area with a corresponding change in types of vegetation. Marshes are highly productive, often contributing as much as ten tons of organic matter per acre to the bay systems every year. Because of the high value placed on marsh lands as primary food source areas, dredging practices have been changed to avoid disposal in marsh areas wherever practicable.

5. ALTERNATIVES. All apparent alternative methods have been investigated in sufficient detail to determine their viability. Consideration of alternatives includes effects on the economic and social well-being of the area, state, and nation, as well as the effects on the natural environment of the project area. The "no action" alternative has been considered, as well as alternate methods of disposal. Investigation has indicated that, of all the alternatives examined, the only environmentally and economically feasible plan at this time is continued maintenance dredging and disposal in the manner and locations as described in the public notice with the recommended changes described in Section 6 of this summary.

6. RESPONSES TO THE PUBLIC NOTICE. A public notice was issued 21 October 1974. The notice has been made available to all interested Federal and State agencies and all known interested parties. This notice addressed new work and subsequent maintenance as well as continued maintenance of the existing project. Four responses to the public notice have been received. Exxon Pipeline Company suggested a conference be held with representatives of the Corps of Engineers to discuss the Galveston District's intended use of disposal area No. 2. A meeting was held and additional information concerning disposal area No. 2 was requested by Exxon Pipeline. The Corps of Engineers has furnished all requested information available. The matter was resolved following a second conference between representatives of the Corps of Engineers and Exxon Pipeline. The Texas Highway Department requested information on the method of transporting dredged material to disposal areas Nos. 3 and 4 and plans for handling highway traffic

on State Highway 361. The Galveston District has furnished all requested information to the Texas Highway Department. Responses from the U.S. Fish and Wildlife Service (USF&WS) and the National Marine Fisheries Service (NMFS) recommended that disposal area No. 3 be confined to the 40 acre tract nearest Texas Highway 361 and that all effluent drain into the channel paralleling the highway. When the channel is improved, disposal area No. 3 will be leveed with a spillway on the side adjacent to the highway borrow ditch. This disposal area will be enlarged in the future, as needed, to contain the material removed during maintenance dredging operations. The USF&WS and NMFS also recommended that dredge material be confined by levees in disposal area No. 4 at or above the Mean High Tide line to mitigate adverse effects on oyster beds or tidal marsh. This recommendation will be complied with. Maintenance of levees and drainage structures prior to and during dredging operations, as recommended by USF&WS, is routinely accomplished. As recommended by NMFS, plans and specifications will be furnished to Federal and State fish and wildlife agencies prior to issuance of contracts for dredging.

7. ENVIRONMENTAL PROTECTION AGENCY APPROVAL. In a letter dated 3 July 1975, EPA approved the dredging and dredged material disposal plan (under 33 CFR 209.145) for one year provided disposal areas are leveed prior to their next use. Long term approval was deferred until an Environmental Statement has been filed with the Council on Environmental Quality.



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77550

SWGCO-M

PUBLIC NOTICE NO. IWW-M-6

21 October 1974

NEW WORK AND MAINTENANCE DREDGING
GULF INTRACOASTAL WATERWAY - TRIBUTARY CHANNEL TO ARANSAS PASS

This public notice is issued in accordance with provisions of established Federal regulations, Title 33 CFR 209.145, concerning the policy, practice and procedures to be followed by the Corps of Engineers in connection with the disposal of dredged material in navigable waters or the transportation of dredged material for the purpose of depositing it in ocean waters associated with Federal projects.

This notice is being distributed to all interested State and Federal agencies and known interested persons in order to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Comments must be submitted to the District Engineer at the above address on or before 20 November 1974. Laws under which the proposed dredging is to be reviewed:

Federal Water Pollution Control Act
Coastal Zone Management Act of 1972
National Environmental Policy Act of 1969
Fish and Wildlife Act of 1956
Migratory Marine Game-Fish Act
Fish and Wildlife Coordination Act
Endangered Species Act of 1973
National Historic Preservation Act of 1966

PROJECT: Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass.

PROJECT LOCATION: Near Aransas Pass, Texas in Nueces and Aransas Counties, Texas.

PROJECT DESCRIPTION: The Federally authorized project includes the Tributary Channel to Aransas Pass, the Turning Basin and connecting channel and Conn Brown Harbor. Improvements to the existing project involve deepening the waterway from 12 feet to 14 feet below Mean Low Tide (Corps of Engineers datum) and widening the Tributary Channel, Mile 3.5 to Mile 4.6, from 125 feet to 175 feet. The Tributary Channel is 6.1 miles long; the Aransas Pass Turning Basin, 300 feet wide by 2,200 feet long; and Conn Brown Harbor, 300 feet wide by 2,200 feet long. Maintenance of the existing project and the improved project are also included.

DISPOSAL AREAS: The City of Aransas Pass, the sponsoring agency, is responsible for furnishing the necessary rights-of-way, easements, and lands required for improving and maintaining the project. The project utilizes six disposal areas (see drawing).

Disposal Area No. 1 is an existing land disposal area located northeast of the Aransas Pass Channel and west of Lydia Ann Channel on Harbor Island. Toe levees will be constructed, when the site is used in the future, to prevent flow of materials into adjacent or nearby marshes.

Disposal Area No. 2 is located southwest of the Aransas Pass Channel in an upland marsh area on Harbor Island. Existing toe levees will be refurbished, when the site is used in the future, to confine the excavated materials.

Disposal Area No. 3 is located southwest of the Aransas Pass Channel on emergent land between South Harbor Island and Stedman Island. Levees will be constructed, when the site is used in the future, to confine the excavated materials.

Disposal Area No. 4 is located southwest of the Aransas Pass Channel on Stedman Island. Levees will be constructed on three sides to prevent flow of deposited materials and effluent water onto a nearby road, petroleum storage facilities which are located on the north, east and south sides and into Redfish Bay. Material will be allowed to flow into an existing borrow area and onto the flats and marsh area on the west side of the island.

Disposal Area No. 5 is located north of Aransas Pass and east of the GIWW cut-off channel on an island in Redfish Bay. Existing levees will be refurbished, when the site is used in the future, to confine the excavated materials.

Disposal Area No. 6 is located east of the Turning Basin on land between the Turning Basin and the GIWW. This disposal area is to be used one time only when improving the project. Levees will be constructed to confine the excavated materials.

COMPOSITION AND QUANTITY OF MATERIALS: Materials to be excavated in improving and maintaining the project consist of clays, silts, sands and shell fragments. Five hundred sixty-nine thousand cubic yards are to be excavated to improve the project. Shoaling in the channel is a result of tidal action and wind driven currents in Redfish Bay. The past shoaling rate of the project was approximately 15,000 cubic yards annually.

METHOD OF DREDGING: The entire Aransas Pass Channel will be deepened to 14 feet and widened to 175 feet between Mile 3.5 to Mile 4.6 by contract pipeline dredge. The overburden shoal and virgin materials will be deposited in Disposal Areas Nos. 1-5.

The Aransas Pass Turning Basin, connecting channel to Conn Brown Harbor, and Conn Brown Harbor will also be deepened to 14 feet by contract pipeline dredge. The excavated overburden shoal and virgin materials will be deposited in Disposal Area No. 6.

Future maintenance requirements will be performed by contract pipeline dredge and shoal materials will be placed in Disposal Areas Nos. 1 - 5. Previous dredging frequencies have been about every 36 months.

PROPERTIES ADJACENT TO DISPOSAL AREAS: Disposal Area No. 1 is bound by the Aransas Pass Channel on the south, Lydia Ann Channel on the east and marsh, grass and tidal flats on the north and west.

Disposal Area No. 2 is bound by Aransas Pass Channel on the north and east, Texas Highway 361 on the west, and an Exxon oil tank farm on the south.

Disposal Area No. 3 is bound by tidal flats on the north, west and south and a private channel on the east.

Disposal Area No. 4 is bound by Redfish Bay on the east, south and west and Texas Highway 361 on the north.

Disposal Area No. 5 is bound by Redfish Bay on the east and north, GIWW on the west, and Aransas Pass Channel on the south.

Disposal Area No. 6 is bound by the Aransas Pass Turning Basin on the west, the Aransas Pass Channel on the south, GIWW on the east, and commercial areas on the north.

DREDGING BY OTHERS: There has been no significant dredging by others recently. Non-Federal dredging activities are regulated by the Department of the Army permit program.

DESIGNATION OF DISPOSAL SITES: The proposed disposal sites have not been previously designated by the Administrator, Environmental Protection Agency (EPA). However, the use of these sites has been previously coordinated with EPA for disposal of materials from channel improvements and subsequent maintenance dredging.

COORDINATION: The following is a list of Federal, State and local agencies with whom these activities are being coordinated.

Advisory Council on Historic Preservation
Region VI Environmental Protection Agency
U. S. Department of Commerce
U. S. Department of the Interior
Eighth Coast Guard District
Division of Planning Coordination, State of Texas
Texas Parks and Wildlife Department
Texas Historical Commission
Nueces County Navigation District No. 1

Aransas County Navigation District No. 1
Commissioners' Court of Aransas County, Texas
Commissioners' Court of San Patricio County, Texas
Commissioners' Court of Nueces County, Texas
City of Aransas Pass, Texas

ENVIRONMENTAL STATEMENT: A Final Environmental Statement on the channel improvements was filed with the Council on Environmental Quality on 28 May 1974. Copies of the statement may be purchased from U. S. Department of Commerce, National Technical Information Service, Springfield, Virginia 22151. An Environmental Statement for maintenance dredging of the Gulf Intracoastal Waterway and Tributary Channels (Texas Section) will be prepared and will include the Channel to Aransas Pass. The statement is scheduled to be placed on file with Council on Environmental Quality in the fall of 1975 after having been coordinated with the above mentioned agencies.

Any person who has an interest which may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

Designation of the proposed disposal plan for dredged material associated with this Federal project shall be made through the application of guidelines promulgated by the Administrator EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of this proposed disposal plan, any potential impairment of the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal plan, will also be considered.

COMMENTS: Persons desiring to express their views or provide information to be considered in evaluation of the impact of the improvement and the continued maintenance dredging in this project are requested to mail their comments to:

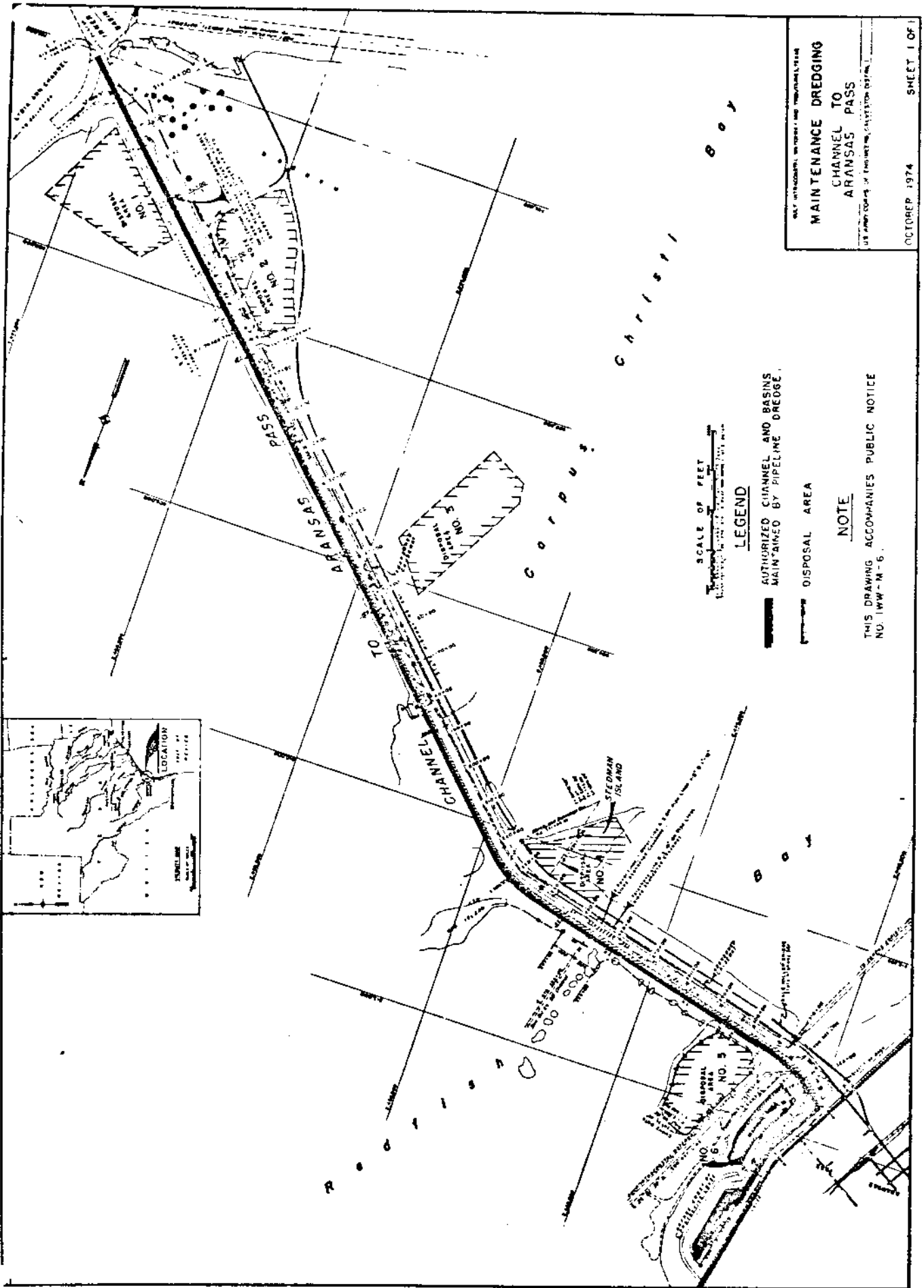
District Engineer
Galveston District, Corps of Engineers
ATTN: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

with specific reference to Public Notice No. IWW-M-6 dated 21 October 1974.



DON S. McCOY
Colonel, CE
District Engineer

1 Incl
Dwg, Oct 74



ONLY AUTHORIZED PERSONS AND VESSELS
MAINTENANCE DREDGING
CHANNEL TO
ARANSAS PASS
 U.S. DEPARTMENT OF THE ARMY, DISTRICT OFFICE, GALVESTON, TEXAS
 OCTOBER 1974 SHEET 1 OF 1

SCALE OF FEET
 0 10 20 30 40 50 60 70 80 90 100
 1" = 100'

LEGEND

AUTHORIZED CHANNEL AND BASINS
 MAINTAINED BY PIPELINE DREDGE

DISPOSAL AREA

NOTE

THIS DRAWING ACCOMPANIES PUBLIC NOTICE
 NO. 14W-M-6



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

RB

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

November 20, 1974

District Engineer
Attn: SWGCO-M
Corps of Engineers, U. S. Army
Post Office Box 1229
Galveston, Texas 77550

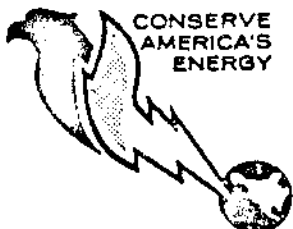
Dear Sir:

By Public Notice No. IWW-M-6, dated October 21, 1974, the U. S. Fish and Wildlife Service was notified of the Corps of Engineers' plans for spoil disposal during new work and maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass, Nueces County, Texas.

The following comments have been coordinated with the Texas Parks and Wildlife Department and the National Marine Fisheries Service:

The six disposal areas indicated on the drawing accompanying the public notice were developed for new work on the channel with the assistance of the Service during a planning conference held on August 26, 1971. At this conference it was determined that spoil would be placed on the north side of the channel between Stations 16+00 and 50+00 (Disposal Area No. 1), 290+00 and 309+00 (Disposal Area No. 5), and between the GIWW and the Aransas Pass Turning Basin (Disposal Area No. 6). Spoil also would be placed south of the channel between Stations 50+00 and 80+00 (Disposal Area No. 2), 140+00 and 158+00 (Disposal Area No. 3), and on Stedman Island (Disposal Area No. 4). At that conference it was determined that Area No. 3 would occupy about 40 acres adjacent to the channel.

Spoil disposal operations at Area No. 3 should be restricted to the emergent 40-acre tract located adjacent to the channel to avoid further encroachment onto surrounding marsh, grass, and tidal flats. This area should be ring-leveed and water returned to drainage ditches paralleling State Highway No. 361 by means of a control weir.



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Save Energy and You Serve America!

Particular care also should be given to the placement and adequacy of levees at Disposal Area No. 4. Spoil should be confined to Stedman Island and borrow areas adjacent to State Highway No. 361 to maintain the viability of a live productive oyster reef on the southeast side of the island and a tidal marsh on the southwest side of the island. In addition, all disposal areas should have levees either constructed or refurbished prior to discharge of any spoil materials and drainage of these areas should be directed towards borrow ditches paralleling State Highway No. 361.

The Fish and Wildlife Service report of October 11, 1974, on maintenance dredging of the GIWW between San Antonio Bay and Corpus Christi Bay, which included the Tributary Channel to Aransas Pass, will be revised to reflect the above provisions.

The opportunity to comment on the spoil disposal aspects of this project is appreciated.

Sincerely yours,



Deputy

Regional Director

cc:

- Executive Director, Texas Parks and Wild. Dept., Austin, Tex.
- Regional Director, Nat'l Mar. Fish. Serv., St. Petersburg, Fla.
- Area Suprv., NMFS, Envr. Assmt. Div., Galveston, Tex.
- Regional Administrator, EPA, Reg. VI, Dallas, Tex.
- Regional Director, BOR, Albuquerque, N. Mex.
- Field Suprv., FWS, Div. of River Basin Studies, Fort Worth, Tex.

20 March 1975

Mr. W. O. Nelson, Jr.
Regional Director
U. S. Fish and Wildlife Service
P. O. Box 1306
Albuquerque, New Mexico 87103

Dear Mr. Nelson:

Reference is made to Mr. Jerry Stegman's letter dated 20 November 1974 concerning Public Notice No. IWV-M-6 on new work and maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass, Texas.

Concerning Disposal Area No. 3, the emergent 40-acre tract you reference is only the portion of that area to be used for the enlargement of Channel to Aransas Pass. The public notice, however, covers not only the new work, but also the subsequent maintenance of the channel. Therefore, the map which accompanied the public notice not only includes a 40-acre segment for the channel improvement, but also additional area for future maintenance of the project. When the channel is improved, the emergent land will be leveed with a spillway on the side adjacent to the highway borrow ditch. The disposal area will then be enlarged in the future, as needed, to contain the material removed during maintenance dredging operations. Additionally, the size of the disposal area shown on the public notice drawing conforms with those shown in the Detailed Project Report and the Final Environmental Statement for the Channel to Aransas Pass.

In reference to Disposal Area No. 4, the area will be leveed prior to its next use. Additionally, the remaining disposal areas will have levees either constructed or refurbished prior to their use. The dredge effluent from Disposal Areas Nos. 3 and 4 will be directed into the borrow ditch paralleling State Highway No. 361.

Sincerely yours,

Copy furnished:
Field Supervisor
USFWS, Corpus Christi 78411

E. D. McGEHEE
Chief, Construction-
Operations Division



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Duval Building
9450 Gandy Boulevard
St. Petersburg, Florida 33702

December 6, 1974

Colonel Don S. McCoy
District Engineer, Galveston District
Department of the Army, Corps of Engineers
Post Office Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice No. IWW-M-6 dated October 21, 1974, wherein the Corps of Engineers requested comments on spoil disposal plans associated with new work and maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass.

We have found that some information in the public notice is inconsistent with other information we have on the project. For example, the public notice states that Disposal Area No. 3 is "on emergent land" and, according to Sheet 1 of 1, encompasses about 120 acres. However, the detailed project report on the proposed deepening and widening of this waterway, dated May 14, 1974, states (under Selection of spoil disposal sites on page 28) that this site is "an existing spoil area and marsh" (emphasis added). Also, the Final Environmental Statement on the same project, dated January 30, 1974, describes the area as "a marsh island previously used as a dredged material disposal area" (emphasis added).

Consistent with our policy that the filling of tidal marshes be kept to a minimum, the NMFS recommends that Disposal Area No. 3 be confined to the 40 acre portion nearest Texas Highway 361 as plotted on page III - 3 of Appendix III in the detailed project report. Also, all effluent should drain into the channel paralleling the highway. Should this spoil area need enlarging, plans for the levees should be coordinated with the Federal and State fish and wildlife agencies to insure that tidal marshes or submerged grass beds are preserved to the maximum extent possible.

Another inconsistency lies in the proposed creation of Disposal Area No. 4 on Stedman Island. The public notice states, "levees will be constructed on three sides to prevent flow of deposited materials and effluent water onto a nearby road, petroleum storage facilities

which are located on the north, east, and south sides and into Redfish Bay. Material will be allowed to flow into an existing borrow area and onto the flats and marsh area on the west side of the island" (emphasis added). However, the detailed project report states "the spoil area on Stedman Island will be leveed on two sides to prevent flow of deposited materials and waste water onto existing petroleum storage facilities and into Redfish Bay. Spoil will be allowed to spill into a borrow trench excavated by another agency during construction of the highway causeway" (emphasis added). Essentially the same statement was made in the Final Environmental Statement, which also states that "the western shoreline is an extensive Spartina marsh except in an existing dredged area near the causeway" and that levees would be built to prevent flow into the marsh as well as Redfish Bay.

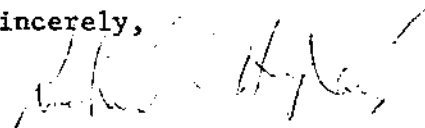
The statements in the detailed project report and the final impact statement reflect previous coordination of the plans with State and Federal fish and wildlife agencies. However, we have recently learned that the southeast shoreline of Stedman Island (facing Morris and Cummings Cut) contains a living, productive oyster (Crassostrea virginica) reef that is extremely valuable estuarine habitat and is also used as a study area by academic institutions in the Corpus Christi vicinity.

The NMFS, therefore, recommends that levees be constructed on the southeast and west sides of Disposal Area No. 4 at or above the mean high tide line in order to prevent damage to any part of the oyster beds or tidal marsh. The levees should be built in such a manner that storm tides or rain would not erode them into the oyster beds and tidal marshes. Also, the highway side of the disposal area should be left sufficiently open to allow effluent from the disposal area to flow into the borrow ditch paralleling the highway.

Prior to issuance of contracts for dredging, we recommend that the detailed plans be submitted to Federal and State fish and wildlife agencies, including the Area Supervisor, National Marine Fisheries Service, Environmental Assessment Division, 4700 Avenue U, Galveston, Texas 77550, for review.

We appreciate the opportunity to comment on the proposed plans of this Federal project.

Sincerely,



William H. Stevenson
Regional Director

24 March 1975

Mr. William H. Stevenson
Regional Director
National Marine Fisheries Service
9450 Gandy Boulevard
St. Petersburg, Florida 33702

Dear Mr. Stevenson:

This is in reply to your 6 December 1974 letter concerning Public Notice No. IWW-M-6 on new work and maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass.

In reference to Disposal Area No. 3, the 40-acre tract you reference will be leveed with a spillway, and the material excavated while improving the project will be deposited in this 40-acre segment of Disposal Area No. 3. When maintenance dredging occurs, the remainder of the area shown on the public notice map will be leveed, as needed, to contain the material. The Detailed Project Report and Final Environmental Statement which you reference addresses only the proposed deepening and widening of the channel. Even though the description of Disposal Area No. 3 contained in them pertains only to that portion of the area to be used for the new work, the maps included in these reports do show the additional area that will be required by future maintenance of the project. Our public notice, however, covers the new work and subsequent maintenance dredging of the channel. As a result, Disposal Area No. 3 as shown on the notice does not delineate between the portion of the area to be used for the new work and the portion to be used for subsequent maintenance dredging. The area shown on notice map does, however, represent the same total area shown in the Detailed Project Report and Final Environmental Statement.

Concerning Disposal Area No. 4, levees will be constructed as necessary to prevent westerly flow onto the oyster beds and tidal marshes. As has been our policy in the past, we will furnish the suggested agencies plans and specifications for review during the advertising period for each contract.

Thank you for your review and comments.

Sincerely yours,

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E. D. McGEHEE
Chief, Construction-
Operations Division

EXON PIPELINE COMPANY

POST OFFICE BOX 2220 • HOUSTON, TEXAS 77001

WM. H. HUFFMAN
MANAGER, RIGHT OF WAY & CLAIMS

November 4, 1974

Your File: Public Notice #IWW-M-6
21 October 1974
New Work and Maintenance
Dredging
Gulf Intracoastal Waterway -
Tributary Channel to Aransas
Pass
Our File: 10.2.11 - Harbor Island Terminal

District Engineer
Galveston District
Corps of Engineers
Attn: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

We have noticed that Disposal Area #2 as shown on the map accompanying the above public notice appears to include a number of acres of our private property located at our Harbor Island Terminal. We are wondering if perhaps this is an error since the description of Disposal Area No. 2 on page 3 of the above notice seems to indicate that it is the intent to use an area bounded on the south by our oil tank farm. The area depicted, however, covers a sizeable portion of our lands. We can not find in our records that any permission or easement has ever been granted by our company for use of this area as a spoil disposal area by the Corps of Engineers or the City of Aransas Pass, the sponsoring agency you have mentioned.

Moreover, use of the areas shown as Disposal Area #2, whether on our land or State of Texas land, for deposits of a sizeable amount of spoil would interfere with the natural drainage of our Harbor Island Tank Farm. The area owned by us and included in Disposal Area No. 2 is quite important to us for future disposal of spoil removed in our routine maintenance dredging at our Harbor Island Docks.

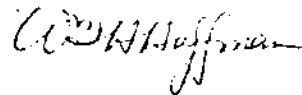
District Engineer
Galveston District

-2-

November 4, 1974

In view of the above, we feel that a conference between our representative and your office should be held immediately to determine first, whether an error has been made in the description of Disposal Site #2 and/or whether this company may be affected by the disposal of the dredged material to the extent that we should request a public hearing in order to protect our interests. We will contact your office just as soon as possible and hope that we will be able to resolve this apparent conflict in a manner satisfactory to all concerned without the necessity of public hearing.

Yours very truly,



WHH:mac

cc: Messrs. T. E. Burnett
W. D. Price
R. M. Smith
L. H. Cox, Jr.

27 November 1974

Mr. William H. Huffman
Exxon Pipeline Company
P. O. Box 2220
Houston, Texas 77001

Dear Mr. Huffman:

Receipt is acknowledged of your letter dated 4 November 1974 in response to Public Notice No. IHW-M-6, dated 21 October 1974, pertaining to new work and maintenance dredging of the Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass.

In your letter, you suggested a meeting be held between your representatives and our office to discuss our intended use of Disposal Area No. 2. On 13 November 1974, a meeting was held to discuss if permission or easement had been granted by Exxon to use the area. We have used the disposal area several times, the earliest known time was 1941 and the most recent time was 1971 for our dredging operations. Because we considered the area to be subject to the Government's paramount right of navigational servitude, no disposal easement from Exxon was requested.

Although nothing was conclusively settled at the meeting, you requested additional information to determine if we could jointly use the disposal area. Information requested included drawings showing elevations in the area, location of levees, quantities to be deposited in the area, and any citations or references on navigational servitude. The citations were furnished by telecopy. We are presently accumulating the other information requested and will forward it to you in the near future.

We appreciate your cooperativeness in discussing this matter and look forward to meeting with you after your review of the material we will be furnishing shortly.

Sincerely yours,

E. D. McGENEE
Chief, Construction-
Operations Division

SWGED-DP

24 January 1975

Mr. William H. Huffman
Manager, Rights of Way & Claims
Exxon Pipeline Company
P. O. Box 2220
Houston, Texas 77001

Dear Mr. Huffman:

This is in response to your letter of 4 November 1974 and to confirm our meeting of 13 November 1974 concerning the proposed plan to dredge the Gulf Intracoastal Waterway - Tributary Channel to Aransas Pass.

A topographic map of the proposed Disposal Area No. 2 shown on Public Notice No. IWM-M-6 dated 21 October 1974 concerning the above mentioned project is inclosed. The tract line of Survey 960 as transposed from Exxon Pipeline Company's drawing, Harbor Island Tank Farm Area, Survey 806 and Survey 960, Nueces County, Texas, dated 22 August 1951 is indicated in red on the topographic map.

A meeting to discuss the matter further can be arranged at your convenience with Mr. James Benham, telephone number (713) 763-1211, extension 327.

Sincerely yours,

D. T. GRAHAM
Chief, Engineering Division

1 Incl
As stated

Copy furnished w/incl:
Mr. Walter T. Tull
Assistant District Manager
Exxon Pipeline Company
P. O. Box 4916
Corpus Christi, Texas 78408

EXXON PIPELINE COMPANY

POST OFFICE BOX 2220 • HOUSTON, TEXAS 77001

WM. H. HUFFMAN
MANAGER, RIGHT OF WAY & CLAIMS

February 24, 1975

Your File: Public Notice #IWW-M-6
 21 October 1974
 New Work and Maintenance
 Dredging
 Gulf Intercoastal Waterway
 Tributary Channel to Aransas
 Pass

Our File: 10.2.11 - Harbor Island
 Terminal

District Engineer
Galveston District
Corps of Engineers

ATTENTION: SWGCO-M
P. O. Box 1229
Galveston, Texas 77550

Dear Sir:

This letter is to confirm the verbal agreements reached in a second meeting, which was held between your representatives and ours in the Exxon Building in Houston on February 19, 1975; namely, that:

1. Exxon Pipeline Company hereby consents to the deposit of dredged material on its private property at its Harbor Island Terminal in Nueces County, Texas, within the area designated "spoil area No. 2" on the attached plat, in connection with the above-captioned project, as proposed in the above-captioned public notice and in subsequent meetings between our respective representatives.
2. We understand that the dredged material will be spread, insofar as practical, in a somewhat uniform manner consistent with good dredging and disposal techniques and that when the project is complete drainage away from our terminal, if blocked by dredged material, can be re-established in

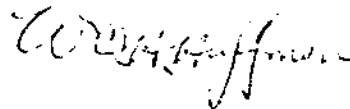
February 24, 1975

a mutually satisfactory manner.

3. Exxon Pipeline Company's consent to the deposit of the dredged material in the designated area is not to be construed in any way as an acknowledgment on our part of the existence of a servitude owned by the Corps of Engineers.

We wish to express our appreciation to your representatives for their courteous attention to our views, and for the additional information they have furnished to enable us to more fully evaluate the effects of this project on our property at Harbor Island.

Yours very truly,



WHH:mac

cc: Mr. T. E. Burnett
Mr. L. H. Cox, Jr.
Mr. W. D. Price
Mr. R. M. Smith, Jr.
Mr. M. B. Grove



COMMISSION

REAGAN HOUSTON, CHAIRMAN
DEWITT C. GREER
CHARLES E. SIMONS

TEXAS HIGHWAY DEPARTMENT
11TH AND BRAZOS
AUSTIN, TEXAS 78701

STATE HIGHWAY ENGINEER
B. L. DEBERRY

November 1, 1974

IN REPLY REFER TO
FILE NO. D-5

SUBJECT: Corps of Engineers Public Notice
Maintenance Dredging in Tributary Channel
to Aransas Pass

District Engineer
Department of the Army
Galveston District, Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550


Dear Sir:

We have reviewed Public Notice No. IWW-M-6 dated October 21, 1974 concerning maintenance dredging in the above channel. It is noted that spoil disposal areas No. 3 and No. 4 are located across S.H. 361 from the channel. Please advise the method to be utilized to transport spoil material to these disposal areas and plans for handling highway traffic.

If highway traffic is to be disrupted at any time during the dredging operations, we desire further contact from you in order to establish satisfactory means of providing for the safety and convenience of the traveling public.

Sincerely yours

B. L. DeBerry
State Highway Engineer

By: 
Wayne Henneberger
Bridge Engineer

SWGCO-M

11 November 1974

Mr. Wayne Henneberger
Bridge Engineer
Texas Highway Department
11th and Brazos
Austin, Texas 78701

Dear Mr. Henneberger:

Receipt is acknowledged of your comments concerning Public Notice No. IWV-M-6, dated 21 October 1974, pertaining to maintenance and new work dredging of the Tributary Channel to Aransas Pass. The method used to transport dredge materials from the channel to Disposal Areas Nos. 3 and 4 is to run the pipeline across State Highway 361 through culverts or under bridges so as not to interfere with highway traffic at all. We have successfully used this method of disposal in the past.

Thank you for your concern and comments.

Sincerely yours,

E. D. MCGHEE
Chief, Construction-
Operations Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

JUL 05 1975

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (787693)

Colonel Don S. McCoy
District Engineer
Galveston District
Corps of Engineers
P. O. Box 1229
Galveston, Texas 77550

Dear Colonel McCoy:

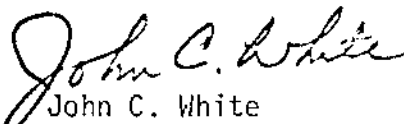
We have completed our review of your proposed plan for new work and for maintenance dredging "Gulf Intracoastal Waterway-Tributary Channel to Aransas Pass" as covered in Public Notice No. IWW-M-6 dated October 21, 1974. We have also reviewed your June 10, 1975, Statement of Findings concerning this project in accordance with 33 CFR 209.145.

Your proposed plan is approved for one year provided the following recommendation is adopted:

Disposal Areas shall be leveed prior to their next use.

Since, as stated in your public notice, an Environmental Impact Statement has not been prepared for maintenance dredging, we have deferred consideration of long term approval of your dredging plan until the final Environmental Impact Statement has been filed with the Council on Environmental Quality.

Sincerely yours,


John C. White
Acting Regional Administrator