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ENVIRONMENTAL DETERMINATION

TO: File

FROM: T. Clay Schultz, Ph.D., Director, Regional Water Project Development

Clay Schultz
Digitally signed by Clay Schultz
Date: 2026.03.25 14:38:14 -05'00'

SUBJECT: City of Corpus Christi, Nueces County, Texas
TWDB SWIFT Project No. 51052
Seawater Desalination Project,
Seawater Desalination Plant Project – Inner Harbor
Total Loan Amount: $760,335,000
Loan Nos. L17070, LM201158, LM2401837, LM241158, LM2501837, LM2601837, and LM2701837

The environmental review for the City of Corpus Christi's (City) Seawater Desalination Plant Project – Inner Harbor component has been completed in accordance with 31 Texas Administrative Code (TAC) § 363.14. The City is proposing to use $760,335,000 in financing from the State Water Implementation Fund for Texas (SWIFT) Program for the proposed Seawater Desalination Project. The Texas Water Development Board (TWDB) committed this financing on July 20, 2017, July 23, 2020, and July 23, 2024. Closings will be spaced out until 2028, as the funds are needed.

The proposed Seawater Desalination Project has two main project components: (1) the Pilot Plant Project – Inner Harbor and (2) the Seawater Desalination Plant Project – Inner Harbor. The Pilot Plant Project component was not included in the City's Seawater Desalination Project Individual Permit (IP) application to the United States Army Corps of Engineers (USACE) and is, thus, on a different regulatory review and permitting timeline. Therefore, the TWDB is segmenting the environmental review to allow the planning, acquisition, and design associated with the Seawater Desalination Plant Project – Inner Harbor component, hereafter, referred to as the proposed project, to proceed without delay. This Environmental Determination (ED) corresponds to the proposed project. The environmental review for the Pilot Plant Project component is being handled separately, and a subsequent environmental finding will be issued by the TWDB for the Pilot Plant Project.

In accordance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, the USACE, Regulatory Division, Galveston District, Corpus Christi Field Office, issued an Individual Permit (IP) on March 25, 2025, for the proposed Seawater Desalination Plant Project (USACE Project No. SWG-2014-00850). Prior to issuing the IP, the USACE issued a Statement of Findings (SOF) on March 18, 2025, based on the Department of the Army Environmental Assessment (EA) for the proposed project.

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The TWDB is issuing this ED, which, in effect, adopts the USACE's SOF, and covers the project components included in the IP. The issuance of this ED satisfies the requirements for project elements funded through the SWIFT Program pursuant to 31 TAC § 363.14(d).

Based on the TWDB's review of the USACE's EA, SOF, and IP, the proposed project meets the requirements of 31 TAC § 363.14 with the following conditions:

Special Environmental Conditions

- Consistent with Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, the City of Corpus Christi Seawater Desalination Plant Project will comply with the terms and conditions of the United States Army Corps of Engineers Individual Permit (Department of the Army Permit No. SWG-2014-00850).

- Consistent with the Flood Insurance Reform Act of 2004, federal Executive Order 11988, Texas Water Code Section 16.315, and local floodplain development ordinances, a floodplain development permit will be obtained from the local floodplain administrator prior to construction in, across, or under a Special Flood Hazard Area.

Standard Environmental Conditions

- Consistent with the Texas Water Development Board Supplemental Construction Contract Conditions (TWDB-0552), the City of Corpus Christi will abide by the standard emergency condition for the discovery of cultural resources.

- Consistent with the Texas Water Development Board Supplemental Construction Contract Conditions (TWDB-0552), the City of Corpus Christi will abide by the standard emergency condition for the discovery of threatened and endangered species.

With the addition of these requirements, design funds may be released once all other requirements are satisfied.

Enclosures: United States Army Corps of Engineers Statement of Findings and Individual Permit

MEMORANDUM FOR RECORD

SUBJECT: Department of the Army Environmental Assessment and Statement of Findings for the Above-Referenced Standard Individual Permit Application

This document constitutes the Environmental Assessment, Section 404(b)(1) Guidelines Evaluation, Public Interest Review, and Statement of Findings for the subject application.

1.0 Introduction and Overview

Information about the proposal subject to one or more of the United States Army Corps of Engineers' (Corps') regulatory authorities is provided in Section 1, detailed evaluation of the activity is found in Sections 2 through 11 and findings are documented in Section 12 of this memorandum. Further, summary information about the activity including administrative history of actions taken during project evaluation is attached (ORM2 Summary) and incorporated in this memorandum.

1.1 Applicant name

City of Corpus Christi

1.2 Activity location

The project is located in the Industrial/Main Turning Basin of the Port of Corpus Christ Authority's (POCCA) Inner Harbor, Corpus Christi, Nueces County, Texas.

1.3 Description of activity requiring permit

The applicant proposes to construct a seawater desalination plant with intake structures and outfall structures/diffusers and pipelines within the waters of the Inner Harbor, onshore pipeline within a relatively permanent water (tidal ditch), and an onshore processing facility to be constructed in uplands. The intake structure will process water from the Inner Harbor through waterlines that lead to a pump station on land. From the pump station, waterlines will then lead further inland to the main desalination facility where the water will be treated. Treated water will be stored in a ground storage tank and distributed into the city's potable water system via a pipeline connection to the Navigation Boulevard Pump Station. Discharge water would exit the facility via waterlines to the discharge/diffuser structure located in the Inner Harbor.

The components of the project that require a permit include construction of: the intake and discharge/outfall structures within the Inner Harbor; the portion of the pipelines connected to the intake and discharge/outfall structures within the Inner Harbor; and a portion of the intake pipelines that will be installed below a tidally-influenced tributary ditch. Construction of these components will involve the following activities:

- Permanent placement of an **intake structure** consisting of a 48-inch diameter intake pipe and three 30 MGD wedgwire intake screens within 0.22 acre of the waters of Inner Harbor. The intake structure will be placed at a depth of -33 feet

below mean high water at a distance of 332 feet from the channel centerline. A coffer dam will be used to install the structure.

- Permanent placement of **two 54-inch diameter intake pipelines** for a distance of 116 feet within the waters of the Inner Harbor. These pipelines will be installed a minimum of 7ft below the mudline.
- Temporary impact to approximately 0.07 acre of a Relatively Permanent Water (tidally influenced tributary ditch) during onshore installation of **two 54-inch diameter intake pipelines** by open cut trenching. The pipeline will be installed a minimum of 4ft below the surface. The entirety of impacts to the ditch will be restored to pre-construction elevations and contours after pipeline installation. No permanent discharge of fill material will occur within the ditch.
- Permanent placement of a **discharge/outfall structure** consisting of a 48-inch-diameter header pipe and four 16-inch diffuser nozzles within 0.40 acre of the waters of the Inner Harbor. The discharge/outfall structure will be placed at a depth of -35 feet below mean high water and at a distance of 316 feet from the channel centerline. A coffer dam will be used to install the structure.
- Permanent placement of a **54-inch diameter discharge/outfall pipeline** along 2,142 linear feet of the shoreline (2,087 linear feet in the water and 55 linear feet from water to onshore) within the waters of the Inner Harbor. This pipeline will be installed a minimum of 4ft below the mudline.
- Coffer dams may be used on the longer pipeline segments near the existing bulkhead in shallower waters. If a coffer dam is not used, construction BMPs will include silt booms/turbidity curtains.
- Turbidity curtains will mostly be used for the construction of the pipelines. Turbidity curtains will also be used during the installation of coffer dams. For the pipelines, the turbidity curtains will remain in place until construction has ceased. For the intake and discharge, the turbidity curtain may be removed once the coffer dams are installed.
- Mechanical or hydraulic **dredging** will occur within the 0.40-acre area of the Inner Harbor where the discharge/outfall structure will be installed. A total of 508 cubic yards will be dredged to a depth of -40 feet below mean high water for placement of the discharge/outfall structure.
- Mechanical or hydraulic dredging will occur within the 4.2-acre area of the Inner Harbor where the pipeline structures will be installed. Once pipeline construction is completed, the dredged material will be discharged back within the pipeline construction area and the area will be restored to pre-construction elevations and contours.
- Dredged material that is not used to restore the pipeline construction area to pre-construction elevations and contours will be utilized as fill in uplands areas, including within the pump station footprint, desalination facility footprint, and/or the nearby city-owned Broadway Wastewater Treatment Plant (WWTP) location (27.804128° N, 97.401218° W). Dredged material placed in upland areas will be placed in a self-contained disposal site to prevent the discharge of dredged material and associated effluent into waters of the US.

1.3.1 Proposed avoidance and minimization measures
The applicant has stated that they have avoided and minimized the environmental impacts by the following: During construction, turbidity curtains may be deployed for work within waters. For land-based construction areas, silt fencing, rock berms, or hay bales may be used to control erosion. Areas that can be seeded and revegetated would be done as soon as practicable. Dredged material from intake/discharge pipe installation will be used to restore the pipeline installation area within the Inner Harbor to pre-construction elevations. Any extra dredged material not required to restore the Inner Harbor pipeline construction area will be used in upland areas on the project site to level the project area for construction. If dredged materials must be removed from the site and not placed in the Broadway WWTP, the materials would be disposed in an approved landfill to avoid contamination.

1.3.2 Proposed compensatory mitigation
No mitigation is proposed

1.4 Existing conditions and any applicable project history
The project site is an approximately 17-acre tract of land located within the Inner Harbor area of the POCCA. The existing site is bordered on the north by the waters of the Industrial Canal, and on the east, south, and west by industrial development and limited residential development. No ecologically sensitive habitats or designated critical habitats of federally listed species are located within the immediate vicinity (2,500 ft) of the potential intake and discharge locations. Additionally, much of the Inner Harbor shoreline in the vicinity of the project is armored and does not provide optimal nursey habitat for sub-adult populations of fish, shrimp, and crabs.

1.4.1 Jurisdictional Determination
Is this project supported by a jurisdictional determination?

An approved jurisdictional determination was done for the

1.5 Permit authority Select the appropriate option to identify whether the proposed activity is regulated under the Corps' regulatory authorities; more than one option may be selected. Use "Section 10 of the Rivers and Harbors Act (33 USC 403)" for projects covered under "Section 10 of the Rivers and Harbors Act (33 USC 403), including as extended by the Outer Continental Shelf Lands Act (43 USC 1333(e))".

Table 1 – Permit Authority	
Section 10 of the Rivers and Harbors Act (33 USC 403)	X
Section 404 of the Clean Water Act (33 USC 1344)	X
Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 USC 1413)	

2.0 Scope of review for National Environmental Policy Act (i.e., scope of analysis), Section 7 of the Endangered Species Act (i.e., action area), and Section 106 of the National Historic Preservation Act (i.e., permit area)

2.1 Determination of scope of analysis for National Environmental Policy Act (NEPA)
The scope of analysis always includes the specific activity requiring a Department of the Army permit that is located within the Corps' geographic jurisdiction. In addition, we have applied the four factors test found in 33 CFR Part 325, Appendix B to determine if there are portions of the larger project beyond the limits of the Corps' geographic jurisdiction where the federal involvement is sufficient to turn these portions of an essentially private action into a federal action.

Based on our application of the guidance in Appendix B, we have determined that the scope of analysis for this review includes the Corps geographic jurisdiction and upland portions beyond the Corps geographic jurisdiction.

These upland components include staging areas for materials and equipment, and water treatment facility areas immediately adjacent to the project site as described in the project description (Section 1.3) of this document. These components have been determined to be within our scope of analysis as the extent of federal involvement is sufficient to turn these portions of an essentially private action into a federal action with the resulting environmental consequences of the larger project essentially being products of the Corps' permit action.

Final description of scope of analysis: The NEPA scope of analysis is the regulated activity in jurisdictional waters as described in Section 1.3 and depicted on the project plans.

2.2 Determination of the Corps' action area for Section 7 of the Endangered Species Act (ESA)
The action area includes those areas comprising waters of the US that will be directly affected by the proposed work or structures, as well as activities outside of waters of the US.

Final description of the action area: The action area will cover those areas as described in the final NEPA scope analysis.

2.3 Determination of Corps' permit area for Section 106 of the National Historic Preservation Act (NHPA)
The permit area includes those areas comprising waters of the United States that will be directly affected by the proposed work or structures, as well as activities outside of waters of the U.S. because all three tests identified in 33 CFR 325, Appendix C(g)(1) have been met.

Final description of the permit area: The action area will cover those areas as described in the final NEPA scope analysis.

3.0 Purpose and Need

3.1 Project purpose and need

Project purpose and need for the project as provided by the applicant and reviewed by the Corps:

The applicant's stated purpose of the proposed project is to construct a drought-proof seawater desalination plant located near the City of Corpus Christi and improve the reliability of the Corpus Christi regional water system. The project is needed to accommodate present and future growth of the City of Corpus Christi region and to reduce the vulnerabilities and risks of the City's current water supply in the uncertainty of climate change.

3.2 Basic project purpose

Basic project purpose, as determined by the Corps: Construction of a desalination facility.

3.3 Water dependency determination

N/A, activity is not located in a special aquatic site.

3.4 Overall project purpose

Overall project purpose, as determined by the Corps: To construct a desalination facility within the Corpus Christi area to provide a constant reliable source of freshwater to maintain resource levels that will supplement dwindling local fresh water supplies.

4.0 Coordination

4.1 Public Notice Results

The results of coordinating the proposal on public notice are identified below, including a summary of issues raised, any applicant response and the Corps' evaluation of concerns.

Public Notice 1: Covered intake and discharge pipelines and structures and facility site construction.

Were comments received in response to the public notice? Yes

Were comments forwarded to the applicant for response? Yes

Was a public meeting and/or hearing requested, and if so, was one conducted?

Yes, a public meeting/hearing was requested but was not held.

During the public interest review, we received approximately thirty-three requests from the general public to hold a public hearing in order to give them an opportunity to question the applicant about the proposed project. The intent of a public hearing is to solicit information or evidence that might assist us in the evaluation of this permit action. Based on our review of all the information submitted during the PN comment period,

and subsequent evaluation process, we have determined that there is sufficient information to render a decision on this permit request. We believe it is unlikely that any new information would have been gained by holding a public hearing. Therefore, a public hearing was not scheduled.

Comments received in response to public notice:

Table 2a – Public Notice Comments			
Agency and/or Person provided with notice of proposal	Response received	Date Received	Comments/Issues Raised
US Environmental Protection Agency (EPA)	Yes	13 February 2024	See below for discussion.
US Fish and Wildlife Service (FWS)	Yes	12 February 2024	See below for discussion.
National Marine Fisheries Service - Habitat Conservation Division (NMFS-HCD)	Yes	6 February 2024	See below for discussion.
National Marine Fisheries Service - Protected Resources Division (NMFS-PRD)	No		
US Coast Guard (USCG)	No		
Texas Commission on Environmental Quality (TCEQ)	No		
Texas Parks and Wildlife Department (TPWD)	Yes	14 February 2024	See below for discussion.
Texas General Land Office (GLO)	No		
Texas State Historic Preservation Officer (SHPO)	Yes	7 February 2024	See below for discussion.
Adjacent Land Owners and General Public	Yes	5 Feb thru 5 Mar 2024	See below for discussion.
Other Agency	No		
Coastal Bend Audubon Society	Yes	16 February 2024	See below for discussion.
Coastal Bend Sierra Club	Yes	16 February 2024	See below for discussion.
Ingleside on the Bay Coastal Watch Association	Yes	16 February 2024	See below for discussion

Additional discussion of submitted comments, applicant response and/or Corps' evaluation:

Comment 1:
EPA

The EPA recommended the following:

1. Provide adequate in-kind compensatory mitigation for the identified permanent impacts to aquatic resources.
2. Recommended permit conditions specify temporarily impacted wetland areas be restored to pre-construction conditions in order to ensure no temporal losses occur.
3. The applicant should provide information to assist the Corps in making its factual determination for compliance or non-compliance with the restrictions as described in §230.11 of the Clean Water Act.
4. The Corps analyze the potential for disproportionate effects on populations in the area of the proposed project and weigh the benefits and detriments of foreseeable impacts, including the needs and welfare of the people.

Applicant's Response:

1. Development work and modeling results for the project predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters.
2. Applicant will provide the Corps with requested information to assist with its permit evaluation process.
3. The applicant states there will be no impacts to residential communities from construction and operation of the water treatment plant or its intake, discharge or pipeline facilities. The proposed water treatment plant will not release objectionable pollutants, noxious odors, loud noises or other harmful substances into the Hillcrest neighborhood.
4. The Corps can implement a Public Hearing if it is determined that more information is needed to address this issue.

Corps Evaluation:

1 thru 4. The applicant provided an email to the City from the EPA, dated 22 Oct 2024, stating that "since EPA is not objecting to the NPDES permit for the City of Corpus Christi, there is no need to address EPA's comments raised." Accordingly, the Corps considers all of the EPA's concerns to be resolved.

Comment 2:
USFWS

The USFWS stated that they had the following concerns:

1. The effect of concentrated brine on local wildlife habitat including many protected species, and recommends consideration of economic impacts to the local economy from direct brine discharge into sensitive estuarine environments.
2. The effect of concentrated brine on prey availability of wading birds and other waterfowl protected by the Migratory Bird Treaty Act.
3. Construction will disturb bird species know to nest in the area, and recommends conducting bird surveys no more than five days prior to ground disturbing activities or mechanical clearing of vegetation.
4. Potential impacts on threatened and endangered species that may be present in

the project area, and recommends conservation measures to minimize project impacts.

5. Recommends preparation of an Environmental Impact Statement to fully evaluate direct, indirect, and cumulative environmental effects of the proposed project and to determine the least environmentally damaging alternative for a desalination plant in this area.

Applicant's Response:

1. The proposed project was modeled to meet TCEQ WQ standards and the salinity is within 2 ppt of ambient conditions within 400 ft of the discharge. Discharge dispersion targets were established based on salinity tolerances of local species at their various life stages to be maximally protective of marine life.
2. Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.
3. Proper active nest surveys, and any necessary avoidance and minimization efforts, would be implemented as part of the project.
4. Applicant has already provided a habitat assessment and proposed effect determinations for potentially occurring federally listed species
5. Meeting state WQ standards is necessary to avoid and minimize potential impacts to the environment, including coastal or estuarine resources. The proposed project was modeled to meet TCEQ WQ standards and the salinity is within 2 ppt of ambient conditions within 400 ft of the discharge. Since the project would meet state WQ standards, the need to prepare an EIS would be unnecessary.

Corps Evaluation:

1. The information in the applicant's response to this comment as well as environmental provided by the applicant over the course of our review of this application has been shared with all of the commenting natural resource agencies. Accordingly, we consider this concern to be resolved.
2. The information in the applicant's response to this comment as well as environmental provided by the applicant over the course of our review of this application has been shared with all of the commenting natural resource agencies. Accordingly, we consider this concern to be resolved.
3. The applicant's response adequately addresses this concern, and the Corps considers it to be resolved.
4. Section 7 consultation has been initiated and completed with FWS and NOAA. The Biological Opinions provided from these agencies contained conservation measures for threatened and endangered species and will be incorporated into the permit document. We consider this concern to be resolved.
5. The EPA has approved an NPDES permit for the desalination project. Based on this, additional environmental information provided by the applicant, and the revised AA, the Corps has determined that an EIS is unnecessary.

Comment 3:
NMFS (EFH)

The NMFS recommended the following:

1. The project should not be authorized until additional information has been submitted.
2. Provide a water quality and salinity impacts analysis to demonstrate how the project will not negatively influence water quality and salinity levels within the Inner Harbor and Corpus Christi Bay.
3. Provide a detailed project alternative analysis to demonstrate the applicant has selected the least environmentally damaging alternative.

Applicant's Response:

1. Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.
2 Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.
3. A 404(b)(1) Alternatives Analysis was prepared as part of the Corps permit application requirements.

Corps Evaluation:

1. Additional information submitted by the applicant concern was shared by the Corps with the natural resource agencies, and the Corps considers this concern to be resolved.
2. The information listed in the applicant's response has been shared by the Corps with the natural resource agencies. In addition, the applicant noted in subsequent correspondence that the TCEQ issued a draft Texas Pollutant Discharge Elimination System (TPDES) Permit (No. TX0139874), which requires the applicant to submit a depth-integrated monitoring plan to assess the effectiveness of the effluent diffuser system, confirm nearfield modeling predictions, characterize the potential effects of the discharge on the salinity gradient within the Corpus Christi Inner Harbor, and report the monitoring results to the TCEQ. The Corps considers this concern to be resolved.
3. The applicant has provided a revised Alternative Analysis that addresses this concern. Accordingly, the Corps considers this concern to be resolved.

Comment 4:
TPWD

The TPWD recommended the following:

1. The environmental review should evaluate the individual and cumulative effects of the proposed project on special aquatic sites and the physical, chemical, biological, and human use characteristics of the affected aquatic ecosystem

2. A water-based aquatic resource survey should be conducted to verify the presence or absence of sensitive aquatic resources. TPWD requests the opportunity to review and provide comments on the survey report.
3. Provide more details about the methods used for pipeline installation within the Inner Harbor and address concerns for open trench methods described above.
4. Project documents should describe the hydrology, topography, and vegetative communities of each aquatic feature, including the relative cover of dominant species.
5. All infrastructure, utility lines, and facilities that would not be constructed, but for the proposed project, should be identified so they may be evaluated as part of the complete project.
6. For terrestrial revegetation efforts, TPWD recommends the exclusive use of a variety of regionally adapted native forbs, grasses, and shrubs in revegetation plans.
7. Submit an application for a permit to introduce aquatic vegetation into public waters of the state.
8. Project construction and operations employees are: (a) advised that manatees and sea turtles may approach the proposed project area, (b) provided materials, such as a poster, to assist in identifying the animal, (c) instructed not to feed or water the animal, and (d) instructed to contact the appropriate authorities.
9. In the event of manatee sightings, contact U.S. Fish and Wildlife Service and the Texas Marine Mammal Stranding Network.

Applicant's Response:

1. Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many addition parameters. Required modeling has been completed.
2. The applicant stated that the requested survey is currently being implemented.
3. Additional details on were provided by the applicant as requested.
4. Additional details on environmental have been provided to the Corps. An oyster and seagrass survey for the lower Harbor portions of the project area were currently being conducted.
5. All proposed infrastructure is shown on the figures provided to the Corps. The project location is in close proximity to the City's water distribution system and electric connections.
6. Where appropriate, native-seed or plants would be used to revegetate the site.
7. No aquatic plants would be introduced.
8. The applicant stated that it will be adhering to guidance provided by NOAA as part of the ESA consultation process.
9. Applicant will be adhering to guidance provided by NOAA as part of the ESA consultation process.

Corps Evaluation:

1. Environment information addressing this concern was shared by the Corps with

the natural resource agencies, and the Corps considers this concern to be resolved.

2. The additional information submitted by the applicant was shared by the Corps with the natural resource agencies, and the Corps considers this concern to be resolved.
3. The additional information submitted by the applicant was shared by the Corps with the natural resource agencies. The applicant's response, which is supported by the revised Alternatives Analysis addresses this concern, and the Corps considers it to be resolved.
4. All environmental submitted by the applicant was shared by the Corps with the natural resource agencies, and the Corps considers this concern to be resolved.
5. The applicant's response, which is supported by the revised Alternatives Analysis addresses this concern, and the Corps considers it to be resolved.
6. The applicant response addresses this concern, and the Corps considers it to be resolved.
7. The applicant response addresses this concern, and the Corps considers it to be resolved.
8. Section 7 consultation has been initiated and completed with FWS and NOAA. The Biological Opinions provided from these agencies contained conservation measures for threatened and endangered species and will be incorporated into the permit document. We consider this concern to be resolved.
9. Section 7 consultation has been initiated and completed with FWS and NOAA. 05The Biological Opinions provided from these agencies contained conservation measures for threatened and endangered species and will be incorporated into the permit document. We consider this concern to be resolved

Comment 5
SHPO

The SHPO stated that an archaeological survey is recommended in the planned Area of Potential Effects due to the current known locations of two sites expected to be impacted by development, and the high potential for historic and prehistoric resources in the area.

Corps Evaluation:

The SHPO's comments were forwarded on 7 Feb 2024 to our staff archaeologist (SA) who had previously determined that the project area has been so extensively impacted by construction and maintenance of the CCSC and industrial development that there is no potential for resources of concern to the Native American Tribes to exist within the permit area. The SA responded on 8 Feb 2024 that he would follow up with the SHPO since he did not understand what they saw as a high probability in the project area. On 15 March 2024, the SA sent an electronic mail message stating that the SHPO did not respond that they would meet and the Corps original determination stood. The SA stated that no survey was necessary.

Comment 6
Coastal Bend Audubon Society

1. An EIS should be completed since this is a major project with potential to negatively impact the marine environment in both the short- and long-term, as

well as bird life, and people's health.

2. Water quality will be affected due to brine discharge affecting salinity level of Corpus Christi Bay waters. Increased salinity can limit marine invertebrate abundance and distribution, decrease dissolved oxygen, and shoreline habitats, which can affect foraging birds.
3. Water from the desalination process may contaminate the City's larger treated water system with pollutants.
4. The proposed site is located adjacent to the Hillcrest Neighborhood subjecting residents to noise, traffic, and pollution from plant operations.

Applicant's Response

1. Since the project would meet state WQ standards, the need to prepare an EIS would be unnecessary
2. Development of the proposed project has included water quality and velocity as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.
3. Water produced through the pretreatment, desalination, and post-treatment processes will be required to meet all applicable drinking water standards. Thorough water quality sampling has already been completed for the Inner Harbor Ship Channel.
4. The intake, discharge and a portion of the pipeline (facilities) required for the intake and discharge facilities will be constructed outside of the neighborhood, in tidal/navigable waters of the Corpus Christi Industrial Canal. There will be no impacts to Indigenous Peoples or residential communities from construction and operation of the facilities.

Corps Evaluation

1. See Section 4.3 regarding EIS requests. The Corps considers this concern resolved.
2. Concerns about the release of pollutants from project operations and water quality fall under the TCEQ's review and will be addressed in its NPDES permit review for this project. See Section 4.3. The applicant's response regarding environmental issues adequately addresses that concern. See also the Public Interest review discussion in Section 7.1
3. Drinking water standards do not fall under Corps authority. The TCEQ is responsible for enforcing rules about public water systems in Texas, Title 30 Texas Administrative Code (30 TAC), Chapter 290. See also Sections 4.3 and 7.1 Public Interest Nos. 14 and 15. We consider this issue to be resolved.
4. This concern does not fall under Corps authority. See Section 4.3 regarding Environmental Justice. See also Section 7.1 Public Interest No. 21. We consider this issue to be resolved.

Comment 7
Coastal Bend Sierra Club

1. An EIS should be prepared to analyze the proposed project's direct, indirect, and cumulative impacts on the quality of the human environment.
2. A Public Hearing should be held.
3. The concentrated brine discharged for the facility may imperil plant and animal life in Corpus Christi Bay
4. The project may introduce Radium 226 ground pollution into the waters of the Inner Harbor.
5. The project would have a negative impact on the Hillcrest neighborhood.
6. An analysis of the proposed project's direct, indirect, and cumulative impacts on the quality of the human environment is needed.
7. A full, rigorous analysis of the environmental consequences of the proposed project must be undertaken.

Applicant's Response

1. The proposed project was modeled to meet TCEQ WQ standards and the salinity is within 2 ppt of ambient conditions within 400 ft of the discharge. Since the project would meet state WQ standards, the need to prepare an EIS would be unnecessary
2. The Corps may implement a Public Hearing if it is determined that more information is needed.
3. The proposed project was modeled to meet TCEQ WQ standards and the salinity is within 2 ppt of ambient conditions within 400 ft of the discharge. Discharge dispersion targets were established based on salinity tolerances of local species at their various life stages to be maximally protective of marine life.
4. The applicant acknowledges the comment.
5. There will be no impacts to Indigenous Peoples or residential communities from construction and operation of the facilities.
6. No Response
7. No Response

Corps Evaluation

1. In regard to requests that an EIS study be done and Public Hearing held for the proposed project, the applicant's response has satisfied those concerns. See Section 10.1.2 for further discussion regarding EIS. The Corps considers this issue to be resolved.
2. In regard to Public Hearings see Public Hearing discussion in Section 4.1. The Corps considers this issue to be resolved.
3. The applicant's response adequately addresses this concern. In addition, concerns about the release of pollutants from project operations and water quality fall under the TCEQ's review and will be addressed in its NPDES permit review for this project. See Section 4.3. The Corps considers this issue to be resolved.
4. There is no evidence that Radium 226 is present at the project site and the commenter did not provide any information to support this claim. We have also evaluated the potential for detrimental effects due to this project in our General Interest review and found such effects to be of negligible, or less, concern (See

Section 7.1). We consider this concern to be resolved.

5. This concern does not fall under Corps authority. See Section 4.3 regarding Environmental Justice. See also Section 7.1 Public Interest No. 21. We consider this issue to be resolved.
6. Direct, secondary, and cumulative impacts to the affected and surrounding aquatic resources were evaluated during our evaluation of the proposed project and were determined to not result in significant cumulative impact on water resources. See Section 9. The Corps considers this issue to be resolved.
7. Environmental parameters that might be affected by this project were reviewed by the Corps. We determined that project effects on the environment to be negligible; therefore, we consider this issue to be resolved. See also Section 7.1.

Comment 8
Ingleside on the Bay Coastal Watch Association (IOBCWA)

1. An EIS and public hearing should be conducted.
2. A volumetric study of the amount of water proposed for intake and the amount of brine water discharged should be conducted to determine the effects of brine water on Corpus Christi Bay and the State Aquarium.
3. The high cost of the project could cause catastrophic economic consequences if the project fails.
4. The proposed pipelines will disturb contaminated soil and what remediation is planned when encountered.
5. Will the Corps evaluate the methods and guarantee that the freshwater produced will be potable without heavy metals and chemical dumped into the CCSC during the past 100 years?
6. What are the environmental and health risks from the biomatter and turbidity waste hauled through neighborhoods?
7. How does the Corps “reduce disaster risk” to the Hillcrest Community and Corpus Christi Bay?

Applicant’s Response

1. Since the project would meet state WQ standards, the need to prepare an EIS would be unnecessary. The Corps may implement a Public Hearing if it is determined that more information is needed.
2. The applicant acknowledged this comment.
3. The Corps’ evaluation considers impacts from the regulated fill discharges within waters of the US (WOTUS) associated with the project, as well as impacts from work performed within a navigable WOTUS. Consideration of desalination failure is beyond the scope of USACE permit evaluation procedures.
4. Construction activities will follow a soil and groundwater management plan.
5. Water produced through the pretreatment, desalination, and post-treatment processes will be required to meet all applicable drinking water standards. Thorough water quality sampling has already been completed for the Inner Harbor Ship Channel. Monitoring of the intake will allow for early detection of any water quality changes.

6. Residuals hauling routes will not enter the neighborhood. No emissions or air quality impairments are anticipated
7. Part of the Corps' evaluation includes a Public Interest Review. A safety plan for the facility operation and infrastructures would be developed by the City and is not specifically part of the Corps' permitting process.

Corps Evaluation

1. In regard to requests that an EIS study be done and Public Hearing held for the proposed project, the applicant's response has satisfied those concerns. See Section 10.1.2 for further discussion regarding EIS. In regard to Public Hearings see Public Hearing discussion in Section 4.1. The Corps considers these issues resolved.
2. This concern does not fall under Corps authority. Effluent discharge for this project falls under the TCEQ's review and will be addressed in its NPDES permit review for this project. We consider this issue to be resolved.
3. The applicant's response covers this concern - consideration of desalination failure is beyond the scope of our review for this project.
4. The applicant's response adequately addresses this concern. We have also evaluated potential detrimental effects due to this project in our General Interest review and found such effects to be of negligible, or less, concern (See Section 7.1). We consider this issue to be resolved.
5. The applicant's response adequately addresses this concern. This concern does not fall under Corps authority.
6. The applicant's response adequately addresses the issue regarding transportation of waste products through neighborhoods. The Corps considers this concern to be resolved.
7. The Corps evaluated the needs and welfare of the public in our review of potential project effects (See Section 7.1) and determined any such effects to be negligible; therefore, we consider this issue to be resolved.

Comment 9

General Public Comments

Approximately 534 additional comment letters were received from the general public. Nearly all the letters requested that an Environmental Impact Study be done to evaluate the proposed project's impacts, and a public hearing be held in order for the public to find out more about the project and voice their concerns. In addition, specific concerns were also expressed about how the project would affect the following points of public interest: Historic and Cultural Resources; Water Quality; Endangered Species; Fish and Wildlife Values; Essential Fish Habitat; Commercial Fisheries; Environmental Justice; Recreation; General Environmental Concerns; Economics; Air/Water Pollution; and Cost.

Applicant's Response

EIS: Since the project would meet state WQ standards, the need to prepare an EIS would be unnecessary.

Public Hearing: The Corps may implement a Public Hearing if it is determined that more information is needed.

Historic and Cultural Resources: There will be no impacts to Indigenous Peoples or residential communities from construction and operation of the facilities. The USACE's POC for Tribal affairs has determined that the "permit area has been so extensively impacted by construction and maintenance of the CCSC and industrial development that there is no potential for resources of concern to the Native American Tribes to exist within the permit area."

Water Quality: Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.

Endangered Species: Applicant will adhere to guidance provided by FWS and NOAA as part of the ESA consultation process. There is no designated critical habitat that would be impacted by this project.

Fish and Wildlife Values: Proper active nest surveys, and any necessary avoidance and minimization efforts, would be implemented as part of the project.

Essential Fish Habitat: Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.

Environmental Justice: There will be no impacts to residential communities from construction and operation of the water treatment plant or its intake, discharge or pipeline facilities. The proposed water treatment plant will not release objectionable pollutants, noxious odors, loud noises or other harmful substances into the Hillcrest neighborhood.

Recreation: Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.

General Environmental Concerns: Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many additional parameters. Required modeling has been completed.

Economics: The Corps' permit evaluation considers impacts from the regulated fill discharges within waters of the US (WOTUS) associated with the project, as well as impacts from work performed within a navigable WOTUS.

Pollution: Monitoring of the intake will allow for early detection of any water quality changes. Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling. Development work and modeling results predict minimal impacts in the near- and far-field related to salinity, dissolved oxygen, temperature, and many more parameters. Required modeling has been completed.
Jet diffusion is the best available technology for dispersion of desalination concentrate and will disperse the discharge to meet regulatory requirements at the mixing zone boundaries. Jet diffusion is proposed specifically to avoid accumulation of a concentrate layer. Construction noise and traffic would be temporary and localized. A traffic control plan would be implemented to address safety concerns. Operational noise is expected to be no greater than the existing noise present in this industrial setting.

Cost: Corps permit evaluation considers impacts from the regulated fill discharges within waters of the US (WOTUS) associated with the project, as well as impacts from work performed within a navigable WOTUS.

Corps Evaluation

The majority of comments were in regard to cultural resources, EIS and Public Hearing requests, environmental concerns (including fish and wildlife), environmental justice, water quality, and pollution.

In regard to requests that an EIS study be done for the proposed project, project information from the applicant and our own (Corps) review has satisfied those concerns. See also Section 10.1.2 for further discussion.

In regard to Public Hearing Requests, project information from the applicant and our own (Corps) review has satisfied those concerns. See also Section 4.1.

In regard to Environmental Concerns, the applicant provided "Technical Memorandum – City of Corpus Christi Desalination Study, Concentrate modeling at Inner Harbor Channel". The memo outlines the modeling done for the project and the results, which indicate that the brine discharge will quickly dissipate to within 2 ppt of the ambient salinity levels and supports that any environmental impact would be minimal. The Corps considers this issue to be resolved. See also Section 7.1.

In regard to Environmental Justice concerns, see Section 4.3.

In regards to Historic and Cultural Resources, see Sections 7.1 and 10.3.

In regard to Water Quality, see Sections 7.1 and 10.5.

In regard to Endangered Species, see Sections 6.4.1 and 10.1.

In regard to Fish and Wildlife Values: applicant's response adequate addresses this concern: "The proposed project was modeled to meet TCEQ WQ standards and the salinity is within 2 ppt of ambient conditions within 400 ft of the discharge. Discharge dispersion targets were established based on salinity tolerances of local species at their various life stages to be maximally protective of marine life." The Corps considers this concern to be resolved. Also see Section 7.1.

In regard to Essential Fish Habitat, see Section 10.2.

In regard to concerns about the release of pollutants from project operations and water quality, these issues fall under the TCEQ's review and will be addressed in that agency's NPDES permit review for this project. See also Section 4.3.

Other General Public Issues

In regard to cultural resources and archaeological issues, the applicant's response has satisfied those concerns. See also Sections 7.1 and 10.3 for further discussion.

In regard to Economics, a sustainable and reliable water supply provided by the desalination project will support the continuing expansion of industry in the area receiving fresh water supplies for the City. The Corps considers the benefits provided by the project to satisfactorily resolve this concern. See also Section 7.1.

In regard to Recreation, see response to Fish and Wildlife Values this section.

In regard to Cost concerns, the applicant noted that the Corps' permit evaluation considers impacts from the regulated fill discharges within waters of the US (WOTUS) associated with the project, as well as impacts from work performed within a navigable WOTUS. The applicant is correct that cost factors are outside of the Corps' scope of review. We consider this concern to be resolved.

Public Notice 2: Covered pipeline connection from desalination facility to the City's potable water system.

The results of coordinating the proposal on public notice are identified below, including a summary of issues raised, any applicant response and the Corps' evaluation of concerns.

Were comments received in response to the public notice? Yes

Were comments forwarded to the applicant for response? No
Was a public meeting and/or hearing requested, and if so, was one conducted?

Yes, a public meeting/hearing was requested but was not held.

The intent of a public hearing is to solicit information or evidence that might assist us in

the evaluation of this permit action. Based on our review of all the information submitted during the PN comment period, and subsequent evaluation process, we have determined that there is sufficient information to render a decision on this permit request. We believe it is unlikely that any new information would have been gained by holding a public hearing. Therefore, a public hearing was not scheduled.
Comments received in response to public notice:

Table 2b – Public Notice Comments			
Agency and/or Person provided with notice of proposal	Response received	Date Received	Comments/Issues Raised
US Environmental Protection Agency (EPA)	No		
US Fish and Wildlife Service (FWS)	No		
National Marine Fisheries Service - Habitat Conservation Division (NMFS-HCD)	Yes	7 March 2025	No Objection
National Marine Fisheries Service - Protected Resources Division (NMFS-PRD)	No		
US Coast Guard (USCG)	No		
Texas Commission on Environmental Quality (TCEQ)	No		
Texas Parks and Wildlife Department (TPWD)	Yes	10 March 2025	No Objection
Texas General Land Office (GLO)	Yes	10 March 2025	No Objection
Texas State Historic Preservation Officer (SHPO)	No		
General Public	Yes	10 March 2025	See below for discussion.
Coastal Bend Sierra Club	Yes	7 March 2025	See below for discussion.
IOBCWA	Yes	10 March 2025	See below for discussion.

Additional discussion of submitted comments, applicant response and/or Corps' evaluation:

Comment 1:
General Public:

Twenty-four letters were received from the General Public and were directed at the proposed desalination project in general rather than the potable water connection pipeline described in Public Notice 2, thirteen of the letters were based on a single form letter format. These form letters listed five concerns: Environmental Harm and Marine Life Destruction; Public Health Risks; Increased Energy Demand and Risk of Power Outages; Rising Costs for Residents; and Environmental Justice Concerns. One letter was independently written and listed the following concerns; water quality; show that state water quality criteria have been met; stratification resulting in hypoxia and anoxia in bottom waters of the Inner Harbor; pollution in Inner Harbor waters; project purpose probably for industry and not public; Inner Harbor designated uses do not include "drinking water"; EPA should ensure that project is not being funded under the State Revolving Loan Fund, or if so, then no laws or regulations are being violated; EIS should be conducted; Public Hearing requested; EPA should determine if project affects aquatic resources of national importance (ARNI) due to potential salinity change over a large part of Corpus Christi Bay system.

Applicant's Response: N/A

Corps' Evaluation: For the 13 form letters, all issues except Increased Energy Demand and Risk of Power Outages (Energy and Power) were addressed in Public Notice 1 and are considered resolved. In regard to Energy and Power, power use in Texas is regulated by the Electric Reliability Council of Texas and is not subject to Corps of Engineers authority. Accordingly, we consider this concern to be resolved.

Eleven independently written comment messages were also received and listed the following issues: EIS needed; Public Hearing needed; Environmental Concerns; Pollution; Environment Justice; Cost; Energy Demands; Water Quality; and Economy. All of these issues, except Inner Harbor designated use for drinking water, funding under the State Revolving Loan Fund, and EPA ARNI determination, were addressed in our Public Notice 1 comment evaluation and are considered resolved. In regard to use of the Inner Harbor as a "drinking water" supply, this issue is outside of the Corps' jurisdiction. The TCEQ, working in coordination with the EPA, is the primary state agency responsible for regulating drinking water standards and enforcing the Safe Drinking Water Act and both are the proper agencies to address this issue. In regard to project funding, how a project is funded is outside of the Corps jurisdiction; therefore, we consider this issue to be resolved. In regard to the EPA making an ARNI determination, the EPA Region must notify Corps District Engineer by letter within the public notice comment period that the project may result in substantial and unacceptable impacts to an ARNI. Since EPA made no such determination, we consider this issue to be resolved.

Comment 2:
Coastal Bend Sierra Club (CBSC)
The CBSC submitted the same form letter with concerns that were noted in Comment 1.
Corps Evaluation: The Corps addressed all of these issues in the Public Notice 1 comments or in Public Notice 2 Comment 1 above. We consider the CBSC concerns to be resolved.

Comment 3:
IOBCWA
The IOBCWA submitted concerns about biomatter, turbidity, lack of circulation in Corpus Christi Bay, environmental concerns, salinity levels, public health, and a request for an EIS. The Corps addressed all of these issues in the Public Notice 1 comments and considers them to be resolved.

4.2 Additional issues raised by the Corps:
Internal coordination conducted within the Galveston District Corps (Corps) offices on: 3 November 2023 and 20 February 2025.

The Programs and Project Management Division, Real Estate (RE) Division, Operations Division (OD-Navigation Branch and OD-Operations Branch), Engineering and Construction Division (including area offices) (E&C), Southwestern Division Regional Planning and Environmental Center (RPEC), Project Management Office (PM), and the Regulatory Division's Compliance Branch (RD-C) and Corps staff archeologist (RD-P) were coordinated with during the Internal Review period.

Table 3 – Corps Internal Coordination Comments

Corps Office	Response received	Date Received	Comments/Issues Raised
RE	Yes	30 June 2023	Adjacent federal interest; See below for discussion
OD-Navigation Branch	Yes	6 July 2023	Adjacent federal interests; No Effect
OD-Operations Branch	No		
E&C	No		
RPEC	No		
PM	No		
RD-C	No		
RD-P	Yes	30 June 2023 20 Feb 2025	See Section 10.3

RE Division commented by electronic mail, dated 30 June 2023, stating that Initial review of this request indicates Corps real estate interests may be affected. Permits may be issued subject to RE clearance with the following statement:

This permit does not authorize any injury or interference with any federal property; nor does it grant property rights, access privileges, or rights-of-way entrance authorizations to any property including those owned by State or federal agencies. There are federal properties (owned or controlled by Corps of Engineers) identified within the project area. All appropriate accesses, authorization, rights-of-way on the Corps Federal project area must be procured from the Corps Real Estate Division prior to impacting any of these federally-owned/operated lands. This Permit authorization is limited to those impacts

exactly as depicted. If property access and/or use is denied and/or requires modification to the project as permitted, this authorization becomes null and void and would require a new authorization to adequately address these new impacts. Please visit the Corps Galveston District's website for the most current information regarding the District's outgrant policy at:
http://www.swg.usace.army.mil/BusinessWithUs/RealEstateDivision/Outgrants.aspx.

The Corps Regulatory has concerns regarding the proposed desalination project and its potential effects on the aquatic environment and associated species. The applicant will be advised that he should thoroughly evaluate potential impacts from the proposed brine discharge as well as the employment of methods by which such effects can be minimized.

4.3 Comments regarding activities and/or effects outside of the Corps' scope of review or within the Corps purview but not relevant to the proposed project's review.

The Corps received approximately sixty comments from the public that that the project would have negative impacts on the nearby Hill Crest Community that would affect the living environment for citizens of that community. We determined that these comments fall under the category of Environmental Justice and are outside of the Corps' jurisdiction for review and should be presented to the City's zoning commission for resolution.

We received approximately 170 requests for the Corps to conduct an EIS for the proposed project. An EIS request is within the Corps purview, but not relevant to the proposed project's review. An EIS is a document required by the NEPA for certain actions "significantly affecting the quality of the human environment". Not all federal actions require a full EIS. If the action may or may not cause a significant impact, a federal agency can first prepare a smaller, shorter document called an Environmental Assessment (EA). The finding of the EA determines whether an EIS is required. If the EA indicates that no significant impact is likely, then the agency can release a finding of no significant impact and carry on with the proposed action. This SOF serves as an EA by the Corps for the proposed action and documents our NEPA review. Refer to Section 12.3 for the Corps determination regarding the need for an EIS.

Concerns about the pollutants that might be contained in the brine discharge and their effect on water quality are issues that fall under the authority of the TCEQ. The desalination discharge has been reviewed by the TCEQ and a draft TPDES Permit (No. TX0139874) to assess the potential impacts of the proposed discharge to the Inner Harbor and the surrounding community for this project has been issued.

Concerns about drinking water standards are outside of the Corps' scope of review for this project. The TCEQ is responsible for enforcing rules about public water systems in Texas, Title 30 Texas Administrative Code (30 TAC), Chapter 290.

Determination of ARNI effects are outside of the Corps' jurisdiction. Such determinations should be made by the EPA within the public notice comment period.

Concerns about project cost and funding for this project are outside of the of the Corps' scope of review.

5.0 Alternatives Analysis

(33 CFR Part 325 Appendix B, 40 CFR 230.5(c), 40 CFR 1501, and RGL 88-13). An evaluation of alternatives is required under NEPA for all jurisdictional activities. NEPA requires discussion of a reasonable range of alternatives, including the no action alternative, and the effects of those alternatives. An evaluation of alternatives is required under the Section 404(b)(1) Guidelines for projects that include the discharge of dredged or fill material to waters of the United States. Under the Section 404(b)(1) Guidelines, practicability of alternatives is taken into consideration and no alternative may be permitted if there is a less environmentally damaging practicable alternative.

5.1 Site selection/screening criteria

In order to be practicable, an alternative must be available, achieve the overall project purpose (as defined by the Corps) and be feasible when considering cost, logistics and existing technology.

A total of 20 potential sites for the desalination project were identified across the Corpus Christi Bay region and screened:
1) Elementis Chromium; 2) Nueces Bay Energy Center; 3) Harbor Bridge; 4) M&G Plastics; 5) Tule Lake Bridge/South Texas Materials; 6) Former Naval Station Ingleside; 7) PCCA Hamilton; 8) Kiewit; 9) Oxy Chem Site A; 10) Oxy Chem Site B; 11) Oxy Chem Site C; 12) Oxy Chem Site D; 13) PCCA La Quinta; 14) PCCA Harbor Island; 15) PCA Site 1; 16) PCCA Site 2; 17) Good Hope; 18) Barney Davis; 19) Nueces Bay Boulevard; 20) Broadway Street.

Criteria for evaluating alternatives as evaluated and determined by the Corps:

The alternatives analysis for these sites was conducted in a three-phased approach. The first phase consisted of a regional site selection process to evaluate potential sites where the proposed project could be constructed that might meet the overall project purpose and need. Initial screening criteria included: 1) Tract Features/Availability; 2) Environmental Characteristics; 3) Source Water Quality; 4) Intake Considerations; 5) Discharge Considerations; 6) Product Water Delivery; 7) Power; 8) Social Considerations. Sixteen of the initial 20 sites were eliminated during the initial screening process due to criteria 1, 2, 4, and 6. As these criteria can overlap, some sites were eliminated for more than one reason.

The second phase screening was based on several criteria, including: A) additional environmental considerations; B) raw water quality; C) discharge and concentrate dispersion modeling; and D) cost. The four remaining candidate sites included two areas along the Inner Harbor and two areas along the La Quinta Channel: 1) PCCA Site 2; Oxy Chem Site A; 3) Nueces Bay Boulevard; and 4) Broadway Street. Both of the La Quinta Channel sites were eliminated due to criteria A and C. The Broadway Street site was eliminated due to criteria C and D, leaving the Nueces Bay Boulevard site.

5.2 Description of alternatives

5.2.1 No action alternative

The no action alternative results in no construction requiring a Corps permit, and may include either the applicant electing to modify the proposal to eliminate work in waters of the US, or denial of the permit. In this instance a permit authorizing the discharge of fill material into waters of the US would either not be required or be denied. In either case no fill would be authorized to be discharged into any waters of the US or special aquatic site. The proposed project site would not be developed for this project and the wetlands on the project site would remain intact.

5.2.2 Off-site alternatives

Off-site alternative 1: Elementis Chromium is a 4.07-acre site located along the Chemical Turning Basin within the Port of Corpus Christi.

Off-site alternative 2: Nueces Bay Energy Center is a 101.56-acre site located along the north shore of the Industrial Canal within the Port of Corpus Christi.

Off-site alternative 3: The (old) Harbor Bridge area is a 13.31-acre site located near the entrance to the Port of Corpus Christi.

Off-site alternative 4: M&G Plastics is a 71.79-acre site located along the north shore of the Tule Lake Turning Basin within the Port of Corpus Christi.

Off-site alternative 5: Tule Lake Bridge/South Texas Materials is a 13.74-acre site located along the south shore of Tule Lake Channel. The site has limited frontage on the Inner Harbor (360 feet width).

Off-site alternative 6: Former Naval Station Ingleside is 3,350.07-acre site located east of Ingleside on the Bay along the Corpus Christi Ship Channel.

Off-site alternative 7: PCCA Hamilton is a 34.07-acre site. This tract consists of a relatively narrow corridor connecting the channel which limits the ability to install an intake. There is an existing wastewater discharge at this site.

Off-site alternative 8: Kiewit is a 24.18-acre site located along the La Quinta Channel east of Ingleside on the Bay.

Off-site alternative 9: Oxy Chem Site B is a 151.21-acre sitelocated along the La Quinta Channel east of Ingleside on the Bay.

Off-site alternative 10: Oxy Chem Site C is a 48.42-acre site located along the La Quinta Channel east of Ingleside on the Bay.

Off-site alternative 11: Oxy Chem Site D is a 213.3-acre site located along the La Quinta Channel east of Ingleside on the Bay.

Off-site alternative 12: PCCA La Quinta is a 122.74-acre site located along the La Quinta Channel east of Ingleside on the Bay. This tract has a shallow shoreline that can include seagrass, tidal wetlands, or tidal flats.

Off-site alternative 13: PCCA Harbor Island is a 405.99-acre tract located along the Corpus Christi Ship Channel near its entrance from the Gulf of America, and across from Mustang Island.

Off-site alternative 14: PCCA Site 1 is a 30.29-acre site located along Green Lake near Gregory, Texas.

Off-site alternative 15: PCCA Good Hope is a 289.7-acre site located on a private dredged material placement area north of Kiewit-Ingleside.

Off-site alternative 16: Barney M. Davis Reservoir is a 1,930-acre site that is part of a cooling pond system located adjacent to the Barney M. Davis power sub-station near Flour Bluff, Texas.

Off-site alternative 17: The PCCA Site 2 is an approximate 32-acre site located on Green Lake south of PCCA Site 1 and south of Gregory, Texas.

Off-site alternative 18: Oxy Chem Site A is an approximate 16-acre site currently in use for agriculture and is on the south side of SH 361 east of Gregory, Texas

5.2.3 On-site alternatives

On-site alternative 1 (applicant's preferred alternative): The Nueces Bay Boulevard Site is an approximately 13-acre parcel located along the southern shore of the Inner Harbor within the Port of Corpus Christi.

On-site alternative 2: Broadway Street Site is an approximately 17-acre parcel located along the southern shore of the Inner Harbor within the Port of Corpus Christi.

5.3 Alternatives evaluation under the Section 404(b)(1) Guidelines and NEPA

The No-Action alternative was considered; however, the No Action Alternative would not fulfill the previously stated project purpose and need. Selection of this alternative may result in increased vulnerability and uncertainties for the City's current water supply given climate unpredictability and pace of growth. Based on the results of the analysis conducted, the No Action Alternative was eliminated during the screening process and was not considered for further analysis

Offsite Alternatives

Site1: The site is unavailable due to several encumbered tracts required for site arrangement

Site 2: Intake and Discharge Considerations and Tract Features/Availability were the

criteria that eliminated this site. The existing intake has a dedicated use and owner and the co-location of brine discharge at the facility was protected by a patent held by others; these reasons presented challenges to availability and discharge design. Additionally, Product Water Delivery was also a consideration for screening as this site would require a new pipeline under the Inner Harbor/Corpus Christi Ship Channel or on the new bridge – this poses additional complexities to permitting, construction, and maintenance.

Site 3: Tract Features/Availability is the criterion that eliminated this site. Construction for the new Harbor Bridge has made this site unavailable. The site availability was unpredictable as it was dependent upon or affected by the construction and completion of the new Harbor Bridge.

Site 4: Tract Features/Availability is the criterion that eliminated this site as this site was unavailable. M&G Plastics was retained by another seawater desalination initiative and was not available to the City. During the initial siting analysis, the facility was facing bankruptcy, and a joint venture group purchased the facility (i.e., CC Polymers).
Site 5: Tract Features/Availability is the criterion that eliminated this site due to its limited frontage on the Inner Harbor which would have impacted siting of the intake and discharge structures. Additionally, there are existing intakes present in the area that would present challenges for locating a discharge location at this site.
Site 6: Product Water Delivery was the criterion that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay (or around the bay, which would double the distance) to connect to the City of Corpus Christi's potable water infrastructure. The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, and would increase relative project costs.

Site 7: Product Water Delivery, Tract Features/Availability, and Intake Considerations were the criteria that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs. Additionally, the tract consists of a relatively narrow corridor connecting the channel which limits the ability to install an intake. Last, the presence of an existing wastewater discharge would require additional pipeline distances to ensure separation from the intake.

Site 8: Tract Features/Availability and Product Water Delivery were the criteria that eliminated this site. The required intake location would be within a side canal due to existing infrastructure, and that canal had insufficient depths needed to install the discharge and achieve appropriate dilution to maintain water quality which is -30 feet. Regarding Product Water Delivery, this site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water

infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs.

Site 9: Intake Considerations, Tract Features/Availability, and Product Water Delivery were the criteria that eliminated this site. The site is near three new wastewater discharges and ensuring intake separation from these discharges posed challenges. Additionally, the site did not offer adequate depths to site the intake (-20 to -30 ft) and discharge (-30 ft) without longer pipelines. Areas between the federal channel and the shoreline range from -0.5 ft to -3.0 ft depth. After this shallow zone, the area immediately transitions to the federally maintained channel (an area avoided due to navigation impact concerns). To construct within shallow areas, there would be greater WOTUS impacts due to dredging/excavation requirements to achieve required depths. Regarding Product Water Delivery, this site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs.

Site 10: Intake Considerations, Tract Features/Availability, and Product Water Delivery were the criteria that eliminated this site. The site is near three new wastewater discharges and ensuring intake separation from these discharges posed challenges. Additionally, the site did not offer adequate depths to site the intake (-20 to -30 ft) and discharge (-30 ft) without longer pipelines. Areas between the federal channel and the shoreline range from -0.5 ft to -3.0 ft depth. After this shallow zone, the area immediately transitions to the federally maintained channel (an area avoided due to navigation impact concerns). To construct within shallow areas, there would be greater WOTUS impacts due to dredging/excavation requirements to achieve required depths. Regarding Product Water Delivery, this site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs.

Site 11: Product Water Delivery was the criterion that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs.

Site 12: Environmental Characteristics and Tract Features/Availability were the criteria that eliminated this site. The tract included a shallow shoreline that can include seagrass, tidal wetlands, or tidal flats – presence of these features could increase permitting complexities. Additionally, the site did not offer adequate depths to site the intake (-20 to -30 ft) and discharge (-30 ft) without longer pipelines. Areas between the federal channel and the shoreline range from -0.5 ft to -3.0 ft depth. After this shallow zone, the area immediately transitions to the federally maintained channel (an area avoided due to navigation impact concerns). To construct within shallow areas, there would be greater WOTUS impacts due to dredging/excavation requirements to achieve required depths.

Site 13: Environmental Considerations and Product Water Delivery were the criteria that eliminated this site. This site is near Aransas Pass which may imply a greater likelihood of impact on larval aquatic organisms that migrate into and out of the Corpus Christi Bay System. There is highly organized opposition to this site and informal conversations with NMFS during initial planning phases of this project indicated they were not in favor of this site. Last, this site would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which increases the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase project relative costs.

Site 14: Product Water Delivery was the criterion that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs.

Site 15: Product Water Delivery was the criterion that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs.

Site 16: Environmental Consideration was the criterion that eliminated this site. It was determined that an offshore discharge may be necessary to avoid seagrass impacts making this site cost prohibitive. Due to its location in the Upper Laguna Madre, this site is abutting extensive and contiguous seagrass beds. The notion of constructing an

offshore discharge would be expected to use HDD technologies to avoid and minimize impacts to seagrass and other coastal resources. HDD is limited in both diameter and distance without access shafts and bore holes. A 60-inch diameter pipe is approximately the largest pipe size that could be constructed with HDD technology and this project would need a larger diameter pipe. Bore holes would be spaced approximately every 5 miles which also pose logistical challenges, costs, and coastal impacts.

Site 17: Product Water Delivery and Discharge Considerations were the criteria that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs. WQ modeling and stratified sampling indicated less than ideal bathymetry and that the intake would require a depth of -20 to -30 feet for consistent WQ, and the discharge may require a depth of -30 to achieve proper dilution; within the La Quinta Channel area (areas between the federal channel and the shoreline range from -0.5 - 3.0 ft deep).

Site 18: Product Water Delivery and Discharge Considerations were the criteria that eliminated this site. This site, along with several others along the La Quinta Channel, would require construction of an approximately 25-mile-long pipeline back across Nueces Bay to connect to the City of Corpus Christi's potable water infrastructure (or a pipeline going around Nueces Bay, which doubles the pipeline length and would cross the Nueces Delta which would involve wetland impacts). The required pipeline would increase the likelihood of cultural resource impacts, coastal resource impacts, WOTUS impacts, and would increase relative project costs. WQ modeling and stratified sampling indicated less than ideal bathymetry and that the intake would require a depth of -20 to -30 feet for consistent WQ, and the discharge may require a depth of -30 to achieve proper dilution; within the La Quinta Channel area (areas between the federal channel and the shoreline range from -0.5 - 3.0 ft deep).

Onsite Alternatives

Alternative 1 (preferred alternative): The construction of the desalination facility at Nueces Bay Boulevard site will minimize or avoid both temporary and permanent impacts to waters of the U.S. (WOTUS) to the maximum extent practicable while fulfilling project needs. Work in this location will not impact special aquatic sites; therefore, no mitigation will be required. Much of the necessary infrastructure is already in place or nearby, thus minimizing the project construction footprint. On-Site alternative 1 is considered practicable due to the minimal amount of construction needed and impacts to the aquatic environment to achieve the project's purpose compared to the other alternatives.

Alternative 2: The Broadway site size was adequate for the proposed project; however, its closer proximity to the mouth of the Inner Harbor were considered an environmental disadvantage in that there would be a greater potential for entrainment, impingement, and impacts of the intake and discharge on marine life compared to the preferred alternative. In addition, this site is in an area of broader channel geometry that decreases velocities conducive to dispersion and mixing of the brine discharge.

5.4 Least environmentally damaging practicable alternative under the Section 404(b)(1) Guidelines

On-Site Alternative 1 is the least environmentally damaging practicable alternative.

This alternative will incorporate minimization measures to decrease the environmental impacts (See Section 1.3.1). The applicant analyzed eighteen alternative locations in the Off-Site Alternative. The offsite configurations would result in additional direct and secondary impacts to waters of the US (including special aquatic sites), fish and wildlife resources, and water quality. Such impacts would include reduction in size and habitat availability for biota and degradation of the aquatic environment. On-site alternative 2 would result in similar aquatic resource impacts, but due to the potential for to the environmental concerns, this alternative was not identified as the least environmentally damaging alternative. Therefore, on-site alternative 1 was determined to be the least environmentally damaging practicable alternative under the 404(b)(1) Guidelines and the environmentally preferable alternative under NEPA.

6.0 Evaluation for Compliance with the Section 404(b)(1) Guidelines

The following sequence of evaluation is consistent with 40 CFR 230.5

6.1 Practicable alternatives

Practicable alternatives to the proposed discharge consistent with 40 CFR 230.5(c) are evaluated in Section 5.

The statements below summarize the analysis of alternatives:

In summary, based on the analysis in Section 5 above, the no-action alternative, which would not involve discharge into waters of the United States, is not practicable.

For those projects that would discharge into a special aquatic site and are not water dependent, the applicant has demonstrated there are no practicable alternatives that do not involve special aquatic sites.

It has been determined that there are no alternatives to the proposed discharge that would be less environmentally damaging (Subpart B, 40 CFR 230.10(a)).

The proposed discharge in this evaluation is the practicable alternative with the least adverse impact on the aquatic ecosystem, and it does not have other significant environmental consequences.

6.2 Candidate disposal site delineation (Subpart B, 40 CFR 230.11(f))
Each disposal site shall be specified through the application of these Section 404(b)(1) Guidelines:

Table 4 – Candidate Disposal Site Delineation	
Depth of water at the disposal site	X
Current velocity, direction, and variability at the disposal site	X
Degree of turbulence	X
Stratification attributable to causes such as obstructions, salinity, or density profiles at the disposal site	X
Discharge vessel speed and direction	
Rate of discharge	X
Ambient concentration of constituents of interest	X
Dredged material characteristics, particularly concentrations of constituents, amount of material, type of material (sand, silt, clay, etc.) and settling velocities	X
Number of discharge actions per unit of time	
Other factors of the disposal site that affect the rates and patterns of mixing	X

The project will involve dredging within the 4.2-acre project area of Inner Harbor to install the intake and discharge structures and the connecting pipeline using hydraulic or mechanical methods. Any incidental fallback of dredged material associated with the proposed dredging for installation of these structures is not considered a discharge; therefore, is not considered further in the 404(b)(1) analysis. The material dredged during installation of these structures will be discharged to fill the pipeline trenches to restore the mudline to preconstruction conditions, after construction is complete within the Inner Harbor. Any remaining dredged material would be used in non-jurisdictional areas as fill for the building pad for the proposed intake pump station building, or placed on the Broadway Waste Water Treatment Plant site located east of the desalination project and off of Broadway Street.

6.3 Potential impacts on physical and chemical characteristics of the aquatic ecosystem (Subpart C 40 CFR 230.20-40 CFR 230.25)

The following has been considered in evaluating the potential impacts on physical and chemical characteristics:

Table 5 – Potential Impacts on Physical and Chemical Characteristics						
Physical and Chemical Characteristics	**N/A**	**No Effect**	**Negligible Effect**	**Minor Effect (Short Term)**	**Minor Effect (Long Term)**	**Major Effect**
Substrate			X			
Suspended particulates/ turbidity			X			
Water			X			
Current patterns and water circulation			X			

Table 5 – Potential Impacts on Physical and Chemical Characteristics						
Physical and Chemical Characteristics	**N/A**	**No Effect**	**Negligible Effect**	**Minor Effect (Short Term)**	**Minor Effect (Long Term)**	**Major Effect**
Normal water fluctuations		X				
Salinity gradients			X			

Discussion:
The applicant plans to employ turbidity curtains in the Inner Harbor if necessary to minimize any impacts to water quality during dredging activities (See 1.3.1). During land-based construction areas, silt fencing, rock berms, or hay bales may be used to control erosion. Any turbidity that will result from the project will be localized and settle out of the water quickly.

6.4 Potential impacts on the living communities or human uses (Subparts D, E and F)

6.4.1 Potential impacts on the biological characteristics of the aquatic ecosystem (Subpart D 40 CFR 230.30)
The following has been considered in evaluating the potential impacts on biological characteristics:

Table 6 – Potential Impacts on Biological Characteristics						
Biological Characteristics	**N/A**	**No Effect**	**Negligible Effect**	**Minor Effect (Short Term)**	**Minor Effect (Long Term)**	**Major Effect**
Threatened and endangered species			X			
Fish, crustaceans, mollusks, and other aquatic organisms			X			
Other wildlife			X			

Discussion: The project may affect but is not likely to adversely affect the West Indian manatee, giant manta ray, and the following sea turtles - Kemp's ridley sea turtle (*Lepidochelys kempii*), green sea turtle (*Chelonia mydas*), hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*). Although these sea turtles and manatees have been observed in the vicinity of the project area, those sightings are rare, transitory, and are typically of single individuals. The proposed work is relatively small in scope and magnitude and will not occur in habitat areas that these species frequent. The applicant has agreed to FWS' recommendations to post BMPs regarding reporting any sightings of West Indian manatee at the project site and we will include FWS' letter, which also contains contact information in the event of encounters with sea turtles, as an

attachment to the project plans. See also Section 10.1.

Fish and other motile animals are likely to avoid the project site during construction. Sessile or slow-moving animals in the path of discharges, equipment, and building materials may be destroyed. Some aquatic animals may be smothered by the placement of fill material. Motile animals are likely to return to those areas that are temporarily impacted by the authorized activity and restored or allowed to revert back to preconstruction conditions. Aquatic animals might not return to sites of permanent fills. Benthic and sessile animals are expected to recolonize sites temporarily impacted by the activity, after those areas are restored.

The proposed discharges of dredged or fill material into waters of the United States proposed by this action may result in adverse effects to other wildlife associated with aquatic ecosystems, such as resident and transient mammals, birds, reptiles, and amphibians, through the destruction of aquatic habitat, including escape cover, travel corridors, and preferred food sources. There are no known breeding or nesting areas within the project area. Any potential impacts are expected to be minor, since the project occurs within an industrial corridor and would occupy a relatively small area.

6.4.2 Potential impacts on special aquatic sites (Subpart E 40 CFR 230.40)
The following has been considered in evaluating the potential impacts on special aquatic sites:

Table 7 – Potential Impacts on Special Aquatic Sites

Special Aquatic Sites	N/A	No Effect	Negligible Effect	Minor Effect (Short Term)	Minor Effect (Long Term)	Major Effect
Sanctuaries and refuges	X					
Wetlands	X					
Mud flats	X					
Vegetated shallows	X					
Coral reefs	X					
Riffle pool complexes	X					

Discussion: There are no sanctuaries/refuges or special aquatic sites (wetlands, mud flats, vegetated shallows, coral reefs, or rifle pool complexes) within the discharge locations.

6.4.3 Potential impacts on human use characteristics (Subpart F 40 CFR 230.50)
The following has been considered in evaluating the potential impacts on human use characteristics:

Table 8 – Potential Effects on Human Use Characteristics						
Human Use Characteristics	**N/A**	**No Effect**	**Negligible Effect**	**Minor Effect (Short Term)**	**Minor Effect (Long Term)**	**Major Effect**
Municipal and private water supplies						X
Recreational and commercial fisheries			X			
Water-related recreation			X			
Aesthetics			X			
Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves		X				

Discussion: There are no parks, national/historical monuments/national seashores/wilderness areas, research sites, or similar preserves within or adjacent to the proposed project area. The project will have a major positive effect on municipal and private water supplies since the purpose of the project is to produce potable water that will be used to supplement the supply of fresh water for users serviced by the City of Corpus Christi. For Negligible Effects discussion of aesthetics and recreation, see Section 7.1.

6.5 Pre-testing evaluation (Subpart G, 40 CFR 230.60)

The following has been considered in evaluating the biological availability of possible contaminants in dredged or fill material:

Table 9 – Possible Contaminants in Dredged/Fill Material	
Physical substrate characteristics	X
Hydrography in relation to known or anticipated sources of contaminants	X
Results from previous testing of the material or similar material in the vicinity of the project	X
Known, significant sources of persistent pesticides from land runoff or percolation	
Spill records for petroleum products or designated hazardous substances (Section 311 of the Clean Water Act)	
Other public records or significant introduction of contaminants from industries, municipalities, or other sources	
Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities	

Discussion: Sampling and analysis data were conducted in 2023 within the project vicinity. Based upon these efforts, no contamination is expected at or within the project construction area. The proposed material to be discharged during construction activities is accumulated from vessel traffic and tidal inflow. The discharge and extraction sites are in the same vicinity and the proposed material to be discharged is expected to be of similar composition to that of the surrounding environment.

It has been determined that testing is not required because the likelihood of contamination by contaminants is acceptably low and the material may be excluded from evaluation procedures.

6.6 Evaluation and testing (Subpart G, 40 CFR 230.61)
Discussion: Sediment testing protocols are in place by the Corps for maintenance dredging of the Inner Harbor, and there are no known sources of contamination within the proposed project area.

6.7 Actions to minimize adverse impacts (Subpart H)
The following actions, as appropriate, have been taken through application of 40 CFR 230.70-230.77 to ensure no more than minimal adverse effects of the proposed discharge:

Table 10 – Actions to Minimize Adverse Effects	
Actions concerning the location of the discharge	X
Actions concerning the material to be discharged	X
Actions controlling the material after discharge	X
Actions affecting the method of dispersion	X
Actions related to technology	X
Actions affecting plant and animal populations	X
Actions affecting human use	X
Other actions	

Discussion: The project area has been surveyed for aquatic vegetation and oysters and none occur within the bounds where construction for the intake/outfall structures will occur. Appropriate BMPs will be utilized to minimize any turbidity plumes resulting from the project construction. Construction equipment and material will be barged to the project site. The BMPs imposed at the project site will minimize any potential for the turbidity to spread farther than the targeted placement area (See Section 4.1 Public Notice Results). In addition, the project has been constructed and operations will be carried out in such a manner as to minimize impacts from the brine discharge (See also Section 6.3).

6.8 Factual Determinations (Subpart B, 40 CFR 230.11)
The following determinations are made based on the applicable information above, including actions to minimize effects and consideration for contaminants:

Table 11 – Factual Determinations of Potential Effects						
Site	**N/A**	**No Effect**	**Negligible Effect**	**Minor Effect (Short Term)**	**Minor Effect (Long Term)**	**Major Effect**
Physical substrate			X			
Water circulation, fluctuation and salinity			X			
Suspended particulates/turbidity			X			
Contaminants			X			
Aquatic ecosystem and organisms			X			
Proposed disposal site			X			
Cumulative effects on the aquatic ecosystem			X			
Secondary effects on the aquatic ecosystem			X			

Discussion: Temporary turbidity is probable during construction operations, resulting in minimal damage to fish and wildlife habitat and other biota; however, since the project is short-term in nature, will employ BMPs, and the construction equipment will be located on shallow draft barges impacts should be minimal. No lasting water pollution will occur. There are no special aquatic sites within the project area. The project as proposed may affect, but will not adversely affect threatened or endangered species that may be present within the disposal area. The proposed activity would have minimal effect on other wildlife and aquatic species.

6.9 Findings of compliance or non-compliance with the restrictions on discharges (40 CFR 230.10(a-d) and 230.12)

Based on the information above, including the factual determinations, the proposed discharge has been evaluated to determine whether any of the restrictions on discharge would occur:

Table 12 – Compliance with Restrictions on Discharge		
Subject	**Yes**	**No**
1. Is there a practicable alternative to the proposed discharge that would be less damaging to the environment (any alternative with less aquatic resource effects, or an alternative with more aquatic resource effects that avoids other significant adverse environmental consequences?)		X
2. Will the discharge cause or contribute to violations of any		X

Table 12 – Compliance with Restrictions on Discharge		
Subject	**Yes**	**No**
applicable water quality standards?		
3. Will the discharge violate any toxic effluent standards (under Section 307 of the Clean Water Act)?		X
4. Will the discharge jeopardize the continued existence of endangered or threatened species or their critical habitat?		X
5. Will the discharge violate standards set by the Department of Commerce to protect marine sanctuaries?		X
6. Will the discharge cause or contribute to significant degradation of waters of the United States?		X
7. Have all appropriate and practicable steps (Subpart H, 40 CFR 230.70) been taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?	X	

Discussion: Applicant will utilize appropriate BMPs to minimize impacts to water quality and aquatic resources (See Section 1.3). The project is not expected to adversely affect threatened or endangered species (See Section 10.1). No degradation of waters of the US due to discharge is anticipated (See Section 6.8).

7.0 General Public Interest Review (33 CFR 320.4 and Regulatory Guidance Letter 84-09)

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest as stated at 33 CFR 320.4(a). To the extent appropriate, the public interest review below also includes consideration of additional policies as described in 33 CFR 320.4(b) through (r). The benefits which reasonably may be expected to accrue from the proposal are balanced against its reasonably foreseeable detriments.

7.1 Public interest factors review

All public interest factors have been reviewed and those that are relevant to the proposal are considered and discussed in additional detail:

Table 13 – Public Interest Factors						
Factor	**None**	**Detrimental**	**Neutral (mitigated)**	**Negligible**	**Beneficial**	**Not Applicable**
1. Conservation:	X					
2. Economics:					X	
3. Aesthetics:				X		
4. General Environmental Concerns:				X		

Table 13 – Public Interest Factors						
Factor	**None**	**Detrimental**	**Neutral (mitigated)**	**Negligible**	**Beneficial**	**Not Applicable**
5. Wetlands:	X					
6. Historic Properties:	X					
7. Fish and Wildlife Values:				X		
8. Flood Hazards:				X		
9. Floodplain Values:				X		
10. Land Use:				X		
11. Navigation:			X			
12. Shoreline Erosion and Accretion:	X					
13. Recreation:				X		
14. Water Supply and Conservation:					X	
15. Water Quality:				X		
16. Energy Needs:				X		
17. Safety:			X			
18. Food and Fiber Production:						X
19. Mineral Needs:				X		
20. Consideration of Property Ownership:	X					
21. Needs and Welfare of the People:					X	

Additional discussion of effects on factors above:

None:
The project will not affect any conservation efforts or actions.

The project will not affect any wetlands.

Historic Properties Factor: None present. See Section 10.3 of this document for information regarding how the Corps has determined that it has fulfilled its responsibilities under Section 106 of the NHPA.

Shoreline erosion and accretion: The project is located within the Inner Harbor of the POCCA, an industrial marine terminal with armored shorelines that is regularly maintained by dredging. There will be no effect on shoreline erosion and accretion.

Consideration of property ownership:

Negligible Effects:

General Environmental Concerns: The proposed work would have negligible effects on the environment, including fish and wildlife values. Open waters provide habitat for fish and other aquatic organisms. However, fish and other motile animals are likely to avoid the areas where construction of the proposed structures would occur. During construction, the proposed construction will temporarily alter the habitat characteristics of the open waters within the project area and temporarily decrease the quantity and quality of fish and wildlife habitat by increasing turbidity and presence of construction equipment. However, due to the small are within the water that would be occupied by the structures after construction is completed, these effects will be minor. There would be a temporary negative effect during construction activities due to disturbances to the surrounding environment in the forms of added turbidity in the water column, added human presence, and noise higher than ambient levels. All of these effects would return to ambient levels once the project is complete and construction activities have ceased. To avoid and minimize impacts to aquatic larvae, the facility will be designed to have an intake velocity of 0.5 feet per second. The project will also not change the current baseline in such a way that the public interests in this area will change. In addition, the proposed dredging is within an industrial marine harbor that is already affected by regular maintenance dredging operations and will affect a minimal area. Turbidity associated with these operations will be temporary and of short duration (see Sections 1.3.1 for proposed avoidance and minimization measures and 6.3). In addition, the proposed project was coordinated with the natural resource agencies for comments and those comments were addressed (see Section 4.1).

Recreation: Boat access into the Inner Harbor by recreational anglers is not allowed, so construction activities in the project area should not affect fishing activities. Aspects of project construction, such as increased human presence, noise, turbidity, etc., may affect the quality of fishing near the entrance of the Inner Harbor, but such effects are expected to be minimal. The salinity changes associated with the discharge of brine water once the project is completed may also affect recreational angling. However, modeling information provided by the applicant shows that the salinity level of the discharge will quickly drop to only about 2 ppt above ambient levels within 400 feet of the discharge, and therefore, would not affect a much area beyond the Inner Harbor entrance. In addition, most recreational species are euryhaline in nature and should be able to tolerate minor fluctuations in salinity levels.

Water Quality: Development of the proposed project has included water quality and velocity surveys as well as hydrodynamic modeling of the proposed outfall discharge. Development work and modeling results predict minimal impacts in the near- and far-

field related to salinity as modeling shows the project would meet TCEQ WQ standards and the brine salinity would be within 2 ppt of ambient conditions within 400 ft of the discharge. The permittee must comply with Section 402 of the Clean Water Act. On 13 Mar 2025, the TCEQ has issued a draft TPDES permit for the discharge.

Flood Hazards and Floodplain Values Factors:
The proposed activities are expected to have negligible adverse effects on the flood-holding capacity of the 100-year floodplain or floodplain values since the infrastructure proposed within waters of the US are relatively small or would be installed underground. Much of the land area within the project site consists of uplands that are outside of the 100-year floodplains, and outside of the Corps' control and responsibility.

Energy needs: The proposed desalination facility, as a whole, is expected to increase energy consumption in the area, but those activities are outside of the Corps' control and responsibility. During construction, there is expected to be a temporary increase in energy consumption.

Mineral needs: The construction of the project may increase the demand for building materials, such as aggregate, stone, steel, aluminum, and copper. However, this demand is not expected to cause more than minimal adverse effect on the area's resources.

Aesthetics: The project would have a temporary negative effect during construction activities due to added human presence and noise higher than ambient levels. A majority of the infrastructure proposed to be constructed within waters of the US would be installed below the water's surface and underground. During construction, activities may modify other aesthetic characteristics, such as air quality and the amount of noise. All of these effects would return to normal levels once the project is complete and construction activities have ceased. The water pumps for the project will be enclosed in a structure with noise dampening features. The project area is located in an industrialized area and will also not change the current baseline in such a way that the public interests in this area will change. Therefore, the project is expected to have minimal effect on the visual character of waters of the US in the area.

Land Use: The land use of the project site comprises industrial development. During construction activities, there would be short-term, temporary impact land use of the project site caused by construction equipment and noise generation. However, it is expected that the activities would be performed during daylight hours, be temporary, and be within normal ranges for construction equipment. In all, the proposed work, construction of the structures, would temporarily, though not more than minimal, impact land use.

Neutral (mitigated) Effects: The project was designed to be beyond the navigation channel and beyond set dock lines to avoid any impacts to navigation. In addition, to assure impacts to navigation and safety are minimized, the authorization will be conditioned to require safety lights, signs and signals as required by U.S. Coast Guard.

Beneficial Effects: The proposed activity is expected to have a positive impact on the local economy. Construction of the project is anticipated to help generate jobs and revenue for local contractors as well as revenue to building supply companies that sell construction materials. The proposed project would have a beneficial effect on water supply and conservation, as well as the needs and welfare of the people, because the purpose of the project is to supplement the potable fresh water supply for the City of Corpus Christi area.

7.2 Public and private need

The relative extent of the public and private need for the proposed structure or work:

The private need for the proposed work for intake and outfall structures and related dredging is an economic return on the full use of the applicant's facility. The public need for the proposed project is the provision of a constant and reliable freshwater source that will supplement the area's dwindling supply of fresh water.

7.3 Resource use unresolved conflicts

If there are unresolved conflicts as to resource use, explain how the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work was considered.

There were no unresolved conflicts identified as to resource use.

7.4 Beneficial and/or detrimental effects on the public and private use

The extent and permanence of the beneficial and/or detrimental effects that the proposed work is likely to have on the public and private use to which the area is suited is described below:

Detrimental effects are expected to be minimal and permanent.

Beneficial effects are expected to be more than minimal and permanent.

The project will produce a constant brine water discharge during its operational life that will increase salinity levels. However, modeling shows that the brine salinity will dissipate to within 2 ppt of ambient conditions within 400 feet of the discharge, which will have only minimal effects on the surrounding environment. Beneficial effects of the project will be a constant and reliable freshwater source that will supplement the supply of fresh water for users serviced by the City of Corpus Christi.

The public use of the area in the vicinity of the proposed structure would not change from current use as this area is zoned for commercial use. Permanent beneficial effects would occur based on the additional supplies of freshwater would be made available upon completion of the project.

8.0 Mitigation

(33 CFR 320.4(r), 33 CFR Part 332, 40 CFR 230.70-77, and 40 CFR 1508)

8.1 Avoidance and minimization

Avoidance and Minimization: When evaluating a proposal including regulated activities in waters of the United States, consideration must be given to avoiding and minimizing effects to those waters. Avoidance and minimization are described in Section 1.3.1 above.

Describe other mitigative actions including project modifications implemented to minimize adverse project impacts? (See 33 CFR 320.4(r)(1)(i))

The applicant will employ BMPs as recommended by FWS to minimize potential impacts to threatened and endangered species that might occur in the project area. BMPs will be employed during construction to minimize water turbidity effects.

8.2 Compensatory mitigation requirement

Is compensatory mitigation required to offset environmental losses resulting from proposed unavoidable impacts to waters of the United States? No

Provide rationale: No mitigation is required because no permanent loss of aquatic function and value is proposed as a result of this project. The project activity in the Inner Harbor consists of construction of intake and outflow structures that would not adversely special aquatic sites. No permanent loss of aquatic function and value is proposed as a result of this project.

9.0 Consideration of Cumulative Effects

(40 CFR 1508 & RGL 84-9) Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor direct and indirect but collectively significant actions taking place over a period of time. A cumulative effects assessment should consider how the direct and indirect environmental effects caused by the proposed activity requiring DA authorization (i.e., the incremental impact of the action) contribute to the aggregate effects of past, present, and reasonably foreseeable future actions, and whether that incremental contribution is significant or not.

9.1 Identify/describe the direct and indirect effects which are caused by the proposed activity:

The direct effects associated with the proposed project are the construction of intake and outfall structures, their associated pipelines, dredging operations for their installation, and the discharge of brine into the Inner Harbor.

The indirect effects associated with the proposed project are disturbances to the surrounding environment and fish and wildlife habitat during construction in the forms of temporary impacts upon the aesthetics, water quality through added turbidity in the

water column, through work and installation activities due to added human presence, and noise higher than ambient levels. These effects would be short-term in nature and will return to normal levels once the project is complete and construction activities have ceased.

9.2 The geographic scope for the cumulative effects assessment is: within approximately 4.2 acres of open water within the Inner Harbor of the Port of Corpus Christi along the western shoreline of Corpus Christi Bay.

9.3 The temporal scope of this assessment covers:
A review of the Corps' regulatory database for the watershed spanning the past five years was performed. Similarly, the Corps analysis will estimate future impacts for the next five years.

9.4 Describe the affected environment:
The project is within the Inner Harbor of the Port of Corpus Christi, which is a highly industrialized area. The Inner Harbor is located on the western side of Corpus Christi Bay at the terminus of the CCSC. This is an open water area that receives regular dredging to maintain a depth of -45 feet, with shoreline that is mostly armored. The project and its effects will be limited to a small portion of the Corpus Christi Bay watershed (Hydrologic Unit Code (HUC) 12110202). Approximately 41% of the watershed is open water, 4.5% of the watershed is wetland, 26% is cultivated cropland, 1 % is pastureland and 20% is developed land, according to a review of GIS data in the Corps ORM database. Corpus Christi Bay has a surface area of 124,796 acres with 127 miles of shoreline and an average depth of 11 feet. Freshwater inflow, which strongly influences estuarine productivity, enters into the Corpus Christi Bay system from the Nueces River and Oso Creek. On an average year, the Corpus Christi Bay system receives 314,000 acre-feet of freshwater from these sources. Approximately 12% of existing Texas seagrasses is contained in this system.

9.5 Determine the environmental consequences:

Past and present actions, outside the Corps jurisdiction, that have been constructed include infrastructure, commercial and residential developments, parks and recreational areas, and industrial areas. While these actions did not require a Corps permit, they did require City and/or County approval prior to construction.

Past and present actions, within the Corps jurisdiction, that have been authorized for impacts within the scope of this assessment were analyzed by a review of the Corps regulatory database. It is important to note that not every action that was authorized has resulted in a loss of Waters of the US. Many permits are authorized and not constructed for a variety of reasons. Nevertheless, a review of authorized activities does provide some indication of potential stressors, and potential impacts, on the environment. The aggregated effect of past actions resulted in the authorization to impact approximately 85 acres of waters of the US. These permitted impacts required 97.64 acres of compensatory mitigation.

Through evaluation of the proposed action's impacts on the navigation, water quality, fish and wildlife values, and general environmental concerns, and the applicant's impact reduction through avoidance and minimization efforts, it was determined that on a long-term and/or cumulative basis, project authorization would not substantially adversely impact the aquatic environment and therefore would not be contrary to the overall public interest.

9.6 Conclusions regarding cumulative impacts:

The resulting natural resource changes and potential stressors are similar to other typical industrialization projects within the Inner Harbor and include development of the shoreline for commercial access, continued turbidity in the water column, continual disturbances to benthic organisms during annual dredging operations, and noise from construction equipment. These resources are also being affected by continued sediment movement caused by vessels present.

When considering the direct and indirect impacts that will result from the proposed activity, in relation to the overall direct and indirect impacts from past, present, and reasonably foreseeable future activities, the incremental contribution of the proposed activity to cumulative impacts in the area described in section 9.2, are not significant . Compensatory mitigation will not be required to offset the impacts of the proposed activity to eliminate or minimize its incremental contribution to cumulative effects within the geographic area described in Section 9.2. Mitigation required for the proposed activity is discussed in Section 8.0.

10.0 Compliance with Other Laws, Policies and Requirements

10.1 Section 7(a)(2) of the Endangered Species Act (ESA)

Refer to Section 2.2 for description of the Corps' action area for Section 7 of the ESA.

10.1.1 Lead federal agency for Section 7 of the ESA

Has another federal agency been identified as the lead agency for complying with Section 7 of the ESA with the Corps designated as a cooperating agency and has that consultation been completed? No

10.1.2 Listed/proposed species and/or designated/proposed critical habitat

Are there listed or proposed species and/or designated critical habitat or proposed critical habitat that may be present or in the vicinity of the Corps' action area? Yes

Name of species and/or critical habitat considered: The West Indian manatee, Eastern Black Rail, Giant Manta Ray (*Manta birostris*) and the following sea turtles - Kemp's ridley sea turtle (*Lepidochelys kempii*), green sea turtle (*Chelonia mydas*), hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*).

Effect determination(s), including no effect, for all known species/habitat, and basis for determination(s): The proposed activity may affect, but is not likely to adversely affect some of the species listed above and proposed green sea turtle critical habitat based on our biological assessment of potential impacts to the listed species and the concurrence we received from the NMFS and FWS regarding our assessment (See Administrative Record for consultation letters).

10.1.3 Section 7 ESA consultation

Consultation with either the National Marine Fisheries Service and/or the United States Fish and Wildlife Service was initiated and completed as required, for any determinations other than “no effect” (see the attached ORM2 Summary sheet for begin date, end date and closure method of the consultation)

The Corps evaluated the project for possible impacts to the species listed in 10.1.2. We determined that the project may affect, but was not likely to adversely affect these species. Accordingly, informal consultation was initiated with the FWS (Consultation No. 2024-0044002) and with the NMFS (No. SERO-2024-00975) for concurrence with this call.

The FWS submitted a letter on 20 September 2024 stating it concurred with our determination based on its review and the implementation of the specific conservation measures to reduce potential effects down to insignificant and/or discountable levels. The applicant will implement this guidance as recommended by FWS in the event these species should be encountered. The FWS stated in its letter that by making a determination, it believed Section 7(a)(2) of the Endangered Species Act of 1973, as amended was complied with.

The NMFS submitted a letter on 16 August 2024 stating it concurred with our determination based on its knowledge, expertise, and the action agency’s materials and that the Corps’ consultation responsibilities were concluded under the ESA for species and/or designated critical habitat under NMFS’ purview.

A special condition regarding ESA compliance is documented in Section 11 of this document.

10.2 Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), Essential Fish Habitat (EFH)

10.2.1 Lead federal agency for EFH provisions of the Magnuson-Stevens Act

Has another federal agency been identified as the lead agency for complying with the EFH provisions of the Magnuson-Stevens Act with the Corps designated as a cooperating agency and has that consultation been completed? No

10.2.2 Magnuson-Stevens Act

Did the proposed project require review under the Magnuson-Stevens Act? Yes, the district engineer determined the proposed activity may adversely affect EFH and thus requires EFH consultation with NMFS.

10.2.3 EFH species or complexes

Were EFH species or complexes considered? Yes, the following is a summary of the type of species listed in the Gulf of Mexico Fishery Management Plans: red drum, triggerfishes (Balistidae), jacks (Carangidae), wrasses (Labridae), snappers (Lutjanidae), tilefishes (Malacanthidae), groupers (Serranidae), and coastal migratory pelagic species, shrimps, stone crabs, and spiny lobsters.

Effect determination and basis for that determination: Minimal adverse effect

10.2.4 National Marine Fisheries Service consultation

Consultation with the National Marine Fisheries Service was initiated and completed as required (see the attached ORM2 Summary sheet for begin date, end date and closure method of the consultation)

NMFS-HCD submitted a letter, dated 6 Feb 2024, stating that based on the limited project information provided for review, NMFS was concerned the proposed project would adversely impact surrounding EFH and associated marine fishery resources. NMFS further stated it could not provide a complete review of the project until additional information was acquired from the applicant. The NMFS requested the applicant provide a water quality and salinity impacts analysis to demonstrate how the project will not negatively influence water quality and salinity levels within the Inner Harbor and Corpus Christi Bay. In addition, NMFS requested the applicant provide a detailed project alternative analysis to demonstrate the applicant has selected the least environmentally damaging alternative. That information was provided to NMFS on 2 Dec 2024.

Summary of NMFS EFH Comments: Per the NMFS-HCD letters, dated 4 Dec 2024 and 9 Dec 2024, any adverse effects that might occur on marine and anadromous fishery resources would be minimal. EFH consultation procedures had been satisfied and no further consultation is required for this action.

10.3 Section 106 of the NHPA

Refer to Section 2.3 for permit area determination.

10.3.1 Lead federal agency for Section 106 of the NHPA

Has another federal agency been identified as the lead federal agency for complying with Section 106 of the NHPA with the Corps designated as a cooperating agency and has that consultation been completed? No

10.3.2 Historic properties

Known historic properties present? No The Corps staff archaeologist reviewed the project facility site for cultural resources and found that the permit area has been so extensively impacted by construction and maintenance of the CCSC and industrial development that there is no potential for historic properties to exist within the permit area. Therefore, the proposed project has no potential to affect historic properties.

The Corps staff archaeologist also reviewed the project potable water connection pipeline route for cultural resources and found no documented historic properties in the Permit Area, or in the Immediate vicinity. The permit area for the pipeline has been so extensively impacted by residential and industrial development and associated infrastructure that there is no potential for historic properties to exist within the permit area. Therefore, the proposed project has no potential to affect historic properties.

Project is within the area of interest for the following Tribes: the Apache Tribe of OK, the Comanche Nation of OK, the Kiowa Indian Tribe of OK, the Mescalero Apache Tribe, the Northern Arapaho Tribe, the Tonkawa Tribe of OK, and the Wichita and Affiliated Tribes PN/SOF Statement: The permit area has been so extensively impacted by construction and maintenance of the CCSC and industrial development that there is no potential for resources of concern to the Native American Tribes to exist within the permit area.Effect determination and basis for that determination: No potential to cause effects

The Corps staff archaeologist reviewed the project site for cultural resources and found that the permit area has been so extensively impacted by construction and maintenance of the CCSC and industrial development that there is no potential for historic properties to exist within the permit area. Therefore, the proposed project has no potential to affect historic properties.

The Corps staff archeologist determined the project had no potential to cause effects. Consequently, in accordance with the April 25, 2005, memorandum titled "Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR Part 800" concurrence by the State Historic Preservation Officer is not required.

10.4 Tribal Trust Responsibilities

10.4.1 Tribal government-to-government consultation

Was government-to-government consultation conducted with federally-recognized tribe(s)? No

Provide a description of any consultation(s) conducted including results and how concerns were addressed. N/A

10.4.2 Other Tribal consultation

Other Tribal consultation including any discussion of Tribal Treaty rights.

N/A

10.5 Section 401 of the Clean Water Act – Water Quality Certification (WQC)

10.5.1 Section 401 WQC requirement

Is an individual Section 401 WQC required, and if so, has the certification been issued or waived?

An individual WQC is required and has been granted.

10.5.2 401(a)(2) Process

If the certifying authority granted an individual WQC, did the United States Environmental Protection Agency make a determination that the discharge 'may affect' water quality in a neighboring jurisdiction? No

10.6 Coastal Zone Management Act (CZMA)

10.6.1 CZMA consistency concurrence

Is a CZMA consistency concurrence required, and if so, has the concurrence been issued, objected to, or presumed?

The applicant has stated that the proposed activity complies with Texas' approved Coastal Management Program (CMP) and will be conducted in a manner consistent with such program. TCEQ will be solely responsible for determining the project's consistency with the goals and policies of the CMP. This determination will accompany TCEQ's Section 401 certification.

10.7 Wild and Scenic Rivers Act

10.7.1 National Wild and Scenic River System

Is the project located in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system? No

10.8 Effects on Corps Civil Works Projects (33 USC 408)

10.8.1 Permission requirements under Section 14 of the Rivers and Harbors Act (33 USC 408)

Does the applicant also require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would alter, occupy, or use a

Corps Civil Works project? No, the appropriate non-Regulatory office has determined that there will be no effects to federal projects that require permission from the Corps.

10.9 Corps Wetland Policy (33 CFR 320.4(b))

10.9.1 Wetland Impacts

Does the project propose to impact wetlands? No

Based on the public interest review herein, the beneficial effects of the project outweigh the detrimental impacts of the project.

10.10 Other (as needed)
N/A

10.11 Compliance Statement
The Corps has determined that it has fulfilled its responsibilities under the following laws, regulations, policies, and guidance

Table 14 – Compliance with Federal Laws and Responsibilities		
Laws, Regulations, Policies, and Guidance	**Yes**	**N/A**
Section 7(a)(2) of the ESA	X	
EFH provisions of the Magnuson-Stevens Act	X	
Section 106 of the NHPA	X	
Tribal Trust		X
Section 401 of the Clean Water Act	X	
CZMA	X	
Wild and Scenic Rivers Act		X
Section 408 - 33 USC 408		X
Corps Wetland Policy (33 CFR 320.4(b))		X
Other: N/A		X

11.0 Special Conditions

11.1 Special condition(s) requirement(s)
Are special conditions required to ensure minimal effects, ensure the authorized activity is not contrary to the public interest and/or ensure compliance of the activity with any of the laws above? Yes

11.2 Required special condition(s):

Special Condition 1: The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or

obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

Special Condition 2: When structures or work authorized by this permit are determined by the District Engineer to have become abandoned, obstructive to navigation or cease to be used for the purpose for which they were permitted, such structures or other work must be removed, the area cleared of all obstructions, and written notice given to the Corps of Engineers, Galveston District, Regulatory Division, within 30 days of completion.

Special Condition 3: The permittee must install and maintain, at the permittee's expense, any safety lights, signs and signals required by US Coast Guard, through regulations or otherwise, on the permittee's fixed structures. To receive a US Coast Guard Private Aids to Navigation marking determination, at no later than 30 days prior to installation of any fixed structures in navigable waters and/or prior to installation of any floating private aids to navigation, you are required to contact the Eighth Coast Guard District (dpw), 500 Poydras St. Suite 1230, New Orleans, LA 70130, (504) 671-2328 or via email to: D8oanPATON@uscg.mil. For general information related to Private Aids to Navigation please visit the Eighth Coast Guard District web site at: https://www.atlanticarea.uscg.mil/District-8/District-Divisions/Waterways/PATON/

Special Condition 4. This permit does not authorize the permittee to take an endangered species. In order to legally take a listed species, the permittee must have separate authorization under the Endangered Species Act (ESA), either a Section 10 permit or a Biological Opinion (BO) with “incidental take” provisions with which the permittee must comply. The attached U.S. Fish and Wildlife Service (FWS) Letter of Concurrence (No. 2024-0044002), dated September 20, 2024, and the National Marine Fisheries Service (NMFS) Letter of Concurrence (SERO-2024-00975), dated August 16, 2024, contain conservation and best management practices that would avoid and minimize potential effects to listed species. Authorization under this permit is conditional upon compliance with the measures contained in the FWS’ and the NMFS’ concurrence letters. Failure to comply with these measures will constitute non-compliance with your permit. If you are unable to implement any of these measures, you must immediately notify the Corps, so we may reinitiate consultation as appropriate, prior to initiating the work, in accordance with Federal law. The FWS and NMFS are the appropriate authorities to determine compliance with the ESA. For further clarification on this subject, the permittee should contact either the FWS or NMFS depending on the species in question.

Special Condition 5. The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to the Galveston District Regulatory Inbox by electronic mail: ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB).

Special Condition 6. At least two weeks prior to initiating the work authorized by this permit, the Permittee shall provide Galveston District with a commencement of work notification that includes the estimated construction start date, a list of all points of

contact associated with the project, and a pre-construction multi-beam bathymetric survey of the 4.2-acre pipeline installation area (see special condition 7 for additional details). This notification shall be sent by electronic mail to ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB; request drop box if needed). The list should include area of responsibility and contact information for each point of contact.

Special Condition 7. The Permittee shall perform a pre- and post-construction multi-beam bathymetric survey of the 4.2-acre pipeline installation area.

a. The pre-construction survey shall include a bathymetry map showing the pre-construction conditions and elevations of the 4.2-acre area. The survey shall be conducted by a licensed surveyor no earlier than 30 days before work begins within the Inner Harbor. The survey shall also include quantity estimate of the material to be dredged, as well as the capacity of the location where the material is expected to be temporarily deposited.
b. The post-construction survey shall include a bathymetry map showing the post-construction conditions and elevations of the 4.2-acre area. The survey shall be conducted by a licensed surveyor no later than 30 days after working is completed within the Inner Harbor. The survey shall include the quantity of material that was dredged and the quantity of material that was discharged to restore the pipeline installation area to pre-construction contours and elevations.

Special Condition 8. When the dredging project utilizes a pipeline dredge, Dredging Quality Management (DQM) shall be implemented when the dredge is equipped with DQM monitoring from previous work. The permittee's DQM equipment must have been certified by the National DQM Support Center within one calendar year prior to the initiation of the dredging/discharge/placement of sediments. Questions regarding certification should be addressed to the National DQM Support Center at (877) 840-8024. Additional information about the DQM program can be found at: https://dqm.usace.army.mil/. The permittee is responsible for ensuring the DQM system is operational throughout the dredging and discharge/placement of sediments and the project data is submitted to the DQM Center in accordance with the specifications provided at the aforementioned website.

Special Condition 9. During construction, the Permittee shall ensure that no equipment or work will obstruct navigation. The Permitee shall coordinate with the respective USCG office and Pilot organization a minimum of 2 weeks prior to commencement of the authorized activities to ensure that the activities will not interfere with navigation. The notification shall include the location affected, equipment, hours of operation, and duration of the project. After construction in the Inner Harbor is complete, the Permitee is responsible for ensuring no material, including coffer dam components, is left above pre-construction conditions.

Special Condition 10. The Permittee shall notify the National Ocean Service (NOS) and the Galveston District, at least two weeks prior to the start of work and within 60 days upon completion of the activities authorized by this permit. The post-construction

notification shall include "as-built plans" by a registered surveyor/engineer licensed in the State of Texas, that certifies the project is constructed as authorized, and must include an accurate depiction of the location and configuration of the completed activity in relation to the mean high water of the navigable water (see Special Condition 11 for additional details). The Permittee shall notify the Galveston District by electronic mail at ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB; request drop box if needed); and, the NOS, either in mailed correspondence to Nautical Data Branch Office of Coast Survey N/CS26, 1315 East-West Highway, Silver Spring, MD 20910-3282 or by electronic mail correspondence, with the requisite documents attached, through ocs.ndb@noaa.gov.

Special Condition 11. Within 60 days of completion of the work authorized by this permit, the Permittee shall submit as-built drawings of the authorized work and a signed statement from a Professional Engineer or Surveyor to the Galveston District by electronic mail at ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB; request drop box if needed). The signed statement shall state: "I hereby certify that the authorized work, including any restoration required by this permit, has been accomplished in accordance with Department of the Army permit SWG-2014-00850 with any deviations noted below. This determination is based upon on-site observation, scheduled, and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings." The as-built drawings shall be signed and sealed by a registered professional engineer or surveyor and include the following:

a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawings shall include the X & Y State Plane coordination points of the most waterward point of the structure. The drawings shall include the dimensions of the structure, location of mean high water line (MHWL), depth of water (at mean low water) at the waterward end of the structure, and the distance from the waterward end of the structure to the near design edge of the Federal channel.
b. Post-construction bathymetry survey, as specified in special condition 7b of this permit.
c. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings does not constitute approval of any deviations by the Corps.
d. The Department of the Army permit number on all sheets submitted.

Rationale: In accordance with 33 CFR 325.4 Conditioning of permits, the district engineer will add special conditions to Department of Army permits when such conditions are necessary to satisfy legal requirements or to otherwise satisfy the public interest requirements. The above special conditions are required for fulfillment of the

public interest requirements specified according to 33 CFR 320.4(o)(3) Navigation and 33 CFR 320.4(g) Consideration of property ownership, and for fulfillment of the public interest requirements specified according to the Endangered Species Act. Commencement and POC notification is required to ensure Corps oversight of the project (33 CFR 325, App. A, and 325.4 Conditioning of Permits). 33 CFR 325 Appendix A requires NOS notification when a Corps permit authorizes a submerged pipeline, in, over, or under Section 10 waters. In accordance with RGL 08-01, the Corps determined the project requires compliance monitoring and will require DQM be used for pipeline dredges only when DQM is on the dredge from previous work.

12.0 Findings and Determinations

12.1 Section 176(c) of the Clean Air Act General Conformity Rule Review:
The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit will not exceed *de minimis* levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons a conformity determination is not required for this permit action.

12.2 Presidential Executive Orders (EO)

12.2.1 EO 11988, Floodplain Management
Alternatives to location within the floodplain, minimization and compensatory mitigation of the effects were considered above.

12.2.2 EO 13112, Invasive Species, as amended by EO 13751
There are no invasive species issues involved in this proposed project.

12.2.3 EO 13212 and EO 13302, Energy Supply and Availability
The proposal is not one that will increase the production, transmission, or conservation of energy, or strengthen pipeline safety.

12.3 Findings of No Significant Impact
Having reviewed the information provided by the applicant and all interested parties and an assessment of the environmental impacts, I find that this permit action will not have a significant impact on the quality of the human environment. Therefore, an environmental impact statement will not be required.

12.4 Compliance with the Section 404(b)(1) Guidelines
The proposed discharge complies with the Guidelines.

12.5 Public interest determination

Having reviewed and considered the information above, I find that the proposed project is not contrary to the public interest. The permit will be issued with appropriate conditions included to ensure minimal effects, ensure the authorized activity is not contrary to the public interest and/or ensure compliance of the activity with any of the authorities identified in Section 10.

PREPARED BY:

PATTILLO.MARK.E[redacted] Digitally signed by PATTILLO.MARK.E[redacted] Date: 2025.03.18 15:48:26 -05'00'

Date: 18 March 2025

Mark Pattillo
Regulatory Project Manager

REVIEWED BY:

WOOD.KRISTIE.ANN[redacted] Digitally signed by WOOD.KRISTIE.ANN[redacted] Date: 2025.03.18 16:00:39 -05'00'

Date: 18 March 2025

Kristie A. Wood
Supervisor, Corpus Christi Regulatory Field Office
Regulatory Division, Galveston District

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
5151 FLYNN PARKWAY, SUITE 306
CORPUS CHRISTI, TEXAS 78411

March 25, 2025

Corpus Christi Regulatory Field Office

SUBJECT: Permit Application – SWG-2014-00850

City of Corpus Christi
Attn: Mr. Jeffrey Edmonds
1201 Leopard Street
Corpus Christi, Texas 78401

Dear Mr. Edmonds:

The above numbered permit has been approved and a signed copy is enclosed for your retention.

Also enclosed is a copy of "Notice to Permittee" which provides important information for permit administration. You should notify the District Engineer, in writing, upon completion of the authorized work. To assist us in improving our service to you, please complete the survey found at: https://regulatory.ops.usace.army.mil/customer-service-survey/.

This permit does not authorize any injury or interference with any federal property; nor does it grant property rights, access privileges, or rights-of-way entrance authorizations to any property including those owned by State or federal agencies. There are federal properties (owned or controlled by Corps of Engineers) identified within the project area. All appropriate accesses, authorization, rights-of-way on the Corps Federal project area must be procured from the Corps Real Estate Division prior to impacting any of these federally-owned/operated lands. This Permit authorization is limited to those impacts exactly as depicted. If property access and/or use is denied and/or requires modification to the project as permitted, this authorization becomes null and void and would require a new authorization to adequately address these new impacts. Please visit the USACE Galveston District's website for the most current information regarding the District's outgrant policy at:
http://www.swg.usace.army.mil/BusinessWithUs/RealEstateDivision/Outgrants.aspx.

Sincerely,

Kristie A. Wood

Kristie A. Wood
Supervisor, Corpus Christi Field Office

cc w/Encl.
Tom Dixon, Freese and Nichols, Inc. - Tom.Dixon@freese.com
EPA wadley.brianna@epa.gov
Texas Commission on Environmental Quality (TCEQ) 401Certs@tceq.texas.gov
United States Coast Guard (USCG) d8dpball@uscg.mil
National Ocean Service (NOAA) ocs.ndb@noaa.gov

DEPARTMENT OF THE ARMY PERMIT

Permittee City of Corpus Christi

Permit No. SWG-2014-00850

Issuing Office Galveston District

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

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

Project Description: To construct a seawater desalination plant with intake structures and outfall structures/diffusers and pipelines within the waters of the Inner Harbor, onshore pipeline within a relatively permanent water (tidal ditch), and an onshore processing facility to be constructed in uplands. The intake structure will process water from the Inner Harbor through waterlines that lead to a pump station on land. From the pump station, waterlines will then lead further inland to the main desalination facility where the water will be treated. Treated water will be stored in a ground storage tank and distributed into the city's potable water system via a pipeline connection to the Navigation Boulevard Pump Station. Discharge water would exit the facility via waterlines to the discharge/diffuser structure located in the Inner Harbor.

This permit authorizes the following project components: the intake and discharge/outfall structures within the Inner Harbor; the portion of the pipelines connected to the intake and discharge/outfall structures within the Inner Harbor; and a portion of the intake pipelines that will be installed below a tidally-influenced tributary ditch. Construction of these components will involve the following activities:

- Permanent placement of an intake structure consisting of a 48-inch diameter intake pipe and three 30 MGD wedgwire intake screens within 0.22 acre of the waters of Inner Harbor. The intake structure will be placed at a depth of -33 feet below mean high water at a distance of 332 feet from the channel centerline. A coffer dam will be used to install the structure.
- Permanent placement of two 54-inch diameter intake pipelines for a distance of 116 feet within the waters of the Inner Harbor. These pipelines will be installed a minimum of 7ft below the mudline.
- Temporary impact to approximately 0.07 acre of a Relatively Permanent Water (tidally influenced tributary ditch) during onshore installation of two 54-inch diameter intake pipelines by open cut trenching. The pipeline will be installed a minimum of 4ft below the surface. The entirety of impacts to the ditch will be restored to pre-construction elevations and contours after pipeline installation. No permanent discharge of fill material will occur within the ditch.
- Permanent placement of a discharge/outfall structure consisting of a 48-inch-diameter header pipe and four 16-inch diffuser nozzles within 0.40 acre of the waters of the Inner Harbor. The discharge/outfall structure will be placed at a depth of -35 feet below mean high water and at a distance of 316 feet from the channel centerline. A coffer dam will be used to install the structure.
- Permanent placement of a 54-inch diameter discharge/outfall pipeline along 2,142 linear feet of the shoreline (2,087 linear feet in the water and 55 linear feet from water to onshore) within the waters of the Inner Harbor. This pipeline will be installed a minimum of 4ft below the mudline.
- Coffer dams may be used on the longer pipeline segments near the existing bulkhead in shallower waters. If a coffer dam is not used, construction BMPs will include silt booms/turbidity curtains.
- Turbidity curtains will mostly be used for the construction of the pipelines. Turbidity curtains will also be used during the installation of coffer dams. For the pipelines, the turbidity curtains will remain in place until construction has ceased. For the intake and discharge, the turbidity curtain may be removed once the coffer dams are installed.
- Mechanical or hydraulic dredging will occur within the 0.40-acre area of the Inner Harbor where the discharge/outfall structure will be installed. A total of 508 cubic yards will be dredged to a depth of -40 feet below mean high water for placement of the discharge/outfall structure.
- Mechanical or hydraulic dredging will occur within the 4.2-acre area of the Inner Harbor where the pipeline structures will be installed. Once pipeline construction is completed, the dredged material will be discharged back within the pipeline construction area and the area will be restored to pre-construction elevations and contours.
- Dredged material that is not used to restore the pipeline construction area to pre-construction elevations and contours will be utilized as fill in uplands areas, including within the pump station footprint, desalination facility footprint, and/or the nearby city-owned Broadway Wastewater Treatment Plant (WWTP) location (27.804128° N, 97.401218° W). Dredged material placed in upland areas will be placed in a self-contained disposal site to prevent the discharge of dredged material and associated effluent into waters of the US.

The project will be conducted in accordance with the attached project plans, in 18 sheets, Attachment A (Water Quality Certification), Attachment B (FWS Consultation), and Attachment C (NMFS Consultation).

Project Location: On the Industrial/Main Turning Basin of the Port of Corpus Christ Authority's Inner Harbor, Corpus Christi, Nueces County, Texas.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on 31 December 2030 . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

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

Special Conditions:

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

2. When structures or work authorized by this permit are determined by the District Engineer to have become abandoned, obstructive to navigation or cease to be used for the purpose for which they were permitted, such structures or other work must be removed, the area cleared of all obstructions, and written notice given to the Corps of Engineers, Galveston District, Regulatory Division, within 30 days of completion.

3. The permittee must install and maintain, at the permittee's expense, any safety lights, signs and signals required by US Coast Guard, through regulations or otherwise, on the permittee's fixed structures. To receive a US Coast Guard Private Aids to Navigation marking determination, at no later than 30 days prior to installation of any fixed structures in navigable waters and/or prior to installation of any floating private aids to navigation, you are required to contact the Eighth Coast Guard District (dpw), 500 Poydras St. Suite 1230, New Orleans, LA 70130, (504) 671-2328 or via email to: D8oanPATON@uscg.mil. For general information related to Private Aids to Navigation please visit the Eighth Coast Guard District web site at: https://www.atlanticarea.uscg.mil/District-8/District-Divisions/Waterways/PATON/

4. This permit does not authorize the permittee to take an endangered species. In order to legally take a listed species, the permittee must have separate authorization under the Endangered Species Act (ESA), either a Section 10 permit or a Biological Opinion (BO) with "incidental take" provisions with which the permittee must comply. The attached U.S. Fish and Wildlife Service (FWS) Letter of Concurrence (No. 2024-0044002), dated September 20, 2024, and the National Marine Fisheries Service (NMFS) Letter of Concurrence (SERO-2024-00975), dated August 16, 2024, contain conservation and best management practices that would avoid and minimize potential effects to listed species. Authorization under this permit is conditional upon compliance with the measures contained in the FWS' and the NMFS' concurrence letters. Failure to comply with these measures will constitute non-compliance with your permit. If you are unable to implement any of these measures, you must immediately notify the Corps, so we may reinitiate consultation as appropriate, prior to initiating the work, in accordance with Federal law. The FWS and NMFS are the appropriate authorities to determine compliance with the ESA. For further clarification on this subject, the permittee should contact either the FWS or NMFS depending on the species in question.

5. The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to the Galveston District Regulatory Inbox by electronic mail: ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB).

6. At least two weeks prior to initiating the work authorized by this permit, the Permittee shall provide Galveston District with a commencement of work notification that includes the estimated construction start date, a list of all points of contact associated with the project, and a pre-construction multi-beam bathymetric survey of the 4.2-acre pipeline installation area (see special condition 7 for additional details). This notification shall be sent by electronic mail to ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB; request drop box if needed). The list should include area of responsibility and contact information for each point of contact.

7. The Permittee shall perform a pre- and post-construction multi-beam bathymetric survey of the 4.2-acre pipeline installation area.

a. The pre-construction survey shall include a bathymetry map showing the pre-construction conditions and elevations of the 4.2-acre area. The survey shall be conducted by a licensed surveyor no earlier than 30 days before work begins within the Inner Harbor. The survey shall also include a quantity estimate of the material to be dredged, as well as the capacity of the location where the material is expected to be temporarily deposited.

b. The post-construction survey shall include a bathymetry map showing the post-construction conditions and elevations of the 4.2-acre area. The survey shall be conducted by a licensed surveyor no later than 30 days after working is completed within the Inner Harbor. The survey shall include the quantity of material that was dredged and the quantity of material that was discharged to restore the pipeline installation area to pre-construction contours and elevations.

8. When the dredging project utilizes a pipeline dredge, Dredging Quality Management (DQM) shall be implemented when the dredge is equipped with DQM monitoring from previous work. The permittee's DQM equipment must have been certified by the National DQM Support Center within one calendar year prior to the initiation of the dredging/discharge/placement of sediments. Questions regarding certification should be addressed to the National DQM Support Center at (877) 840-8024. Additional information about the DQM program can be found at: https://dqm.usace.army.mil/. The permittee is responsible for ensuring the DQM system is operational throughout the dredging and discharge/placement of sediments and the project data is submitted to the DQM Center in accordance with the specifications provided at the aforementioned website.

9. During construction, the Permittee shall ensure that no equipment or work will obstruct navigation. The Permittee shall coordinate with the respective USCG office and Pilot organization a minimum of 2 weeks prior to commencement of activities in the Inner Harbor to ensure that the activities will not interfere with navigation. The notification shall include the location affected, equipment, hours of operation, and duration of the project. After construction in the Inner Harbor is complete, the Permittee is responsible for ensuring no material, including coffer dam components, is left above pre-construction conditions.

10. The Permittee shall notify the National Ocean Service (NOS) and the Galveston District, at least two weeks prior to the start of work and within 60 days upon completion of the activities authorized by this permit. The post-construction notification shall include "as-built plans" by a registered surveyor/engineer licensed in the State of Texas, that certifies the project is constructed as authorized, and must include an accurate depiction of the location and configuration of the completed activity in relation to the mean high water of the navigable water (see Special Condition 11 for additional details). The Permittee shall notify the Galveston District by electronic mail at ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB; request drop box if needed); and, the NOS, either in mailed correspondence to Nautical Data Branch Office of Coast Survey N/CS26, 1315 East-West Highway, Silver Spring, MD 20910-3282 or by electronic mail correspondence, with the requisite documents attached, through ocs.ndb@noaa.gov.

11. Within 60 days of completion of the work authorized by this permit, the Permittee shall submit as-built drawings of the authorized work and a signed statement from a Professional Engineer or Surveyor to the Galveston District by electronic mail at ceswgregulatoryinbox@usace.army.mil (not to exceed 15 MB; request drop box if needed). The signed statement shall state: "I hereby certify that the authorized work, including any restoration required by this permit, has been accomplished in accordance with Department of the Army permit SWG-2014-00850 with any deviations noted below. This determination is based upon on-site observation, scheduled, and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings." The as-built drawings shall be signed and sealed by a registered professional engineer or surveyor and include the following:

a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawings shall include the X & Y State Plane coordination points of the most waterward point of the structure. The drawings shall include the dimensions of the structure, location of mean high water line (MHWL), depth of water (at mean low water) at the waterward end of the structure, and the distance from the waterward end of the structure to the near design edge of the Federal channel.

b. Post-construction bathymetry survey, as specified in special condition 7b of this permit.

c. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings does not constitute approval of any deviations by the Corps.

d. The Department of the Army permit number on all sheets submitted.

Further Information:

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

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

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

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

2. Limits of this authorization.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

JH Edmonds

(PERMITTEE)
JEFFREY EDMONDS
DIRECTOR OF ENGINEERING SERVICES
CITY OF CORPUS CHRISTI

March 19, 2025
(DATE)

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

Kristie A Wood

(DISTRICT ENGINEER)
KRISTIE A. WOOD, SUPERVISOR
CORPUS CHRISTI REGULATORY FIELD OFFICE
FOR COLONEL RHETT A. BLACKMON, P.E.

March 25, 2025
(DATE)

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

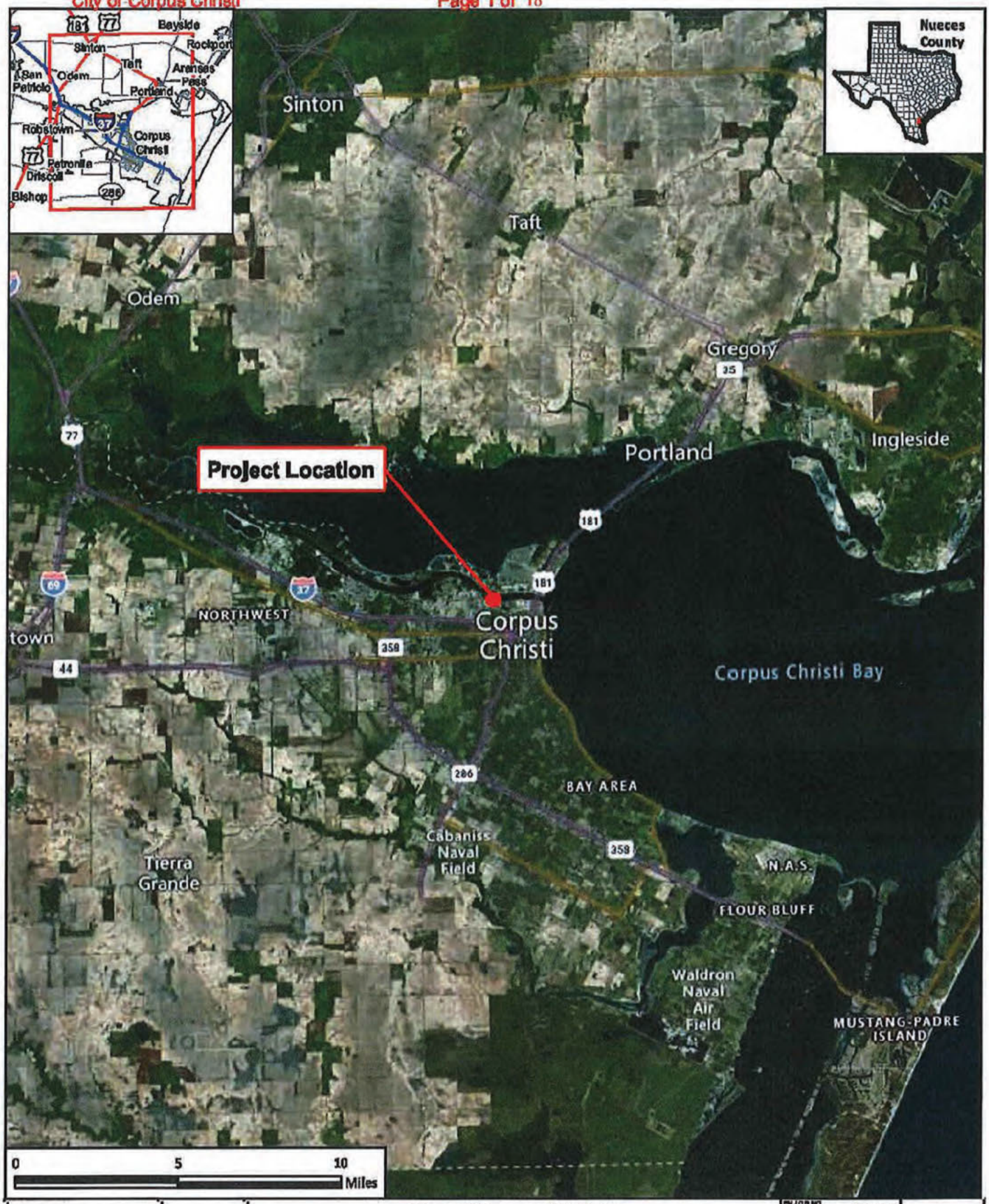
(TRANSFEREE – Typed/Printed Name)

(DATE)

(TRANSFEREE - Signature)

(Mailing Address)

(REVERSE OF ENG FORM 1721)



FREESE AND NICHOLS
FREESE AND NICHOLS, INC
800 N Shoreline Blvd #1600n
Corpus Christi, TX78401
Phone - 361-561-6500

City of Corpus Christi

Seawater Desalination

Vicinity Overview

FN JOB NO	COR20598
FILE NAME	1_Aerial Overview.mxd
DATE	4/11/2023
SCALE	1:250,000
DESIGNED	CB
DRAFTED	CB

1
FIGURE

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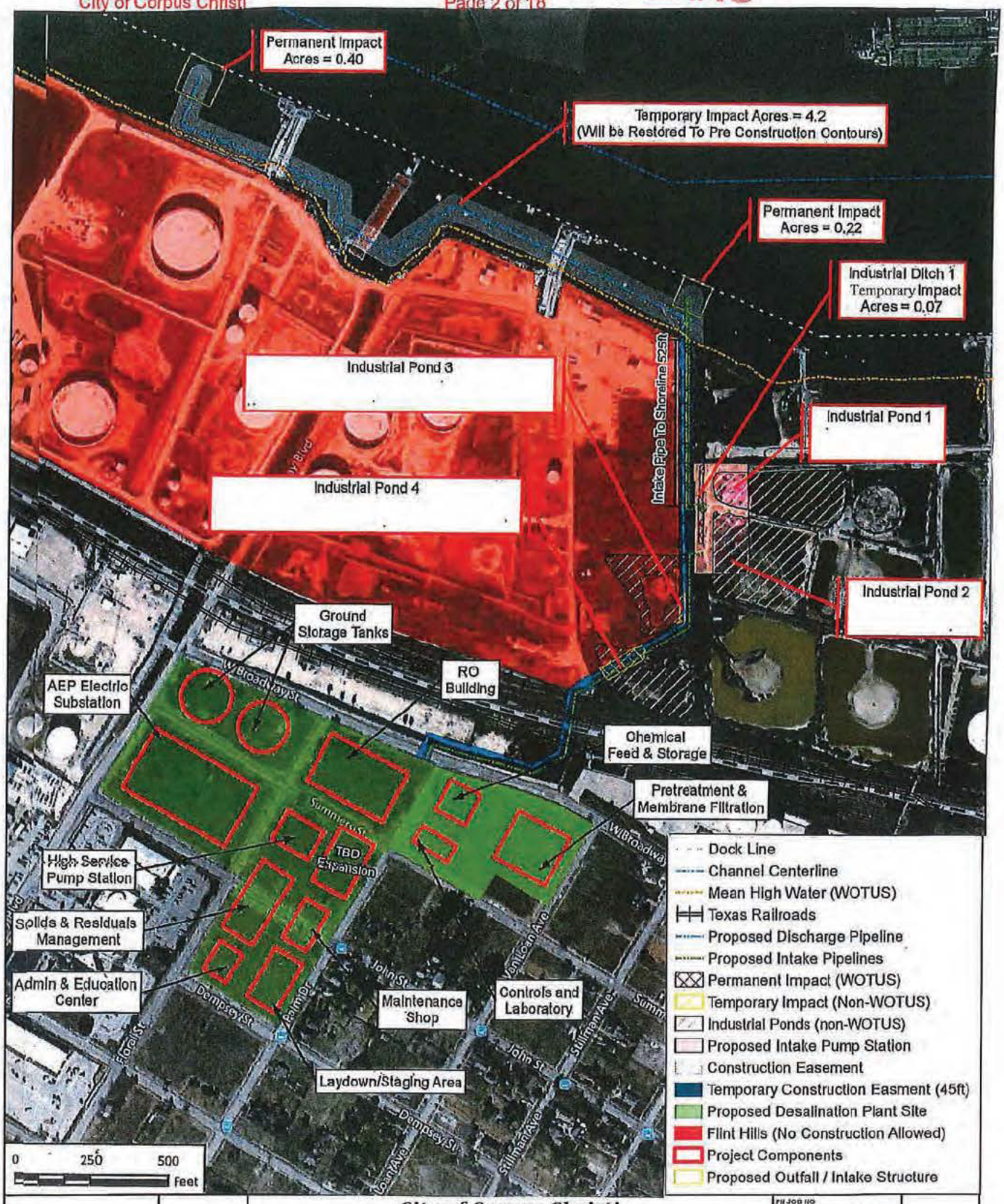

FREESE AND NICHOLS
FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2800
Fort Worth, Texas 76102
Phone - 817-735-7300

N W E S

City of Corpus Christi
Seawater Desalination

WOTUS Overview

FN JOB NO	COR20598
FILE NAME	Wotus_over.mxd
DATE	10/11/2023
Scale	1:5,000
DRAFTED	CS

2
FIGURE

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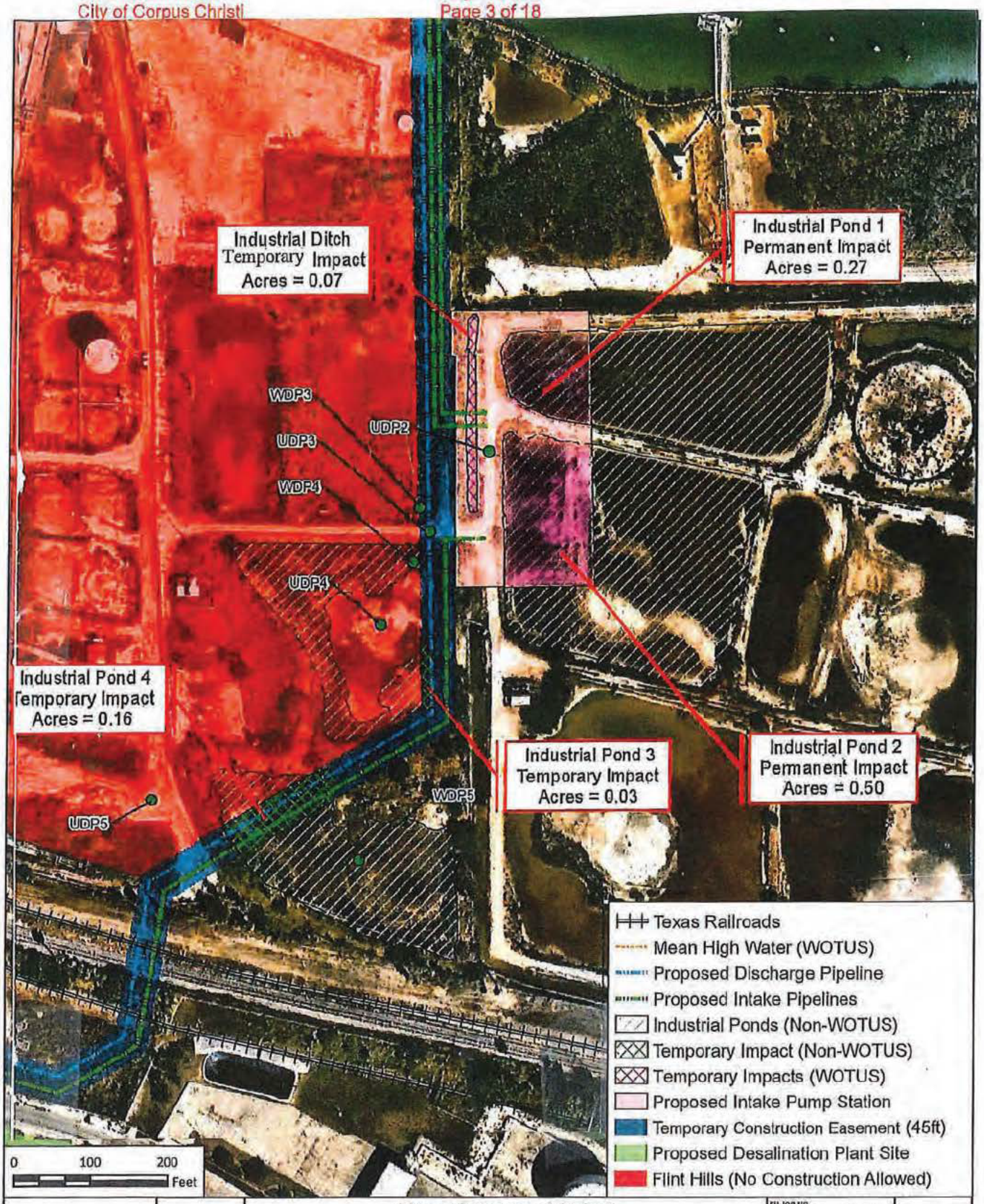

FREESE AND NICHOLS
FREESE AND NICHOLS, INC
801 Cherry Street, Suite 2000
Fort Worth, Texas 76102
Phone - 817-735-7300

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City of Corpus Christi

Seawater Desalination

Industrial Wetlands Inset

FN JOB NO	COR20596
FILE NAME	wetland_inset.mxd
DATE	9/29/2023
Scale	1:2,000
DRAFTED	CS

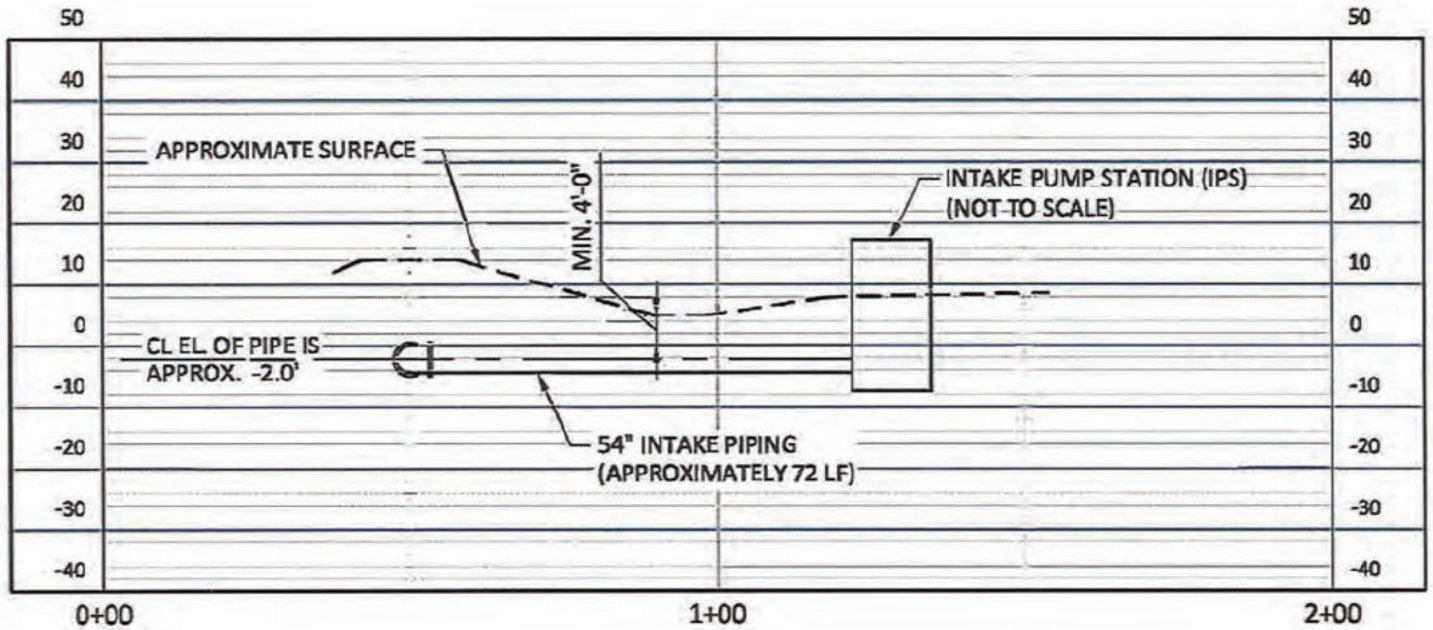
3

FIGURE

Path: H:\ENVIRONMENTAL\Working\CS_Working\Memo_figures\Corps_updates\wetland_inset.mxd

NAD 1983 StatePlane Texas South FIPS 4205 Feet

Received 13 October 2023



PERMITTED PLANS

0 10' 20' 30' 60'

SCALE IN FEET
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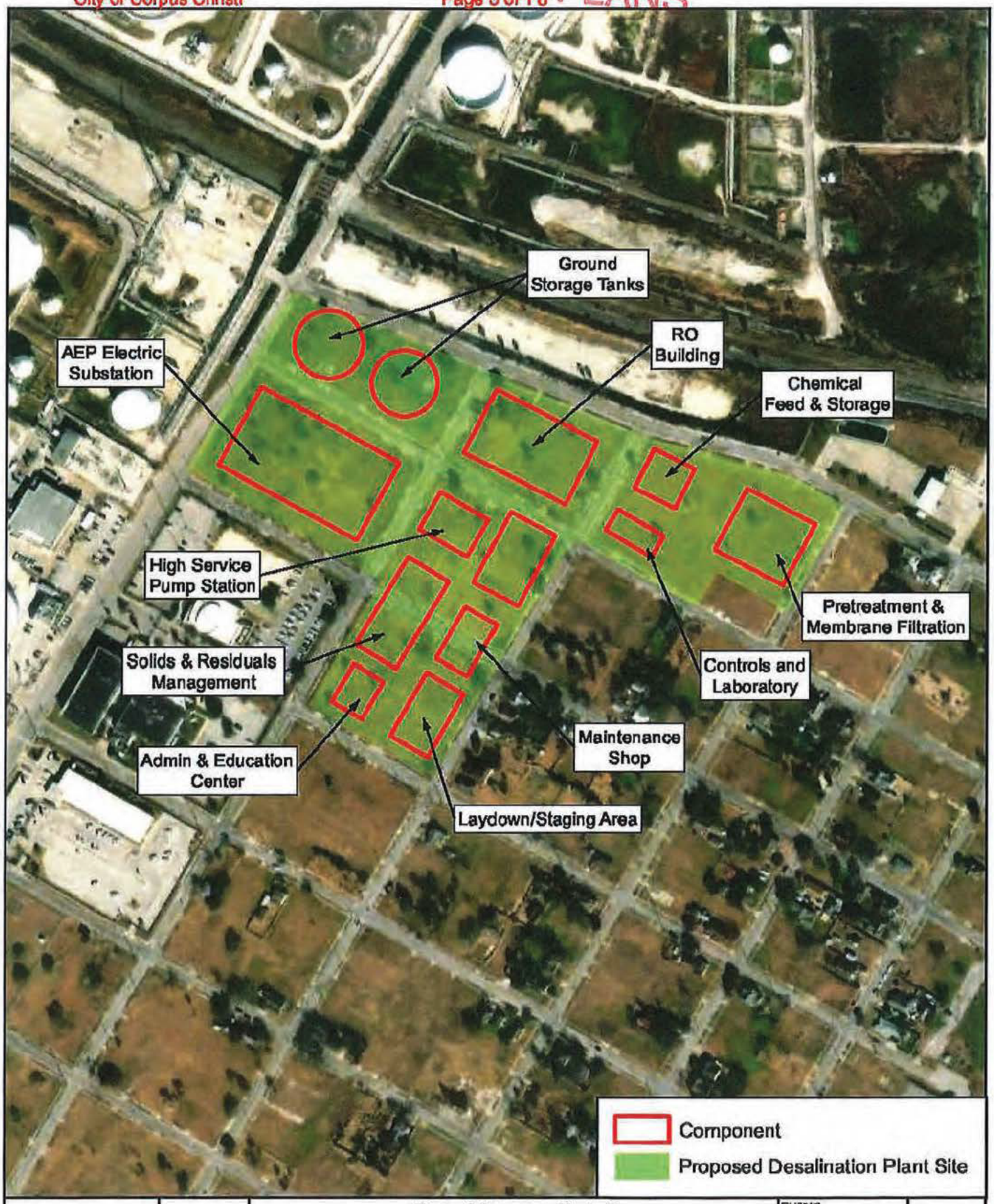
B

INTAKE PIPING SECTION AT IPS

SCALE: NTS

FIGURE 5



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Corpus Christi, TX 78401
Phone - 361-561-6500

City of Corpus Christi
Seawater Desalination

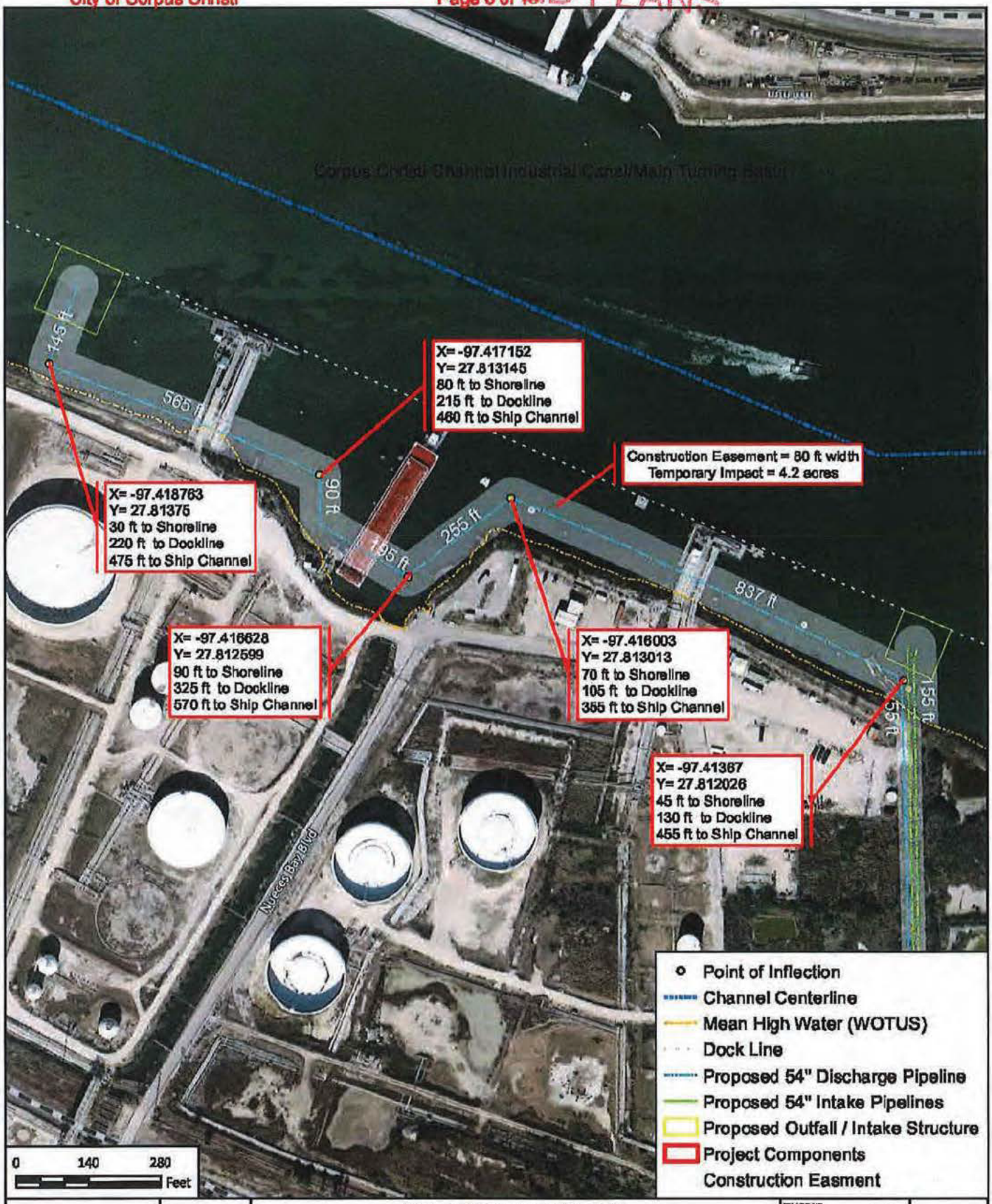
Inland Project Facilities

FN JOB NO CQR20598
DATE 8/11/2023
DESIGNED CS
DRAFTED CS

4
FIGURE

Public:\ENVIRONMENTAL\Working\CS_Working\Memo_Figures\Corpus_Update\Fig2a_Aerial_ProjectComponents.mxd
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

PERMITTED PLANS
Received 02 November 2023



FREESE AND NICHOLS
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800 N Shoreline Blvd #1600n
Corpus Christi, TX78401
Phone - 361-561-6500

N W E S

City of Corpus Christi

Seawater Desalination

Pipeline Inset

FN JOB NO	COR20596
FILE NAME	length_pipe.mxd
DATE	9/28/2023
Scale	1:3,000
DRAFTED	CS

7

FIGURE

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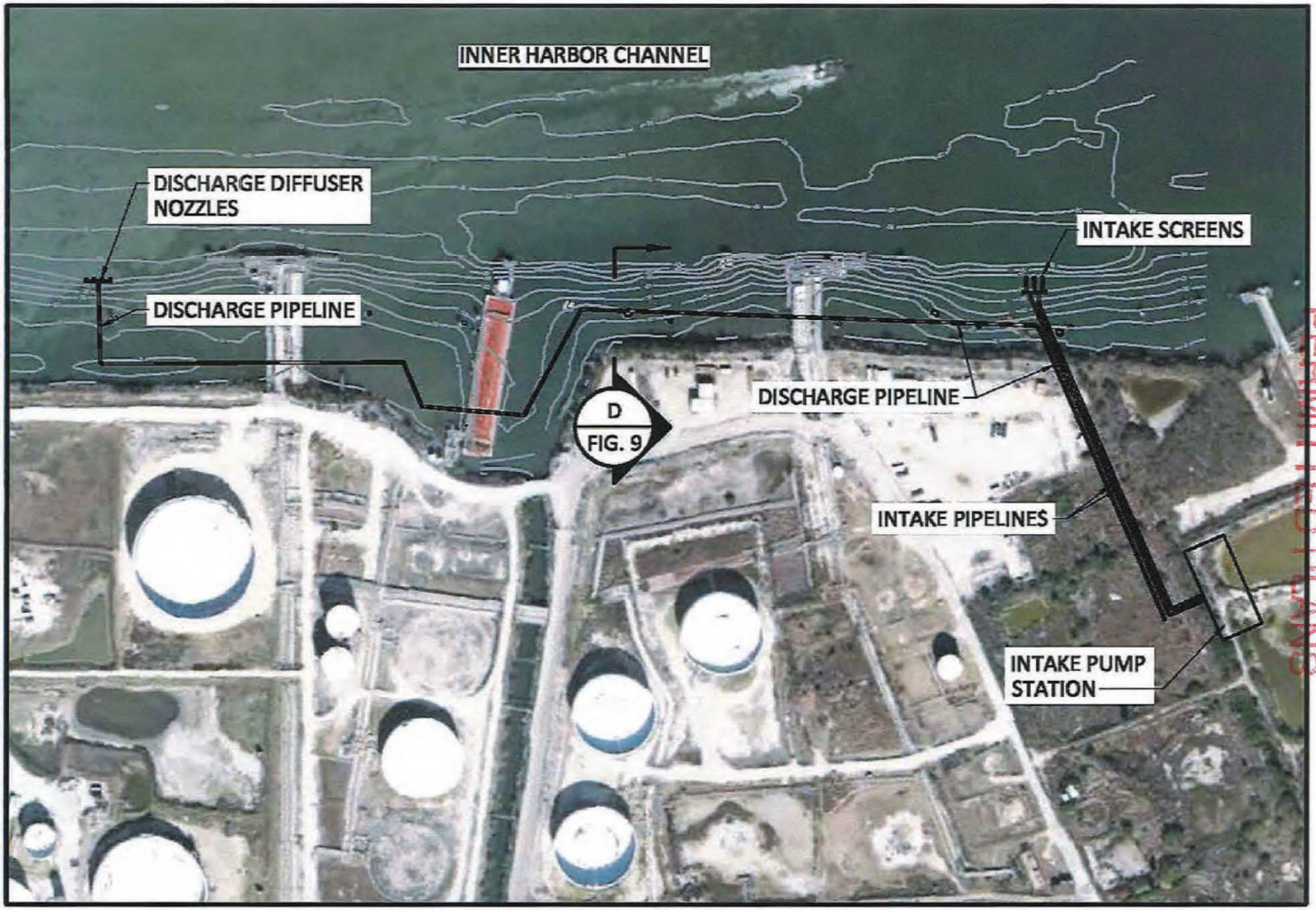
NAD 1983 StatePlane Texas South FIPS 4205 Feet



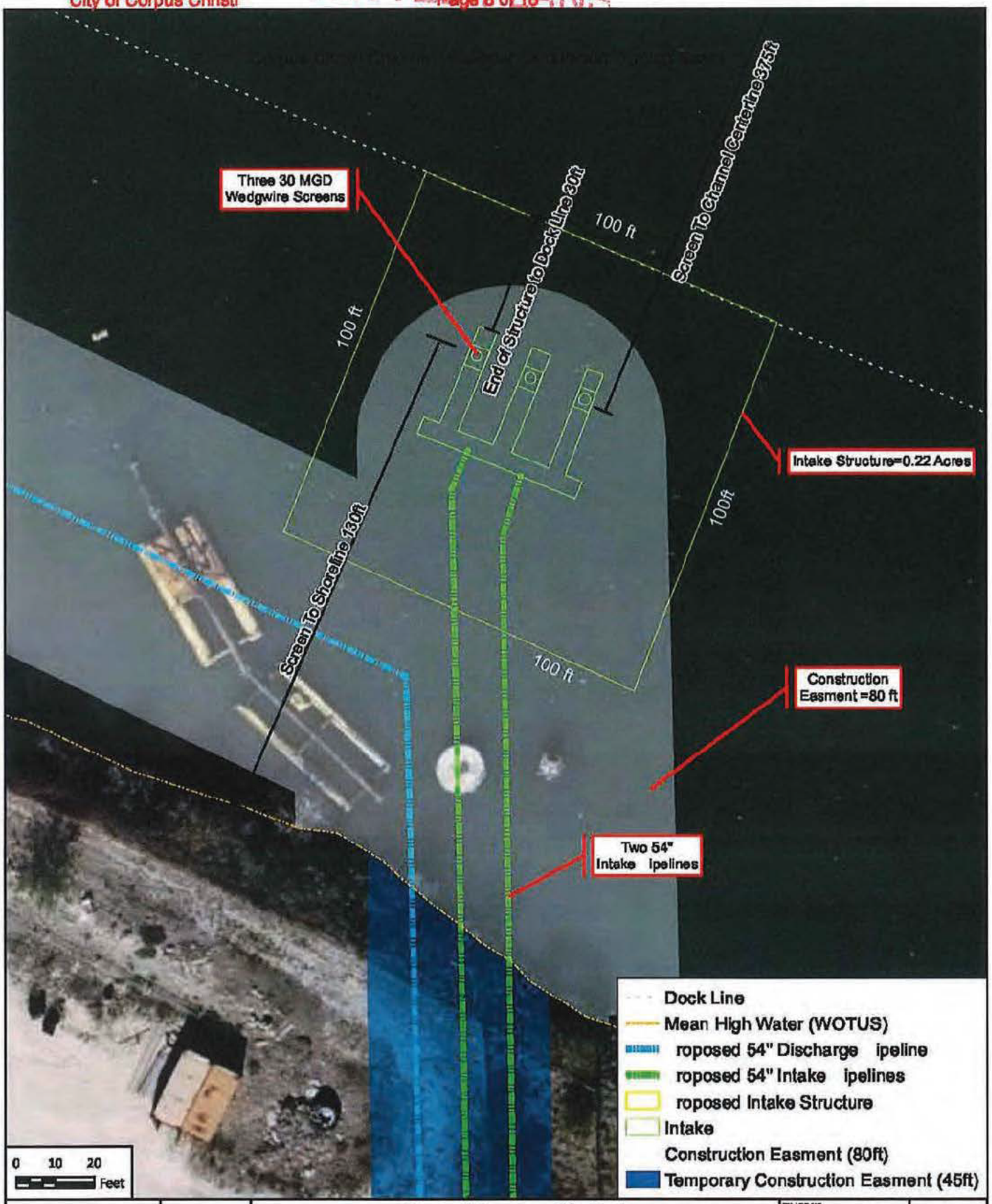
NORTH 1

OVERALL PLAN

SCALE: NTS

FIGURE 1

PERMITTED PLANS



FREESE AND NICHOLS
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800 N Shoreline Blvd #1600 n
Corpus Christi, TX78401
(361) 561-6500

N W E S

City of Corpus Christi

Seawater Desalination

Intake Details

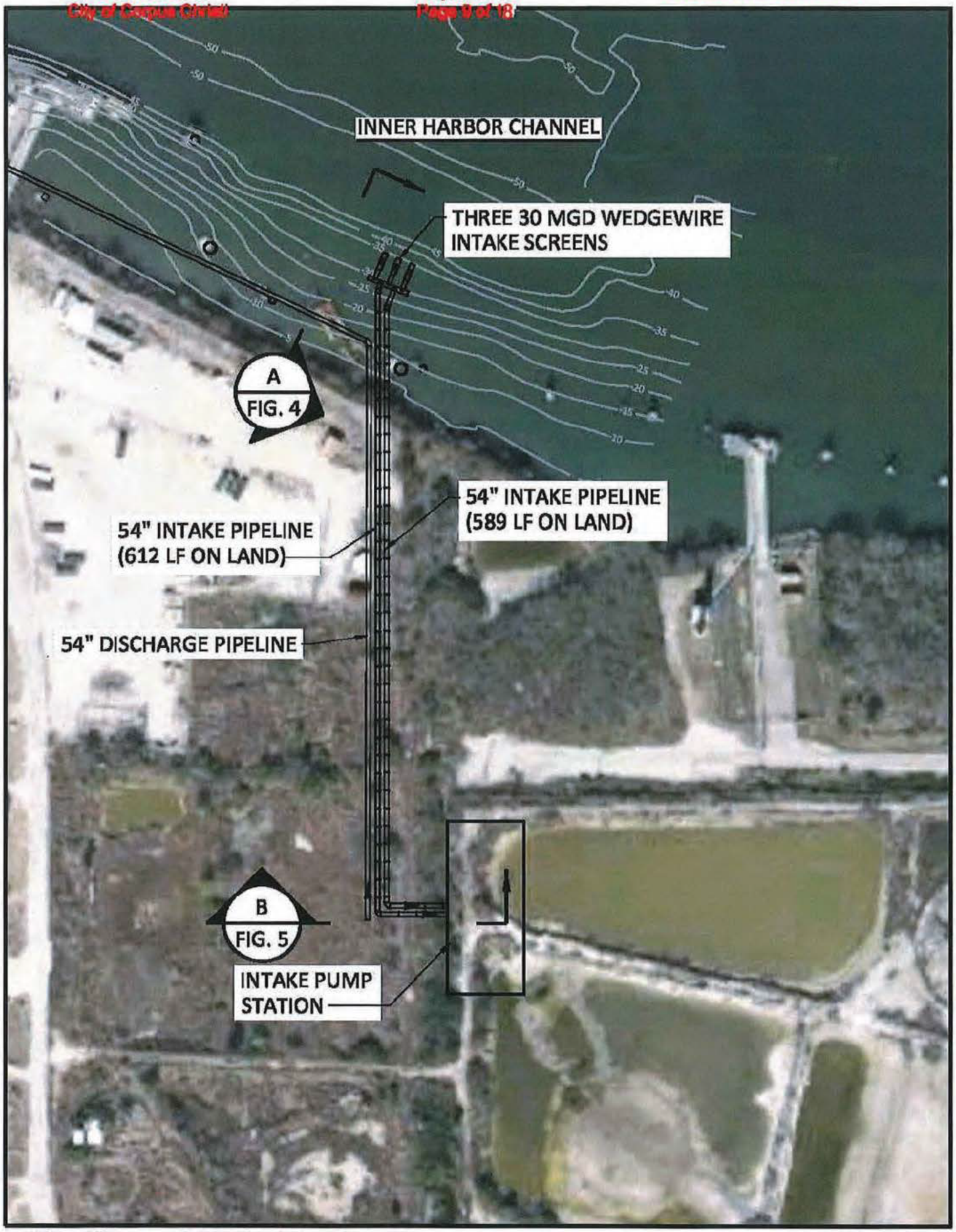
PN JOB NO	COR20586
FILE NAME	intakedetails.mxd
DATE	10/2/2023
SCALE	1:400
DRAFTED	CS

5

FIGURE

str: R:\ENVIRONMENTAL\Working\CS_Working\Memo_figures\Corpa_update\intakedetails.mxd

NAD 1983 State Plane Texas South FT S 4205 Feet

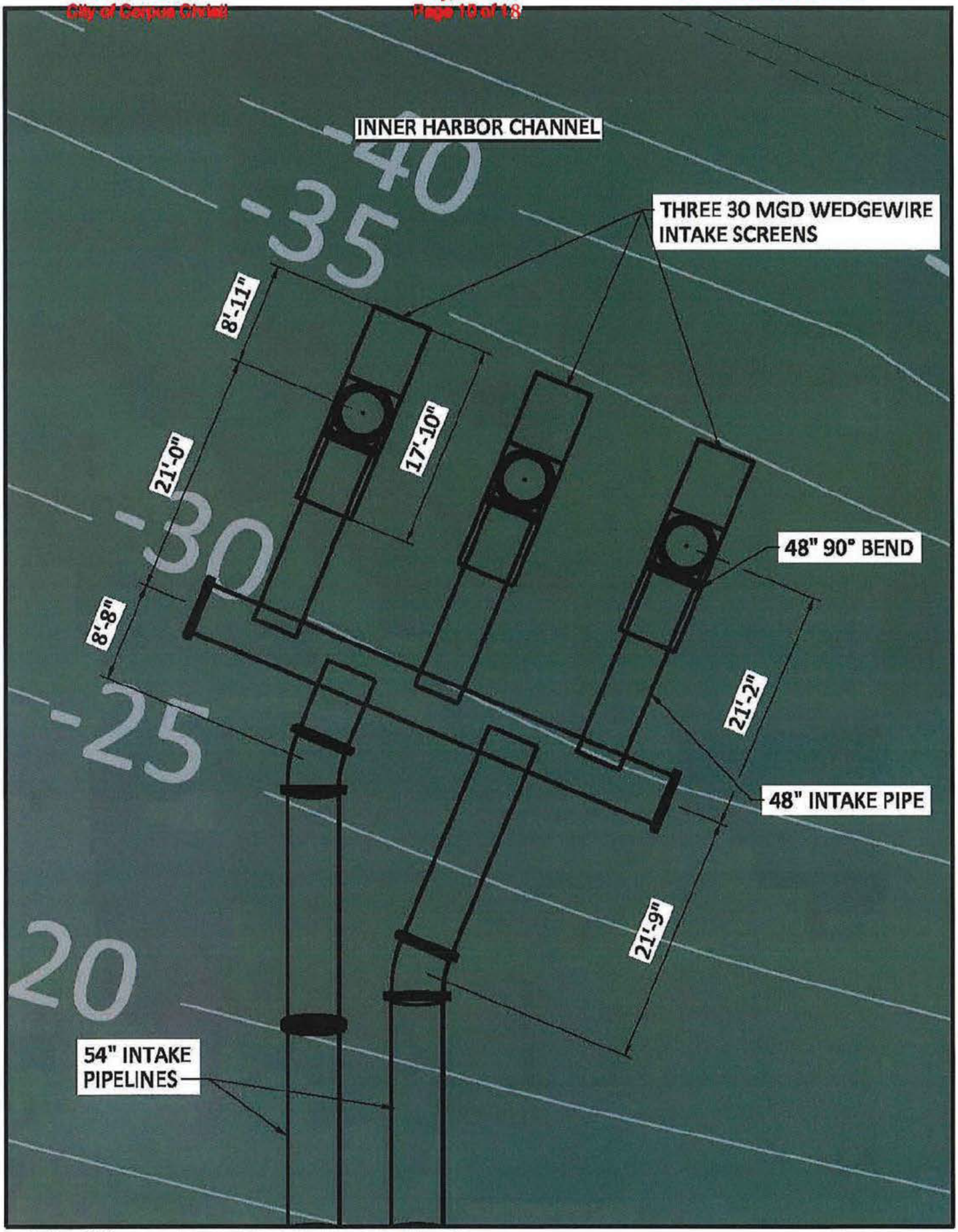


NORTH 2

INTAKE PIPING PLAN

SCALE: NTS

FIGURE 2



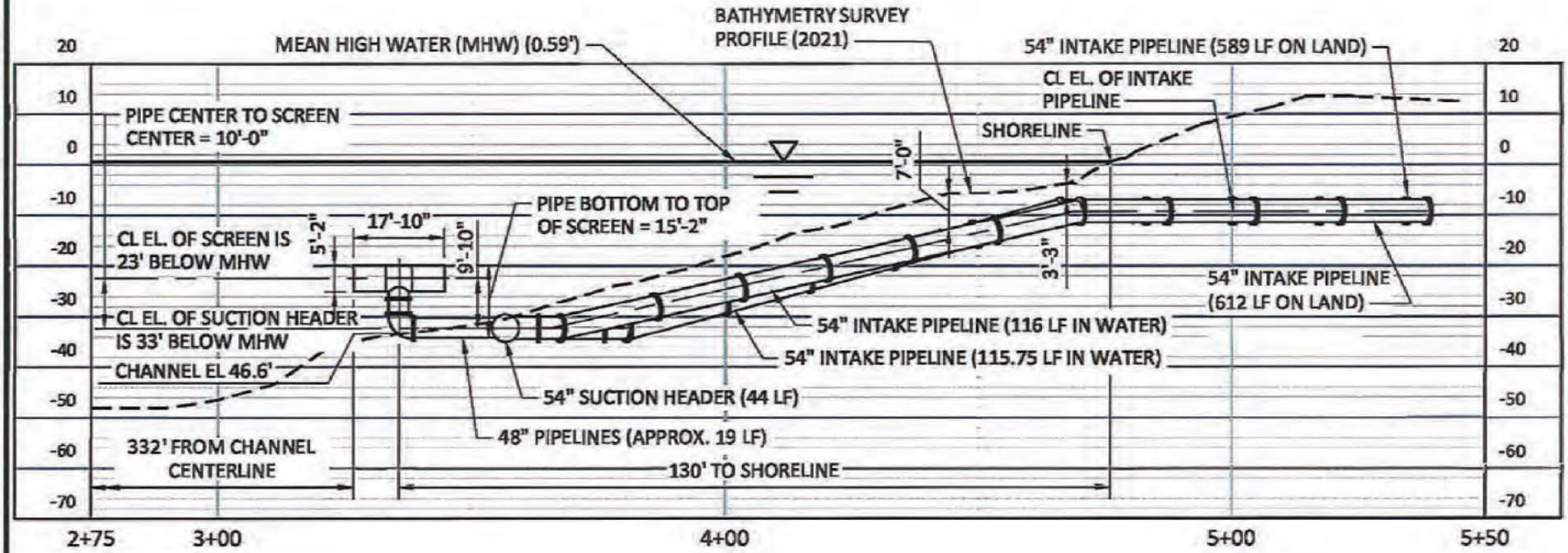
NORTH 3

INTAKE ENLARGED PLAN

SCALE: NTS

FIGURE 3

Received 13 October 2023



NOTE:
PORTION OF DISCHARGE LINE NOT SHOWN IN THIS PROFILE FOR CLARITY.

0 10' 20' 30' 60'

SCALE IN FEET
H - 1"=30' V - 1"=30'

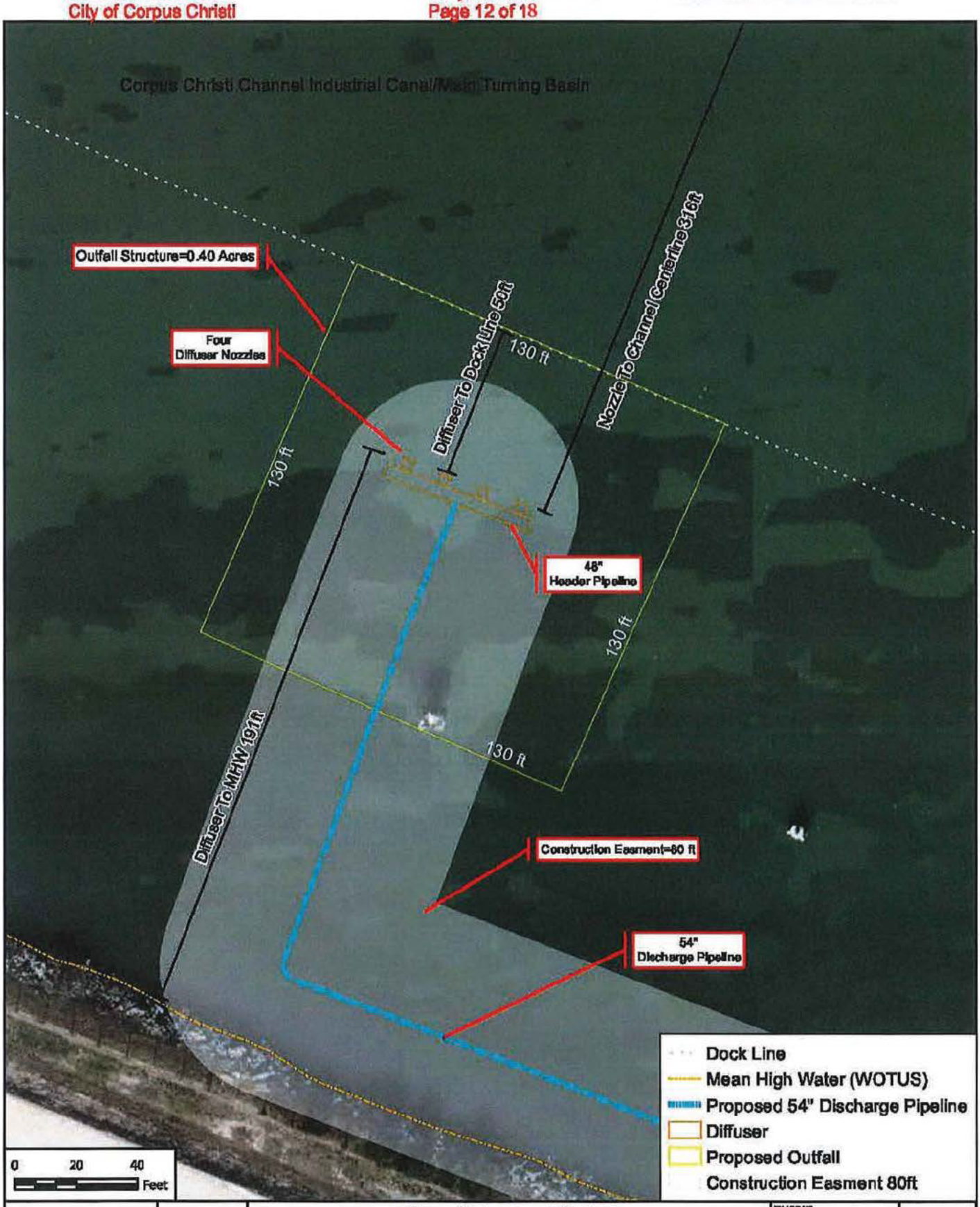
A

INTAKE PIPING SECTION LOOKING EAST

SCALE: NTS

FIGURE 4

PERMITTED PLANS



FREESE AND NICHOLS

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800 N Shoreline Blvd #1600 n
Corpus Christi, TX 78401
(361) 561-6500

N W E S

City of Corpus Christi

Seawater Desalination

Outfall Details

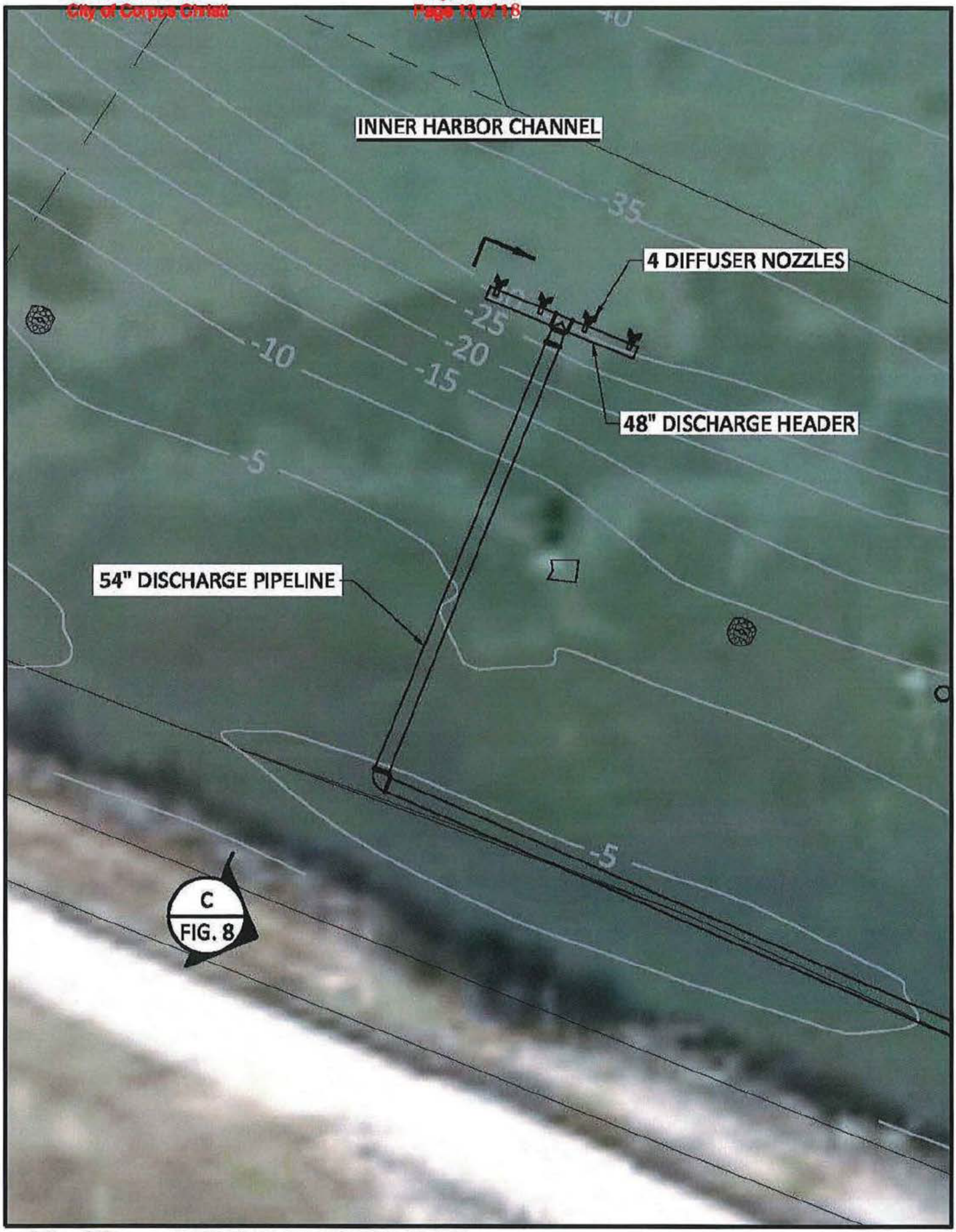
PN / JOB NO	COR20598
FILENAME	outfalldetails.mxd
DATE	9/28/2023
Scale	1:500
DRAFTED	CS

6

FIGURE

Path: H:\ENVIRONMENTAL\Working\CS_Working\Memo_figures\Corpus_update\outfalldetails.mxd

NAD 1983 StatePlane Texas South FIPS 4205 Feet

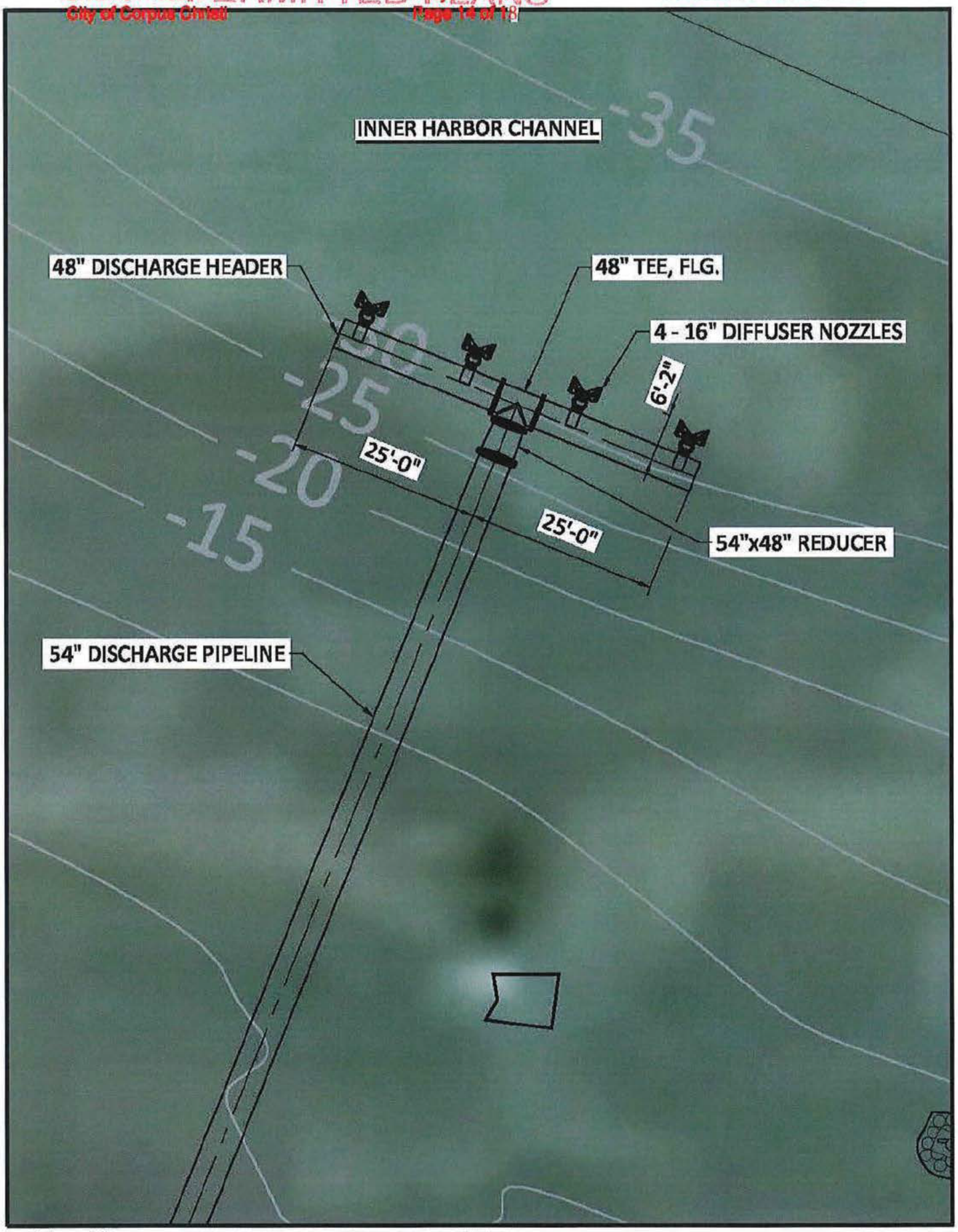


NORTH 6

DISCHARGE PIPING PLAN

SCALE: NTS

FIGURE 6



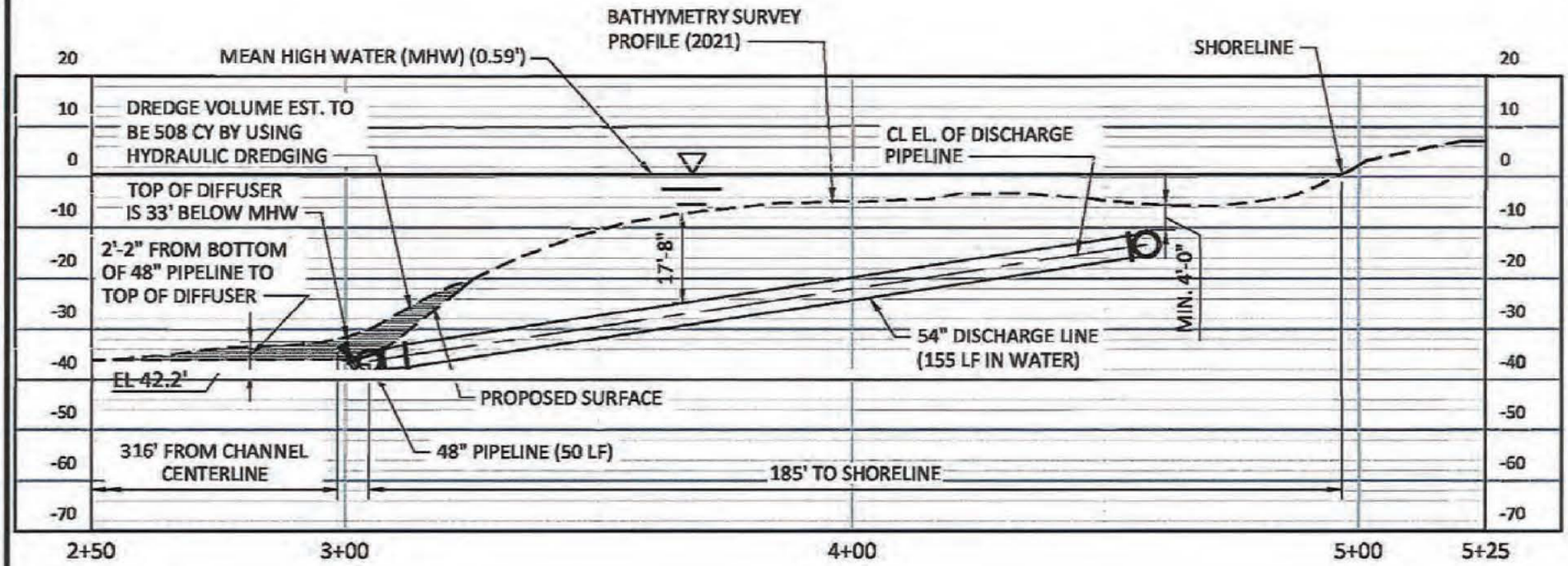
NORTH 7

DISCHARGE ENLARGED PLAN

SCALE: NTS

FIGURE 7

Received 13 October 2023



0 10' 20' 30' 60'

SCALE IN FEET
H - 1"=30' V - 1"=30'

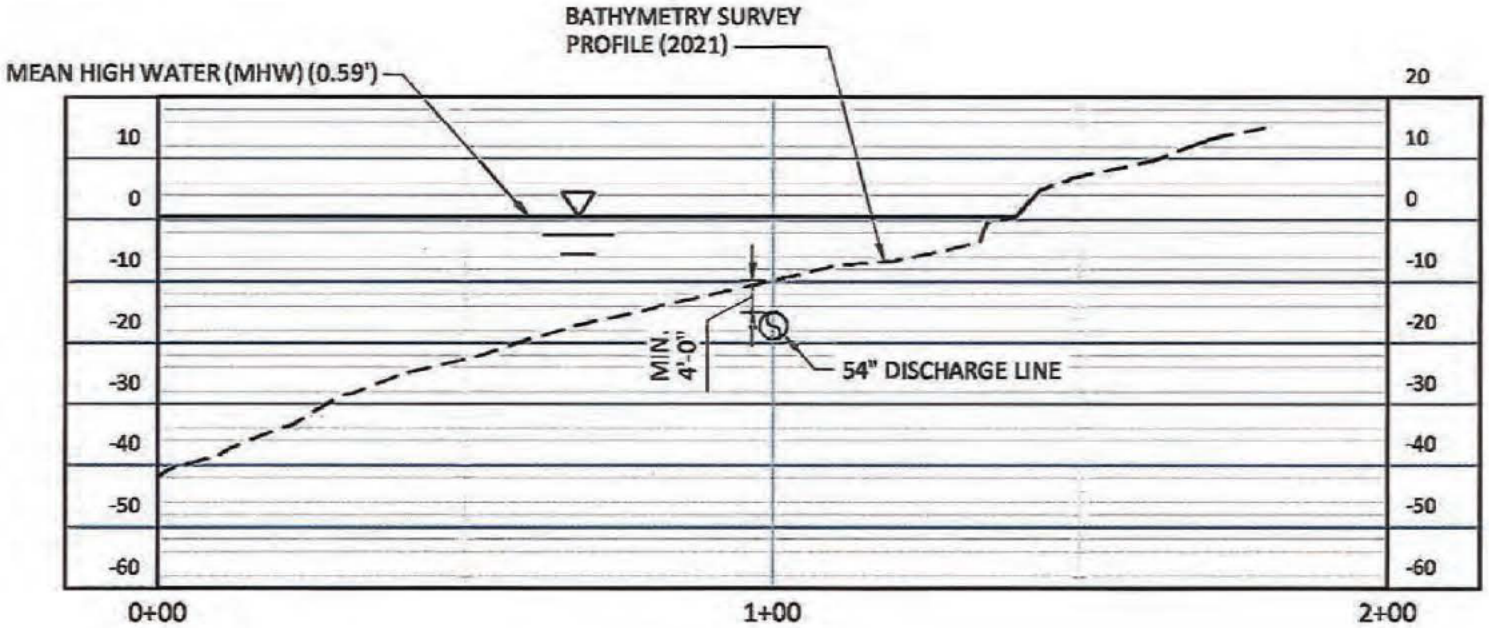
C

DISCHARGE PIPING SECTION LOOKING EAST

SCALE: NTS

FIGURE 8

PERMITTED PLANS



0 10' 20' 30' 60'

SCALE IN FEET
H - 1"=30' V - 1"=30'

PERMITTED PLANS

D

TYPICAL
DISCHARGE PIPING SECTION LOOKING EAST

SCALE: NTS

FIGURE 9

FREESE AND NICHOLS
FREESE AND NICHOLS, INC
800 N Shoreline Blvd #1600n
Corpus Christi, TX 78401
Phone - 361-561-6500

City of Corpus Christi

Seawater Desalination

Hydraulic Material Placement Options

FN JOB NO	COR20596
FILE NAME	1_Disposal.mxd
DATE	11/2/2023
Scale	1:10,000
DESIGNED	CS
DRAFTED	CS

8

FIGURE

Path: H:\ENVIRONMENTAL\Working\CS_Working\Memo_figures\Corps_updates\1_Disposal.mxd

PERMITTED PLANS
37
37
Up River Rd
Leopard St
Baldwin Blvd
Navigation Blvd
Old Robstown Rd
N Port Ave
Agnes St
Agnes St
City of Corpus Christi
SWG-2014-00850
Desalination Connection Pipeline Route
Nueces County
Pg. 18 0f 18
PERMITTED PLANS

PERMITTED PLANS

Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 6, 2024

Jeffrey Edmonds
City of Corpus Christi
1201 Leopard Street
Corpus Christi, TX 78401

Re: USACE Permit Application No. SWG-2014-00850

Dear Mr. Edmonds:

This letter is in response to the 401 Certification Request dated May 1, 2024, for the Public Notice dated January 16, 2024, on the City of Corpus Christi proposed seawater desalination plant. The project is located along the southern shoreline of the Inner Harbor of the Corpus Christi Ship Channel within the Industrial Canal just west of the Main Turning Basin, in Corpus Christi, Nueces County, Texas.

The Texas Commission on Environmental Quality (TCEQ) has reviewed the public notice and related application information along with the 401 Certification Request. On behalf of the Executive Director and based on our evaluation of the information contained in these documents, the TCEQ certifies that there is reasonable assurance that the project will be conducted in a way that will not violate water quality standards. General information regarding this water quality certification, including special conditions and standard provisions of the certification, is included as an attachment to this letter.

The applicant proposes to construct a desalination plant with intake structures and outfall structures/diffusers and pipelines within the waters of the Corpus Christi Ship Channel Inner Harbor, onshore pipeline within adjacent wetlands, and an onshore processing facility. Areas to be impacted include 0.56 acres of permanent impacts from the intake and discharge structures, and 2.21 acres of temporary impacts from pipeline installation and contour restoration.

No mitigation is proposed as all wetlands are non-jurisdictional, and there will be no impacts to coastal critical areas as a result of this project. The applicant has stated that they will use best management practices (BMPs) during construction to minimize environmental impacts to on-site water quality; these BMPs include the use of turbidity curtains in open water, silt fences, rock berms, and hay bales, as well as seeding and revegetating areas as soon as practicable after construction.

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The TCEQ has reviewed this proposed action for consistency with the Texas Coastal Management Program (CMP) goals and policies in accordance with the CMP regulations (Title 31, Texas Administrative Code (TAC), Section (§)505.30) and has determined that the action is consistent with the applicable CMP goals and policies.

This certification was reviewed for consistency with the CMP's development in critical areas policy (31 TAC §501.23) and dredging and dredged material disposal and placement policy (31 TAC §501.25). This certification complies with the CMP goals (31 TAC §501.12(1, 2, 3, 5)) applicable to these policies.

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

If you require additional information or further assistance, please contact Ms. Michelle Labrie, Water Quality Assessment Section, Water Quality Division (MC-150), at (512) 239-4535 or by email at Michelle.Labrie@tceq.texas.gov.

Sincerely,

Robert Sadlier, Deputy Director
Water Quality Division
Texas Commission on Environmental Quality

RS/ML

Attachment

ccs: Mr. Jeffrey Edmonds, City of Corpus Christi via email at jeffreye@cctexas.gov

Ms. Leslie Koza, Texas General Land Office via e-mail at Federal.Consistency@GLO.TEXAS.GOV

Mr. Mark Patillo, Corps project manager via email at Mark.e.pattillo@usace.army.mil

PERMITTED PLANS

WORK DESCRIPTION: As described in the public notice dated January 16, 2024, and the 401 Certification Request dated May 1, 2024.

SPECIAL CONDITIONS: If dredging is performed for this project, all decant water from confined dredge disposal areas associated with this project shall not exceed 300 mg/L total suspended solids. This condition is necessary to ensure that return water discharges will comply with water quality requirements in accordance with Texas Water Code §26.003 and antidegradation policy in 30 TAC §307.5, and not result in violations of general water quality criteria in 30 TAC 307.4(b)(2)-(5).

GENERAL: This certification, issued pursuant to the requirements of Title 30, Texas Administrative Code, Chapter 279, is restricted to the work described in the May 1st, 2024, 401 Certification Request and shall be concurrent with the Corps of Engineers (COE) permit. This certification may be extended to any minor revision of the COE permit when such change(s) would not result in an impact on water quality. The Texas Commission on Environmental Quality (TCEQ) reserves the right to require full joint public notice on a request for minor revision. If this application is a modification of an original permit or any modification thereof for which a special condition was cited by the Commission or a predecessor agency, such conditions shall remain valid. The applicant is hereby placed on notice that any activity conducted pursuant to the COE permit which results in a violation of the state's surface water quality standards may result in an enforcement proceeding being initiated by the TCEQ or a successor agency.

STANDARD PROVISIONS: These following provisions attach to any permit issued by the COE and shall be followed by the permittee or any employee, agent, contractor, or subcontractor of the permittee during any phase of work authorized by a COE permit. These conditions are necessary to ensure that the project is conducted in a way that will comply with water quality requirements in accordance with Texas Water Code §26.003 and antidegradation policy in 30 TAC §307.5, and not result in violations of general water quality criteria in 30 TAC 307.4(b)(2)-(5)

1. The water quality of wetlands shall be maintained in accordance with all applicable provisions of the Texas Surface Water Quality Standards including the General, Narrative, and Numerical Criteria.

2. The applicant shall not engage in any activity which will cause surface waters to be toxic to man, aquatic life, or terrestrial life.

3. Permittee shall employ measures to control spills of fuels, lubricants, or any other materials to prevent them from entering a watercourse. All spills shall be promptly reported to the TCEQ by calling the State of Texas Environmental Hotline at 1-800-832-8224.

4. Sanitary wastes shall be retained for disposal in some legal manner. Marinas and similar operations which harbor boats equipped with marine sanitation devices shall provide state/federal permitted treatment facilities or pump out facilities for ultimate transfer to a permitted treatment facility. Additionally, marinas shall display signs in appropriate locations advising boat owners that the discharge of sewage from a marine sanitation device to waters in the state is a violation of state and federal law.

5. Materials resulting from the destruction of existing structures shall be removed from the water or areas adjacent to the water and disposed of in some legal manner.

6. A discharge shall not cause substantial and persistent changes from ambient conditions of turbidity or color. The use of silt screens or other appropriate methods is encouraged to confine suspended particulates.

7. The placement of any material in a watercourse or wetlands shall be avoided and placed there only with the approval of the Corps when no other reasonable alternative is available. If work within a wetland is unavoidable, gouging or rutting of the substrate is prohibited. Heavy equipment shall be placed on mats to protect the substrate from gouging and rutting if necessary.

8. Dredged Material Placement: Dredged sediments shall be placed in such a manner as to prevent any sediment runoff onto any adjacent property not owned by the applicant. Liquid runoff from the disposal area shall be retained on-site or shall be filtered and returned to the watercourse from which the dredged materials were removed. Except for material placement authorized by this permit, sediments from the project shall be placed in such a manner as to prevent any sediment runoff into waters in the state, including wetlands.

9. If contaminated spoil that was not anticipated or provided for in the permit application is encountered during dredging, dredging operations shall be immediately terminated and the TCEQ shall be contacted by calling the State of Texas Environmental Hotline at 1-800-832-8224. Dredging activities shall not be resumed until authorized by the Commission.

10. Contaminated water, soil, or any other material shall not be allowed to enter a watercourse. Noncontaminated stormwater from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.

11. Stormwater runoff from construction activities that result in a disturbance of one or more acres or are a part of a common plan of development that will result in the disturbance of one or more acres, must be controlled and authorized under Texas Pollutant Discharge Elimination System (TPDES) general permit TXR150000. A copy of the general permit, application (notice of intent), and additional information is available at:

http://www.tceq.texas.gov/permitting/stormwater/construction or by contacting the TCEQ Stormwater Team at (512) 239-4671.

12. Upon completion of earthwork operations, all temporary fills shall be removed from the watercourse/wetland, and areas disturbed during construction shall be seeded, riprapped, or given some other type of protection to minimize subsequent soil erosion. Any fill material shall be clean and of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters.

13. Disturbance to vegetation will be limited to only what is absolutely necessary. After construction, all disturbed areas will be revegetated to approximate the pre-disturbance native plant assemblage.

14. Where the control of weeds, insects, and other undesirable species is deemed necessary by the permittee, control methods which are nontoxic to aquatic life or human health shall be employed when the activity is located in or in close proximity to water, including wetlands.

15. Concentrations of taste and odor producing substances shall not interfere with the production of potable water by reasonable water treatment methods, impart unpalatable flavor to food fish including shellfish, result in offensive odors arising from the water, or otherwise interfere with reasonable use of the water in the state.

16. Surface water shall be essentially free of floating debris and suspended solids that are conducive to producing adverse responses in aquatic organisms, putrescible sludge deposits, or sediment layers which adversely affect benthic biota or any lawful uses.

17. Surface waters shall be essentially free of settleable solids conducive to changes in flow characteristics of stream channels or the untimely filling of reservoirs, lakes, and bays.

18. The work of the applicant shall be conducted such that surface waters are maintained in an aesthetically attractive condition and foaming or frothing of a persistent nature is avoided. Surface waters shall be maintained so that oil, grease, or related residue will not produce a visible film of oil or globules of grease on the surface or coat the banks or bottoms of the watercourse.

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

PERMITTED PLANS

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Texas Coastal and Central Plains Ecological Services Field Office
Corpus Christi Sub-Office
4444 Corona Drive, Suite 215
Corpus Christi, Texas 78411
PHONE: 361/994-9004

In Reply Refer To:
2024-0044002

September 20, 2024

Mark Pattillo, Project Manager
Corpus Christi Field Office
U.S. Army Corps of Engineers, Galveston District
5151 Flynn Parkway, Ste. 306
Corpus Christi, Texas 78411-4318

Dear Mr. Pattillo:

The U.S. Fish and Wildlife Service (Service) received a September 18, 2024, letter via email requesting informal consultation from the Department of the Army, U.S. Army Corps of Engineers (Corps) for Permit Application SWG-2014-00850. The Applicant, City of Corpus Christi, proposes to construct a seawater desalination plant with intake structures, discharge/diffusers, ground storage tanks, and maintenance buildings. The proposed project is located within the Corpus Christi Inner Harbor, Nueces County, Texas.

The Service reviewed the proposed action pursuant to the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.) and evaluated the project for possible impacts. Section 7 of the Act requires that all Federal agencies consult with the Service to ensure that the actions authorized, funded, or carried out by such agencies do not jeopardize the continued existence of any threatened or endangered species or adversely modify or destroy designated critical habitat of such species.

The Corps made a determination that the proposed project may affect but is not likely to adversely affect the threatened West Indian manatee (*Trichechus manatus*) and eastern black rail (*Laterallus jamaicensis* ssp. *jamaicensis*). The Service concurs with the Corps' determinations since the effects of the proposed project are insignificant or discountable. This concurrence is based upon a review of Service files and the implementation of the following agreed-upon conservation measures to reduce potential effects to insignificant and/or discountable levels:

<u>West Indian manatee</u>

If a manatee is observed, the applicant will contact the Service at 361-533-6765 and the Texas Marine Mammal Stranding Network hotline at 800-962-6625. The following conservation measures will be implemented during construction:

- The permittee will instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel are

responsible for observing water-related activities for the presence of manatee(s). The permittee will advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973.

- Siltation barriers shall be made of material in which manatees cannot become entangled, properly secured, and regularly monitored to avoid manatee entrapment.
- If manatee(s) are seen within 100 yards of the active daily construction operation or vessel movement, all appropriate precautions shall be implemented to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet to a manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of that equipment. Activities will not resume until the manatee(s) has departed the project areas of its own volition.
- If a manatee(s) is sighted in or near the project area, all vessels associated with the project shall operate at "no wake/idle" speeds within the construction area, and at all times while in waters where the draft of the vessel provides less than a four- foot clearance from the bottom. Vessels shall follow routes of deep water whenever possible.

Eastern black rail

The Applicant will avoid construction during March 1 through September 30, when rails are most vulnerable.

- If this timing restriction cannot be avoided, all equipment will move at a very slow pace through potential habitat to allow birds to escape ahead of equipment.
- If an eastern black rail (alive, injured, or dead) is observed, the work should stop immediately and the Service contacted at 361-533-67.

No further endangered species consultation will be required unless: 1) the identified action is subsequently modified in a manner that causes an effect on a listed species or designated critical habitat; 2) new information reveals the identified action may affect federally protected species or designated critical habitat in a manner or to an extent not previously considered; 3) a new species is listed or a critical habitat is designated under the Act that may be affected by the identified action; or, 4) the project is not completed within five years from the date of this consultation. If you have any questions or comments, please feel free to contact Mary Kay Skoruppa at 361-225-7314 or via email to mary_kay_skoruppa@fws.gov.

Sincerely,

CATHERINE YEARGAN Digitally signed by CATHERINE YEARGAN Date: 2024.09.20 17:33:36 -05'00'

Catherine Yeargan
Field Supervisor

PERMITTED PLANS

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
https://www.fisheries.noaa.gov/region/southeast

8/16/2024

F/SER31:SG
SERO-2024-00975

Mark Patillo
Regulatory Project Manager, Corpus Christi Regulatory Field Office
Galveston District Corps of Engineers
Department of the Army
5151 Flynn Parkway, Suite 306
Corpus Christi, Texas 78411-4318

Ref.: SWG-2014-00850, City of Corpus Christi, Desalination Plant, Corpus Christi, Neuces County, Texas – EXPEDITED TRACK

Dear Mark Patillo,

This letter responds to your August 8, 2024, request pursuant to Section 7 of the Endangered Species Act (ESA) for consultation with the National Marine Fisheries Service (NMFS) on the subject action.

We reviewed the action agency's consultation request document and related materials. Based on our knowledge, expertise, and the action agency's materials, we concur with the action agency's conclusions that the proposed action is not likely to adversely affect the NMFS ESA-listed species and/or designated critical habitat.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on May 6, 2024 (89 Fed. Reg. 24268). We are applying the updated regulations to this consultation. The 2024 regulatory changes, like those from 2019, were intended to improve and clarify the consultation process, and, with one exception from 2024 (offsetting reasonable and prudent measures), were not intended to result in changes to the Services' existing practice in implementing section 7(a)(2) of the Act. 84 Fed. Reg. at 45015; 89 Fed. Reg. at 24268. We have considered the prior rules and affirm that the substantive analysis and conclusions articulated in this letter of concurrence would not have been any different under the 2019 regulations or pre-2019 regulations.

This concludes your consultation responsibilities under the ESA for species and/or designated critical habitat under NMFS's purview. Reinitiation of consultation is required and shall be requested by the action agency where discretionary Federal action agency involvement or control over the action has been retained or is authorized by law and: (a) take occurs; (b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in this consultation; (c) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not previously considered in this consultation; or (d) if a new species is listed or critical habitat designated that may be affected by the action.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions on this consultation, please contact Sarah Garvin, Consultation Biologist, at (727) 342-0249 or by email at Sarah.Garvin@noaa.gov.

Sincerely,

REECE.KARLA.MICHELLE.1365885962 Digitally signed by REECE.KARLA.MICHELLE.1365885962 Date: 2024.08.16 14:23:05 -04'00'

for David Bernhart
Assistant Regional Administrator
for Protected Resources

File: 1514-22.f.8