Draft Environmental Assessment

Marisol Street

Proposed Boat Ramp

South Padre Island (Cameron County), Texas

March 21, 2025

Prepared For:

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Acronyms, Abbreviations, Definitions, and Terms

APE	Area of potential effect
ASTM	American Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLI	Closed Landfill Inventory
CORRACT	Corrective Action
ERNS	Emergency Response Notification System Environmental
ESA	Site Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
IOP	Innocent Owner/Operator Program municipal
MSW	solid waste
NPL	National Priority List
NRCS	Natural Resources Conservation Service
NWP	Nationwide Permit
PCB	polychlorinated biphenyl
PST	Petroleum Storage Tank
RCRA	Resource Conservation and Recovery Act
ROW	right-of-way
RRC	railroad commission
SCS	Soil Conservation Service
SWANCC	Solid Waste Agency of Northern Cook County
TCEQ	Texas Commission on Environmental Quality
T&E	threatened and endangered
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TSCA	Toxic Substances Control Act
TSD	treatment, storage, disposal
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

USGS	United States Geological Survey
VCP	Voluntary Cleanup Program

Introduction

Project Summary

The City of South Padre Island, Texas proposes to construct a new boat ramp and associated improvements in South Padre Island at a publicly accessible location at the western terminus of Marisol Street. Using the NAD 1983 (2011) State Plane Texas South coordinate system, the project's center coordinates are 26.0967° N, 97.1677° W.

The City of South Padre has secured funding for this project through the Texas Parks & Wildlife Boating Access Grant for work associated with the engineering and permitting processes. Land acquisition and construction funding has been secured through the Gulf Coast Restoration Trust Fund (as federally furnished under the RESTORE Act). Because federal funds are anticipated for this project, the United States Fish and Wildlife Service (USFWS) is required to assess its potential environmental impacts in accordance with the National Environmental Policy Act (NEPA). Thus, an Environmental Assessment (EA) has been prepared.

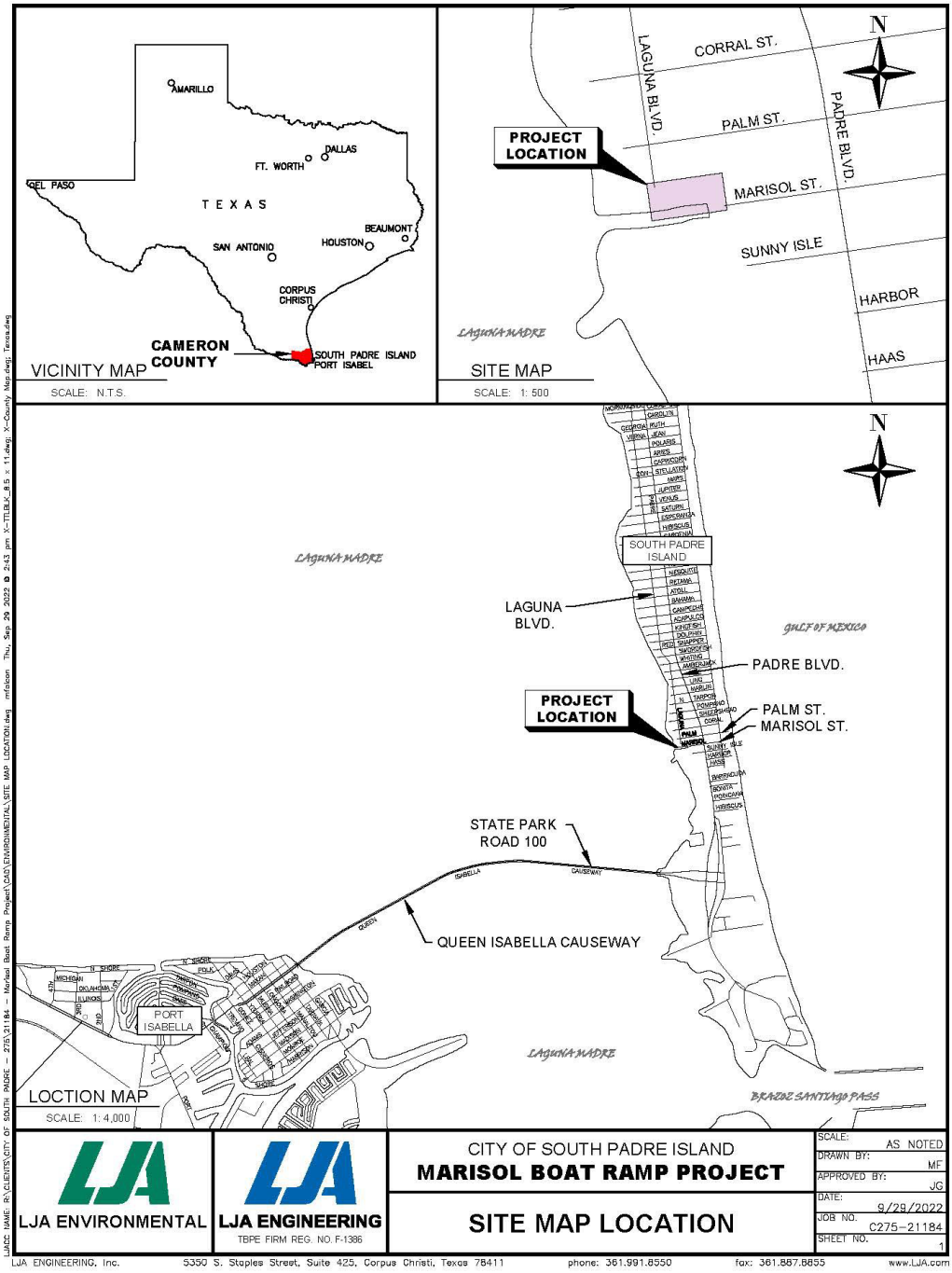
The area's previous dredging and bulkheading were completed under a US Army Corps of Engineers (USACE) Nationwide Permit on February 7, 2023, and the boat ramp creation was approved as an Individual Permit on May 31, 2023, both under permit SWG-2022-00301 (Letter of Permission and Nation Wide Permit Verification attached in Appendix I).

The proposed plans include the creation of a boat ramp with scour protection and an adjacent ADA accessible loading dock/attendant dock (see Appendix A for existing site conditions and proposed plans and Figure 1 for project location). The area will first be dewatered to facilitate construction of the boat ramp. To prevent impacts to water quality (e.g., increased suspended solids [TSS] affecting adjacent waterways), the dewatering area will be enclosed with both a cofferdam and a silt fence. Once the cofferdam is removed, the adjacent ADA-compliant attendant dock will be constructed from land, within the silt fence's confines. Timber pilings will support the dock, and will be installed by jetting. The total fill for the boat ramp and scour protection will amount to 45.5 cubic yards (CY). The project is expected to take approximately 46 months to complete.

The boat ramp will be constructed in what is currently uplands, however the scour protection for the ramp and the attendant dock will be placed in Section 10 Waters. These impacts are unavoidable, as the boat ramp will need to be protected. Scour is the primary reason that other ramps in the area have failed or are rendered unusable. This will result in 480 square feet (SF) of permanent fill (0.011 acres and 13.3 CY).

SWG-2022-00301 **PERMITTED PLANS**

Recd 1 Nov 2022



Sheet 1 of 3

Figure 1 Site Map Location

Purpose and Need for Proposed Action

The purpose of the project is to construct a public boat ramp and loading dock. There is a lack of public boat ramps that are usable on the bay side of South Padre Island. While there are several ramps in surrounding areas, they are in disrepair, and only the smallest of boats are able to use them.

Regulatory Framework

The National Environmental Policy Act (NEPA) of 1969, as amended and Department of Interior NEPA Regulations (43 CFR 46)[1] require federal agencies, such as the USFWS, to assess the environmental effects of their proposed actions prior to making decisions. The purpose of NEPA is to have federal agencies consider relevant environmental information during their decision-making processes and inform the public of the decision-making process.

An individual permit (IP) for the proposed activity has already been approved by USACE. The project has also been verified under Nationwide Permits (NWP) 36 and 13 pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 (both under permit SWG-2022-00301). This NWP and IP verification is valid provided the activity is compliant with the enclosed plans (see Appendix A). In addition, the activity must be in compliance with the NWP General/Regional Conditions and the Coastal Management Program.

Use of the Environmental Assessment

The USFWS will determine whether this EA is sufficient to support a Finding of No Significant Impact (FONSI) or whether an environmental impacts statement (EIS) will be required.

Alternatives Considered

No Action Alternative

The No Action Alternative would be defined by not creating a boat ramp with scour protection or the associated attendant dock. The No Action Alternative is not preferred, as no action will not protect the ramp in the future, and the lack of scour protection would result in sediments being disturbed by boats loading and unloading, which would affect water quality. Additionally, the lack of an ADA accessible attendant dock would render the boat ramp less functional to the general public.

[1] Executive Order 14154, *Unleashing American Energy* (Jan. 20, 2025), and a Presidential Memorandum, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity* (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The [bureau] verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum. The [bureau] has also voluntarily considered the Council on Environmental Quality's rescinded regulations implementing NEPA, previously found at 40 C.F.R. Parts 1500–1508, as guidance to the extent appropriate and consistent with the requirements of NEPA and Executive Order 14154.

Offsite Alternative

A boat ramp exists near the project site on Palm Street that could potentially be rehabilitated, however, the right-of-way is too narrow for expansion, and there are utilities (stormwater drainage) that would have to be moved on to private property. Previous efforts to rehabilitate the adjacent ramp have not been able to overcome these hurdles. In addition, there is a lack of parking for the Palm Street ramp, and the preferred alternative provides a parking lot for the proposed ramp. The proposed project is the least environmentally damaging practicable alternative. This Alternative does not merit review, and will be excluded from analysis in this EA.

Preferred Alternative

The Preferred Alternative would allow for the protection and preservation of the new boat ramp by the placement of scour protection. The preferred alternative would also allow for the creation of an ADA accessible attendant dock.

Description of Proposed Action and Alternative

Proposed Action

The project site is located in an artificial canal within the Laguna Madre at the southern end of Laguna Blvd., on South Padre Island, Cameron County, Texas. The boat ramp will be 20 feet by 59 feet and nine inches and will be constructed in uplands adjacent to estuarine and marine deepwater.

Approximately 13.3 cubic yards of rock rip rap will be placed at the bottom of the boat ramp in 32 feet by 15 feet area for scour protection. A cofferdam will be constructed, and the area will be dewatered prior to the construction of the boat ramp. The cofferdam will be constructed by the contractor using sheet pile placed by machinery into the water from the land. The cofferdam sheet pile will be installed inside the silt curtain surrounding the project site by jetting the interlocking panels to protect from suspended solids entering the adjacent water ways. The piling will be installed by jetting or vibratory driving; no impact driving will be used to install the sheet pile for the cofferdam. The area will then be dewatered by pumps into the water enclosed by the silt curtains. The dewatering area will be surrounded with a silt curtain to prevent total suspended solids from entering the neighboring waterways. The construction of the boat ramp and placement of scour protection will result in approximately 0.02 acres of temporary impacts and 0.01 acres of permanent impacts to waters of the United States. Based on available information/desktop research, there appears to be “Waters of the United States” and/or “navigable waters of the United States” on the proposed project site. Project design features indicate that these waters will not be affected by the proposed project.

Affected Environment and Environmental Consequences

General Setting

The proposed project site is in South Padre Island, Texas (Cameron County). The proposed area is situated on a man-made canal adjacent to commercial and residential properties. The project

site is currently anthropogenically affected, non-vegetated, and not a typical refuge for federally threatened or endangered species.

Physical Environment: Topography, Geology, and Soils

Based on the Geologic Atlas of Texas, the entire project site is classified as barrier island deposits (Qbi), consisting primarily of well-sorted, fine-grained sand interspersed with shells and shell fragments. The site is situated near Fill and Spoil (F S) areas, which are materials dredged to raise land surfaces above alluvium and barrier island deposits or to create new land.

According to the Natural Resource Conservation Service (NRCS) web soil survey for Cameron County, three soil mapping units are present within the project site (Appendix E). These units and their respective proportions of the site area are as follows:

- Mustang fine sand, saline, frequently flooded (MU) – 62.4%
- Water (W) – 29.7%
- Galveston fine sand, hummocky, occasionally flooded (GA) – 7.9%

The majority of the project area consists of MU soils, which are characterized by 0-1% slopes and poor drainage.

Effects on Topography, Geology, and Soils

No Action Alternative – No construction would take place, and as such, there would be no impact to the geological or topographical conditions. The site's soils, particularly in the vicinity of the existing dredged area and the parking lot, would remain unchanged.

Preferred Alternative – Construction activities associated with the preferred alternative would be restricted to the proposed plans laid out in Appendix A. Excavation is not anticipated to affect subsurface resources. The grading and excavation activities would not be deep enough to impact underlying geological resources. The general topography of the area would not be altered from construction activities and drainage would continue to be directed towards the Laguna Madre, the adjacent water body.

Hydrology and Water Resources

Waters of the U.S.

The regulation of discharges of dredged or fill material into "Waters of the United States" (WOTUS) is governed by the Clean Water Act (CWA), initially established by the Federal Water Pollution Control Act (FWPCA) of 1972 and amended in 1977. Under Section 404 of the CWA, the Environmental Protection Agency (EPA) is responsible for oversight, while the United States Army Corps of Engineers (USACE) administers the permitting process for activities that involve the discharge of dredged or fill material into WOTUS, which includes navigable waters, tributaries, and wetlands. The General Land Office (GLO) does not assert control over this area and, therefore, does not claim jurisdiction over this project.

A desktop analysis was conducted to assess the presence of WOTUS at the proposed project site, utilizing the National Wetlands Inventory (NWI) map (see Appendix C). The NWI review revealed that Estuarine Subtidal Unconsolidated Bottom (E1UBL) areas are located within the project area. These areas are considered part of WOTUS. Based on the information from the NWI and the current site conditions, as well as the historical context of the project area, a detailed field delineation of wetlands was not conducted.

Effects on Waters of the U.S.

No Action Alternative – Under the No Action Alternative, no construction would occur, and therefore, no impacts to WOTUS would result.

Preferred Alternative – The construction of the boat ramp and the placement of scour protection would result in temporary and permanent impacts to WOTUS. Specifically, approximately 0.02 acres of temporary impact would occur due to construction activities, such as the installation of the cofferdam and dewatering efforts. Additionally, 0.01 acres of permanent impact would result from the placement of scour protection. These impacts are considered minimal and are not expected to cause any detrimental effects to water quality or aquatic habitat.

Water Quality

Texas Surface Water Quality Standards (TSWQS) govern the quality of surface waters in Texas and are established under the authority of the Clean Water Act (CWA) and the Texas Water Code (TWC). The Texas Commission on Environmental Quality (TCEQ) monitors the physical, chemical, and biological characteristics of aquatic systems across the state. The quality of surface waters is assessed with regard to human health, ecological conditions, and designated uses.

The Texas Integrated Report, published by the TCEQ, identifies two relevant segments in the project area: Laguna Madre (2491) and Laguna Madre (Oyster Waters) (2491OW), which have been listed on the Texas 303(d) List. These segments have three identified impairments, as detailed below:

Table 1: *TCEQ Water Quality Impairments*

Segment ID	Segment Name	Impairment Description	Year First Listed	Impairment Category
2491	Laguna Madre	Depressed dissolved oxygen in water	1999	5b
		Bacteria in water (Recreation Use)	2010	5r
2491OW	Laguna Madre (Oyster Waters)	Bacteria in oyster waters	2006	5c

These impairments have been addressed through approved management approaches under Nationwide Permit (SWG-2022-00301), provided the activities are compliant with NWP General/Regional Conditions and the Coastal Management Program. A signed Tier I Water Quality Certification Checklist is included in Appendix G.

Effects on Water Quality

No Action Alternative:

If no construction occurs, there will be no direct or indirect impact on the listed impairments affecting the Laguna Madre system. The water quality will remain consistent with existing conditions.

Preferred Alternative:

The proposed project includes the construction of a boat ramp and associated infrastructure, with a cofferdam employed to prevent water quality impacts during construction. The following mitigation measures will ensure that water quality standards are maintained throughout the project:

- **Erosion and Sediment Control:** The proposed construction will take place in dewatered areas due to the cofferdam, thus there will be no effects to the water quality of the adjacent water body. Additionally, the silt fence used during the construction of the attendant dock will prevent deleterious effects to water quality.
- **Waste Management:** Excavated soils and construction debris will be managed in accordance with local, state, and federal regulations. Waste materials will be properly disposed of or recycled to minimize environmental impact.

The proposed project is designed to avoid or minimize negative impacts on water quality, ensuring that the Laguna Madre's listed impairments are not exacerbated. Compliance with the **NWP General/Regional Conditions** and **Coastal Management Program** further guarantees that water quality will be maintained during construction.

Flood Plains

Executive Order (EO) 11988, "Floodplain Management," mandates that Federal agencies avoid, to the greatest extent possible, supporting or permitting development within the 100-year floodplain unless there are no practicable alternatives. This order is intended to minimize the potential for flood damage and to protect the natural and beneficial functions of floodplains.

To assess flood risk in the project area, a review of the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) was conducted. The FIRM indicates that the entire project site is located within Zone AE, which represents areas within the 100-year floodplain where base flood elevations (BFE) have been determined (see Appendix F). According

to FEMA's National Flood Hazard Layer Viewer, the BFE in the project area is 8 feet above mean sea level (MSL).

Effects on Floodplains

No Action Alternative – No construction will occur and there will be no impact to the floodplain.

Preferred Alternative – The construction will take place entirely below the BFE of MSL. Therefore, the Preferred Alternative has the potential to affect the floodplain and would be required to obtain a local permit from the City of South Padre Island or Cameron County prior to construction.

Biological Resources

Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 mandates that all federal agencies consider the conservation of endangered and threatened species in their actions. Specifically, Section 7 of the ESA requires agencies to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) to ensure that any actions they fund, authorize, permit, or carry out do not jeopardize the continued existence of listed species or adversely affect their designated critical habitats.

Based on preliminary assessments, no known threatened or endangered species, nor their critical habitats, are expected to be impacted by the proposed project activities.

To ensure compliance with ESA regulations, a threatened and endangered species habitat evaluation was conducted in February 2025. This evaluation was informed by the Official Species List from the USFWS Information for Planning and Conservation (IPaC) system, the NMFS Section 7 consultation mapper (Appendix H). The habitat descriptions were provided by the USFWS, Texas Parks and Wildlife Department (TPWD), and published literature. According to the species list, fifteen (15) federally listed species—either threatened (T), endangered (E), potentially threatened (PT), or potentially endangered (PE)—may occur within or near the project area. A detailed table listing these species and their federal status can be found in Table 2. Refer to the IPaC results for detailed species information (Appendix H).

Table 2: Federally listed endangered (E), threatened (T), potentially endangered (PE), and potentially threatened (PT) species within the Action Area

Common Name	Scientific Name	Federal Status	Habitat Presence
Mammals			
West Indian Manatee	*Trichechus manatus*	T	Potential
Birds			
Eastern Black Rail	*Laterallus jamaicensis ssp. Jamaicensis*	T	N
Northern Aplomado Falcon	*Falco femoralis septentrionalis*	E	N
Piping Plover	*Charadrius melodus*	T	N
Rufa Red Knot	*Calidris canatus rufa*	T	N
Cactus Ferruginous Pygmy-owl	*Glaucidium brasilianum*	T	N
Reptiles			
Green Sea Turtle	*Chelonia mydas*	T	Potential
Hawksbill Sea Turtle	*Eretmochelys imbricata*	E	Potential
Kemp's Ridley Sea Turtle	*Lepidochelys kempii*	E	Potential
Loggerhead Sea Turtle	*Caretta caretta*	T	Potential
Clams			
Salina Mucket	*Potamilus metnecktayi*	PE	N
Insects			

Monarch Butterfly	*Danaus plexippus*	PT	N
Plants			
Texas Ayenia	*Ayenia limitaris*	E	N
South Texas Ambrosia	*Ambrosia cheiranthifolia*	E	N
Fishes			
Giant Manta Ray	*Mobula birostris*	T	Potential

Based on the habitat evaluation, the proposed project site does not contain adequate or preferred habitat for any of the species listed in Table 2. Although the Laguna Madre is present within the project site, there is not suitable habitat for foraging or nesting for any federally listed species. Additionally, the silt curtain/fence to be used during construction would prevent any protected species from entering the Action Area.

Effects on Threatened and Endangered Species

No Action Alternative - No effects would be had on endangered species.

Preferred Alternative – Given that there is not suitable habitat for the listed species, no effect to threatened (T), endangered (E), potentially threatened (PT) , or potentially endangered (PE) species would be made. Furthermore, The Interagency Coordination Notice For Letter of Permission (SWG-2022-00301 dated 01-19-2023) states that preliminary indications are that no known threated and or endangered species or their critical habitat will be affected by the proposed work.

Cultural Resources

Internal coordination was carried out with the USACE's chief archaeologist, who has reviewed and approved the relevant documents. The following is current knowledge of the presence or absence of historic properties and the effects of the undertaking upon these properties: The proposed project is of such limited nature and scope that it has no potential to affect historic properties, even if present within the project area.

The project area was also reviewed with reference to the Texas Historical Commission by use of the Texas Historic Sites Atlas. The area of potential effect (APE) does not overlap or come near a historically or culturally significant cultural resource (see Appendix D). The APE is defined as the proposed construction footprint and the area immediately adjacent to the footprint. The Padre J. Nicolas Balli is the closest Historical Marker to the project area (approximately 1.2 km to the south).

Effects on Cultural Resources

No Action Alternative – No effects will be had on cultural resources.

Preferred Alternative– Due to the lack of cultural resources within or near the project footprint, no effects will be had on cultural resources.

Previous Agency Correspondence

The activity has already been approved by all relevant agencies under the Nation Wide Permit and the Individual Permit (SWG-2022-00301)

Public Interest Review Factors

Conservation- The repurposing and improvements to/of existing infrastructure will conserve natural resources through prevention of potential impacts from construction in a new/different area.

Economics - The proposed project will benefit the Texas General School Fund through increased revenue to the TxGLO through increased Lease fees expected because of the area's improvement. Local businesses will also benefit due to the increased traffic influenced by increased access to the adjacent waterways.

Aesthetics - The proposed project will improve aesthetics through the grading and paving of the parking lot area. Improvements also include landscaping with native vegetation, which may also slightly increase food supply for some migratory birds, such as various hummingbird species.

General environmental concerns - The cofferdam will prevent impacts to water quality during construction. The construction of the dock will be performed from land and accessed via unvegetated ground that is not wetland. There will be no deleterious impact to the environment.

Wetlands - The current state of the parking lot has never resembled functional wetlands. Traditional Wetlands will not be affected as a result of this project. No wetland vegetation will be lost.

Historic properties - No historic properties will be affected by this project, as the proposed project considers grading and filling a parking lot that was created from dredge material.

Fish and wildlife values - The proposed project will not likely have any effect on fish or wildlife values.

Flood hazards - This project is expected to decrease flood hazards as the current state of the parking lot is marked by occasional flooding associated with tropical disturbance.

Floodplain values - This project will not decrease the amount of floodplain.

Land use - This project is expected to improve land use, as the site has historically been used as a parking lot, although flooding occasionally prevents this land use during those times. The project will improve the current land use and increase safety. No loss of vegetated wetlands will occur.

Navigation - The project will increase navigation access as there is presently no boat ramp. The parking lot improvements will not impede navigation in the area.

Shore erosion and accretion – The existing bulkhead will prevent erosion or accretion to occur because of this activity.

Recreation - This project has a high recreational value. The purpose of the dock is to support activities related to the boat ramp. There is a lack of public boat ramps that are usable on the bay (Laguna Madre) side of South Padre. While there are several ramps in the vicinity, they are in disrepair, and only the smallest of boats are able to use them. Additionally, the addition of an ADA compliant ramp/dock will allow for more utilization of the facility.

Water supply and conservation - This project will not affect water supply or conservation.

Water quality - this project will not impact the water quality of the adjacent waterways.

Energy needs - This project will help protect access to waterways that are occasionally used by oil and gas companies to reach wells and energy production structures. These structures, such as offshore oil rigs, are often accessed by vessels that use public boating infrastructure to reach these waters.

Food and fiber production - The boat ramp, parking lot will be used by recreational and commercial fisherman. The ramp will give access the productive waters of the Laguna Madre and the Gulf of Mexico which provide commercial fish, crabs, shrimp, and shellfish for food.

Mineral needs - No overwhelming mineral needs will benefit from this project at this time.

The needs and welfare of the people – There is a public need for this project to enhance access to coastal resources and improve the use of existing public infrastructure.

Public Notice

This EA will be submitted to the USFWS for review and approval. After that, the City of South Padre will publish a Public Notice on their website located at http://www.myspi.org and in the local paper, the Valley Morning Star (the largest circulated newspaper in Cameron County) informing people of the link that they can download the EA, and/or the location that they can obtain a physical copy of the EA for review. Once published, the EA will be made available to the public for no less than 30 days, and all comments will be compiled and submitted to the USFWS for review. The USFWS may request that the City respond to comments, or revise and re-publish the EA for another public comment period. The USFWS will determine when the public review period has been adequate and can be closed.

Recommendations for Additional Work

Based on the results of the research outlined in this letter, a review of recent and historic aerial photography, analyses of topographic and geological characteristics associated with the project area, and documented agency coordination, it is understood that the project will not negatively harm the environment as currently planned, thus necessitating no additional work.

References

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Appendix A

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CONSTRUCTION PLANS FOR

SOUTH PADRE ISLAND, TEXAS

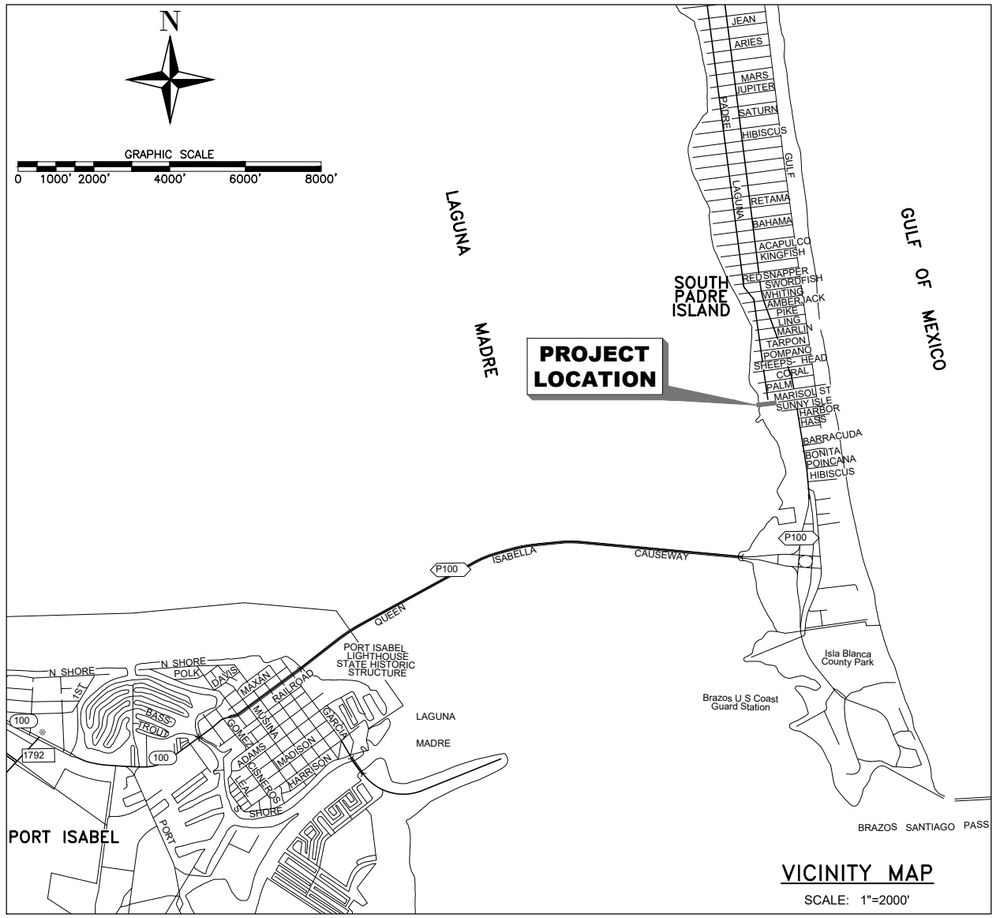
MARISOL BOAT RAMP PROJECT

ITB 2024–SL01

LJA PROJECT No.: C275–21184

TDLR REGISTRATION No. TABS2023004314

LOCATION MAP
SCALE: N.T.S.



VICINITY MAP
SCALE: 1"=2000'

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DECEMBER 2023

PROJECT No.: C275–21184

STATE OF TEXAS — YESENIA SINGLETON — 102398 — LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre Island

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

TITLE SHEET

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

T1

GENERAL NOTES:

1. PROJECT CONTROL INFORMATION:

PROJECT CONTROL IS DRILLED HOLE IN BULKHEAD CAP
NORTHING = 16562723.818
EASTING = 1421444.282
ELEVATION = 4.97

PROJECT CONTROL IS CHISELED 'X' ON CONCRETE INLET
NORTHING = 16562753.491
EASTING = 1421788.232
ELEVATION = 3.20

PROJECT CONTROL IS DRILLED HOLE IN BULKHEAD CAP
NORTHING = 16562731.397
EASTING = 1421734.741
ELEVATION = 5.19

ALL HORIZONTAL INFORMATION SHOWN IS IN N.A.D. 83 DATUM, TEXAS SOUTH ZONE 4205, AS OBSERVED BY GPS. ALL VERTICAL INFORMATION SHOWN IS IN N.A.D. 88 DATUM, U.S. SURVEY FEET.

2. EXISTING UTILITIES AND STRUCTURES:

EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE BASED ON CITY'S GIS MAP AS WELL AS AN ON THE GROUND SURVEY PERFORMED BY LJA ENGINEERING, INC. EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE FOR REFERENCE ONLY AND DO NOT NECESSARILY REPRESENT THE EXACT LOCATION OF SUCH FACILITIES, NOR IS IT IMPLIED THAT ALL EXISTING UTILITIES ARE SHOWN ON THE DRAWINGS. LJA ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR THE EXISTENCE OR LOCATION OF ANY SUBSURFACE UTILITIES OR STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY OWNERS AND LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING WITH ANY CONSTRUCTION OPERATIONS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL UTILITIES AND PRIVATE OR PUBLIC PROPERTY ON OR NEAR THE PROJECT FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES AND PRIVATE OR PUBLIC PROPERTY SHALL BE REMEDIED AND PAID FOR IN WHOLE BY THE CONTRACTOR.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE OR OTHERWISE PROVIDE FOR THE ADJUSTMENT OR RELOCATION OF ANY UTILITIES AS REQUIRED TO COMPLETE THE PROPOSED CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES AS NECESSARY TO IMPLEMENT THE PROPOSED CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE FOR ANY SUCH ADJUSTMENTS OF RELOCATIONS, FORESEEN OR UNFORESEEN.

CONTRACTOR TO REPLACE ALL SIGNS, CULVERTS, FENCES, AND OTHER APPURTENANCES REMOVED DURING CONSTRUCTION. NO SEPARATE PAY.

CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES 48 HOURS PRIOR TO THE START OF CONSTRUCTION:

TEXAS 811
EMERGENCY 911
CITY OF SOUTH PADRE ISLAND – (596) 761–6456
FIRE DEPARTMENT – (596) 761–3040
POLICE DEPARTMENT – (956) 761–5454
PUBLIC WORKS– (956) 761–8159
LAGUNA MADRE WATER DISTRICT (956) 943–2626
ENVIRONMENTAL HEALTH SERVICES (956) 761–8123
LJA ENGINEERING, INC. – (361) 991–8550

3. EXPLORATORY EXCAVATION:

PRIOR TO ANY CONSTRUCTION WHEREVER ON THE PROJECT, CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION TO LOCATE BULKHEAD DEADMAN ANCHORS, WITHOUT DISTURBING THEM, AND OTHER UNDERGROUND UTILITIES.

THE WORK SHALL BE PERFORMED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND CONFLICTS WITH PROPOSED CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER.

CONTRACTOR SHALL THEN PREPARE A SET OF MARKED PLANS AND SUBMIT IT TO THE ENGINEER FOR APPROVAL INDICATING BULKHEAD DEADMAN ANCHORS, THE OWNER OF PIPELINES AND UTILITIES EXCAVATED AND SURVEYED, AS WELL AS THE APPROXIMATE STATION THEREOF, DISTANCE TO THE PROPOSED IMPROVEMENTS AND ELEVATIONS OF THE TOP OF EXISTING PIPELINES AND PROPOSED PROFILE OF NEW IMPROVEMENTS IF DIFFERENT FROM THAT SHOWN ON THE PLANS. THE ENGINEER WILL REQUIRE 10 WORKING DAYS AFTER RECEIPT IN HIS OFFICE OF THE MARKED PLANS TO REVIEW, ANALYZE AND, IF NECESSARY, MAKE CHANGES IN ALIGNMENT AND/OR ELEVATION.

CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM ANY CONSTRUCTION WORK ON THE PROJECT UNTIL ALL EXPLORATORY EXCAVATIONS HAVE BEEN MADE IN THEIR ENTIRETY, THE RESULTS THEREOF REPORTED TO THE ENGINEER AND UNTIL CONTRACTOR RECEIVES ENGINEER'S APPROVAL OF REPORT.

4. RIGHT OF ENTRY:

CONTRACTOR MAY NEED TO OBTAIN A TEMPORARY RIGHT OF ENTRY OR CONSTRUCTION EASEMENT FROM ADJACENT PROPERTY IN ORDER TO INSTALL BOAT RAMP AT LOT LINE.

5. STORM WATER POLLUTION PREVENTION:

CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SILT AND DEBRIS FROM CONSTRUCTION OPERATIONS DOES NOT FLOW ONTO THE ADJACENT PRIVATE PROPERTY NOR ENTER INTO ADJACENT DRAINAGE AND IRRIGATION DITCHES AND CANALS AS SHOWN IN THE STORM WATER MEASURES AND DETAILS. THE PROJECT SITE IS LESS THAN ONE (1) ACRE AND IS NOT PART OF LARGER COMMON PLAN OF DEVELOPMENT THEREFORE A NOTICE OF INTENT (NOI) PERMIT IS NOT REQUIRE.

6. SAFETY:

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF HIS EMPLOYEES AND THE PUBLIC DURING ALL PHASES OF THE CONSTRUCTION. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS.

TRENCHING OPERATIONS SHALL COMPLY WITH WORKER SAFETY REQUIREMENTS FOR EXCAVATION AND TRENCHING OPERATIONS. WORKER SAFETY IN EXCAVATIONS AND TRENCHES SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS 29 CFR PART 1926 SUBPART P–EXCAVATIONS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND NOT THE TEXAS FACILITY COMMISSION OR CONSULTING ENGINEER, TO DETERMINE AND MONITOR SPECIFIC APPLICABILITY OF THE SAFETY SYSTEM TO THE FIELD CONDITIONS. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE TEXAS FACILITY COMMISSION AND CONSULTING ENGINEER FROM ANY AND ALL DAMAGES AND COSTS THAT MAY RESULT FROM FAILURE OF METHODS OR EQUIPMENT USED BY THE CONTRACTOR TO PROVIDE FOR WORKER SAFETY.

DURING CONSTRUCTION, CONTRACTOR SHALL MAINTAIN A SAFE DISTANCE AWAY FROM EXISTING LINES TO KEEP THE EXISTING LINES FROM COLLAPSING.

7. EARTHWORK:

AREAS THAT RECEIVE FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% OF THE STANDARD PROCTOR DENSITY PER ASTM D–698 AND A MOISTURE CONTENT WITHIN +3% TO –1% OF OPTIMUM. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8" OF UNDISTURBED SOIL FREE OF DEBRIS AND ORGANIC MATERIALS. TEST REPORTS FOR COMPACTED FILL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

CONTRACTOR TO REMOVE ALL EXCESS SPOIL, STRIPPED MATERIAL AND DEBRIS WITHIN LIMITS OF PROPOSED CONSTRUCTION OR AS SHOWN ON PLANS. DISPOSAL SHALL BE CONTRACTOR'S RESPONSIBILITY.

ALL TESTING SHALL BE PROVIDED BY THE OWNER.

8. PIPE FOR NEW WATERLINES:

PIPE FOR NEW WATERLINES SHALL CONSIST OF PVC PIPE WITH A DIMENSION RATIO (DR) OF 18 AND SHALL MEET THE REQUIREMENTS OF AWWA C900 AND THE STANDARD DETAILS AND SPECIFICATIONS.

ALL LINES TO BE INSTALLED SO AS TO NOT EXCEED THE MANUFACTURER'S MAXIMUM RECOMMENDED DEFLECTION PER JOINT. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATION OF THE MINIMUM DEFLECTION DISTANCES REQUIRED FOR UTILITY CLEARANCES.

CONTRACTOR TO INSURE A "DRY DITCH" CONDITION PRIOR TO THE PLACEMENT OF WATERLINES.

CONTRACTOR TO MAINTAIN ADEQUATE PIPE, MISCELLANEOUS FITTINGS, SUPPLIES, AND PUMPS ON THE PROJECT TO INSURE WATER LINE BREAKS WILL BE REPAIRED RAPIDLY. CONTRACTOR SHALL OPERATE NO VALVES WITHOUT CONSENT OF THE LAGUNA MADRE WATER DISTRICT.

9. COORDINATION:

ALL PUBLIC UTILITIES WORK SHALL BE COORDINATED WITH THE LAGUNA MADRE WATER DISTRICT'S INSPECTOR AND ENGINEER AND SHALL BE PERFORMED IN ACCORDANCE WITH THEIR REQUIREMENTS.

10. REPAIR OF DAMAGED FACILITIES:

CONTRACTOR SHALL REPAIR OR REPLACE, AT CONTRACTOR'S EXPENSE, ANY AND ALL EXISTING UTILITIES, DRAINAGE FACILITIES, ELECTRICAL DUCT BANKS OR CABLES, PAVEMENTS, SIDEWALKS, CURBS, PIPELINES, SIGNS, LIGHTS, FENCES, GATES, PROPERTY PINS OR OTHER ITEMS DAMAGED OR DISTURBED BY CONTRACTOR'S OPERATIONS.

ANY DAMAGE TO EXISTING PAVEMENT, DRAINAGE, UTILITIES, OR EXISTING STRUCTURES SHALL BE REPAIRED TO PRE–CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.

11. PERMITS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE THE PROPOSED CONSTRUCTION.

A PERMIT IS REQUIRED FOR ANY PUBLIC UTILITY CONSTRUCTION DONE IN A PUBLIC RIGHT OF WAY OR PUBLIC EASEMENT (WATER CONNECTION). CONTACT LAGUNA MADRE WATER DISTRICT FOR WATER SERVICES CONNECTION AND TESTING REQUIRED.

12. MATERIALS AND WORKMANSHIP:

ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT STANDARD SPECIFICATIONS. ANY DEVIATION OF THESE PLANS AND SPECIFICATIONS FROM SUCH STANDARDS AND PRACTICES THAT WILL AFFECT THE PROJECT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AS SOON AS POSSIBLE FOR REVIEW AND ACTION.

13. ENGINEER'S RESPONSIBILITY DURING CONSTRUCTION:

THE ENGINEER OR ENGINEER'S REPRESENTATIVE SHALL BE AT THE SITE SOLELY FOR THE PURPOSE OF PROVIDING GENERAL OBSERVATION OF THE CONTRACTOR'S COMPLIANCE WITH THE DESIGN, PROGRESS REVIEW AND DESIGN PROBLEM RESOLUTION. THE ENGINEER SHALL NOT SUPERVISE THE CONSTRUCTION OR BE RESPONSIBLE FOR SAFETY PRECAUTIONS OR COMPLIANCE.

14. CONCRETE NOTES:

ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI–318 BUILDING CODE. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED. ALL REINFORCING STEEL MATERIAL TO BE A615–GRADE 60 (EPOXY COATED). ALL REINFORCING STEEL PLACEMENT AND SPLICING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI–318 BUILDING CODE. ALL BARS ARE TO BE SUPPORTED IN THE FORMS AND SLAB WITH CHAIRS AND TIED AT EVERY OTHER INTERSECTION. ALL CONDUIT, GROUND WIRES, DRAINS, ETC., ARE TO BE IN PLACE PRIOR TO POURING CONCRETE. ALL REINFORCING STEEL SHALL HAVE 3" MIN. CLEAR COVER UNLESS NOTED OTHERWISE.

15. PIPE FOR WASTEWATER LINES:

PIPE AND FITTINGS FOR NEW WATER SERVICE LINES SHALL MEET THE REQUIREMENTS OF LAGUNA MADRE WATER DISTRICT, STANDARD DETAILS AND SPECIFICATIONS.

ALL WATER LINES UNDER PROPOSED PAVEMENT, TO BE BACKFILLED ACCORDING TO DETAIL SHEETS.

16. TRAFFIC CONTROL:

IF TRAFFIC CHANNELIZATION AND BARRICADES ARE REQUIRED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

CONTRACTOR SHALL PROVIDE PROTECTIVE DEVICES SUCH AS SIGNS, LIGHTS, AND SIGNALS FOR THE SAFETY OF THE PUBLIC AND WORKERS, AS REQUIRED.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND SAFETY OF THE WORK, WORKERS, SUBCONTRACTORS, MATERIALS AND EQUIPMENT.

TEMPORARY TRAFFIC CONTROL PLANS AND TRAFFIC CONTROL DEVICES SHALL CONFORM WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST EDITION (EDITION 2011, REVISION 2, OCTOBER 2014, AS OF THE DATE OF THESE PLANS).

THE CONTRACTOR SHALL SUBMIT THE TEMPORARY TRAFFIC CONTROL PLANS TO THE CITY'S PUBLIC WORKS DEPARTMENT (STREET OPERATIONS) FOR APPROVAL AT LEAST 14 WORKING DAYS PRIOR TO THE ANTICIPATED START DATE.

THE CONTRACTOR SHALL PROVIDE A 72 HOUR NOTICE TO THE CITY, LJA ENGINEERING, AS WELL AS AFFECTED BUSINESSES AND RESIDENCES, PRIOR TO IMPLEMENTING THE TEMPORARY TRAFFIC CONTROL PLAN AND COMMENCING CONSTRUCTION ACTIVITIES.

17. TESTING:

FOR ALL NEW WATERLINES, CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING AND BACTERIOLOGICAL (STERILIZATION) TESTING ON WATERLINES IN ACCORDANCE WITH THE SPECIFICATIONS. ALL WATER DISCHARGE MUST BE DECHLORINATED IN ACCORDANCE WITH TCEQ AND NPDES REGULATIONS.

18. BOAT RAMP EXCAVATION:

IN THE EVENT THE CONTRACTOR UTILIZES ANY PORTION OF THE PROPOSED WINGWALL/TOE WALL AS PART OF HIS COFFERDAM, HE SHALL BE RESPONSIBLE FOR THE STRUCTURAL ADEQUACY OF ALL CONSTRUCTION WHEN THE RAMP IS DEWATERED FOR CONSTRUCTION PURPOSES. HE SHALL BE RESPONSIBLE FOR PROVIDING A CERTIFIED SKETCH AND DESIGN, PREPARED BY AN ENGINEER LICENSED IN THE STATE OF TEXAS, DELINEATING ANY AND/OR ALL BRACING REQUIRED, AND SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REMOVAL OF THE COFFERDAM AS NECESSARY TO ADEQUATELY PROVIDE CONTINUOUS DEWATERING OF THE BOAT RAMP AREA DURING PLACEMENT OF THE SUB–BASE AND CONCRETE AND CURING OF THE CONCRETE.

EXCAVATION OF THE BOAT RAMP'S SUBGRADE MATERIAL SHALL BE PERFORMED TO THE REQUIRED DEPTH, AS SHOWN ON THE CONTRACT DRAWINGS. SLOPES SHALL BE MAINTAINED AS NECESSARY OR AS OTHERWISE DIRECTED OR APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE EXCAVATED SLOPES TO THE REQUIRED LIMITS UNTIL PLACEMENT OF THE #57 STONE BASE MATERIAL IS COMPLETED. PRIOR TO INITIATION OF EXCAVATION, THE CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR APPROVAL HIS PROPOSED METHOD OF EXCAVATION.

19. GEOTECHNICAL ENGINEERING REPORT:

IN THE BACK OF THE OF THE CONTRACT DOCUMENTS, A COPY OF THE GEOTECHNICAL ENGINEERING REPORT CALLED "BOAT RAMP AND PARKING LOT PROJECT"; CAN BE FOUND FOR REFERENCE PURPOSES.

PROJECT No.: C275–21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

GENERAL NOTES

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

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LEGEND

EXISTING LEGEND:

BOTTOM OF BANK		TOP OF BANK	
CONCRETE		BUILDING CORNER	
EDGE OF ASPHALT		IRON ROD FOUND	
WOODEN FENCE		WATER VALVE	WV
CHAIN FENCE		WATER METER	W
OVERHEAD ELECTRIC	OHE	WATERLINE TAP	
UNDERGROUND COMMS	UGT	WATERLINE	WL
WASTEWATER LINE	WW	TELEPHONE PEDESTAL	
MAJOR CONTOUR		TELECOMMUNICATION BOX	COM
MINOR CONTOUR		LIGHT POLE	
POWER POLE		GUY WIRE	
SPOT ELEVATION	16.76	EBOX	
TRAFFIC SIGN		DRILL HOLE	
WASTE WATER MANHOLE	WW		
STORM WATER MANHOLE	ST		

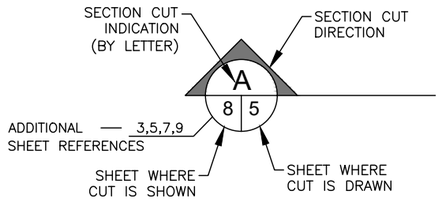
PROPOSED LEGEND:

BULKHEAD	
LANDSCAPE	
PAVERS	
BOAT RAMP	
ADA RAMP	
PARKING LOT	
DECK	
CURB & GUTTER	
STRIPING	
WATERLINE	2 WL
PROPOSED CONTOUR	10
EXPANSION JOINT	EJ
CONTROL JOINT	CJ
EXISTING ELEVATION	EX
TOP OF CONCRETE	TC
TOP OF PAVERS	TP
TOP OF BULKHEAD	BK
BACK OF CURB	BOC
LANDING	L
PROPOSED LIGHT POLE	

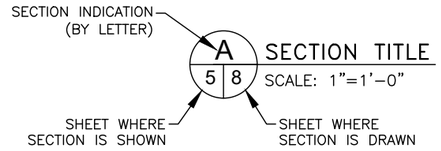
ABBREVIATIONS

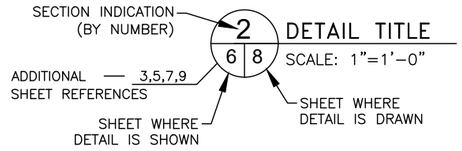
ASPHT – ASPHALT PAVEMENT
C&G – CURB AND GUTTER
CONC – CONCRETE
C TO C – CENTER TO CENTER
ELEV – ELEVATION
EXIST – EXISTING
G – GUTTER
LP – LIGHT POLE
LT – LEFT
MIN. – MINIMUM
MAX. – MAXIMUM
NG – NATURAL GROUND
O.C. – ON CENTER
OCEW – ON CENTER EACH WAY
PVMT – PAVEMENT
R – RADIUS
S – SLOPE
R.O.W. – RIGHT OF WAY
RCP – REINFORCED CONCRETE PIPE
RIM – ELEVATION AT MANHOLE COVER
RT – RIGHT
S.E.T. – SAFETY END TREATMENT
ST – STORM WATER
S/W – SIDEWALK
TC 00.00 – TOP OF CONCRETE ELEVATION
TS – TRAFFIC SIGNAL
TYP – TYPICAL
WT – WALKING TRAIL
WTR – WATER
WW – WASTEWATER

TYPICAL SECTION AND DETAIL SYMBOLS



SECTION CUTS





NORTH ARROW

TESTING SCHEDULE *

DESCRIPTION	RATE
SOILS:	
STANDARD PROCTOR – TRENCH BACKFILL	PER MATERIAL SOURCE
STANDARD PROCTOR – SUBGRADE	PER STREET/MATERIAL
DENSITIES – SUBGRADE (CONCRETE PAVEMENT)	PER 200 LF/LANE/LIFT
DENSITIES – SUBGRADE (DRIVEWAYS)	PER 2 DRIVEWAYS
DENSITIES – SUBGRADE (SIDEWALKS)	PER 5,000 SF
DENSITIES – BEHIND CURB AND GUTTER	PER 200 LF
FLEXIBLE BASE:	
SIEVE ANALYSIS	PER 3,000 CY
ATTERBURG LIMITS	PER 3,000 CY
MODIFIED PROCTOR	PER 3,000 CY
L.A. ABRASION	PER 3,000 CY
CBR (STANDARD)	PER MATERIAL SOURCE
WET BALL MILL TEST	PER MATERIAL SOURCE
TRIAXIAL TEST	PER MATERIAL SOURCE
DENSITIES OF COMPACTED BASE (CONCRETE STREET)	PER 200 LF/LANE/LIFT
DENSITIES OF COMPACTED BASE (C&G)	PER 200 LF C&G
CONCRETE:	
(UNCONFINED COMPRESSION, 7, 14, & 28 DAY)	
CURB & GUTTER / CURB	PER 500 LF C&G / CURB
SIDEWALK AND CURB RAMPS	PER 4,000 SF
RIPRAP, APRONS & S.E.T.s	PER 4,000 SF
RIGID CONCRETE PAVEMENT:	
COMPRESSION STRENGTH (7 & 28 DAY)	PER 2,500 SY OR DAY
FLEXURAL (BEAM) STRENGTH (7 & 28 DAY)	PER 2,500 SY OR DAY
AIR CONTENT	PER 2,500 SY OR DAY
SLUMP	PER 2,500 SY OR DAY
NOTE: THE ENINGEER MAY REQUIRE ADDITIONAL TESTING AS HE/SHE DEEMS NECESSARY.	

1. THE ABOVE TESTING RATES ARE ONLY ANTICIPATED GUIDELINES. THE ENGINEER RESERVES THE RIGHT TO CONDUCT ADDITIONAL TESTING AT THE ENGINEER'S DISCRETION. RE-TEST FOR FAILURES ARE NOT INCLUDED.
2. MOISTURE CONTENTS TO BE INCLUDED WITH DENSITY TEST.
3. IN THE EVENT OF FAILURES, ADDITIONAL TESTS WILL BE REQUIRED. IF EXCESSIVE RAIN OR DRY PERIOD OCCURS ON A PREVIOUSLY TESTED SECTION, THE CITY MAY ORDER RE-TESTS AS NECESSARY.

PROJECT No.: C275-21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

LEGEND, ABBREV., QUANTITY & TESTING SCHEDULE

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275-21184

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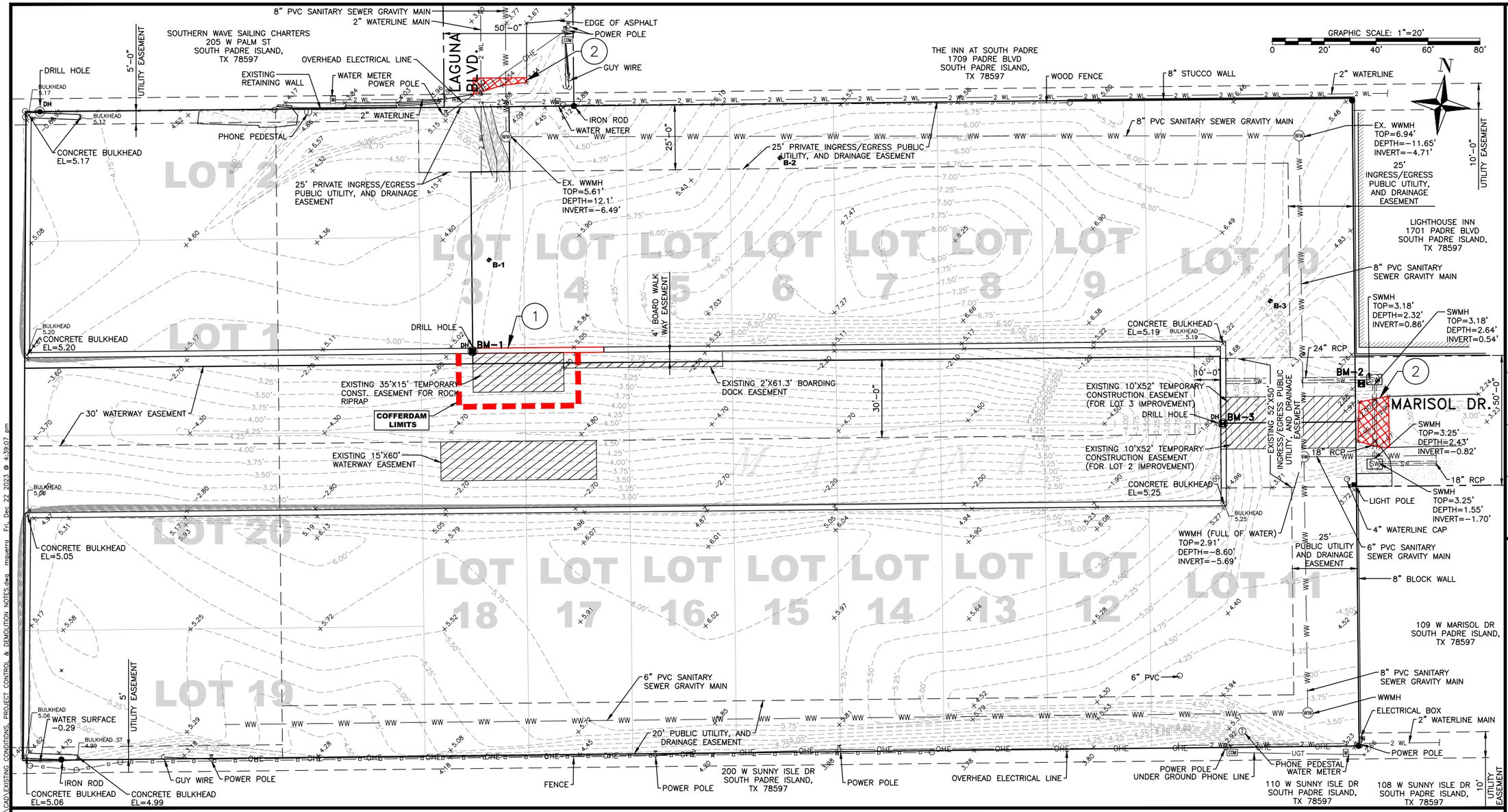

PROJECT CONTROL – MARISOL BOAT RAMP				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
☒ BM–1	16562723.818	1421444.282	4.97	DRILLED HOLE IN BULKHEAD CAP
☒ BM–2	16562753.491	1421788.232	3.20	CHISELED 'X' ON INLET
☒ BM–3	16562731.397	1421734.741	5.19	DRILLED HOLE IN BULKHEAD CAP

NOTES:

1. ALL HORIZONTAL INFORMATION SHOWN IS IN N.A.D. 83 DATUM, TEXAS SOUTH ZONE 4205, AS OBSERVED BY GPS.
2. ALL VERTICAL INFORMATION SHOWN IS IN N.A.D. 88 DATUM, U.S. SURVEY FEET.

DEMOLITION NOTES:

(1) REMOVE 51 LF OF CONCRETE BULKHEAD.

(2) REMOVE 32 SY OF BITUMINOUS SURFACE.

GENERAL NOTES:

1. INSTALL COFFERDAM PRIOR TO DEMOLITION. CONTRACTOR SHALL MINIMIZE TEMPORARY IMPACT TO WETLAND AREA/SEAGRASS. SEE PERMITTING.
2. ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE CONSTRUCTION AREA AND WHILE IN WATER DEPTHS WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR–FOOT CLEARANCE FROM THE BOTTOM.

PROJECT No.: C275–21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER
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South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

EXISTING CONDITIONS, PROJECT CONTROL & DEMOLITION NOTES

SCALE: AS NOTED
DRAWN BY: MF
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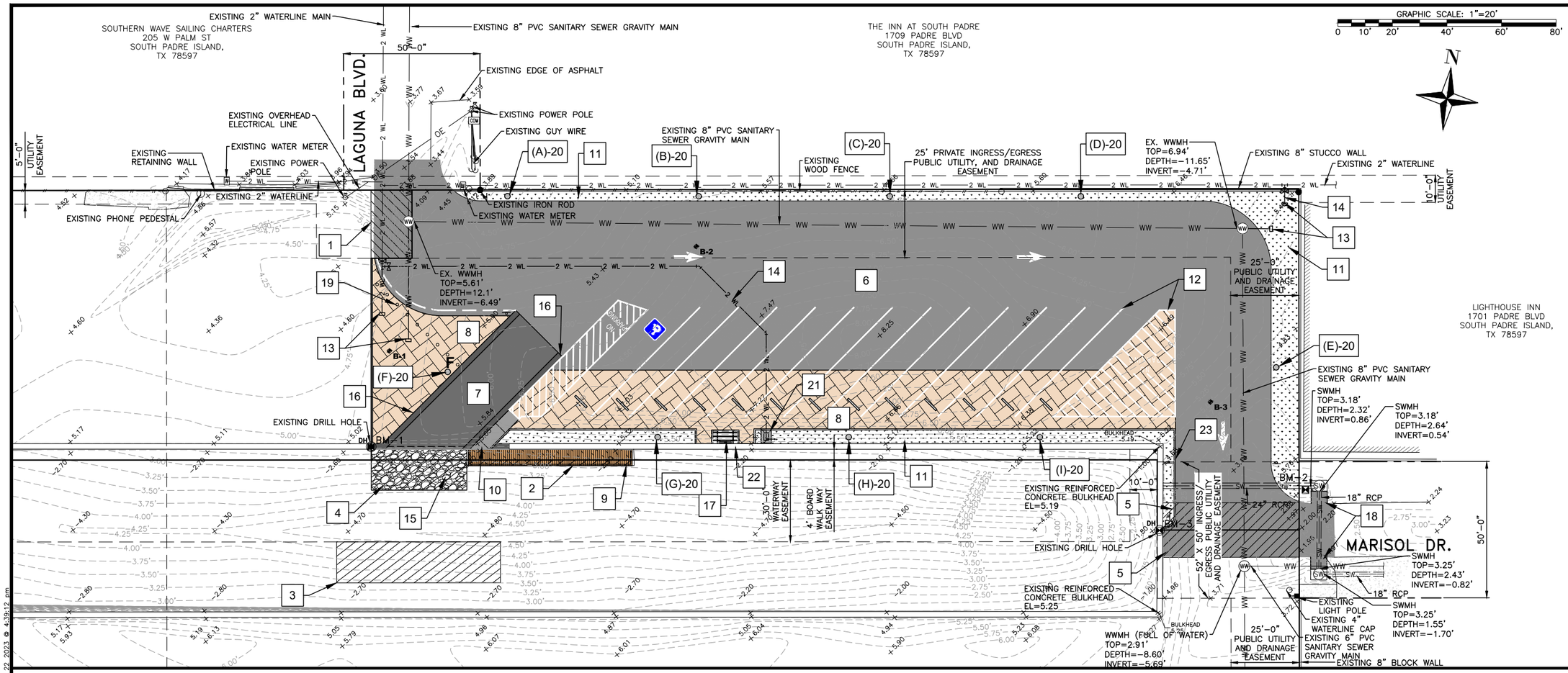


DRILLED SHAFT FOUNDATION LOCATIONS		
LOCATION ID	NORTHING	EASTING
A	16562821.44	1421481.77
B	16562830.63	1421551.21
C	16562839.81	1421620.63
D	16562849.00	1421690.06
E	16562796.25	1421769.29
F	16562754.71	1421468.53
G	16562741.13	1421547.90
H	16562750.32	1421617.34
I	16562759.50	1421686.76

NOTES:

1. PROPOSED DRILLED SHAFT FOUNDATIONS
2. (A) INDICATES ID.

CONSTRUCTION NOTES:

1. EXISTING 25' PRIVATE INGRESS/EGRESS PUBLIC UTILITY, AND DRAINAGE EASEMENT.
2. EXISTING 2'X61.3' BOARDING DOCK EASEMENT.
3. EXISTING 15'X60' WATERWAY EASEMENT.
4. EXISTING 35'X15' TEMPORARY CONSTRUCTION EASEMENT FOR ROCK RIPRAP.
5. EXISTING 10'X52' TEMPORARY CONSTRUCTION EASEMENT.
6. PROPOSED 2,036 SY OF 6" REINFORCED CONCRETE PARKING LOT (SEE SHEET C3, C10 & C11 FOR DETAILS).
7. PROPOSED 133 SY OF 6" REINFORCED CONCRETE BOAT RAMP (SEE SHEET C4, C10 & C11 FOR DETAILS).
8. PROPOSED 789 SF OF 4" PAVERS (SEE SHEET C9 FOR DETAILS).
9. PROPOSED 360 SF (6' X 60') OF WOODEN ATTENDANT DOCK (SEE SHEET C19 FOR DETAILS).
10. PROPOSED 95 SF OF 4" REINFORCED CONCRETE ADA RAMP (SEE SHEET C7 FOR DETAILS).
11. PROPOSED 393 SY OF SOD.
12. PROPOSED 1,425 LF. OF PARKING LOT STRIPING (SEE SHEET C6-C8 FOR DETAILS).
13. PROPOSED UTILITIES STUB-OUTS (SEE SHEET C12-C13 FOR DETAILS)
14. PROPOSED 254 LF OF 2" (SCH 80) WATER LINE (SEE SHEET C14-C16 FOR DETAILS)
15. PROPOSED 36 CY OF ROCK RIPRAP SEE SHEET C4 & C10 FOR DETAILS)
16. PROPOSED 132 LF OF REINFORCED CONCRETE BULKHEAD (SEE SHEET C11 FOR DETAILS)
17. PROPOSED FISH CLEANING STATION (SEE SHEET C17-C18 FOR DETAILS)
18. PROPOSED REINFORCED CONCRETE RIPRAP (SEE SHEET C11 FOR DETAILS)
19. PROPOSED BOLLARDS (SEE SHEET C11 FOR DETAILS)
20. PROPOSED DRILLED SHAFT FOUNDATIONS (A-I) FOR LIGHT POLES (SEE SHEET C9 FOR DETAILS)
21. PROPOSED BACKFLOW PREVENTER (SEE SHEET C14-C16 FOR DETAILS)
22. PROPOSED 1" (SCH 80) WATERLINE, HOSE BIB, AND RELATED APPURTENANCES (SEE SHEET C14-C16 FOR DETAILS)
23. PROPOSED 38 LF OF 6" HEADER CURB (SEE SHEET C10 FOR DETAILS)

REVISION NO.	DATE	BY	DESCRIPTION

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

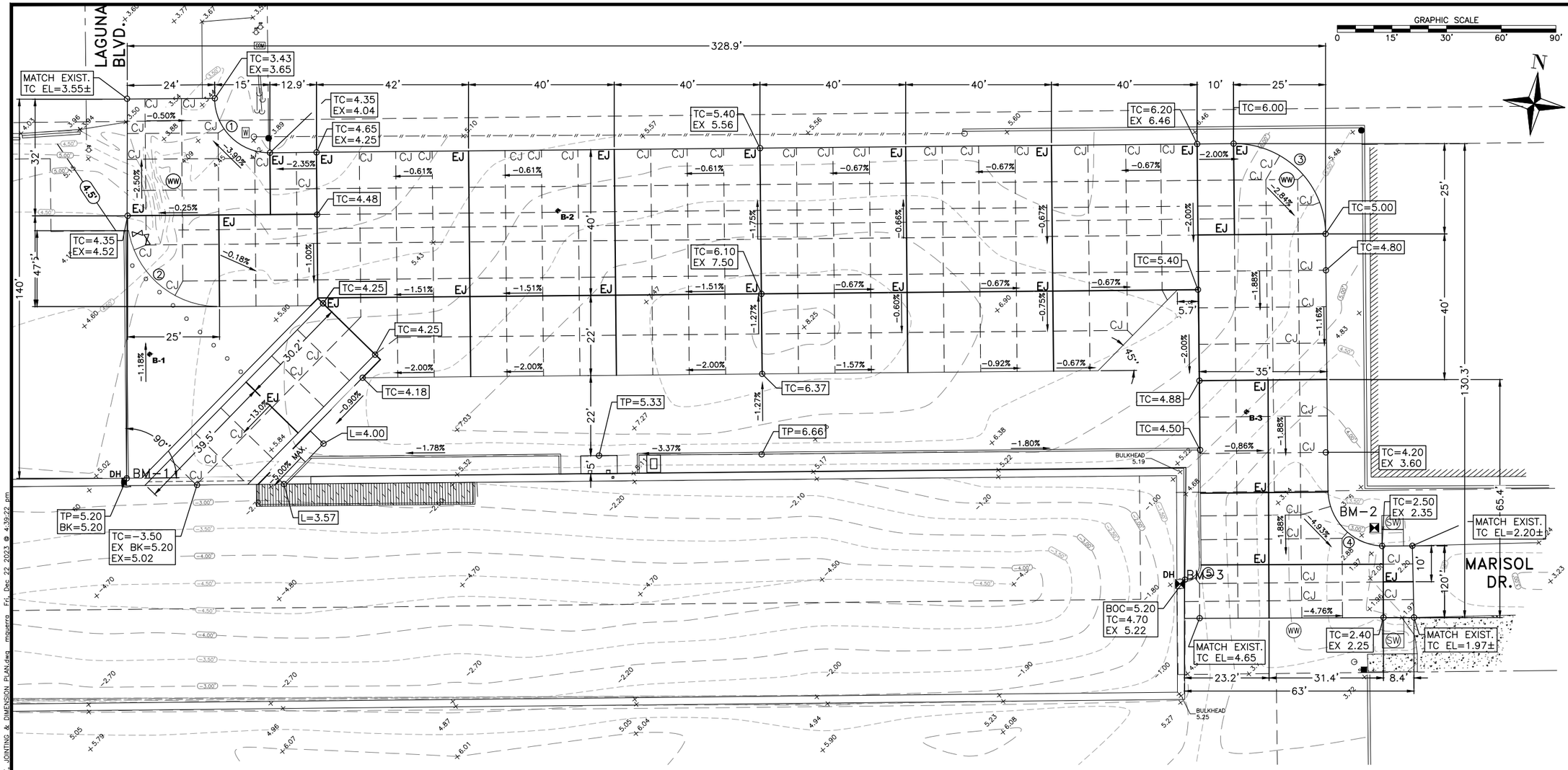
MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

PROPOSED SITE PLAN

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275-21184

C2
24

R:\CLIENTS\CITY OF SOUTH PADRE - 2753\21184 - Marisol Boat Ramp Project\CAD\PROPOSED SITE PLAN.dwg maguerra Fri, Dec 22, 2023 @ 4:39:12 pm



PROPOSED LEGEND:

4.5'	PROPOSED CONTOUR
EJ	EXPANSION JOINT
CJ	CONTROL JOINT
EX	EXISTING ELEVATION
TC	TOP OF CONCRETE
TP	TOP OF PAVERS
BK	TOP OF BULKHEAD
BOC	BACK OF CURB
L	LANDING

CURVE DATA CHART				
CURVE NUMBER	DELTA	RADIUS	TANGENT	LENGTH
①	90d29'21"	15'	15.13'	23.69'
②	81d3'43"	25'	21.38'	35.37'
③	90d0'0"	25'	25'	39.27'
④	85d44'30"	15.59'	14.47'	23.33'
⑤	92d10'57"	4.5'	4.67'	7.24'

NOTES:

1. PROPOSED WATER VALVE AND EXISTING WASTEWATER MANHOLE RIM AND COVERS TO BE ADJUSTED TO PROPOSED CONCRETE PAVEMENT FINAL GRADE.

PROJECT No.: C275-21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER
December 22, 2023

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South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

GRADING, DRAINAGE, JOINTING & DIMENSION PLAN

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

REVISION NO. | DATE | BY | DESCRIPTION

C3

25

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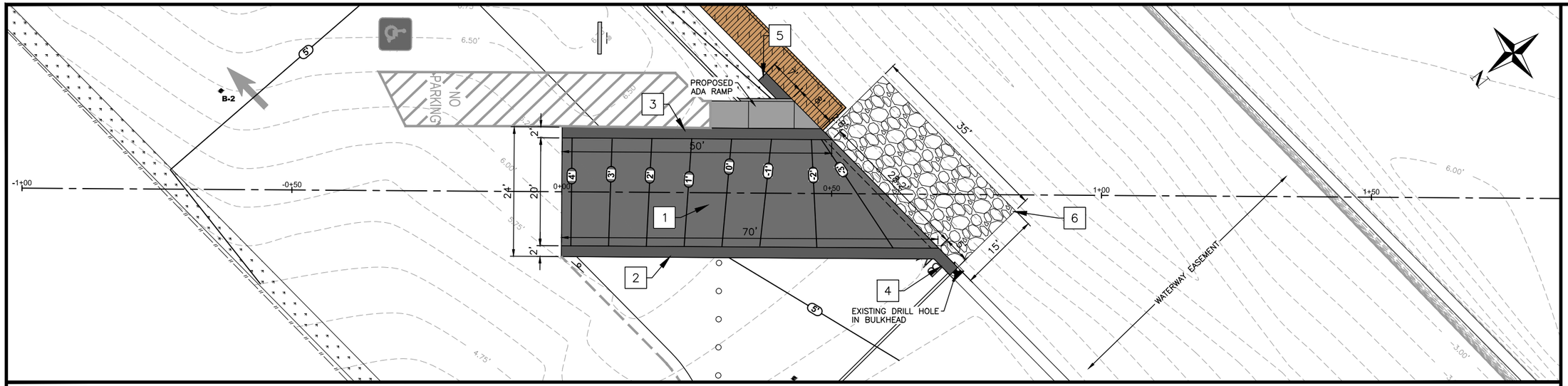
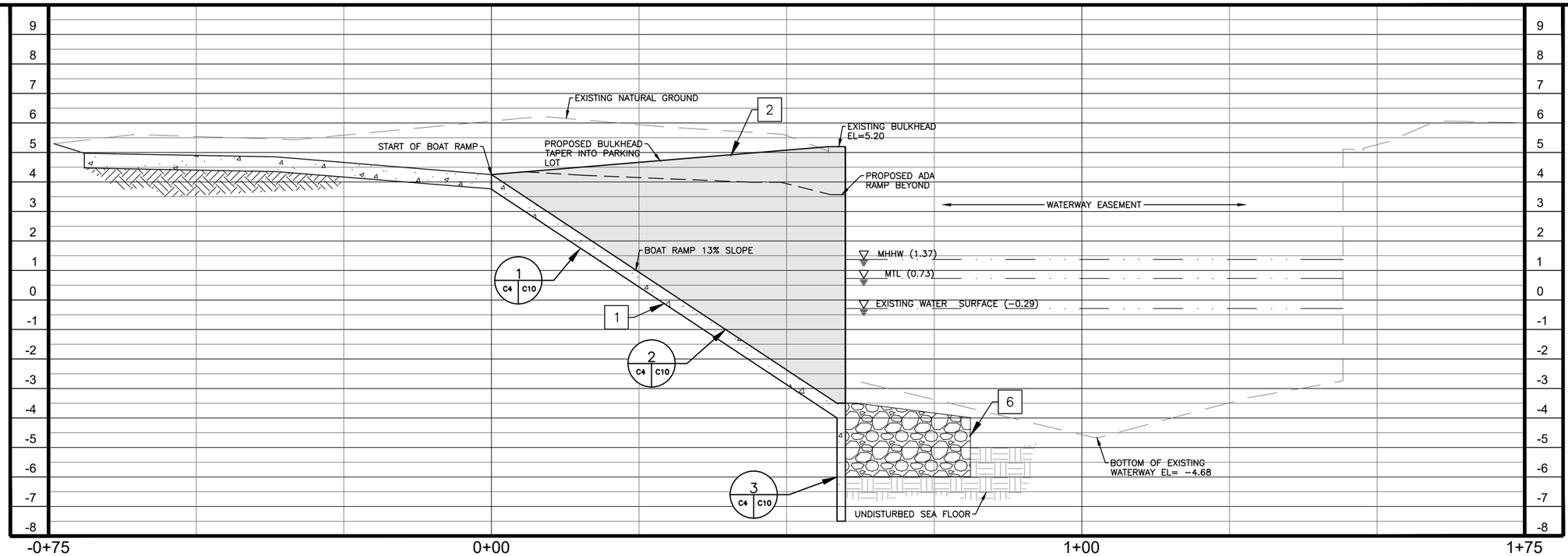


HORIZONTAL GRAPHIC SCALE
0 10' 20' 30'

VERTICAL GRAPHIC SCALE
0 2' 4' 6'

MARISOL BOAT RAMP
PROPOSED PLAN & PROFILE



CONSTRUCTION NOTES:

1. PROPOSED 133 SY OF 6" CONCRETE BOAT RAMP (SEE SHEET C10 & C11 FOR DETAILS).
2. PROPOSED 70 LF OF CONCRETE BULKHEAD TAPERED FROM EL: 5.20 TO 4.25 (SEE SHEET C11 FOR DETAILS)
3. PROPOSED 50 LF OF CONCRETE BULKHEAD TAPERED FROM EL: 5.20 TO 4.25 (SEE SHEET C11 FOR DETAILS)
4. PROPOSED 5 LF OF CONCRETE BULKHEAD EL= 5.20 (SEE SHEET C11 FOR DETAILS)
5. PROPOSED 7 LF OF CONCRETE BULKHEAD EL= 5.20 (SEE SHEET C11 FOR DETAILS)
6. PROPOSED 36 CY OF ROCK RIPRAP (SEE DETAIL 1 SHEET C10 FOR DETAILS)

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LICENSED PROFESSIONAL ENGINEER
December 22, 2023

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South Padre ISLAND

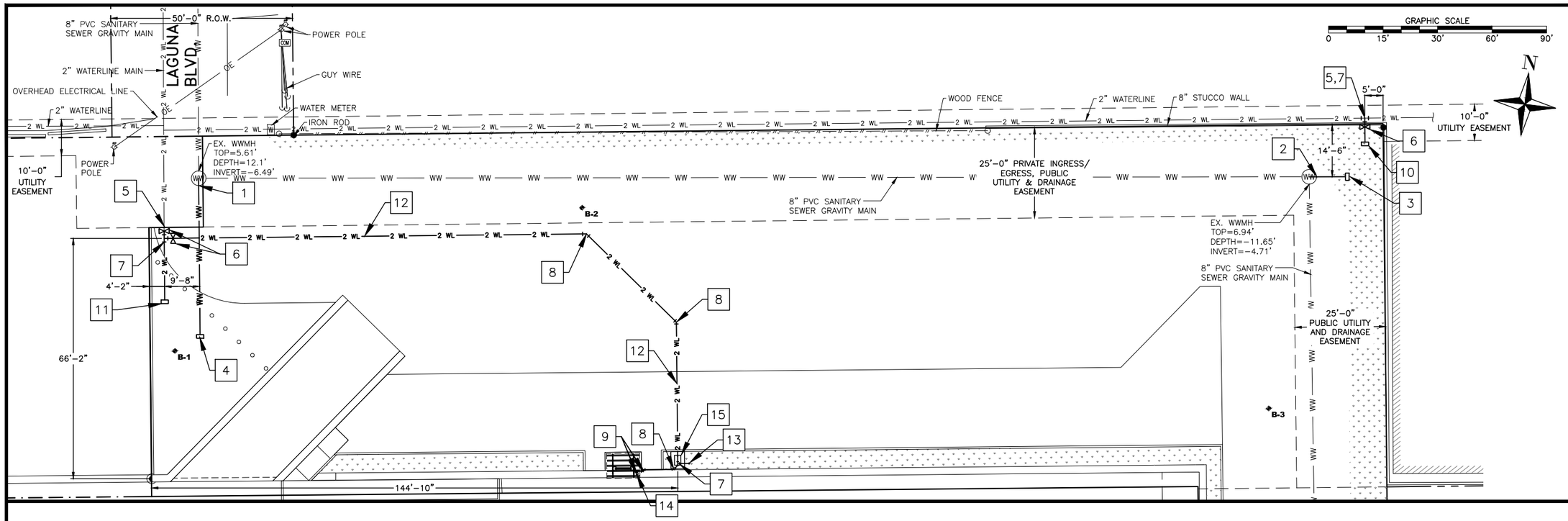
REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

BOAT RAMP PLAN & PROFILE

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

C4



GENERAL NOTES:

1. CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER 2 DAYS (48 HOURS) IN ADVANCE PRIOR TO COMMENCING DRIVEWAY REPAIR CONSTRUCTION.
2. THE EXISTING WASTEWATER SERVICE TIE–IN FLOWLINE IS BASED OFF OF THE APPROXIMATE BURIAL DEPTH THAT WAS FIELD VERIFIED BY LJA. WASTEWATER TIE–IN FLOWLINE SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE WASTEWATER LINE. THE CONTRACTOR SHALL VERIFY THE CONDITION AND PIPE MATERIAL OF THE EXISTING WASTEWATER SERVICE.
3. ALL PROPOSED SERVICE TAPS SHALL BE MADE BY THE LAGUNA MADRE WATER DISTRICT.
4. CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
5. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN UNANTICIPATED UTILITY CONFLICTS ARISE AND IF THERE APPEARS TO BE EXISTING LEAKAGE FROM THE UNDERGROUND UTILITIES.
6. ALL ELEVATIONS SHOWN ARE IN FEET, UNLESS OTHERWISE STATED.
7. WHERE THE PROPOSED WATERLINE CROSSES OVER THE EXISTING WASTEWATER SERVICE:
   - 7.1. THERE SHALL BE A MINIMUM UNDISTURBED HORIZONTAL SEPARATION DISTANCE OF 4–FEET FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE, AND A VERTICAL SEPARATION OF 12–INCHES.
   - 7.2. CASING FOR THE PROPOSED WATERLINE MAY BE REQUIRED IF THE EXISTING WASTEWATER LINE PIPE MATERIAL DOES NOT HAVE A PRESSURE RATING OF AT LEAST 150 PSI.
8. SEE SHEETS C12–C16 FOR WASTEWATER LINE DETAILS AND WATER LINES DETAILS.
9. CONTRACTOR SHALL VERIFY FINAL RIM AND COVER ELEVATIONS OF EXISTING WASTEWATER MANHOLE OR PROPOSED WATER VALVE.
10. SEE SHEETS E1–E2 FOR ELECTRICAL DETAILS

CONSTRUCTION NOTES:

1. PROPOSED 4" WASTEWATER SERVICE CONNECTION TIE–IN WITH DROP CONNECTION TO EXISTING WASTEWATER MANHOLE. ADJUST RIM AND COVER TO PROPOSED FINISHED GRADE: PROP RIM: 4.15 PROP SERVICE CONNECTION INV: 0.10.
2. PROPOSED 4" WASTEWATER SERVICE CONNECTION TIE–IN WITH DROP CONNECTION TO EXISTING WASTEWATER MANHOLE. ADJUST RIM AND COVER TO PROPOSED FINISHED GRADE: PROP RIM: 5.46 PROP SERVICE CONNECTION INV: 1.31.
3. PROPOSED 10 LF OF 4" ASTM D–3034 PVC (SDR 26) @ 1.5% MINIMUM SLOPE WASTEWATER LINE WITH END CAP (MINIMUM 4' COVER).
4. PROPOSED 44 LF OF 4" ASTM D–3034 PVC (SDR 26) @ 1.5% MINIMUM SLOPE WASTEWATER LINE WITH END CAP (MINIMUM 4' COVER).
5. PROPOSED 2" (SCH 80) WATERLINE TAP INTO EXISTING 2" PVC WATERLINE (TOTAL: 2).
6. PROPOSED 2" WATER VALVE (TOTAL: 3).
7. PROPOSED 2" X 2" X 2" TEE (TOTAL: 3).
8. PROPOSED 2" 45° BEND (TOTAL: 3).
9. PROPOSED 2" 90° BEND (TOTAL: 6).
10. PROPOSED 7 LF OF 2" (SCH 80) WATERLINE WITH END CAP (MINIMUM 3' COVER).
11. PROPOSED 20 LF OF 2" (SCH 80) WATERLINE WITH END CAP (MINIMUM 3' COVER).
12. PROPOSED 224 LF OF 2" (SCH 80) WATERLINE (MINIMUM 3' COVER).
13. PROPOSED 3 LF OF 2" (SCH 80) WATERLINE WITH END CAP (MINIMUM 3' COVER).
14. PROPOSED HOSE BIB.
15. BACK FLOW PREVENTER

PROJECT No.: C275–21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

UTILITY PLAN

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

C5
27

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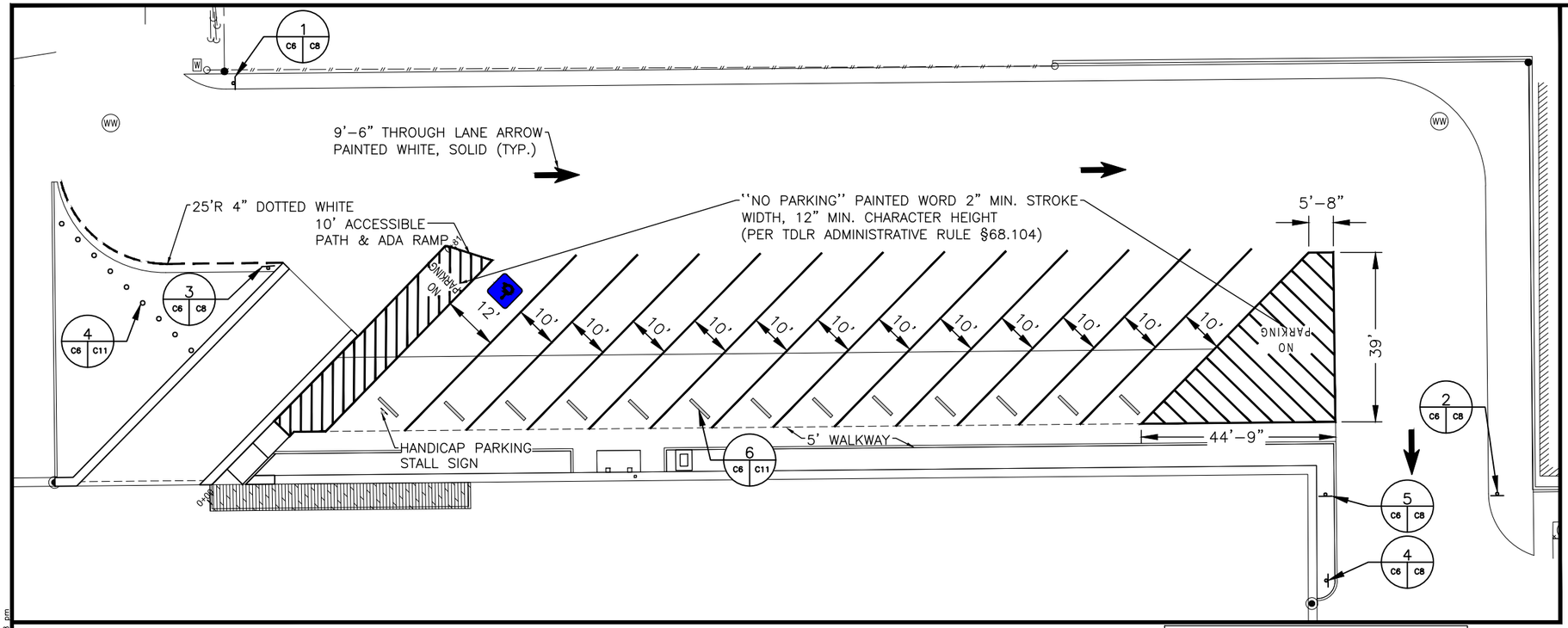
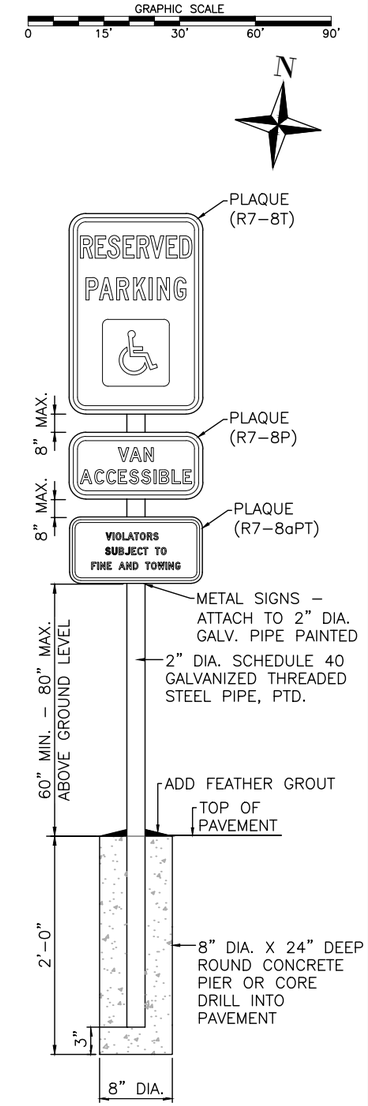
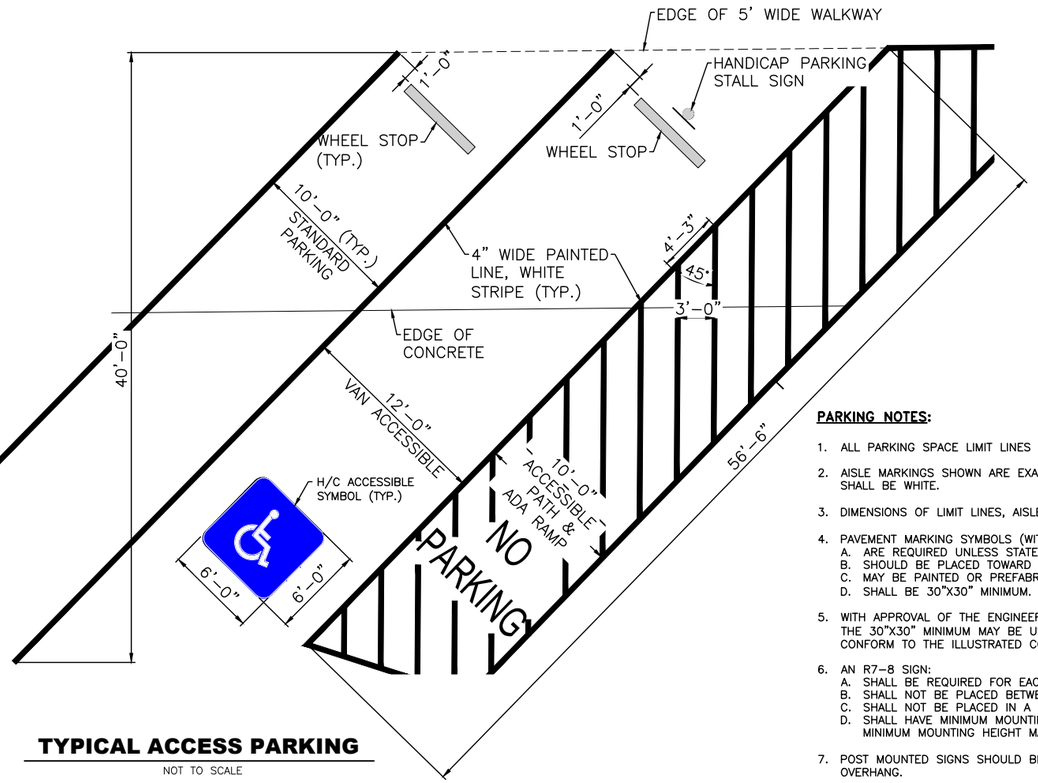
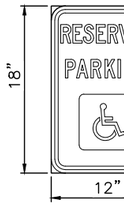






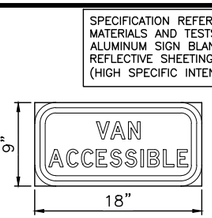
TYPICAL ACCESS PARKING

NOT TO SCALE



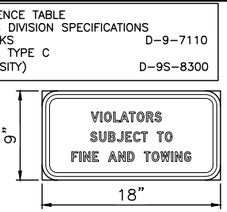
R7-8T

LEGEND AND BORDER: GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND: WHITE



R7-8P

LEGEND AND BORDER: GREEN
BACKGROUND: WHITE



R7-8aPT

LEGEND AND BORDER: GREEN
BACKGROUND: WHITE

SPECIFICATION REFERENCE TABLE	
MATERIALS AND TESTS DIVISION SPECIFICATIONS	
ALUMINUM SIGN BLANKS	D-9-7110
REFLECTIVE SHEETING, TYPE C (HIGH SPECIFIC INTENSITY)	D-9S-8300

STRIPING NOTES:

1. PAINT FOR STRIPING PER SPECIFICATION SECTION 025807, PAVEMENT MARKINGS (S-45) PAINT AND THERMOPLASTIC.
2. PAINT SHALL BE APPLIED UNIFORMLY BY SUITABLE EQUIPMENT AT A RATE OF NOT LESS THAN 105 NOR MORE THAN 115 SQUARE FEET PER GALLON.
3. AFTER APPLICATION, ALL MARKINGS SHALL BE PROTECTED WHILE DRYING. THE FRESH MARKINGS SHALL BE PROTECTED FROM DAMAGE OF ANY KIND.

PARKING NOTES:

1. ALL PARKING SPACE LIMIT LINES SHALL BE 4" SOLID WHITE LINES.
2. AISLE MARKINGS SHOWN ARE EXAMPLES ONLY. OTHER METHODS TO INDICATE A NO PARKING AREA ARE ACCEPTABLE. AISLE MARKINGS SHALL BE WHITE.
3. DIMENSIONS OF LIMIT LINES, AISLE MARKINGS AND SYMBOLS (WITH OR WITHOUT BACKGROUND) MAY VARY + 10%.
4. PAVEMENT MARKING SYMBOLS (WITH BACKGROUND):
   A. ARE REQUIRED UNLESS STATED ELSEWHERE IN THE PLANS,
   B. SHOULD BE PLACED TOWARD THE FAR END OF THE PARKING SPACES SO AS TO BE VISIBLE TO MOTORISTS IN THE TRAVEL LANE,
   C. MAY BE PAINTED OR PREFABRICATED MATERIAL AND
   D. SHALL BE 30"X30" MINIMUM.
5. WITH APPROVAL OF THE ENGINEER, PREFABRICATED PAVEMENT MARKING SYMBOLS WITH BACKGROUND OF OTHER DIMENSIONS EXCEEDING THE 30"X30" MINIMUM MAY BE USED. ALTERNATIVE DESIGNS SHALL INCLUDE A PROPORTION SIZED SYMBOL OF ACCESSIBILITY AND SHALL CONFORM TO THE ILLUSTRATED COLORS FOR BACKGROUND, SYMBOL AND BORDER.
6. AN R7-8 SIGN:
   A. SHALL BE REQUIRED FOR EACH ACCESSIBLE PARKING SPACE,
   B. SHALL NOT BE PLACED BETWEEN TWO ACCESSIBLE PARKING SPACES,
   C. SHALL NOT BE PLACED IN A LOCATION THAT RESTRICTS MOVEMENT OF WHEELCHAIRS WITHIN THE ADJACENT SIDEWALK, AND
   D. SHALL HAVE MINIMUM MOUNTING HEIGHT OF 7 FEET. IF MOUNTED TO WALL OR LOCATED SO AS NOT TO BE NEAR PEDESTRIAN TRAFFIC MINIMUM MOUNTING HEIGHT MAY BE 7 FEET.
7. POST MOUNTED SIGNS SHOULD BE PLACED APPROXIMATELY 1 FOOT (OR GREATER) BEHIND THE CURB TO PREVENT DAMAGE FROM VEHICLE OVERHANG.
8. SIGNS MAY BE MOUNTED DIRECTLY TO AN ADJACENT WALL OF A BUILDING WHEN POST MOUNTING IS IMPRACTICAL.

HANDICAPPED PARKING SIGN NOTES:

A. THE ALPHABETS AND LATERAL SPACING BETWEEN LETTERS AND NUMERALS SHALL CONFORM WITH THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", LATEST EDITION, AND ANY APPROVED CHANGES THERETO. LATERAL SPACING OF TEXT SHALL PROVIDE A BALANCED APPEARANCE. ALL MATERIALS SHALL CONFORM TO DEPARTMENT SPECIFICATIONS.

B. LEGEND SHALL BE APPLIED BY SCREENING PROCESS OF BLACK AND/OR TRANSPARENT COLORED INK, CUT-OUT BLACK VINYL NON-REFLECTIVE DECAL SHEETING AND/OR REFLECTIVE SHEETING OR COMBINATION THEREOF. BACKGROUND SHALL BE WHITE REFLECTIVE SHEETING (TYPE C).

C. SIGN BLANKS SHALL BE ONE PIECE 0.08 INCH THICK SHEET ALUMINUM ALLOY (TYPE A). UNLESS OTHER-WISE NOTED ELSEWHERE IN THE PLANS.

HANDICAPPED PARKING SIGN

NOT TO SCALE

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

PARKING LOT STRIPING & TDLR COMPLIANCE

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

C6

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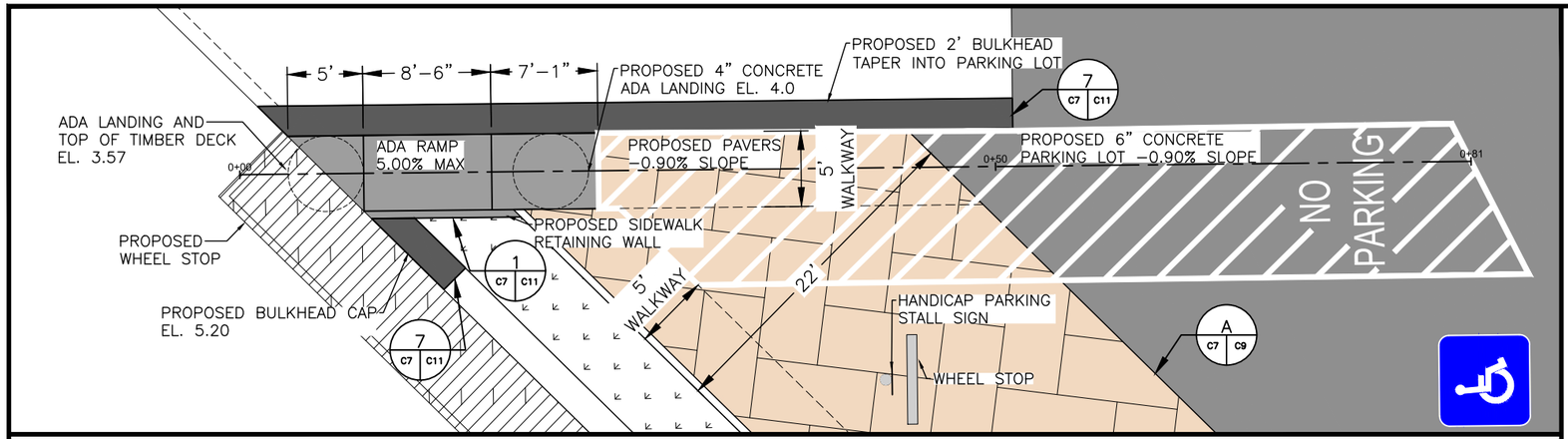
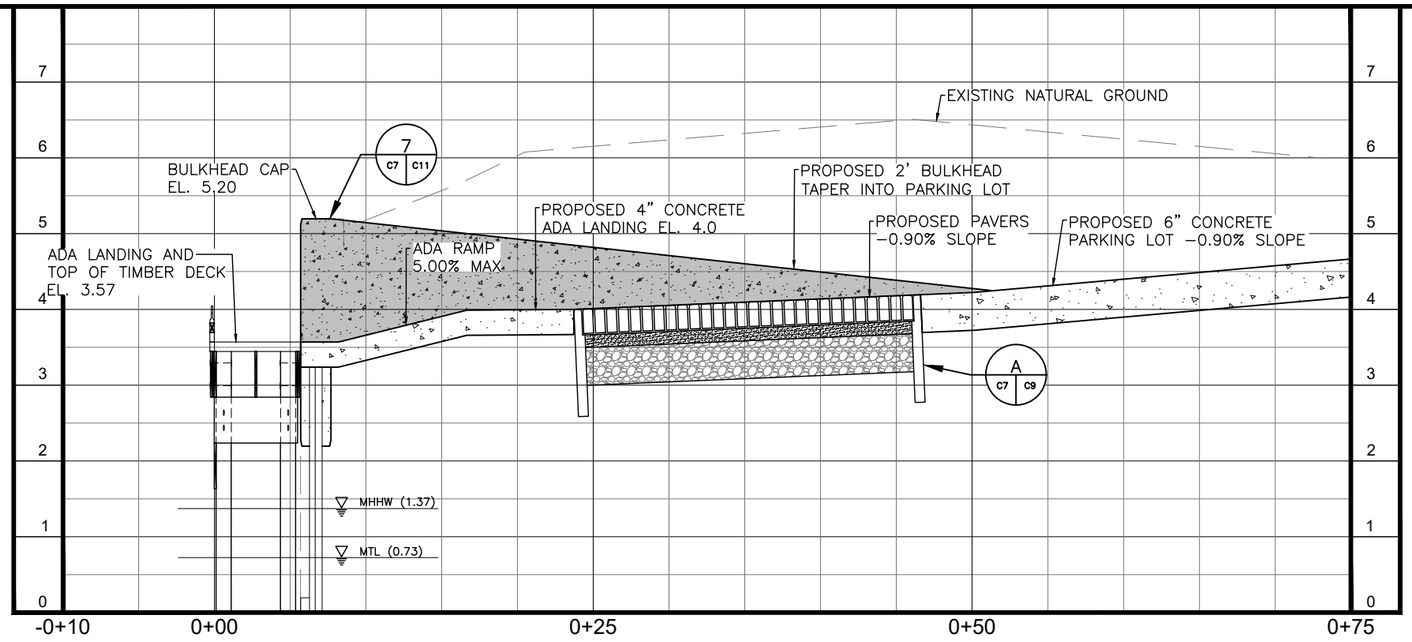


HORIZONTAL GRAPHIC SCALE
0 5' 10' 15'

VERTICAL GRAPHIC SCALE
0 2' 4' 6'

MARISOL BOAT RAMP
PROPOSED PLAN & PROFILE



GENERAL NOTES:

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED.
2. THE MAXIMUM ALLOWABLE SIDEWALK CROSS SLOPE EQUALS 2%.
3. PARKING LOTGRADES AND CROSS SLOPES SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
4. EXISTING FEATURES THAT COMPLY WITH TAS MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
5. CHANGES IN LEVEL GREATER THAN 1/4 INCH ARE NOT PERMITTED.
6. THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY. THE RUNNING SLOPE OF SIDEWALKS AND CROSSWALKS, WITHIN THE PUBLIC RIGHT–OF–WAY, MAY FOLLOW THE GRADE OF THE PARALLEL ROADWAY. WHERE A CONTINUOUS GRADE GREATER THAN 5% MUST BE PROVIDED. HANDRAILS MAY BE DESIRABLE ON ONE OR BOTH SIDES OF THE SIDEWALK TO IMPROVE ACCESSIBILITY. HANDRAILS MAY ALSO BE NEEDED TO PROTECT PEDESTRIANS FROM POTENTIALLY HAZARDOUS CONDITIONS. IF PROVIDED, HANDRAILS MUST COMPLY WITH TAS 4.85.
7. HANDRAIL EXTENSIONS SHALL NOT PROTRUDE INTO THE USEABLE LANDING AREA OR INTO INTERSECTING PEDESTRIAN ROUTES.
8. SIDEWALK DETAILS ARE SHOWN ELSEWHERE IN THE PLANS.

RAMP NOTES:

1. PROVIDE CURB RAMPS WHEREVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
2. SLOPE CRITERIA

RAMP AND LANDING AREA	MAX SLOPE (V:H, %, IN PER FT)
RAMP IN DIRECTION OF TRAVEL	1:12/8.03%/1" PER FT
SIDE SLOPE OF RAMP (FLARE)	1:10/10%/1.2" PER FT
CROSS SLOPE OF RAMP	1:50/2%/0.24" PER FT
LANDING AREA (ALL DIRECTIONS)	1:50/2%/0.24" PER FT

ADJOINING AREAS	
SIDEWALK IN DIRECTION OF TRAVEL	1:20/5%/0.60" PER FT
SIDEWALK CROSS SLOPE	1:50/2%/0.24" PER FT
GUTTER IN DIRECTION OF TRAVEL	1:20/5%/0.60" PER FT

A SMOOTH TRANSITION (S≤1:50) IN DIRECTION OF TRAVEL IN REQUIRED WHERE RAMPS TRANSITION TO THE PARKING LOT

3. PROVIDE FLARED SIDES WHERE THE PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP. FLARED SIDES SHALL BE SLOPED AT 10% MAXIMUM. MEASURED PARALLEL TO THE CURB. RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS PLANTED, SUBSTANTIALLY OBSTRUCTED, OR OTHERWISE PROTECTED.
4. LANDINGS SHALL BE 5'X5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
5. CURB RAMP MUST BE WHOLLY CONTAINED WITHIN CROSSWALK MARKINGS, EXCLUDING SIDE FLARES.
6. CURB RAMPS FLARES AND LANDINGS SHALL BE AT LEAST 5" THICK CONCRETE AND EXPANSION JOINTS SHALL TYPICALLY BE USED AT MATCHLINE WITH ADJOINING AREAS.
7. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4'X4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
8. LAYBACK CURB AND GUTTER MAY BE CONSTRUCTED MONOLITHICALLY WITH CURB RAMPS. PROVIDE NO. 4 X 12" LONG SMOOTH DOWELS @ 12" ON CENTERS IF NOT PLACED MONOLITHICALLY.
9. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET. 5% MAXIMUM SLOPE IN GUTTER.
10. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGNED, LIGHT REFLECTIVE VALUE AND TEXTURE MAYBE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC §68.102
11. FINAL ACCEPTANCE OF THE PROJECT SHALL BE CONTINGENT UPON THE CONTRACTOR PROVIDING THE CITY WITH A FINAL INSPECTION REPORT FROM A CERTIFIED REGISTERED ACCESSIBILITY SPECIALIST (RAS) PER 16 TAC §68.52 STATING THAT ALL ADA (AMERICANS WITH DISABILITIES ACT) HANDICAP IMPROVEMENTS, AS CONSTRUCTED, COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) FOR ELIMINATION OF ARCHITECTURAL BARRIERS PER TEXAS GOVERNMENT CODE CHAPTER 469.

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South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

ADA RAMP DETAILS

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275–21184

C7
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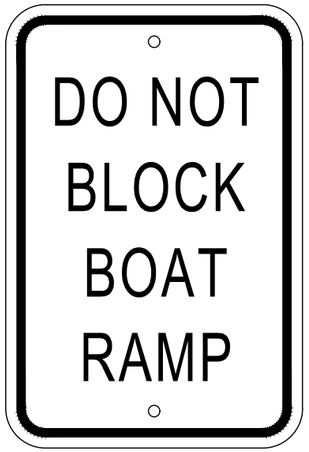
BOLTS USED TO MOUNT SIGN PANELS TO THE CLAMP ARE 5/16–18 UNC GALVANIZED SQUARE HEAD WITH NUT, NYLON WASHER, FLAT WASHER AND LOCK WASHER. THE BOLT LENGTH IS 1 INCH FOR ALUMINUM.

1 C6 C8 **ENTRANCE ONLY SIGN**
NOT TO SCALE

2 C6 C8 **EXIT ONLY SIGN**
NOT TO SCALE

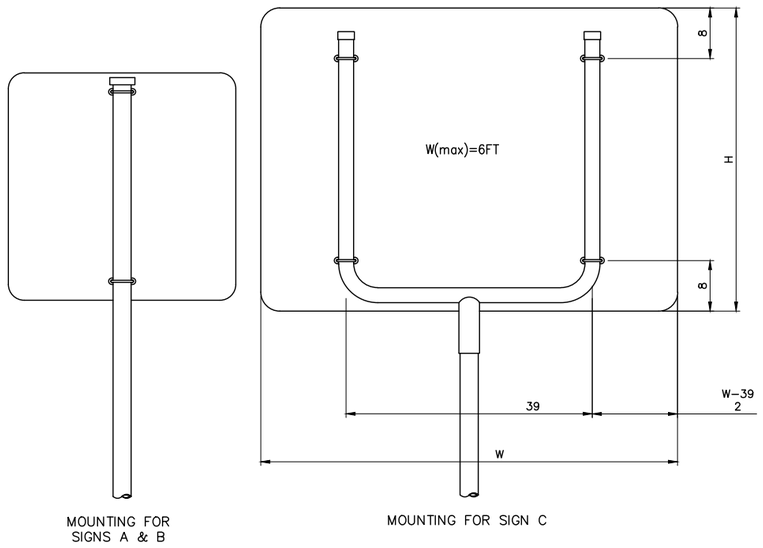


WEB SAFE COLOR
00CCFF BLUE

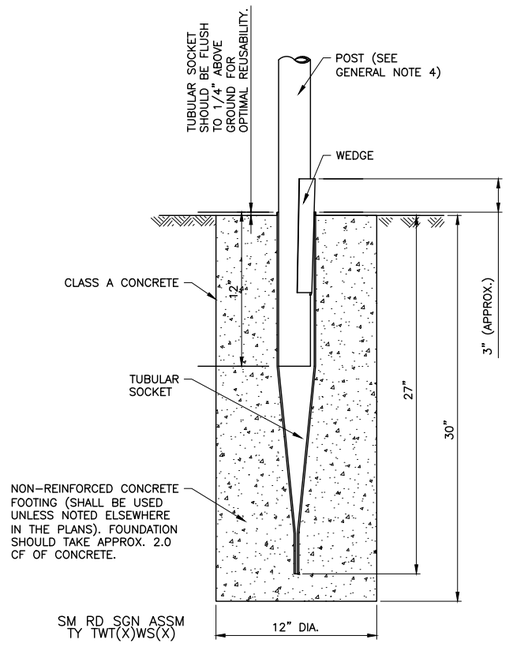
3 C6 C8 **BOAT RAMP SIGN**
NOT TO SCALE

4 C6 C8 **NO RIGHT TURN (R3-1)**
NOT TO SCALE

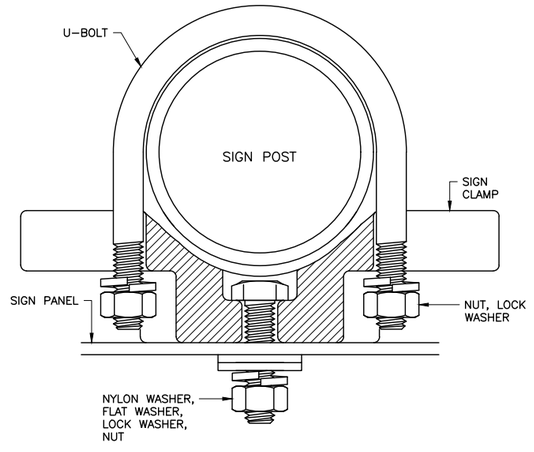
5 C6 C8 **DO NOT ENTER (R5-1)**
NOT TO SCALE



A C8 C8 **SIGN MOUTING DETAIL**
NOT TO SCALE



B C8 C8 **WEDGE ANCHOR STEEL SYSTEM**
NOT TO SCALE



C C8 C8 **TYP. SIGN ATTACHMENT DETAIL**
NOT TO SCALE

PROJECT No.:
C275–21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED
PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
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South Padre ISLAND

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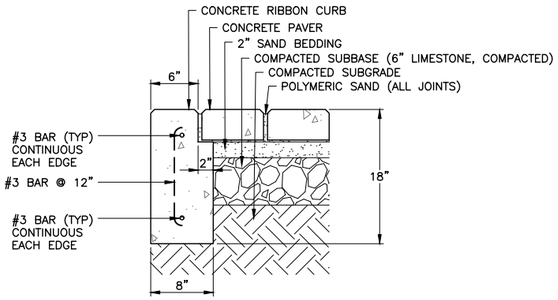
MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

SIGNAGE DETAILS

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275–21184

C8



PAVER INSTALLATION DETAIL

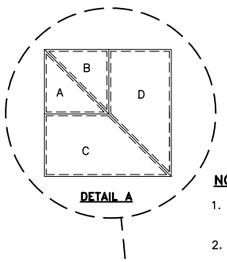
NOT TO SCALE

GENERAL SPECIFICATIONS INSTALLATION

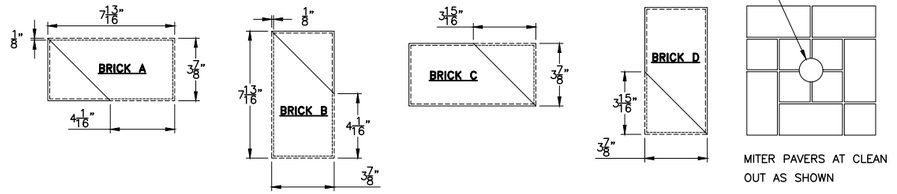
1. EXCAVATE UNSUITABLE, UNSTABLE OR UNCONSOLIDATED SUBGRADE MATERIAL AND COMPACT THE AREA WHICH HAS BEEN CLEARED. THEN BACKFILL AND LEVEL WITH DENSE GRADED AGGREGATE SUITABLE FOR SUBBASE MATERIAL (6" OF COMPACTED LIMESTONE)
2. PLACE BEDDING COURSE OF WASHED CONCRETE SAND CONFORMING TO THE GRADING REQUIREMENTS OF ASTM C33 TO A UNIFORM DEPTH OF 2" (50MM) SCREEDED TO THE GRADE AND PROFILE REQUIRED.
3. INSTALL PAVERS WITH JOINTS APPROXIMATELY 1/8" (3MM). (PAVERS WITH SPACER RIBS AUTOMATICALLY PROVIDE MINIMUM JOINT WIDTH.)
4. WHERE REQUIRED, CUT PAVERS WITH AN APPROVED CUTTER TO FIT ACCURATELY, NEATLY AND WITHOUT DAMAGED EDGES.
5. TAMP PAVERS WITH A PLATE COMPACTOR, UNFORMILY LEVEL, TRUE TO GRADE AND FREE OF MOVEMENT.
6. FILL JOINTS WITH POLYMERIC SAND BINDER (SANDLOCK OR APPROVED EQUAL.)

NOTES

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CONFIRM COLOR AND SIZE WITH OWNER PRIOR TO INSTALLATION
4. CONTRACTOR TO PROVIDE 6'x6' MOCKUP OF PAVING TO INCLUDE FIELD PATTERN, BORDER PATTERN AND COLORS.



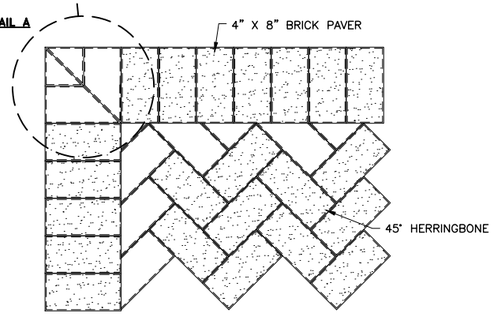
DETAIL A



NOTES:

1. DIMENSIONS SHOWN ARE FOR A 90° CORNER. ADJUST DIMENSIONS ACCORDINGLY FOR OTHER ANGLED CORNERS.
2. ALL MITER CUTS TO BE EVEN AND CONSISTENT.

DETAIL A



PAVER DETAIL - 90° MITER

NOT TO SCALE

PAVING NOTES

1. CONTRACTOR SHALL REVIEW AND COORDINATE WITH EXISTING CONDITIONS. LOCATE AND PROTECT ALL UNDERGROUND UTILITIES, DRAINS, ELECTRICAL, ETC.
2. CONTRACTOR TO FOLLOW CIVIL ENGINEER'S GRADING/DRAINAGE PLANS. ENSURE PROPER DRAINAGE AWAY FROM ALL BUILDINGS TO DRAIN INLETS PER GRADING/DRAINAGE PLANS.
3. CONTRACTOR SHALL STAKE OUT ALL PAVING AREAS FOR SSP APPROVAL PRIOR TO STARTING ANY PAVING WORK.
4. CONTRACTOR SHALL STRIP/REMOVE EXISTING UNSUITABLE SOIL/SOD/GRASS IN AL PAVER AREAS.
5. CONTRACTOR SHALL SUPPLY/INSTALL SELECT FILL, SUB-BASE, MOISTURE CONDITION, AND COMPACT SUB GRADE TO 95% PROCTOR DENSITY (ASTM D698).
6. CONTRACTOR SHALL SUPPLY/APPLY PRE-EMERGENT HERBICIDE TO SUB-BASE OF ALL PAVER AREAS. USE 'RONSTAR' PRE-EMERGENT HERBICIDE OR APPROVED EQUAL.
7. CONTRACTOR SHALL SUPPLY/INSTALL PAVERS AS INDICATED IN SCHEDULE
8. CONTRACTOR SHALL CUT/MITRE ALL RADII AND CORNERS USING MASONRY SAW AS DETAILED.
9. CONTRACTOR SHALL FILL/SWEEP AL JOINTS WITH MIXTURE OF JOINT SAND AND 'SANDLOCK' JOINT STABILIZER. MI. 3-4 LBS. OF 'SANDLOCK' PER 100 LBS OF JOINT SAND. SWEEP ADDITIONAL 'SANDLOCK' ONTO FINAL SURFACE AND INTO AL JOINTS THEN SATURATE WITH WATER TO ACTIVATE STABILIZER.
10. CONTRACTOR SHALL NOTIFY SSP BEFORE INSTALLATION FOR INSPECTIONS/APPROVALS OF AL WORK.
11. CONTRACTOR SHALL WARRANTY ALL MATERIALS AND LABOR FOR A PERIOD OF TWO YEARS.
12. INCLUDED RE-SANDING IF REQUIRED, HERBICIDE TREATMENT AND REPAIR OF ALL SUBGRADE FAILURES IF REQUIRED.

PAVING MATERIAL SCHEDULE		
DESCRIPTION	NOTES	QUANTITY
BRICK PAVERS	4"X8" MM KEYSTONE HOLLANDSTONE BRICK PAVERS BAND (LIGHT BROWN/TAN MIX)	
BRICK PAVERS BAND	4"X8" MM KEYSTONE HOLLANDSTONE BRICK PAVERS BAND (DARK BROWN)	

NOTE CONTRACTOR TO PROVIDE AVAILABLE PAVER COLORS FOR APPROVAL BY CITY BEFORE OFFERING MATERIAL

A / C9 C9 **PAVER DETAILS**

NOT TO SCALE

PROJECT No.: C275-21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER

December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

PAVER DETAILS

SCALE:	AS NOTED
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C9

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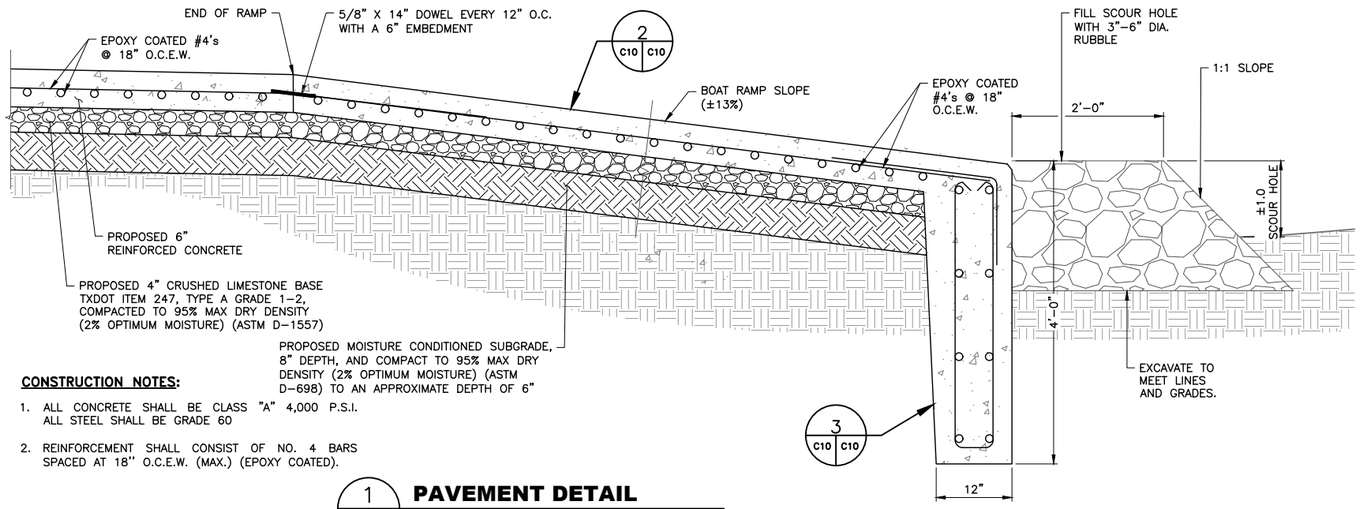
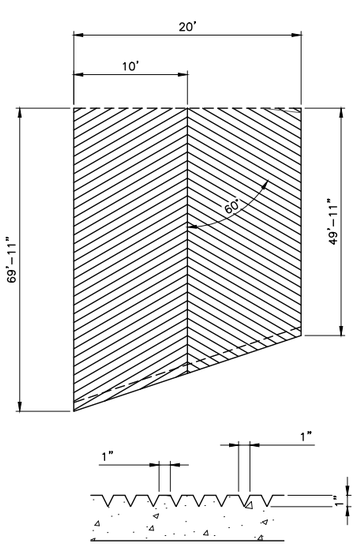


CONSTRUCTION NOTES:

1. ALL CONCRETE SHALL BE CLASS "A" 4,000 P.S.I. ALL STEEL SHALL BE GRADE 60
2. REINFORCEMENT SHALL CONSIST OF NO. 4 BARS SPACED AT 18" O.C.E.W. (MAX.) (EPOXY COATED).

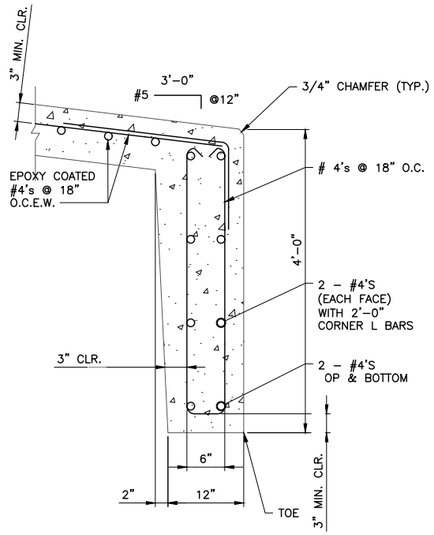
1 C2 C10 PAVEMENT DETAIL

NOT TO SCALE



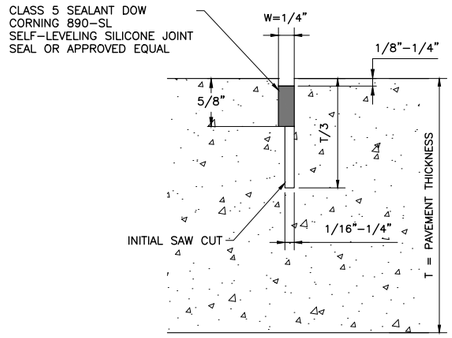
2 C10 C10 RAMP V-GROOVE FINISHING DETAIL

NOT TO SCALE

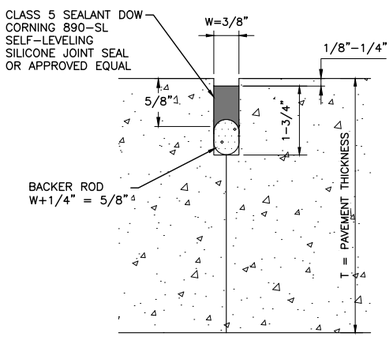


3 C10 C10 TOE WALL DETAIL

NOT TO SCALE



SAWED LONGITUDINAL JOINT



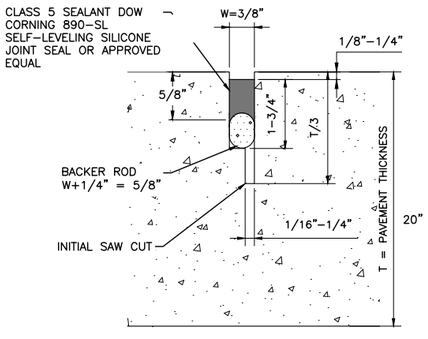
LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT

JOINT SEALANT COMPOUND NOTES:

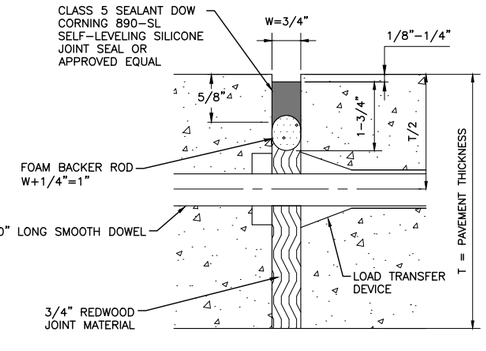
1. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE DRAWINGS.
2. THE JOINT RESERVOIR FOR SEALANT SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION AND THE TWO SAWED JOINTS.
3. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE SEALANT MANUFACTURE'S RECOMMENDATION. PRIOR TO BEGINNING OPERATIONS, THE CONTRACTOR SHALL SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.
4. THE SAW CUT FOR THE LONGITUDINAL JOINT SHALL BE ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.

6" CURB NOTES:

1. EXPANSION AND CONSTRUCTION JOINTS OF THE 6" SEPARATE CURB SHALL MATCH CONCRETE PAVEMENT, AND SHALL NOT EXCEED 39' O.C. (MAX) SPACING.
2. TRANSVERSE GROOVES 1/8" WIDE BY 1/2" DEEP SHALL BE MADE AT 10' O.C. (MAXIMUM).
3. EXPANSION JOINTS ON ALL CURBS SHALL BE REDWOOD. ALL JOINTS IN 6" SEPARATE CURB SHALL BE SEALED IMMEDIATELY WITH JOINT SEALANT.
4. SEAL ALL LANDSCAPED AREAS ADJACENT TO PAVEMENT AND CURB AND GUTTER.
5. PLACE CURB AND SIDEWALK DIRECTLY ON LOW PERMEABLE SUBGRADE SOILS.



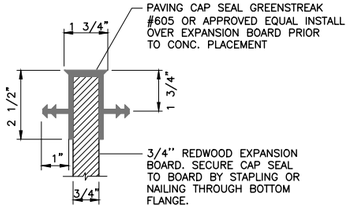
TRANSVERSE SAWED CONTRACTION JOINT



EXPANSION JOINT

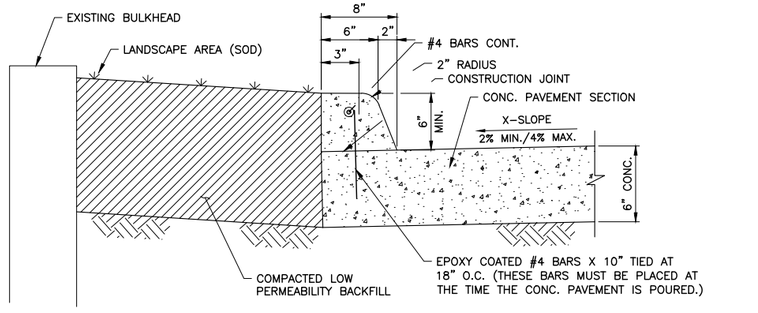
4 C3 C10 JOINT SEALANT COMPOUND

NOT TO SCALE



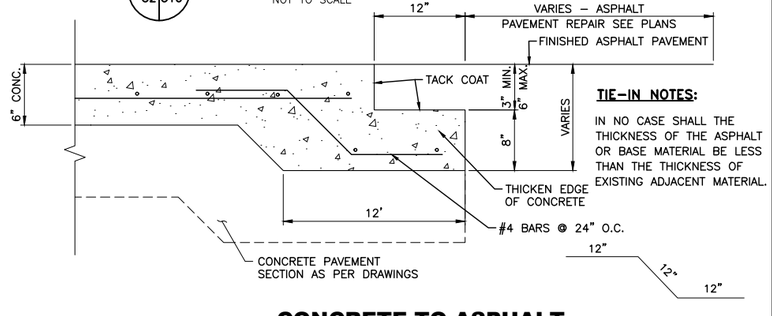
6 C10 C10 CAP SEAL DETAIL NEW CONC. TO NEW CONC.

NOT TO SCALE



5 C2 C10 CURB DETAIL DETAIL

NOT TO SCALE



TIE–IN NOTES:

IN NO CASE SHALL THE THICKNESS OF THE ASPHALT OR BASE MATERIAL BE LESS THAN THE THICKNESS OF EXISTING ADJACENT MATERIAL.

7 C2 C10 CONCRETE TO ASPHALT PAVEMENT SECTION TIE-IN DETAIL

NOT TO SCALE

PROJECT No.: C275–21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER

December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

CONCRETE DETAILS (1 OF 2)

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C10

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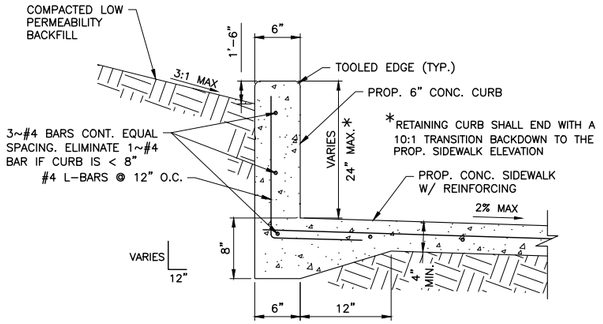
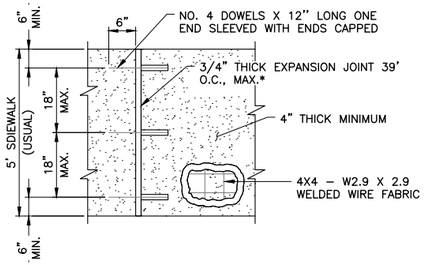


1 SIDEWALK RETAINING CURB DETAIL

C2 C11

NOT TO SCALE



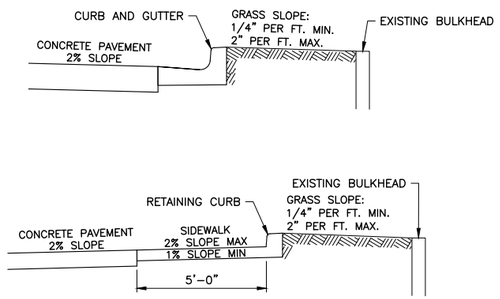
2 PLAN FOR SIDEWALK

C2 C11

NOT TO SCALE

SIDEWALK NOTES:

1. ALL EXPANSION JOINTS TO BE 3/4" REDWOOD EXPANSION BOARD, UNLESS OTHERWISE NOTED.
2. ALL CONCRETE CLASS "A", 3,000 PSI. ALL STEEL, GRADE 60, FY =60,000 PSI.
3. CONCRETE TO RECEIVE BROOM FINISH.
4. TRANSVERSE CONTRACTION JOINTS 1/8": WIDE BY 1/2" DEEP SHALL BE CUT IN ALL SIDEWALKS AT 5'-0" INTERVALS (TYPICAL) OR THE INTERVALS SHALL BE SPACED TO MATCH THE WIDTH OF THE SIDEWALK.
5. PLACE CURB AND SIDEWALK DIRECTLY ON LOW PERMEABLE SUBGRADE SOILS.



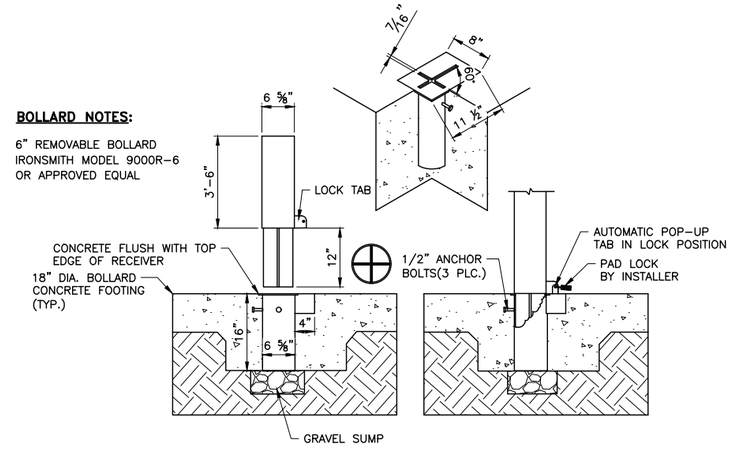
3 SURFACES AND SLOPES

C2 C11

NOT TO SCALE

BOLLARD NOTES:

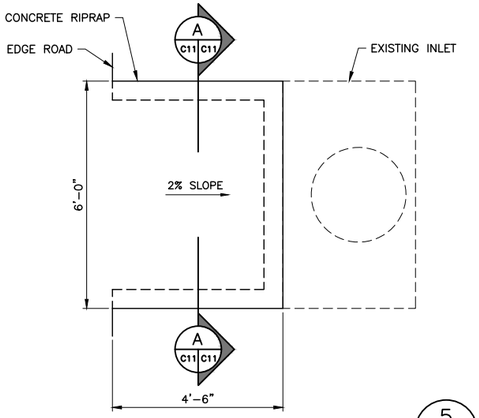
6" REMOVABLE BOLLARD IRONSMITH MODEL 9000R-6 OR APPROVED EQUAL



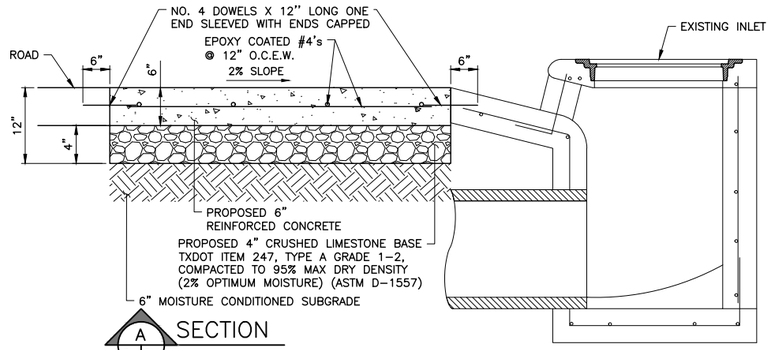
4 REMOVEABLE BOLLARD

C2 C11

NOT TO SCALE



PLAN

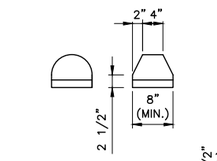


A C11 C11 SECTION

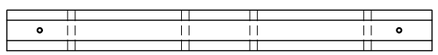
5 CONCRETE RIPRAP

C2 C11

NOT TO SCALE



END VIEWS



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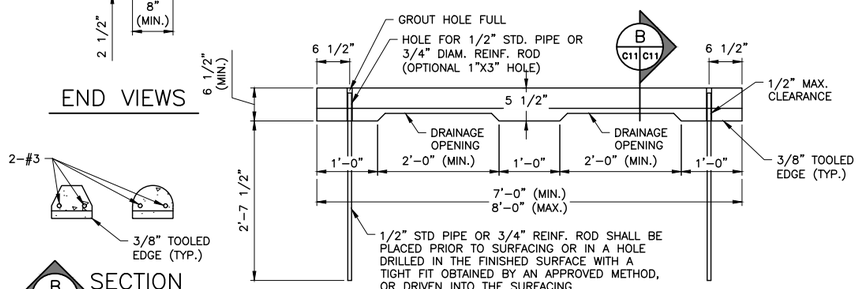


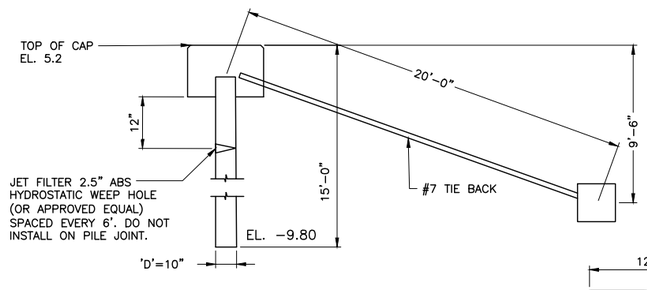
B C11 C11 SECTION

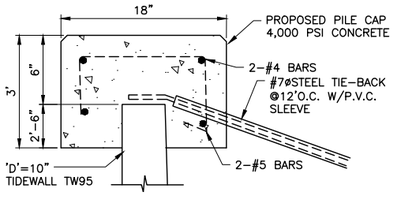
ELEVATION

6 PRECAST CONCRETE WHEEL STOP DETAILS

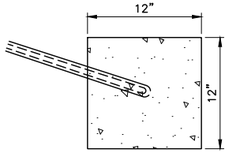
C2 C11

NOT TO SCALE





CAP DETAIL

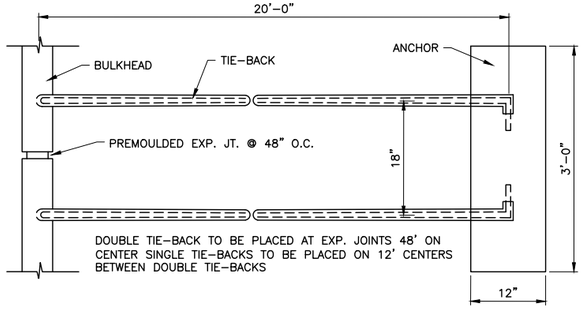


ANCHOR DETAIL

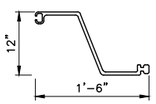
7 BULKHEAD

C2 C11

NOT TO SCALE



PLAN- DOUBLE TIE BACK



SHEET PILE NOTE:

1. VINYL SHEET PILE, TIDEWALL™ TW95, OR APPROVED EQUAL.

'Z' PROFILE TIDEWALL TW95 DETAIL

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CONCRETE DETAILS (2 OF 2)

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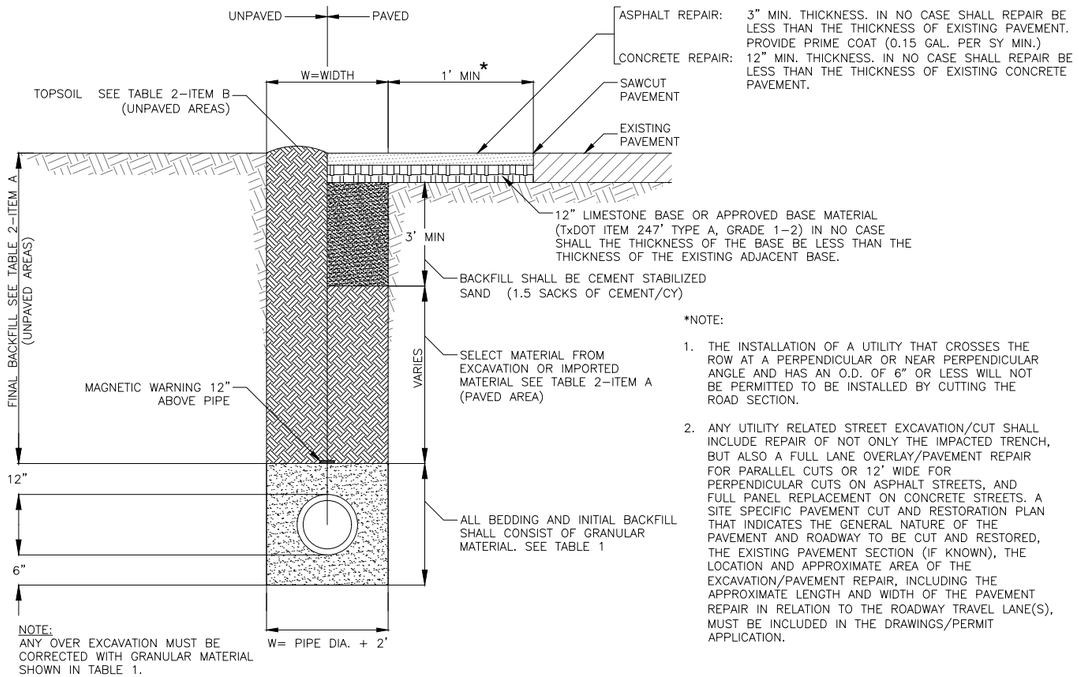


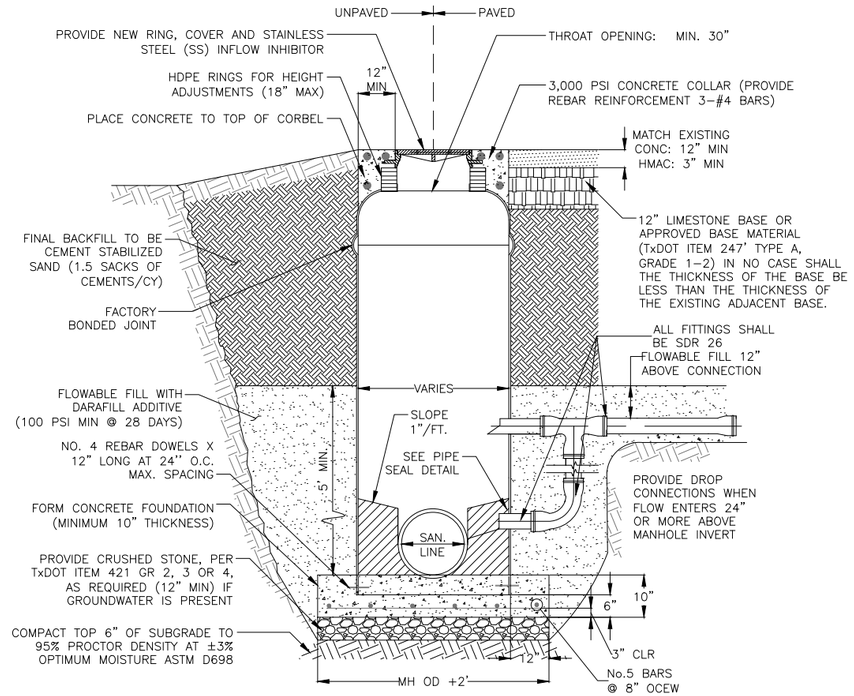
NOTE:
ANY OVER EXCAVATION MUST BE CORRECTED WITH GRANULAR MATERIAL SHOWN IN TABLE 1.

*NOTE:

1. THE INSTALLATION OF A UTILITY THAT CROSSES THE ROW AT A PERPENDICULAR OR NEAR PERPENDICULAR ANGLE AND HAS AN O.D. OF 6" OR LESS WILL NOT BE PERMITTED TO BE INSTALLED BY CUTTING THE ROAD SECTION.
2. ANY UTILITY RELATED STREET EXCAVATION/CUT SHALL INCLUDE REPAIR OF NOT ONLY THE IMPACTED TRENCH, BUT ALSO A FULL LANE OVERLAY/PAVEMENT REPAIR FOR PARALLEL CUTS OR 12' WIDE FOR PERPENDICULAR CUTS ON ASPHALT STREETS, AND FULL PANEL REPLACEMENT ON CONCRETE STREETS. A SITE SPECIFIC PAVEMENT CUT AND RESTORATION PLAN THAT INDICATES THE GENERAL NATURE OF THE PAVEMENT AND ROADWAY TO BE CUT AND RESTORED, THE EXISTING PAVEMENT SECTION (IF KNOWN), THE LOCATION AND APPROXIMATE AREA OF THE EXCAVATION/PAVEMENT REPAIR, INCLUDING THE APPROXIMATE LENGTH AND WIDTH OF THE PAVEMENT REPAIR IN RELATION TO THE ROADWAY TRAVEL LANE(S), MUST BE INCLUDED IN THE DRAWINGS/PERMIT APPLICATION.

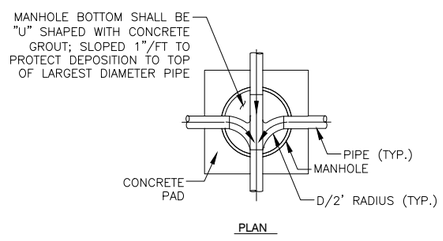
TRENCH BACKFILL FOR WASTEWATER LINES AND PAVEMENT REPAIR FOR UTILITIES

NOT TO SCALE



FIBERGLASS MANHOLE

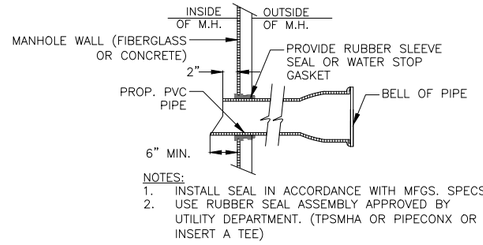
NOT TO SCALE



PLAN

WASTEWATER MANHOLE (BOTTOM)

NOT TO SCALE



NOTES:
1. INSTALL SEAL IN ACCORDANCE WITH MFGS. SPECS.
2. USE RUBBER SEAL ASSEMBLY APPROVED BY UTILITY DEPARTMENT. (TPSMHA OR PIPECONX OR INSERT A TEE)

PIPE SEAL DETAIL

NOT TO SCALE

GENERAL NOTES FOR BACKFILL

TABLE 1
BEDDING AND INITIAL BACKFILL
(BELOW PIPE TO 12" ABOVE PIPE)

ALL BEDDING AND INITIAL BACKFILL SHALL CONSIST OF THE FOLLOWING OR REFER TO DESIGN ENGINEER REQUIREMENTS: GRANULAR BACKFILL CONSISTING OF EITHER NATURAL SAND OR SANDY GRAVEL, OR MATERIAL PRODUCED BY CRUSHING OF NATURAL STONE OR GRAVEL:

(1.) EXCAVATIONS <20 FT. DEEP AND ABOVE WATER TABLE, USE MATERIAL MEETING THE FOLLOWING CRITERIA.

MEETING REQUIREMENTS OF ASTM D2487 FOR:

SP	GP
SW	GW
SP–SM	GP–GM
SW–SM	GW–GM

AND IN ADDITION:
PASSING 1/2" SIEVE – 100%
PASSING #4 SIEVE – 30% MINIMUM
PLASTICITY INDEX (PI) – NP TO 10 MAX.

(2.) IN DEEP EXCAVATIONS (>20') OR BELOW WATER TABLE, USE CRUSHED STONE OR CRUSHED GRAVEL MEETING GRADATION OF:

A. CONCRETE COARSE AGGREGATE; TxDOT ITEM 421; GRADE 2, 3, OR 4.

OR

B. CRUSHED LIMESTONE PER TxDOT ITEM 421' GRADE 2, 3, OR 4.

TABLE 2
FINAL BACKFILL
(GREATER THAN 12" ABOVE PIPE)

UNPAVED AREAS

A. FROM 12" ABOVE PIPE TO BOTTOM OF TOPSOIL BACKFILL SHALL BE APPROVED SELECT MATERIAL FROM THE EXCAVAT– ION; OR IMPORTED MATERIAL; ALL TO BE FREE OF ROCKS, DEBRIS, OR ANY CLUMPS GR– EATER THAN 2" IN DIAMETER; LOOSE LIFTS TO BE PLACED 10" MAX.

COMPACT MATERIAL TO 95% STD. PROCTOR (D698).

MOISTURE TO BE ADJUSTED TO ± 3% OF OPTIMUM.

B. TOPSOIL TO BE PROVIDED EQUAL OR BETTER THAN EXISTING; AND MATCH EXISTING TOPSOIL DEPTH. COMPACT TO EXISTING ADJACENT TOP–SOIL THICKNESS. (CONSTRUCTION TO BE PERFORMED BY "DOUBLE DITCH" METHOD–TOP SOIL SALVAGED TO BE PLACED ON TOP)

PAVED AREAS

A. FROM 12" ABOVE PIPE TO 3' BELOW BOTTOM OF ROAD BASE: BACKFILL SHALL BE SELECT MATERIAL FROM EXCAVATION OR IMPORTED MATERIAL. IN EITHER CASE, ALL MATERIAL SHALL MEET THE FOLLOWING:

LL<35
PI 8–20
NO CLUMPS > 2" DIA.
MOISTURE – 1 TO +3%
COMPACT 95% D698 STD PROCTOR

LOOSE LIFTS OF 12" MAX
OR IF SELECT MATERIAL FROM EXCAVATION DOES NOT
MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND.
SEE TABLE 2–ITEM B BELOW.

B. FROM 3' BELOW BOTTOM OF ROAD BASE TO BOTTOM OF ROAD BASE:

BACKFILL SHALL BE CEMENT STABILIZED SAND (1.5 SK/C.Y.)
AND SHALL MEET THE FOLLOWING REQUIREMENTS:

SAND GRADATION:
% PASSING

#4	55–100
#10	40–100
#40	25–100
#200	10–20
PI	NP–10

COMPACT TO 95% OF D588. MOISTURE TO BE ADJUSTED TO
TO (+/–2%) OF OPTIMUM.

MANHOLE REQUIREMENTS	
PIPE DIAMETER	MANHOLE DIAMETER
≤18"	4'
18"< TO ≤36"	5'
36"< TO ≤42"	6'

APPROVED COATINGS TABLE	
MANUFACTURER	MODEL NAME
JEFFCOAT	JEFFCOAT 326
RAVEN LINING SYSTEM	RAVEN 405
SHERWIN WILLIAMS	DURAPLATE 5800
CARBOLINE	PHENOLINE 309

NOTE:
COAT ALL CONCRETE SURFACES INCLUDING BENCH & WALLS.

GENERAL WASTEWATER CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND EXAMINE LOCAL CONDITIONS TO BE ENCOUNTERED, IMPROVEMENTS TO BE PROTECTED, AND PERMITS AND FEES TO BE REQUIRED, ALONG WITH OTHER RESEARCH THAT IS NECESSARY TO ENSURE THAT THE CONTRACTOR THOROUGHLY UNDERSTANDS THE PROJECT AND IS FULLY AWARE OF ALL THE CONDITIONS AND CONSTRAINTS THAT MAY BE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL ADHERE TO ALL TCEQ REGULATIONS PER 30 TAC CHAPTER 217 AND TRENCH SAFETY FOR EXCAVATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AND MUST ADHERE TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. ALL FIBERGLASS MANHOLES SHALL BE MONOLITHIC WITH 0.50" MINIMUM WALL THICKNESS. IF PROVIDED OR REQUIRED, FIBERGLASS BOTTOM SHALL BE DESIGNED TO WITHSTAND HYDROSTATIC HEAD PRESSURE UNDER ALL CONDITIONS.
5. THE MANHOLE WALL PENETRATIONS FOR PIPE (8"–15" DIAMETER PIPE) ABOVE THE FLOWLINE OF THE MANHOLE SHALL BE CORED AND SEALED WITH APPROVED SEAL GASKET WATER STOP ASSEMBLY.
6. FOR FIBERGLASS MANHOLES, THE MANHOLE FOUNDATION MAY BE PRECAST ON GROUND SURFACE. (PROCEDURE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL.)
7. THE CONTRACTOR SHALL PROVIDE PROTECTIVE COATING ON ALL EXPOSED CONCRETE SURFACES, INCLUDING CORBEL AREA, MANHOLE WALLS AND MANHOLE BENCH.
8. FOR FIBERGLASS MANHOLES WITH WATERTIGHT BOTTOM, ADHERE TO ALL MANUFACTURER REQUIREMENTS. FIBERGLASS BOTTOM AND BENCH MUST ALSO BE FACTORY INSTALLED.

PROJECT No.: C275–21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

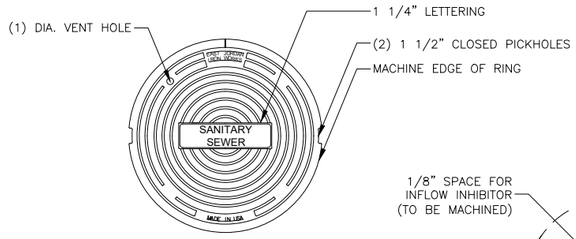
MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

WASTEWATER STANDARD DETAILS (1 OF 2)

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

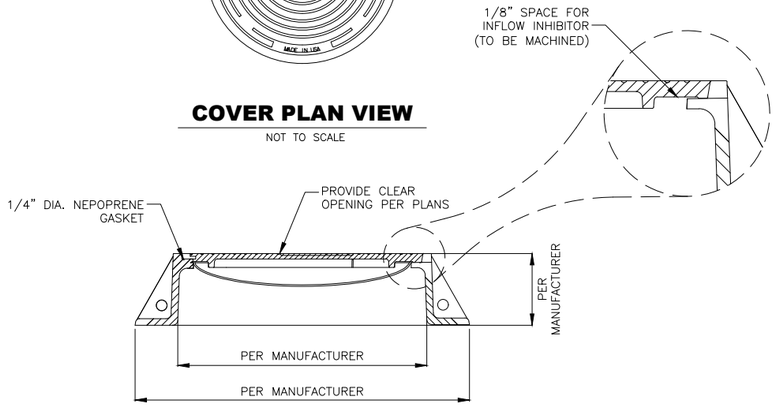
C12
34

R:\CLIENTS\CITY OF SOUTH PADRE – 275\21184 – Marisol Boat Ramp Project\CAD\Wastewater Std Details.dwg mquerra Fri, Dec 22, 2023 @ 4:40:20 pm



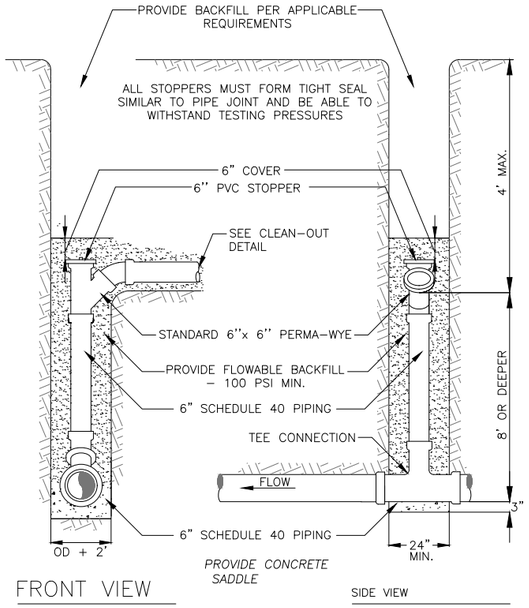
COVER PLAN VIEW

NOT TO SCALE



SECTION OF RING & COVER

NOT TO SCALE



DEEP CUT SERVICE CONNECTION

NOT TO SCALE

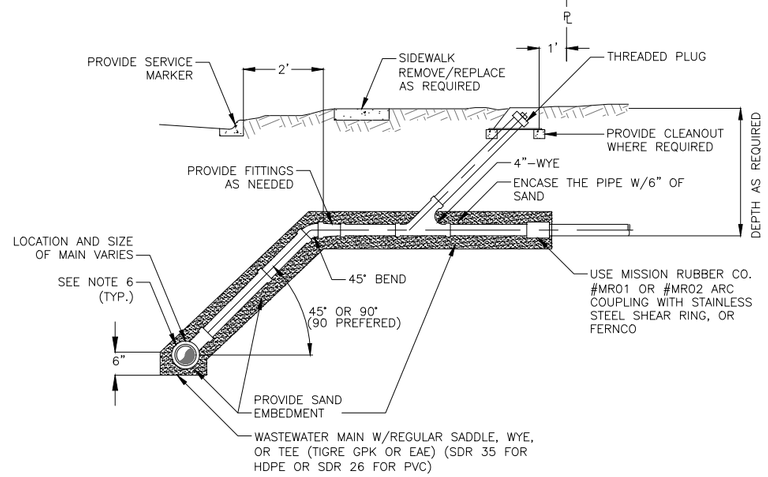
ROADWAY MANHOLE RING AND COVER:

1. THE CONTRACTOR SHALL PROVIDE STAINLESS STEEL (S.S.) INFLOW INHIBITOR WITH SS TETHER SECURED TO MANHOLE WALL, SUCH THAT THE INNER LID IS FLUSH WITH THE OUTER LID.
2. TRAFFIC SHALL BE RESTRICTED FROM MANHOLE FOR 48 HOURS AFTER THE PLACEMENT OF CONCRETE, AND COLLAR SHALL PROVIDE A SUFFICIENT, CLEAR OPENING TO ACCOMMODATE THE SPECIFIED MANHOLE COVER.
3. AASHTO-M-306 (LATEST REVISION) PROOF LOAD TESTING IS REQUIRED (40,000 LBS) AND MUST BE INSPECTED. PRIOR TO INSTALLATION, THE RESULTS OF THE TEST SHALL BE SUBMITTED TO THE CITY.
4. THE MANUFACTURING FACILITIES FOR ALL PROVIDED RING AND COVER ASSEMBLIES SHALL MEET OR EXCEED ALL EPA ENVIRONMENTAL STANDARDS AND OSHA SAFETY STANDARDS. THE CONTRACTOR SHALL PROVIDE CERTIFICATION.

CLEAR OPENING	MANUFACTURER (1)	MODEL NUMBER*	INFLOW INHIBITOR
24"	EAST JORDAN IRON WORKS	V-1168	STAINLESS STEEL REQUIRED ON ALL INSTALLATIONS PER CITY SPECIFICATIONS
	U.S. FOUNDRY	COVER- #8018538 FRAME- #8022247	
	NEENAH FOUNDRY	R-1930-24	
30" (2)	EAST JORDAN IRON WORKS	COVER- V1430 FRAME- V1420	
	U.S. FOUNDRY	COVER- #9210048 FRAME- #8021361	
	NEENAH FOUNDRY	DF-1274	

(1) OR APPROVED EQUAL (MADE IN THE USA)
(2) UNLESS NOTED IN THE PLANS, ALL COVERS SHALL BE 24" DIAMETER AND NOT INTENDED FOR MANNED ENTRY.

RING & COVER APPROVED LIST

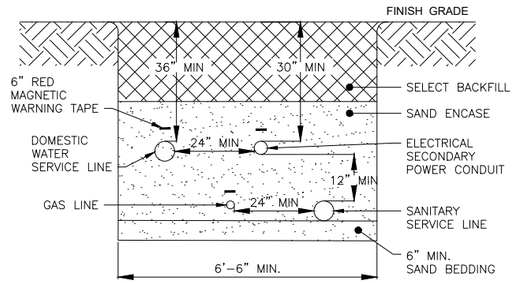


SERVICE CONNECTION NOTES:

1. CONTRACTOR TO PROVIDE SERVICE CONNECTION TAP TO THE R.O.W. LINE & CONNECT EXIST. SERVICE LINE OUTSIDE EASEMENT AS SHOWN AND REQUIRED.
2. ALL SERVICE PIPE AND FITTINGS TO BE SOLVENT WELD SCH 40 PVC UNLESS SHOWN OTHERWISE IN THE PLANS.
3. FOR EXISTING MAIN PIPE MATERIAL – PVC AND/OR VCP USE PUBIC WORKS DEPARTMENT APPROVED CONNECTOR.
4. FOR NEW PVC MAIN AND SERVICE, USE PVC WYE OR TEE AS DIRECTED AT SERVICE CONNECTION.
5. IF PIPE LENGTH, ON SERVICE LINE, IS GREATER THAN 50', USE 6" PVC SCH 40 FROM CLEANOUT WYE TO THE MAIN LINE.

SERVICE CONNECTION DETAILS

NOT TO SCALE

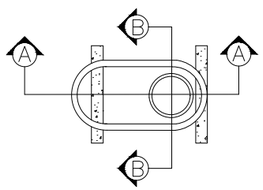


UTILITY TRENCH DETAIL

NOT TO SCALE

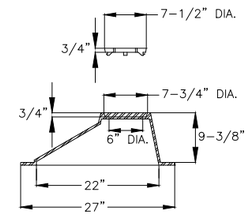
GENERAL NOTES FOR INSTALLATION OF UNDERGROUND CONDUIT SYSTEMS:

1. UNDERGROUND (BURIED) CONDUIT SHALL BE SCHEDULE 80 PVC.
2. CONDUIT MINIMUM DEPTH SHALL BE 36 INCHES.
3. TRENCHES ARE TO BE IN AS STRAIGHT AND DIRECT A LINE AS POSSIBLE.
4. CAUTION RIBBON SHALL BE INSTALLED ABOVE THE CONDUIT, A FOOT BELOW FINISHED GRADE.
5. A PULLING ROPE, 3/4 INCH DIAMETER POLYPROPYLENE, SHALL BE INSTALLED IN EACH CONDUIT.
6. THE ENDS OF THE CONDUIT SHALL BE PLUGGED DURING CONSTRUCTION TO PREVENT THE ENTRANCE OF FOREIGN MATTER.
7. CONDUIT SHALL TERMINATE NOT MORE THAN 6 INCHES INSIDE A HANDHOLE OR J-BOX. WHENEVER POSSIBLE THE CONDUIT SHALL RUN STRAIGHT INTO THE HANDHOLE WITHOUT SWEEPS OR BENDS.
8. ALL ENDS, JOINTS AND INTERNAL FINISH OF THE CONDUIT SHALL BE FREE OF SHARP EDGES OR BURRS WHICH COULD DAMAGE THE CABLE.
9. ALL BURIED JOINTS SHALL BE GLUED WITH CEMENT AS RECOMMENDED BY THE CONDUIT MANUFACTURER.
10. INSTALL A COPPER CONDUCTOR IN EACH CONDUIT TRENCH FOR FUTURE CONDUIT LOCATES.
11. PLACE 6" OF COMPACTED GRAVEL UNDER THE BOX. GRAVEL SHOULD NOT ENCROACH ON THE INTERIOR VOLUME OF BOX. GRAVEL BED SHOULD BE PLACE PRIOR TO SETTING BOX AND CONDUITS SHALL BE CAPPED.
12. STEEL COVER SHOULD BE MARKED WITH DESIGNATED UTILITY NAME SUCH AS ELECTRICAL, COMMUNICATION OR IRRIGATION.
13. STEEL COVER SHOULD BE FURNISH WITH LID GASKETS INHIBIT WATER FLOW INTO THE BOX TO PREVENT WATER INTRUSION.
14. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.
15. SEWER LINES WHICH PARALLEL PRIMARY ELECTRICAL RACEWAYS SHALL HAVE A HORIZONTAL CLEARANCE OF NOT LESS THAN 24".
16. JUNCTION BOX FOR POWER OUTLET NEAR THE LIGHT POLE SHALL BE OLDCASTLE SYNERTECH 1212, 18" DEEP WITH CLOSE BOTTOM, LID GASKET AND SEALER AROUND CONDUIT TO WEATHERPROOF.
17. AEP PRIMARY CONDUIT MINIMUM DEPTH SHALL BE 52 INCHES AND 48 INCHES FOR SECONDARY AEP CONDUIT.



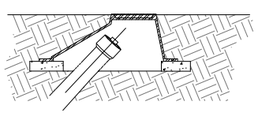
PLAN

NOT TO SCALE



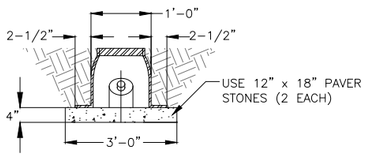
CLEAN-OUT BOOT

NOT TO SCALE



SECTION A-A

NOT TO SCALE



SECTION B-B

NOT TO SCALE

TYPICAL CAST IRON CLEAN-OUT BOOT

NOT TO SCALE

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

WASTEWATER STANDARD DETAILS (2 OF 2)

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

C13

WATER DISTRIBUTION SYSTEM GENERAL NOTES

1. PROPOSED WATER DISTRIBUTION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SOUTH PADRE ISLAND PUBLIC WORKS DISTRIBUTION SYSTEM STANDARDS.
2. THE CITY RESERVES THE RIGHT TO ACCEPT THE SYSTEM FOR OPERATION AT ANY TIME, BUT THE DATE OF OFFICIAL ACCEPTANCE OF THE SYSTEM WILL BE UPON COMPLETION OF THE PROJECT AND SATISFACTORY TEST RESULTS.
3. THE EXISTING SYSTEM SHALL REMAIN IN SERVICE UNTIL THE PROPOSED SYSTEM IS PUT INTO SERVICE. THE CONTRACTOR SHALL PROTECT THE EXISTING SYSTEM UNTIL IT IS TAKEN OUT OF SERVICE.
4. THE CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT REQUIRED TO INSTALL THE PROPOSED SYSTEM.
5. TESTING OF LINES (STERILIZATION AND PRESSURED) SHALL BE DONE BY THE CONTRACTOR UNDER THE SUPERVISION OF PUBIC WORKS DEPARTMENT. WATER FOR FILLING THE NEW WATER LINE AND PERFORMING TESTS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY OF SOUTH PADRE ISLAND THROUGH A STANDARD WATER CONSTRUCTION METER CONNECTION. STANDARD WATER CONSTRUCTION METER AND GAUGE WILL BE SUPPLIED BY THE CITY AFTER THE CONTRACTOR HAS PAID ALL APPLICABLE FEES FOR THE WATER CONSTRUCTION METER. ALL WATER DISCHARGE MUST BE DECHLORINATED IN ACCORDANCE WITH TCEQ & NPDES REGULATIONS.
6. THE CONTRACTOR SHALL RECOVER AND STOCK–PILE AT A LOCATION DESIGNATED BY THE PUBLIC WORKS INSPECTOR, ALL FIRE HYDRANTS, VALVES, AND FITTINGS THAT ARE TAKEN OUT OF SERVICE . THESE MATERIALS MAY BE SALVAGED BY THE CITY . HOWEVER, ALL ITEMS NOT CLAIMED BY THE CITY PRIOR TO THE FINAL INSPECTION SHALL BE DISPOSED OF BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL BEAR ALL COST ASSOCIATED WITH WATERLINE REPAIRS (WHICH RESULT FROM DAMAGE CAUSED BY THE CONTRACTOR) UPON COMPLETION OF PROJECTS. ALL WATER LINES SHALL BE FREE OF ALL PATCHES AND SPLICES.
8. ALL PHYSICAL TIES OF THE PROPOSED SYSTEM INTO THE EXISTING WATERLINE SHALL BE RECONNECTED AND BE MADE UNDER SUPERVISION OF THE PUBLIC WORKS INSPECTOR. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND ALL EQUIPMENT THAT IS REQUIRED TO MAKE TIE–INS. CITY PUBLIC WORKS CREWS WILL MAKE TAPS ON CITY MAINS ARRANGED THROUGH PUBLIC WORKS INSPECTOR (72 HOUR NOTIFICATION).
9. ALL EXISTING SERVICE CONNECTIONS TIED ONTO THE EXISTING WATERLINE SHALL BE RECONNECTED BY THE CONTRACTOR, INCLUDING RELOCATING EXISTING WATER METERS. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY AND COORDINATE WITH THE PUBLIC WORKS INSPECTOR SAID RECONNECTIONS / RELOCATIONS IN ADVANCE OF CONSTRUCTION TO AVOID DELAYS. (NO SEPARATE COSTS)
10. MINOR LENGTH OF DUCTILE IRON PIPE ADJACENT TO FITTINGS MAY BE REQUIRED AS DIRECTED BY THE PUBLIC WORKS INSPECTOR BASED ON CONDITIONS ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL USE D.I.P. AS DIRECTED AND SHALL BE PAID AT THE UNIT PRICE BID FOR THE APPROPRIATE SIZE WATERLINE. A MINOR LENGTH IS DEFINED AS A SINGLE LOCATION REQUIRING THE USE OF TWO JOINTS OR LESS.
11. MINOR ADJUSTMENTS IN THE LOCATIONS OF FITTINGS, VALVES, FIRE HYDRANTS, ETC. CAN BE ANTICIPATED. THE CONTRACTOR SHALL MAKE SAID MINOR ADJUSTMENTS AS DIRECTED BY THE ENGINEER AND/OR PUBLIC WORKS INSPECTOR AT NO INCREASE OF CONTRACT PRICE. PUBLIC WORKS WILL BE NOTIFIED PRIOR TO ALL CHANGES.
12. ALL NIPPLES BETWEEN FITTINGS AND VALVES ALONG MAINS SHALL BE DUCTILE IRON.
13. ALL DUCTILE IRON PIPES, VALVES, AND FITTINGS SHALL BE WRAPPED WITH (2) THICKNESSES OF 8 MIL. POLYETHYLENE AND SHALL BE RESTRAINED WITH "MEGALUG", MECHANICAL JOINT RESTRAINT OR ENGINEER APPROVED EQUAL AT ALL FITTINGS. CONCRETE THRUST BLOCKS SHALL BE PLACED BEHIND ALL FIRE HYDRANTS AS SHOWN ON DETAIL EXCEPT WHERE LOCKING OR SWIVEL FITTINGS ARE UTILIZED, UNLESS OTHERWISE SPECIFIED BY THE PUBLIC WORKS DEPARTMENT.
14. ALL OFFSETS ARE TO BE DUCTILE IRON PIPE ASSEMBLIES LOCKED TOGETHER BY RETAINER GLANDS. DUCTILE IRON BENDS SHALL BE UTILIZED FOR ANY CHANGES IN ALIGNMENT OR GRADE.
15. IF A WATER LINE IS TO BE ABANDONED, THE CONTRACTOR WILL FILL WITH CONTROLLED LOW STRENGTH MATERIAL, "DARAFILL" BRAND OR ENGINEER APPROVED EQUAL, VALVES WILL BE REMOVED OR FILLED AS REQUIRED BY PUBLIC WORKS INSPECTOR.
16. CONTRACTOR SHALL COORDINATE WITH PUBLIC WORKS INSPECTOR AND NOTIFY ALL AFFECTED CUSTOMERS 24 HOURS PRIOR TO KILLOUT OF EXISTING WATER SYSTEM.
17. WATER DISTRIBUTION SYSTEM STANDARDS CALL FOR MAXIMUM 48" COVER ON WATERLINES. WHEN DEPTHS EXCEED 48" COVER TO AVOID OBSTRUCTION, THE USES OF BENDS COULD BE REQUIRED.
18. CONTRACTOR SHALL KEEP ALL EXISTING VALVES ACCESSIBLE DURING ALL PHASES OF CONSTRUCTION.
19. ALL NEW WATER MAINS SHALL BE INSTALLED SO THAT PIPE IDENTIFICATION MARKINGS ARE LOCATED ON THE TOP OF THE PIPE.
20. ALL SERVICE LINES UNDER PAVEMENT SHALL BE ONE INCH, INSIDE DIAMETER, MINIMUM, UNLESS SPECIFIED OTHERWISE.

SPECIAL NOTE:

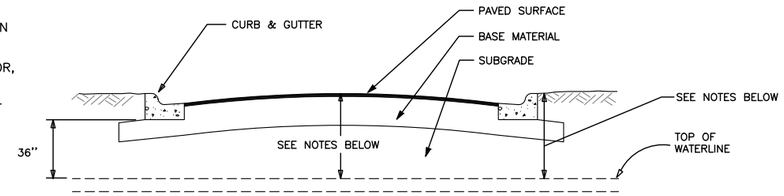
ENGINEER SHALL CONTACT THE PUBLIC WORKS DEPARTMENT FOR WATER VAULT DESIGN COORDINATION.

SEPARATION OF WATER AND WASTEWATER LINES

1. THE SEPARATION OF WATER AND WASTEWATER LINES AND THE MATERIAL USED SHALL BE IN ACCORDANCE WITH THE "RULES & REGULATIONS FOR PUBLIC WATER SYSTEMS" OF TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND THE CITY WATER DETAILS.
2. WHENEVER WATER & WASTEWATER LINES CROSS, ONE JOINT OF C900 PVC WATER LINE SHALL BE CENTERED OVER THE WASTEWATER LINE IN ADDITION TO ANY REQUIREMENTS AS DICTATED BY ITEM 1 ABOVE .

NOTES:

CONTRACTOR MAY BE REQUIRED BY THE PUBIC WORKS DEPARTMENT INSPECTOR TO INSTALL CENTERED JOINTS OF DUCTILE IRON PIPE AT WATERLINE CROSSINGS OF EXISTING HAZARDOUS PRODUCT FLOWLINES.

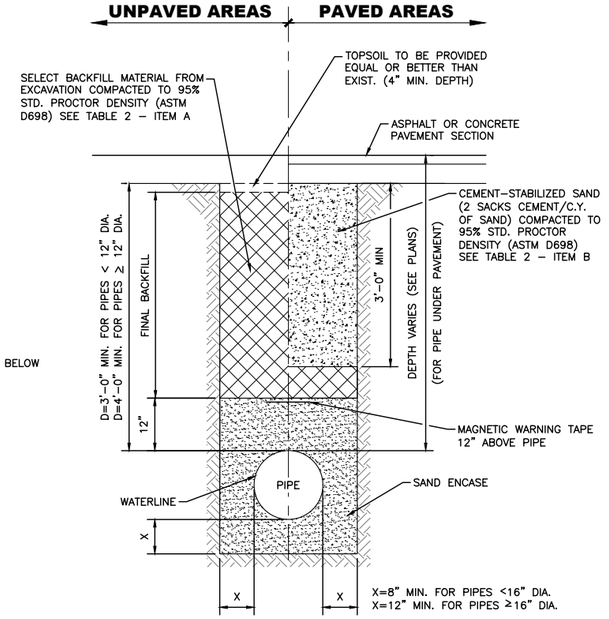


WATERLINE MINIMUM COVER REQUIREMENTS

NOT TO SCALE

NOTES:

1. ALL MAINS IN THE STREET SHALL HAVE A MINIMUM OF 36" OF COVER AND BE 12" MINIMUM BELOW SUBGRADE AT ALL POINTS AND HAVE VALVE CLEARANCES IN ACCORDANCE WITH THE VALVE DETAIL.
2. ALL TRANSMISSION MAINS (12" DIAMETER & ABOVE) IN THE STREET SHALL HAVE 48" OF COVER AT ALL POINTS.
3. ALL MAINS NOT UNDER THE STREET SHALL HAVE A MINIMUM OF 36" OF COVER AT ALL POINTS.



TYP. PIPE TRENCHING BEDDING AND BACKFILL FOR WATERLINE

NOT TO SCALE

NOTE: (CONCRETE PAVEMENT ONLY)

CONTRACTOR HAS OPTION TO USE CEMENT STABILIZED SAND OR BACKFILL WITH SELECT BACKFILL MATERIAL

GENERAL NOTES FOR BACKFILL

TABLE 1
BEDDING AND INITIAL BACKFILL
(BELOW PIPE TO 12" ABOVE PIPE)

ALL BEDDING AND INITIAL BACKFILL SHALL CONSIST OF THE FOLLOWING OR REFER TO DESIGN ENGINEER REQUIREMENTS:
GRANULAR BACKFILL CONSISTING OF EITHER NATURAL SAND OR SANDY GRAVEL, OR MATERIAL PRODUCED BY CRUSHING OF NATURAL STONE OR GRAVEL.

WATER LINES:

1. EXCAVATIONS <20FT. DEEP AND ABOVE WATER TABLE, USE MATERIAL MEETING THE FOLLOWING CRITERIA.

   MEETING REQUIREMENTS OF ASTM D2487 FOR:

SP	GP
SW	GW
SP–SM	GP–GM
SW–SM	GW–GM

   AND IN ADDITION:
   PASSING 1/2" SIEVE – 100%
   PASSING #4 SIEVE – 30% MINIMUM
   PLASTICITY INDEX (PI) – NP TO 10 MAX.

2. IN DEEP EXCAVATIONS (>20') OR BELOW WATER TABLE, USE CRUSHED STONE OR CRUSHED GRAVEL MEETING GRADATION OF:

   A. CONCRETE COARSE AGGREGATE; TxDOT ITEM 421; GRADE 2, 3, OR 4.

TABLE 2
FINAL BACKFILL
(GREATER THAN 12" ABOVE PIPE)

UNPAVED AREAS

A. FOR 12" ABOVE PIPE TO BOTTOM OF TOPSOIL BACKFILL SHALL BE APPROVED SELECT MATERIAL FROM THE EXCAVATION; OR IMPORTED MATERIAL; ALL TO BE FREE OF ROCKS, DEBRIS, OR ANY CLUMPS GREATER THAN 2" IN DIAMETER; LOOSE LIFTS TO BE PLACED 10" MAX.

   COMPACT MATERIAL TO 95% STD. PROCTOR (D698).

   MOISTURE TO BE ADJUSTED TO ± 3% OF OPTIMUM.

B. TOPSOIL TO BE PROVIDED EQUAL OR BETTER THAN EXISTING; AND MATCH EXISTING TOPSOIL DEPTH. COMPACT TO FIX CONFLICT TO EXISTING ADJACENT TOPSOIL. (CONSTRUCTION TO BE PERFORMED BY "DOUBLE DITCH" METHOD TOP SOIL SALVAGED TO BE PLACED ON TOP)

PAVED AREAS

A. FOR 12" ABOVE PIPE TO 3' BELOW BOTTOM OF ROAD BASE: BACKFILL SHALL BE SELECT MATERIAL FROM EXCAVATION OR TO BE IMPORTED MATERIAL IN EITHER CASE, ALL MATERIAL SHALL MEET THE FOLLOWING:

   LL<35
   PI 8–20
   NO CLUMPS > 2" DIA.
   MOISTURE 0 TO +3%
   COMPACT 95% D698 STD PROCTOR

   LOOSE LIFTS OF 10" MAX OR IF SELECT MATERIAL FROM EXCAVATION DOES NOT MEET REQUIREMENTS, THEN USE CEMENT STABILIZED SAND SEE TABLE 2–ITEM B BELOW (OR PER DESIGN ENGINEER)

B. FOR 3' BELOW BOTTOM OF ROAD BASE TO BOTTOM OF ROAD BASE:

   BACKFILL SHALL BE CEMENT STABILIZED SAND (2 SK/C.Y.) AND SHALL MEET THE FOLLOWING REQUIREMENTS:

   SAND GRADATION:
   % PASSING

#4	55–100
#10	40–100
#40	25–100
#200	10–20
PI	NP–10

   (OR AS PER DESIGN ENGINEER)

   COMPACT TO 95% OF D698. MOISTURE TO BE ADJUSTED TO (+/–2%) OF OPTIMUM.

PROJECT No.: C275–21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

WATER STANDARD DETAILS (1 OF 3)

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

C14
36

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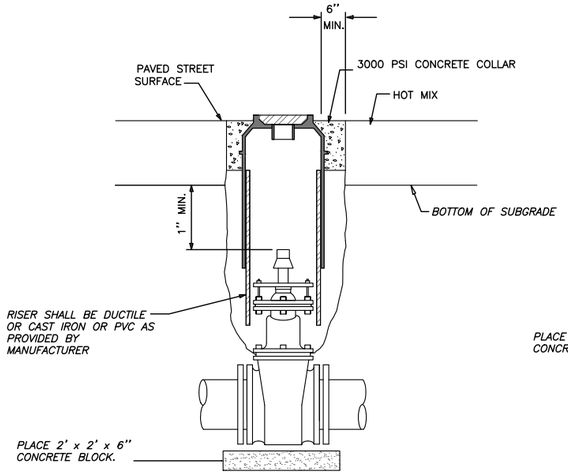
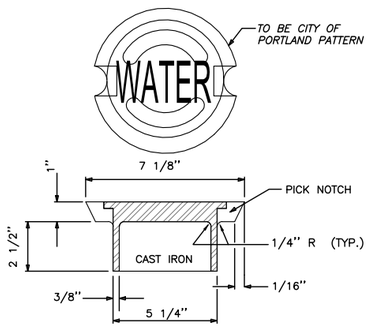


VALVE BOX DETAIL @ PAVEMENT

NOT TO SCALE



LID DETAIL

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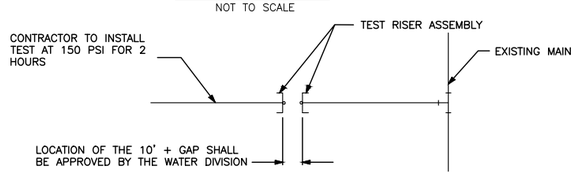
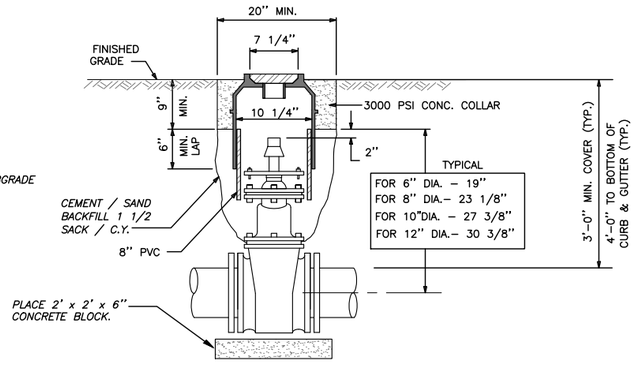


1. HYDROSTATIC TEST: WATER FOR FILLING THE NEW WATER LINE AND PERFORMING TESTS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY OF SOUTH PADRE ISLAND THROUGH A STANDARD WATER CONSTRUCTION METER CONNECTION. STANDARD WATER CONSTRUCTION METER AND GAUGE WILL BE SUPPLIED BY THE CITY AFTER THE CONTRACTOR HAS PAID ALL APPLICABLE FEES FOR THE WATER CONSTRUCTION METER. THE TEST PUMP WITH APPROPRIATE CONNECTION POINTS AS APPROVED BY THE WATER SUPERINTENDENT FOR THE INSTALLATION OF METER AND GAUGE SHALL BE FURNISHED BY THE CONTRACTOR. THE METER SHALL BE DIRECTLY CONNECTED TO THE MAIN OR PIPE BEING TESTED BY THE USE OF COPPER TUBING OR AN APPROVED REINFORCED HOSE. THE METER SHALL BE PROTECTED AGAINST EXTREME PRESSURES BY THE USE OF A ONE (1") INCH SAFETY RELIEF VALVE SET AT THE TEST PRESSURE PLUS TEN POUNDS PER SQUARE INCH AND FURNISHED BY THE CITY (48 HOURS NOTIFICATION).
2. BACTERIOLOGICAL TEST: CONTRACTOR SHALL FURNISH AND INSTALL TEST RISER ASSEMBLY. AFTER BACTERIOLOGICAL SAMPLE PASSES TEST, CONTRACTOR SHALL REMOVE TEST RISER ASSEMBLIES AND TIE NEW SYSTEM TO EXISTING UNDER THE SUPERVISION OF THE PUBIC WORKS DEPARTMENT INSPECTOR. CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT THAT IS REQUIRED TO MAKE TIE / CONNECTION. CONTRACTOR WILL SCHEDULE & COORDINATE WITH PUBIC WORKS DEPARTMENT INSPECTOR ON DATE & TIME OF TIE-IN. (24 HOURS NOTIFICATION)
3. CONTRACTOR SHALL FURNISH AND INSTALL TAPPING SLEEVE OR SADDLE AND TAPPING GATE VALVE AND VALVE BOX COMPLETE. CITY TO MAKE TAP (72 HOURS NOTIFICATION)

DETAIL "A" TEST RISER ASSEMBLY CONNECTION

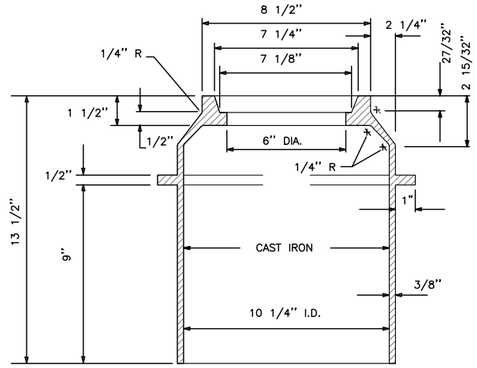
NOT TO SCALE



VALVE BOX DETAIL @ NATURAL GROUND

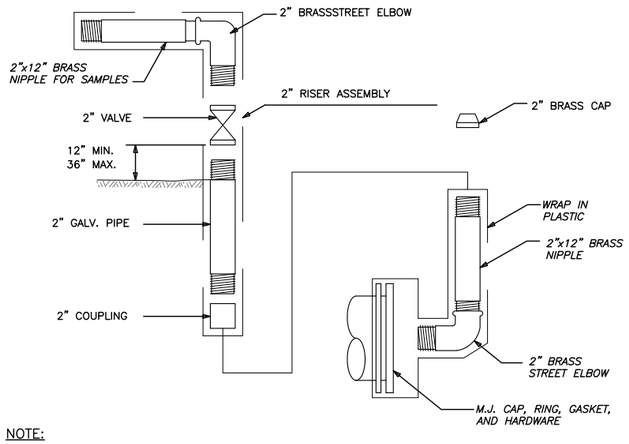
NOT TO SCALE

ALL VALVES SHALL BE HOUSED IN APPROVED VALVE BOXES



EXTENSION DETAIL

NOT TO SCALE



NOTE:

AFTER BACTERIOLOGICAL SAMPLE PASSES TEST, CONTRACTOR WILL REMOVE RISER ASSEMBLY AND INSTALL 2" BRASS CAP

DETAIL "B" TEST RISER ASSEMBLY

NOT TO SCALE

FURNISHED AND INSTALLED BY CONTRACTOR

SERVICE LINE MATERIALS

SERVICE CLAMPS
FOR 3/4", 1", 1 1/2" I.P. THREAD TAPS FOR 6" MAINS; 2" I.P. THREAD CLAMP TAP CONNECTION ALLOWED FOR 8" AND LARGER MAINS.

CORPORATION STOPS
3/4", 1", 1 1/2". AND 2" REQUIRED WITH I.P. THREAD INLET BY COPPER COMPRESSION OUTLET WITH CLAMP – CORPORATION STOP REQUIRED AT ALL SERVICE TAPS.

ONE PIECE SDR9 POLYETHYLENE TUBING OR TYPE K COPPER
REQUIRED FOR ALL SERVICE LINES BETWEEN MAIN TO METER – SIZES REQUIRED 3/4", 1", 1 1/2", AND 2" (NO SPLICES ALLOWED)

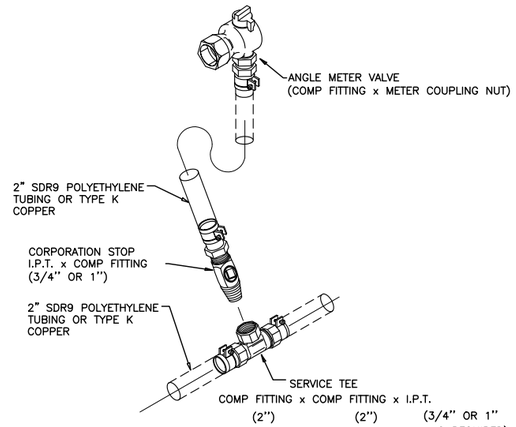
ANGLE METER STOP
REQUIRED AT ALL METERS – SIZES 3/4" & 1" – INSTALL 3/4" UNLESS DIRECTED OTHERWISE – COPPER COMPRESSION W/ CLAMP INLET BY METER COUPLING NUT OUTLET.

METER (BY OTHERS)
METER ADAPTER AND CHECK VALVE (BY OTHERS)
REQUIRED AT ALL METERS – SIZES 3/4" & 1" – INSTALL 3/4" UNLESS DIRECTED OTHERWISE – METER NUT INLET BY 3/4" MALE I.P. OUTLET.

ADAPTER COUPLING (BY OTHERS)
REQUIRED AT ALL METERS – 3/4" & 1" – FEMALE I.P. BY PVC COMPRESSION.

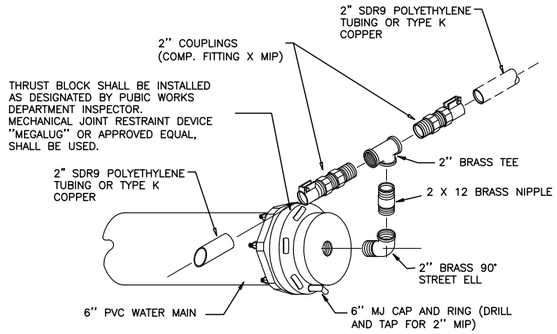
METER BOX
CAST IRON W/ HOT TAR DIP SHALL BE PROVIDED BY THE CONTRACTOR FOR 3/4" METER SETTINGS, IF EXISTING STRUCTURE DOES NOT HAVE ONE. BOXES FOR LARGER (1" & UP) METER SETTINGS SHALL BE FURNISHED BY THE CITY.

BRASS FITTINGS
BRASS FITTINGS SHALL COMPLY WITH A.W.W.A. C800–66 AND BE WRAPPED IN POLYETHYLENE.



TYPICAL CONNECTION DETAIL

NOT TO SCALE

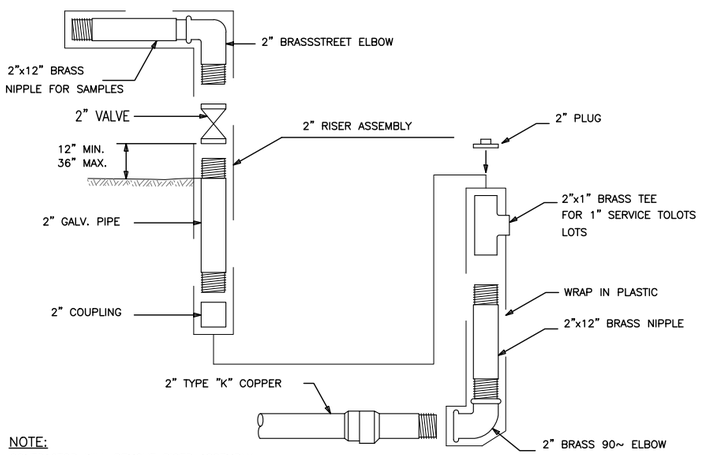


NOTE:

NO MORE THAN 3 LOTS SHALL BE SERVED PER LEG.

TYPICAL CONNECTION DETAIL

NOT TO SCALE



NOTE:

CONTRACTOR WILL REMOVE RISER ASSEMBLY AND INSTALL 2" BRASS PLUG ON 2"x1" BRASS TEE AFTER SAMPLE PASSES

DETAIL "C" TEST RISER ASSEMBLY

NOT TO SCALE

FURNISHED AND INSTALLED BY CONTRACTOR

PROJECT No.: C275–21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

WATER STANDARD DETAILS (2 OF 3)

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275–21184

C15
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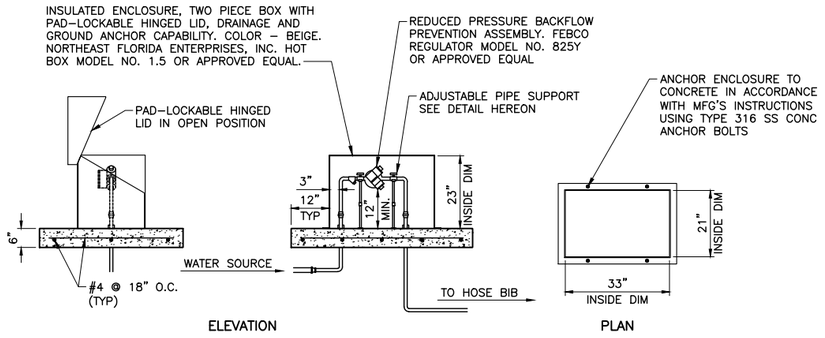
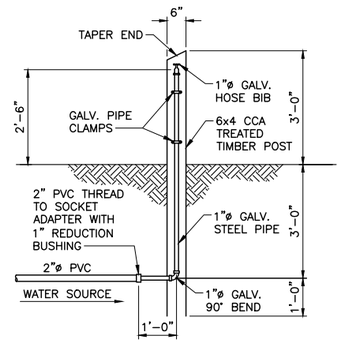


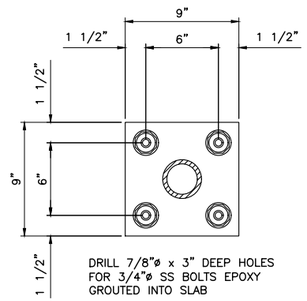
A C17 C16 **BACKFLOW PREVENTER**

NOT TO SCALE

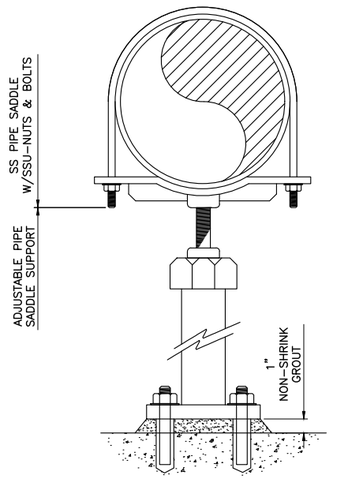


B C17 C16 **HOSE BIB**

NOT TO SCALE



NOTE:
EPOXY TO BE SIMPSON STRONG TIE SET-XP® OR APPROVED EQUAL.



NOTE:
"PIPING TECHNOLOGY AND PRODUCTS" ADJUSTABLE PIPE SADDLE SUPPORT W/SS PIPE SADDLE, STEEL U-BOLTS OR APPROVED EQUAL.

ADJUSTABLE PIPE SUPPORT

NOT TO SCALE

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

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South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

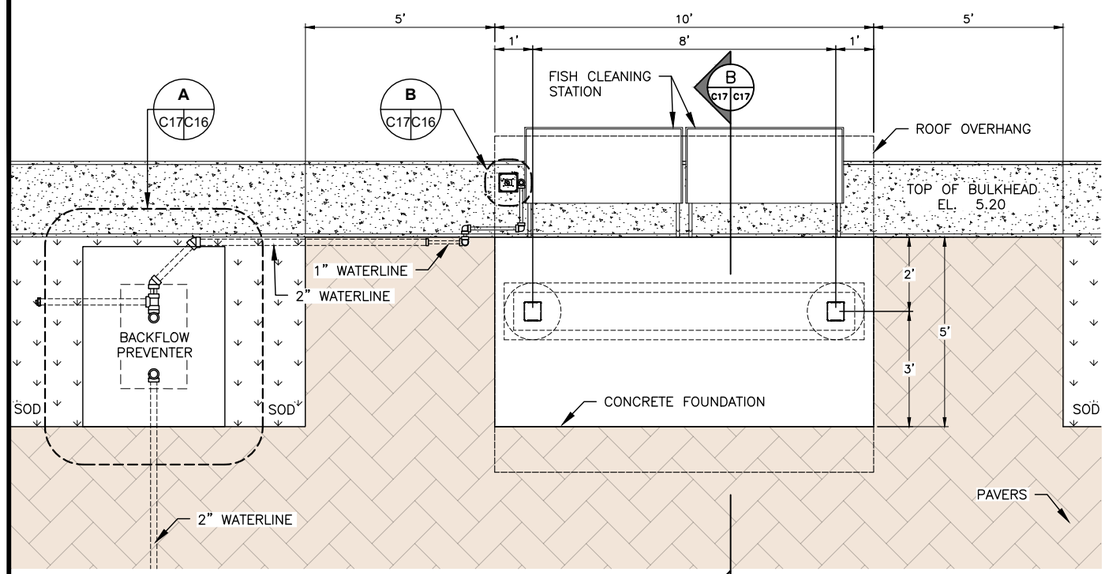
MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

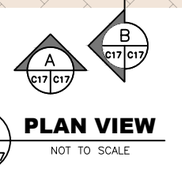
WATER STANDARD DETAILS (3 OF 3)

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

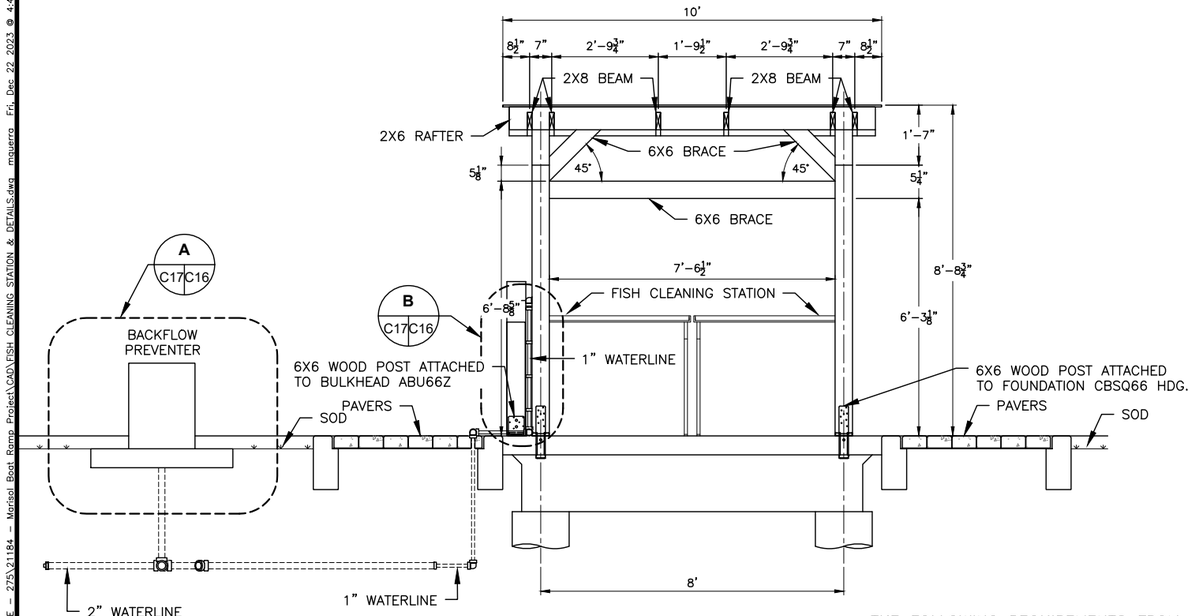
C16

38





1 C2 C17 **PLAN VIEW**
NOT TO SCALE



A C17 C17 FRAMING DETAIL **FRONT VIEW**
NOT TO SCALE

GENERAL NOTES:

1. ALL HURRICANE TIES SHALL BE SIMPSON STRONG–TIE STAINLESS STEEL TYPE 316 OR APPROVED EQUAL. INSTALL PER MANUFACTURE'S RECOMMENDATIONS.
2. ROOF SHEATHING NAILS WILL BE 10D STAINLESS STEEL NAILS AT 4" ON CENTER ALONG EDGE AND 6" ON CENTER AT INTERIOR SUPPORTS.
3. ALL 10D STAINLESS STEEL NAILS TO MEET MINIMUM LENGTH AT 3" AND SHANK DIAMETER AT 0.148"
4. PROVIDE PLYWOOD FILLER AS REQUIRED TO BE FLUSH WITH WOOD POST.

CONSTRUCTION NOTES:

1 FISH CLEANING STATION CM MARINES– LINE FISH CLEANING STATION ANGLED PRODUCT ID: CP1600–007 MFG ID: SLFCS40–4 OR APPROVED EQUAL.

2 ALL HARDWARE TO BE STAINLESS STEEL.

3 ALL SLABS & BEAMS ARE SUSPENDED. REFER TO SECTIONAL DETAILS FOR REINFORCEMENT.

4 SPLICE JOINTS FOR TOP BARS FOR REINFORCED CONCRETE SLABS AND BEAMS SHALL BE LOCATED AT MIDDLE THIRD OF THE SPAN OF SLABS OR BEAMS.

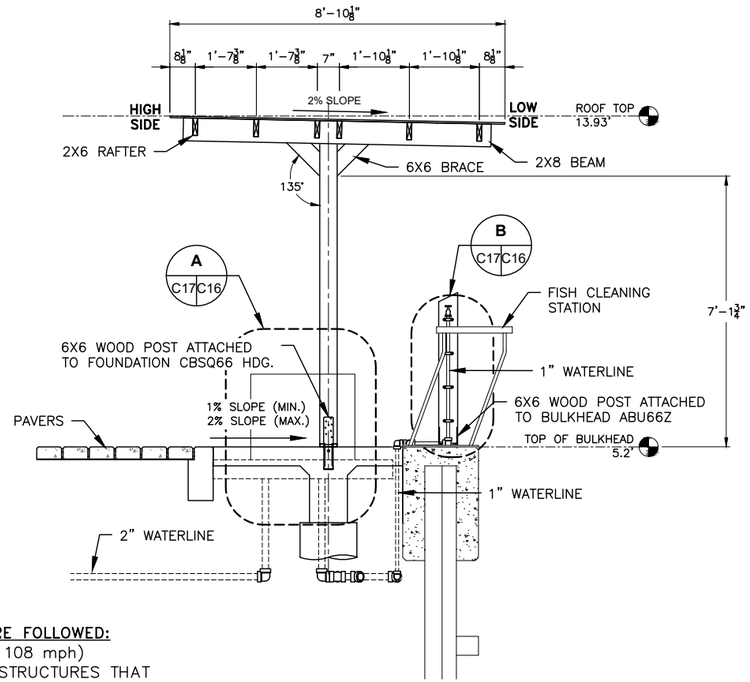
5 SPLICE JOINTS FOR BOTTOM BARS FOR REINFORCED CONCRETE SLAB AND BEAMS SHALL BE LOCATED AT SUPPORTS.

6 CONSTRUCTION JOINTS OF CONCRETE BEAMS/SLABS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE SPAN. CONTRACTOR TO SUBMIT PROPOSED LOCATION OF CONSTRUCTION JOINTS TO ARCHITECT/ENGINEER FOR APPROVAL.

7 LAPPING OF SPLICE BARS AT SPLICE JOINTS SHALL BE 62 BAR DIAMETER OR A MINIMUM OF 36" LONG.

8 ☐ INDICATES SIMPSON 6X6 COLUMN BASE CBSQ66 HDG.

9 ▣ INDICATES SIMPSON 6X6 POST BASE ABU66Z.



B C17 C17 FRAMING DETAIL **SECTION VIEW**
NOT TO SCALE

THE FOLLOWING REQUIREMENTS FROM ASCE 7–16 WERE FOLLOWED:

- ULTIMATE DESIGN WIND SPEED: 140 mph (VASD = 108 mph)
- OCCUPANCY CATEGORY: I (BUILDINGS AND OTHER STRUCTURES THAT PRESENT A LOW HAZARD TO HUMAN LIFE IN THE EVENT OF FAILURE)
- WIND EXPOSURE CATEROGY: D
- INTERNAL PRESSURE COEFFICIENT (GCpi): 0.18 (+/–)
- Kzt: 1
- Kd: 0.85

PROJECT No.: C275–21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

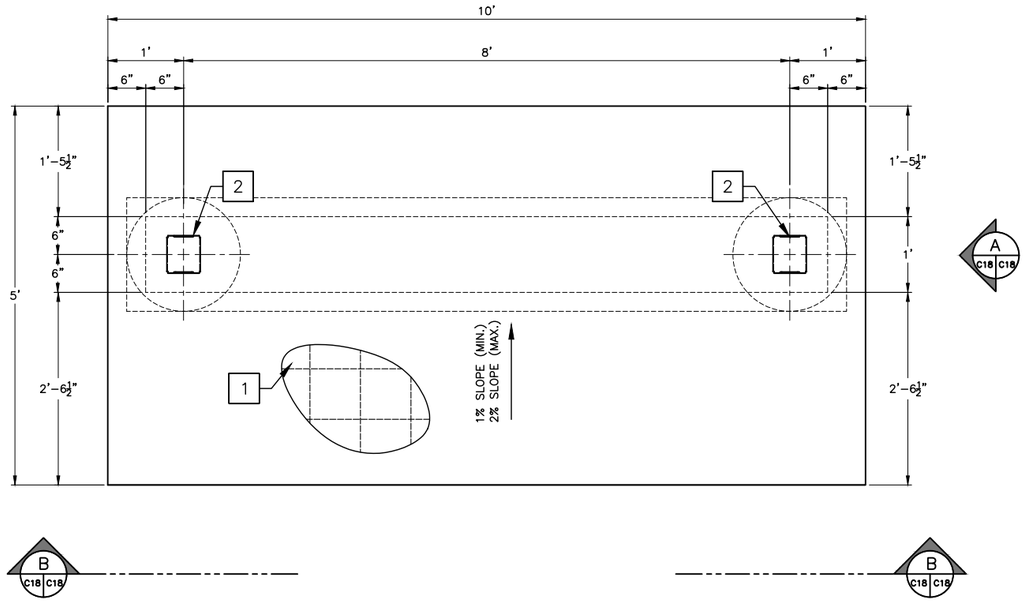
FISH CLEANING STATION

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

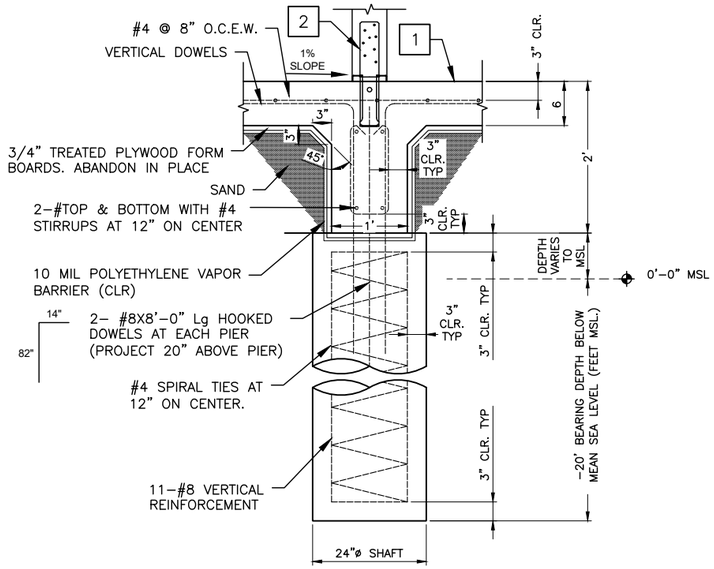
C17
39

R:\CLIENTS\CITY OF SOUTH PADRE – 275\C21184 – Marisol Boat Ramp Project\CAD\FISH CLEANING STATION & DETAILS.dwg mquero Fri, Dec 22, 2023 @ 4:40:45 pm



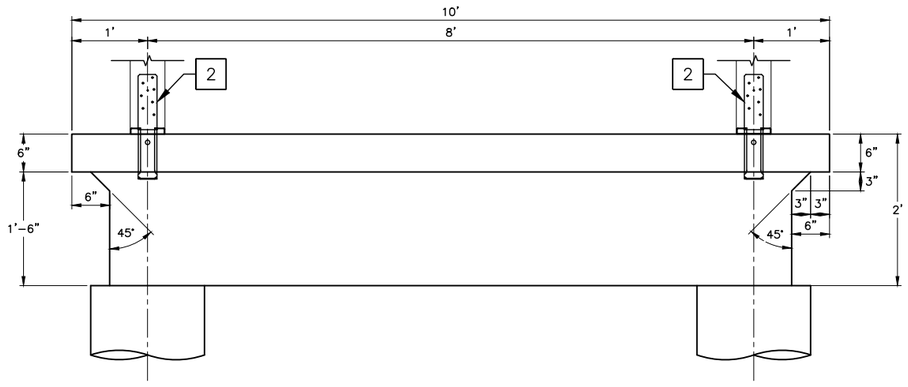
1 C18 C18 **FOUNDATION PLAN VIEW**

SCALE: 1"= 1'-0"



A C18 C18 **FOOT DETAIL**

SCALE: 1"= 1'-0"



B C18 C18 FOUNDATION ELVETAION **SECTION VIEW**

SCALE: 1"= 1'-0"

THE FOLLOWING REQUIREMENTS FROM ASCE 7-16 WERE FOLLOWED:

- ULTIMATE DESIGN WIND SPEED: 140 mph (VASD = 108 mph)
- OCCUPANCY CATEGORY: I (BUILDINGS AND OTHER STRUCTURES THAT PRESENT A LOW HAZARD TO HUMAN LIFE IN THE EVENT OF FAILURE)
- WIND EXPOSURE CATEROGY: D
- INTERNAL PRESSURE COEFFICIENT (GCpi): 0.18 (+/-)
- Kzt: 1
- Kd: 0.85

GENERAL NOTES:

1. ALL SLABS & BEAMS ARE SUSPENDED. REFER TO SECTIONAL DETAILS FOR REINFORCEMENT.
2. SPLICE JOINTS FOR TOP BARS FOR REINFORCED CONCRETE SLABS AND BEAMS SHALL BE LOCATED AT MIDDLE THIRD OF THE SPAN OF SLABS OR BEAMS.
3. SPLICE JOINTS FOR BOTTOM BARS FOR REINFORCED CONCRETE SLAB AND BEAMS SHALL BE LOCATED AT SUPPORTS.
4. CONSTRUCTION JOINTS OF CONCRETE BEAMS/SLABS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE SPAN. CONTRACTOR TO SUBMIT PROPOSED LOCATION OF CONSTRUCTION JOINTS TO ARCHITECT/ENGINEER FOR APPROVAL.
5. LAPPING OF SPLICE BARS AT SPLICE JOINTS SHALL BE 62 BAR DIAMETER OR A MINIMUM OF 36" LONG.
6. ☐ INDICATES SIMPSON 6X6 COLUMN BASE CBSQ66 HDG.

CONSTRUCTION NOTES:

1 PROPOSED 6" CONCRETE FOUNDATION SLAB AT A 1% SLOPE (TOTAL: 25 ft³) WITH #4 @ 8" O.C.E.W. ON COMPACTED SELECT FILL.

2 PROPOSED 6X6 COLUMN BASE CBSQ66 HDG (TOTAL: 2) TYP. INSTALL PER MRF RECOMMENDATIONS.

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

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South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

FISH CLEANING STATION FOUNDATION PLAN

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

C18

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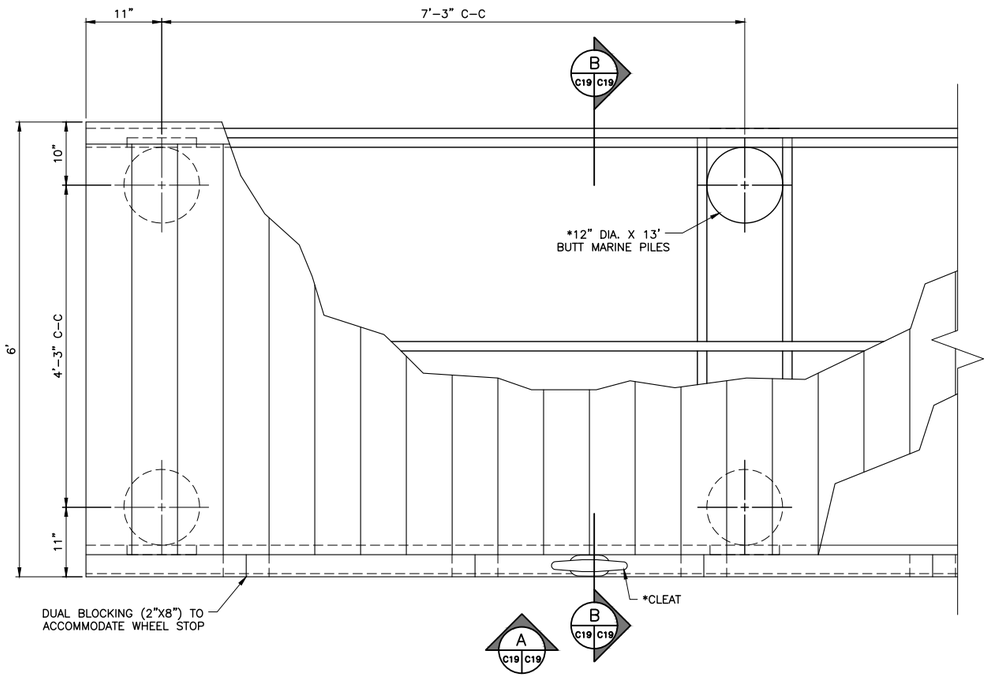
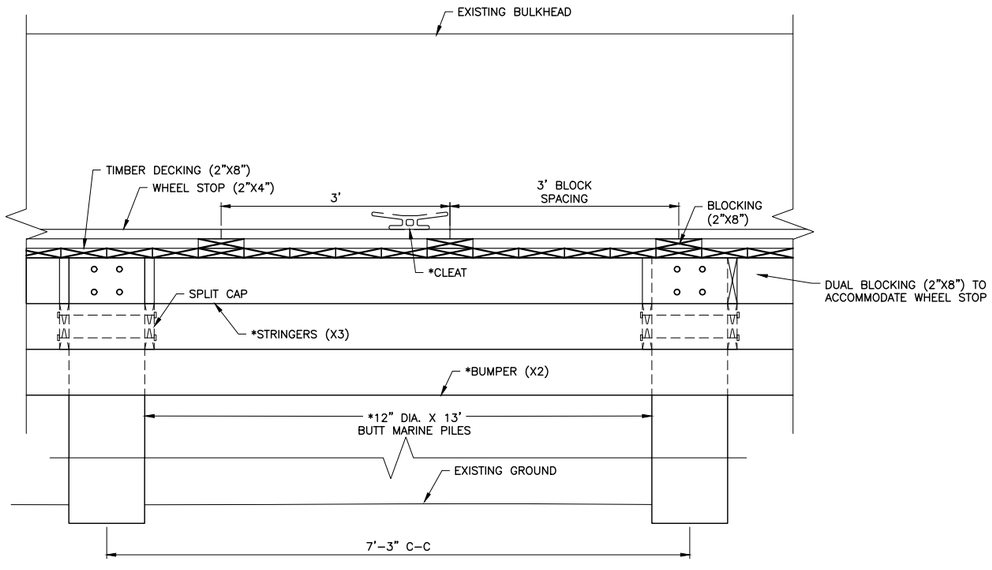
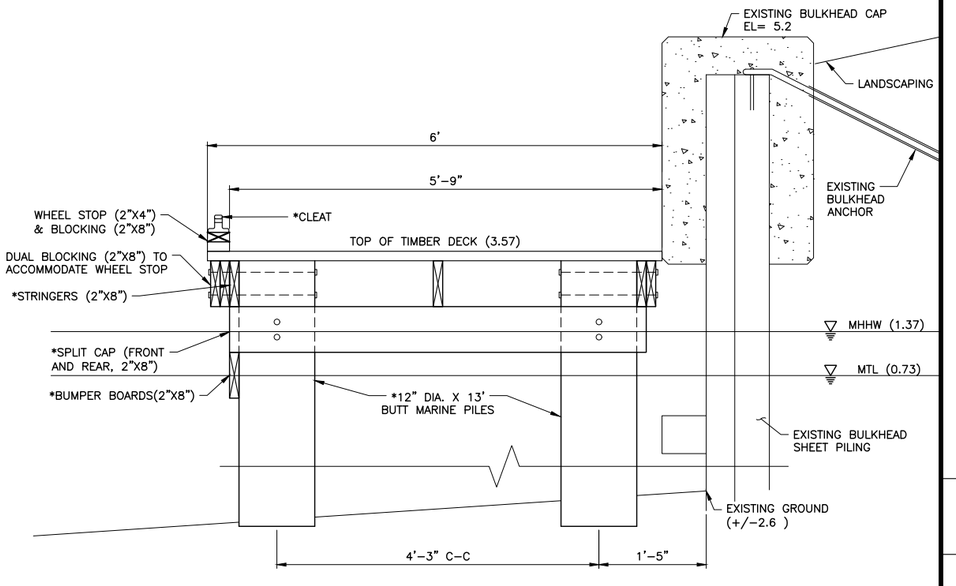


1 C2 C19 **PLAN VIEW**
NOT TO SCALE



A C19 C19 FRAMING DETAIL
FRONT VIEW
NOT TO SCALE



B C19 C19 TYPICAL FRAMING
SECTION VIEW
NOT TO SCALE

WOOD CONSTRUCTION

1. PROVIDE DRESSED LUMBER, S4S, UNLESS OTHERWISE INDICATED.
2. PIER LUMBER: NO. 2 GRADE, SOUTHERN YELLOW PINE
3. PRESSURE TREATMENT: IN ACCORDANCE WITH THE REQUIREMENTS OF AWPA STANDARD C1 AND IN ACCORDANCE WITH THE FOLLOWING STANDARDS FOR INDICATED END USES:
   - A. LUMBER (SALT WATER USE ONLY): C2
   - B. PILING: C3
   - C. MARINE CONSTRUCTION: C18
4. CCA TREATED WOOD, AWPA USE CATEGORY UC5C – MARINE USE, SOUTHERN WATERS
5. PRESERVATIVE RETENTION: IN ACCORDANCE WITH THE SPECIFIED STANDARD, DETERMINED IN THE SPECIFIED ZONE FOR THE FOLLOWING APPLICATIONS:
   - D. ABOVE GROUND
   - E. SALT WATER IMMERSION
6. ANY CUT SURFACES SHOULD BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4 WITH A PRESERVATIVE CONTAINING AT LEAST 2% COPPER.

GENERAL NOTES:

1. 12" CLEATS SHALL BE INSTALLED THROUGH STINGERS AND DECKING.
2. ALL HARDWARE SHALL BE STAINLESS STEEL
3. MAXIMUM SPACING BETWEEN TIMBER DECKING SHALL BE 1/2" (HORIZONTAL).

PROJECT No.:
C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED
PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

DOCK DETAILS

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	YS
DATE:	12/22/2023
JOB NO.	C275-21184

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R:\CLIENTS\CITY OF SOUTH PADRE – 275\21184 – Marisol Boat Ramp Project\CAD\DOCK DETAILS.dwg mfolson Fri, Dec 22, 2023 @ 4:40:55 pm

DRILLED SHAFT FOUNDATION NOTES:

1. DESIGN LOADS
   A. WIND LOAD (ASCE 7-10)
      RISK CATEGORY II: 160 MPH
   B. LIGHT POLE AND LIGHTING FIXTURE LIMITS
      LIGHT POLE TYPE: ROUND
      OVERALL POLE LENGTH: 18 FT. MAX.
      POLE HEIGHT ABOVE GRADE: 20 FT. MAX.
      POLE BASE O.D.: 8-1/4 INCH.
      POLE AND LIGHTING FIXTURE WEIGHT: 600 LBS MAX.
      LIGHTING FIXTURE EPA: 2.1 SQ. FT. MAX.

2. DESIGN STRENGTH
   A. CONCRETE: F'c = 4,000 PSI AT 28 DAYS
   B. REINFORCEMENT: Fy = 60,000 PSI. PROVIDE ASTM A615 GRADE 60 STEEL.

3. FOR BORING LOGS, REFER TO GEOTECHNICAL REPORT TITLED: "GEOTECHNICAL ENGINEERING REPORT, BOAT RAMP AND PARKING LOT PROJECT, SOUTH PADRE ISLAND, TEXAS", PREPARED BY TERRACON CONSULTANTS, INC., TERRACON PROJECT NO. 88225026, MARCH 28, 2022.

4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, UNDERGROUND, AND OVERHEAD CONDITIONS PRIOR TO CONSTRUCTION.

5. EXISTING BULKHEAD TIE BACKS, RETAINING WALL FOOTINGS, BUILDING FOUNDATIONS ADJACENT TO THE DRILLED SHAFT SHALL BE PHYSICALLY LOCATED AND PROTECTED DURING FOUNDATION CONSTRUCTION. COORDINATE FINAL LIGHT POLE FOUNDATION LOCATIONS TO AVOID CONFLICTS. PROVIDE BRACING AND TEMPORARY SUPPORT IF NEEDED.

6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE SOIL CONDITION AND PROVIDE PROPER CONSTRUCTION METHOD TO ENSURE THE SIZE AND DEPTH OF THE DRILLED HOLES FOR SHAFT INSTALLATION.

7. IF SHALLOW OR PERCHED GROUNDWATER IS ENCOUNTERED AT THE TIME OF CONSTRUCTION, DRILLED SHAFT CONSTRUCTION SHOULD UTILIZE EITHER THE WET CONSTRUCTION METHOD USING DRILLING SLURRY OR THE CASING CONSTRUCTION METHOD TO FACILITATE PROPER DRILLED SHAFT INSTALLATION.

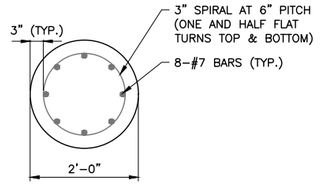
8. SHAFT EXCAVATION SHALL BE OBSERVED BY GEOTECHNICAL ENGINEER OF RECORD TO DETERMINE THAT THE PROPER BEARING STRATUM IS ENCOUNTERED.

9. DRILLED SHAFT INSTALLATION SHALL COMPLY WITH CHAPTER 4 OF THE FHWA PUBLICATION GEC 010 "DRILLED SHAFTS: CONSTRUCTION PROCEDURES AND LRFD DESIGN METHODS" (FHWA-NHI-10-016), AND "STANDARD SPECIFICATION FOR THE CONSTRUCTION OF DRILLED PIERS", ACI PUBLICATION NO. 336.1-01.

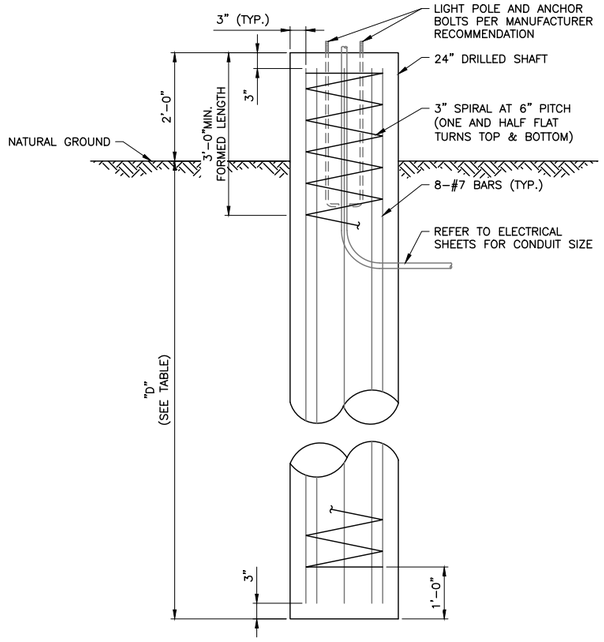
10. DRILLED SHAFTS SHOULD BE CHECKED FOR SIZE AND DEPTH PRIOR TO THE PLACEMENT OF CONCRETE. PRECAUTIONS SHOULD BE TAKEN DURING THE PLACEMENT OF THE PIER REINFORCEMENT CONCRETE IN DRILLED SHAFTS TO PREVENT THE LOOSE EXCAVATED MATERIAL FROM FALLING INTO THE EXCAVATION.

DRILLED SHAFT FOUNDATION ID	"D" (FT)
A-E	15
F-I	25

REFER TO PROPOSED SIGHT PLAN FOR DRILLED SHAFT FOUNDATIONS A-I EXACT LOCATIONS.



DRILLED SHAFT FOUNDATION
TOP VIEW



DRILLED SHAFT FOUNDATION
FOR 17'-10" HIGH LIGHT POLE

1 C2 C20 **DRILLED SHAFT FOUNDATION DETAIL**
NOT TO SCALE

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

DRILLED SHAFT LIGHT POLE FOUNDATION

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275-21184

C20
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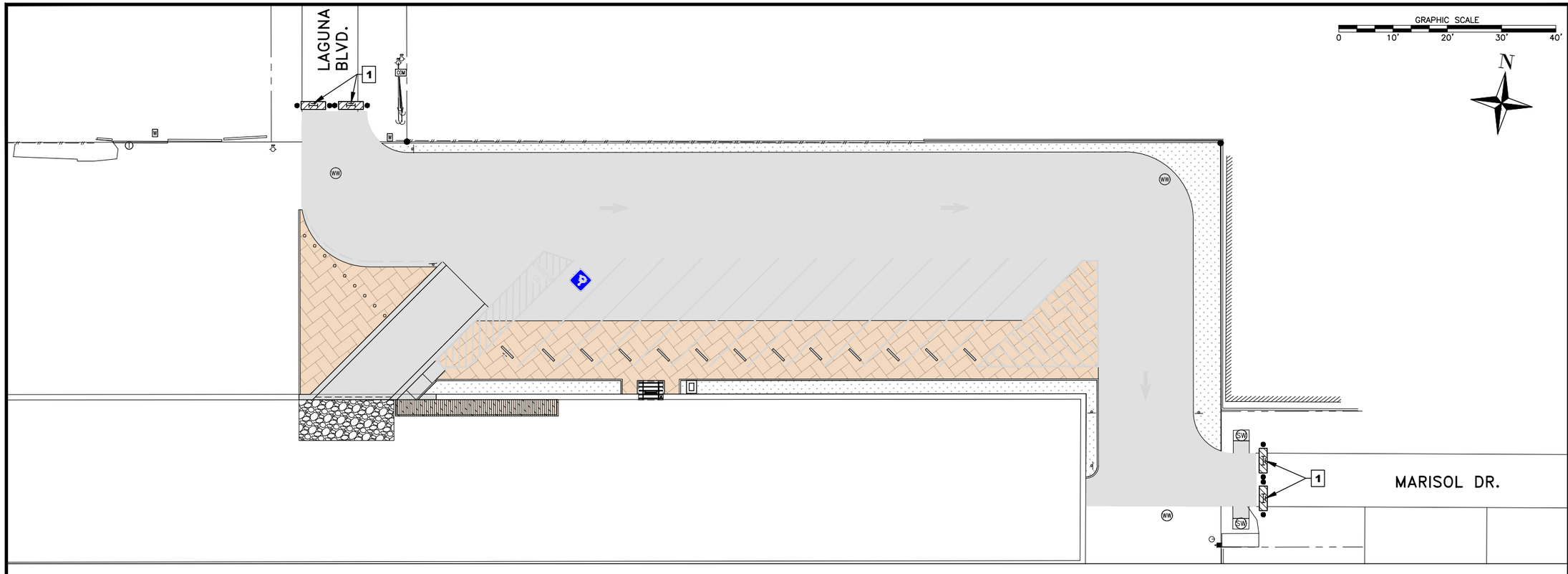


SPECIAL CONDITIONS:

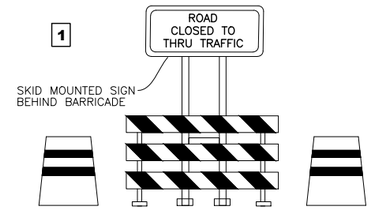
THE FOLLOWING SPECIAL CONDITIONS OUTLINE THE MINIMUM REQUIREMENTS ASSOCIATED WITH THIS TRAFFIC CONTROL PLAN.

NOTE:

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM WITH CITY AND STATE SPECIFICATIONS IN ACCORDANCE WITH THE LATEST VERSION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND SUBSEQUENT REVISIONS.
2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES DURING THE COURSE OF THE CONSTRUCTION PERIOD.
3. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC SIGNS DURING THE CONSTRUCTION PERIOD.
4. ALL CONSTRUCTION WARNING SIGNS MAY BE MOUNTED ON PORTABLE DEVICES.
5. SHOULD ANY TRAFFIC SIGN, SIGN POST OR ITS FOUNDATION BE DAMAGED, CONTRACTOR SHALL REPORT SUCH INFORMATION IMMEDIATELY TO THE ATTENTION OF THE CITY'S STREET DEPARTMENT AT. AFTER 5 PM WEEKDAYS AND ON WEEKENDS, ALL EMERGENCY SITUATIONS SHOULD BE REPORTED TO THE POLICE DEPARTMENT AT.
6. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL RESIDENT AND BUSINESS DRIVEWAYS DURING THE CONSTRUCTION PERIOD.
7. THE CONTRACTOR SHALL PROVIDE A CERTIFIED FLAGGER DURING THE COURSE OF THE CONSTRUCTION PERIOD. CERTIFIED FLAGGER WILL NOT BE PAID DIRECTLY BUT TO BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS. CONTRACTOR SHALL NOT BEGIN ANY CONSTRUCTION ACTIVITIES UNLESS THERE IS ENOUGH PERSONNEL TO ENSURE TCP IS FOLLOWED AS WELL AS CONSTRUCTION ACTIVITY.
8. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING BICYCLE TRAFFIC AROUND ALL WORK AREAS THROUGHOUT THE PERIODS OF CONSTRUCTION WHEN EXISTING BICYCLE TRAILS, LANES, OR ROUTES ARE DESIGNATED. WHERE POSSIBLE, ADEQUATE SPACE FOR BICYCLISTS MUST BE PROVIDED, AND BICYCLE DETOUR SIGNS, INCLUDING "SHARE THE ROAD" SIGNS SHALL BE INSTALLED. WHEN ADEQUATE SPACE IS NOT AVAILABLE TO PROVIDE FOR BICYCLE ACCESS, THE BICYCLE FACILITIES SHALL BE ADEQUATELY DETOURED AROUND THE CONSTRUCTION SITE. THE DETOUR ROUTE SHALL MINIMIZE OUT–OF–DIRECTION TRAVEL DISTANCE, AND SHALL BE ADEQUATELY SIGNED AND DIRECTED. BICYCLE DETOUR SIGNS SHALL BE INCIDENTAL TO PAYMENT FOR TRAFFIC CONTROL.
9. THE WORK AREA SHALL NEVER PRESENT AN IMPASSABLE CONDITION. CONTRACTOR SHALL MAINTAIN AT LEAST ONE 9' MINIMUM TRAVEL LANE AT ALL TIMES DURING CONSTRUCTION.
10. ALL CONSTRUCTION ACTIVITIES WITHIN THE PROPOSED CONSTRUCTION AREA SHALL BE CONTAINED IN BETWEEN TWO FLAG PERSONS.
11. FLAG PERSONS SHALL BE EQUIPPED WITH TWO–WAY RADIOS FOR COMMUNICATION, AND WILL BE RESPONSIBLE FOR STOPPING AND RELEASING TRAFFIC AS NEEDED AROUND THE WORK AREA.
12. CONTRACTOR SHALL SCHEDULE CONSTRUCTION SO THAT BOTH TRAFFIC LANES WILL BE OPENED ALLOWING FOR TWO–WAY TRAFFIC AT THE END OF EACH DAY. PRIOR TO DIRECTING TRAFFIC ON A MILLED, UNEVEN OR ANY OTHER SURFACE LESS THAN A SMOOTH PAVEMENT, THE CONTRACTOR SHALL PLACE THE APPROPRIATE SIGNS TO WARN TRAFFIC OF THE UPCOMING CONDITIONS. THE FOLLOWING SIGNS MAY BE REQUIRED DEPENDING ON WHICHEVER SUITS THE CURRENT CONDITIONS: ECW8–8 "ROUGH ROAD" , ECW8–7 "LOOSE GRAVEL", CW8–11 "UNEVEN LANES".
13. CONTRACTOR NEEDS TO INFORM PROPERTY OWNERS WHEN THEY PLAN TO START WORK AND LET THEM KNOW HOW LONG WORK WILL LAST DEPENDING ON WEATHER CONDITIONS.

LEGEND:

- PROPOSED CONSTRUCTION AREA
- TYPE III BARRICADE
- DENOTES - SKID MOUNTED SIGNS
- REFLECTORIZED PLASTIC DRUM

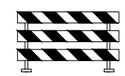


TYPICAL ROAD CLOSURE TRAFFIC CONTROL APPLICATION

NOTE:

1. USE 30 MPH SPEED LIMIT FOR MIN. SIGN SPACING
2. FOR CONSTRUCTION WARNING SIGN SIZE AND SPACING SEE TABLE 'B'

REFLECTORIZED PLASTIC DRUM



8' TYPE III BARRICADE

TABLE B		Minimum Desirable Taper Lengths X x			Suggested Maximum Spacing of Device		Minimum Sign Spacing X Distance
Posted Speed S	Formula	10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60–75	120'
35		205'	225'	245'	35'	70'–90'	160'
40		265'	295'	320'	40'	80'–100'	240'
45	L=WS	450'	495'	540'	45'	90'–110'	320'
50		500'	550'	600'	50'	100'–125'	400'
55		550'	605'	660'	55'	110'–140'	500'
60		600'	660'	720'	60'	120'–150'	X 600'
65		650'	715'	780'	65'	130'–165'	X 700'
70		700'	770'	840'	70'	140'–175'	X 800'

PERIMETER SIGNAGE PLAN
NOTE: FOR CONSTRUCTION WARNING SIGN SPACING (SEE TABLE "B")

PROJECT No.: C275–21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

REVISION NO.	DATE	BY	DESCRIPTION

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

TRAFFIC CONTROL PLAN

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

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1. STORMWATER POLLUTION PREVENTION–CLEAN WATER ACT SECTION 402

TPDES TXR 150000: STORMWATER DISCHARGE PERMIT OR CONSTRUCTION GENERAL PERMIT REQUIRED FOR PROJECTS WITH 1 OR MORE ACRES DISTURBED SOIL. PROJECTS WITH ANY DISTURBED SOIL MUST PROTECT FOR EROSION AND SEDIMENTATION IN ACCORDANCE WITH THE SPECIFICATIONS.
LIST MS4 OPERATOR(S) THAT MAY RECEIVE DISCHARGE FROM THIS PROJECT. THEY MAY NEED TO BE NOTIFIED PRIOR TO CONSTRUCTION ACTIVITIES.

1. THIS PROJECT IS LOCATED WITHIN THE BOUNDARIES OF THE SOUTH PADRE ISLAND MUNICIPAL SEPARATE STORM SEWER SYSTEM, AND WOULD COMPLY WITH ALL APPLICABLE MS4 REQUIREMENTS.

☑ NO ACTION REQUIRED ☐ REQUIRED ACTION

ACTION NO.

1. PREVENT STORMWATER POLLUTION BY CONTROLLING EROSION AND SEDIMENTATION IN ACCORDANCE WITH TPDES PERMIT TXR 150000.
2. COMPLY WITH THE SW3P AND REVISE WHEN NECESSARY TO CONTROL POLLUTION OR REQUIRED BY THE ENGINEER.
3. POST CONSTRUCTION SITE NOTICE (CSN) WITH SW3P INFORMATION ON OR NEAR THE SITE, ACCESSIBLE TO THE PUBLIC AND TCEQ, EPA OR OTHER INSPECTORS.
4. WHEN CONTRACTOR PROJECT SPECIFIC LOCATIONS (PSL's) INCREASE DISTURBED SOIL AREA TO 5 ACRES OR MORE, SUBMIT NOI TO TCEQ AND THE ENGINEER.

2. WORK IN OR NEAR STREAMS, WATER BODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404.

USACE PERMIT REQUIRED FOR FILLING, DREDGING, EXCAVATING OR OTHER WORK IN ANY WATER BODIES, RIVERS, CREEKS, STREAMS, WETLANDS OR WET AREAS.

THE CONTRACTOR MUST ADHERE TO ALL OF THE TERMS AND CONDITIONS ASSOCIATED WITH THE FOLLOWING PERMIT(S):

☐ NO PERMIT REQUIRED

☐ NATIONWIDE PERMIT 14 – PCN NOT REQUIRED (LESS THAN 1/10TH ACRE WATERS OR WETLANDS AFFECTED)

☑ NATIONWIDE PERMIT 36 – BOAT RAMPS – PCN REQUIRED (1/10 TO <1/2 ACRE, 1/3 IN TIDAL WATERS)

☐ INDIVIDUAL 404 PERMIT REQUIRED

☑ OTHER NATIONWIDE PERMIT REQUIRED: LETTER OF PERMISSION (ATTENDANT DOCK) SWG–2022–00301

REQUIRED ACTIONS: LIST WATERS OF THE US PERMIT APPLIES TO, LOCATION IN PROJECT AND CHECK BEST MANAGEMENT PRACTICES PLANNED TO CONTROL EROSION, SEDIMENTATION AND POST–PROJECT TSS.

1.
2.
3.
4.

THE ELEVATION OF THE ORDINARY HIGH WATER MARKS OF ANY AREAS REQUIRING WORK TO BE PERFORMED IN THE WATERS OF THE US REQUIRING THE USE OF A NATIONWIDE PERMIT CAN BE FOUND ON THE BRIDGE LAYOUTS.

BEST MANAGEMENT PRACTICES:

EROSION	SEDIMENTATION	POST–CONSTRUCTION TSS
☑ TEMPORARY VEGETATION	☑ SILT FENCE	☐ VEGETATIVE FILTER STRIPS
☐ BLANKETS/MATTING	☐ ROCK BERM	☐ RETENTION/IRRIGATION SYSTEMS
☑ MULCH	☐ TRIANGULAR FILTER DIKE	☐ EXTENDED DETENTION BASIN
☐ SODDING	☐ SAND BAG BERM	☐ CONSTRUCTED WETLANDS
☐ INTERCEPTOR SWALE	☐ STRAW BALE DIKE	☐ WET BASIN
☐ DIVERSION DIKE	☐ BUSH BERMS	☐ EROSION CONTROL COMPOST
☐ EROSION CONTROL COMPOST	☐ EROSION CONTROL COMPOST	☐ MULCH FILTER BERM & SOCKS
☐ MULCH FILTER BERM & SOCKS	☐ MULCH FILTER BERM & SOCKS	☐ COMPOST FILTER BERM & SOCKS
☐ COMPOST FILTER BERM & SOCKS	☐ COMPOST FILTER BERM & SOCKS	☐ VEGETATION LINED DITCHES
	☐ STONE OUTLET SEDIMENT TRAPS	☐ SAND FILTER SYSTEMS
	☐ SEDIMENT BASINS	

3. CULTURAL RESOURCES

REFER TO TxDOT STANDARD SPECIFICATIONS IN THE EVENT HISTORICAL ISSUES OR ARCHEOLOGICAL ARTIFACTS ARE FOUND DURING CONSTRUCTION. UPON DISCOVERY OF ARCHEOLOGICAL ARTIFACTS (BONES, BURNT ROCK, FLINT, POTTERY, ETC.) CEASE WORK IN THE IMMEDIATE AREA AND CONTACT THE ENGINEER IMMEDIATELY.

☑ NO ACTION REQUIRED ☐ REQUIRED ACTION

ACTION NO.

1.
2.
3.
4.

4. VEGETATION RESOURCES

PRESERVE NATIVE VEGETATION TO THE EXTENT PRACTICAL.

☑ NO ACTION REQUIRED ☐ REQUIRED ACTION

ACTION NO.

1.
2.

5. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☐ NO ACTION REQUIRED ☑ REQUIRED ACTION

ACTION NO.

1. THE FEDERAL MIGRATORY BIRD TREATY ACT (MBTA) STATES THAT IT IS UNLAWFUL TO KILL, CAPTURE, COLLECT, POSSESS, BUY, SELL, TRADE OR TRANSPORT ANY MIGRATORY BIRD, NEST, YOUNG, FEATHER, OR EGG IN PART OR IN WHOLE, WITHOUT A FEDERAL PERMIT. IN ACCORDANCE WITH THIS REGULATION, THE CONTRACTOR WILL AVOID DISTURBING, DESTROYING, REMOVING, OR RELOCATING ACTIVE NESTS FOUND IN TREES, CULVERTS, BRIDGES, ON THE GROUND, ETC. TYPICAL BREEDING SEASON OCCURS FROM MARCH THROUGH AUGUST; THEREFORE, TREE TRIMMING AND OTHER ACTIVITIES THAT MAY DISTURB BREEDING BIRDS SHOULD BE DONE I THE NON–BREEDING SEASON (SEPTEMBER–FEBRUARY), WHEN POSSIBLE. IF WORK MUST BE PERFORMED DURING THE BREEDING SEASON, THE CONTRACTOR SHALL HAVE A QUALIFIED BIOLOGIST CONDUCT A SURVEY OF THE RIGHT OF WAY TO DETERMINE IF BIRD NESTS ARE PRESENT. IN THE EVENT THAT ACTIVE NESTS ARE ENCOUNTERED ON–SITE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND MEASURES SHALL BE TAKEN TO AVOID DISTURBANCE OF THESE BIRDS, THEIR OCCUPIED NEST, EGGS, AND/OR YOUNG, IN ACCORDANCE WITH THE MBTA. PHASING OF WORK DURING CONSTRUCTION MAY BE NECESSARY TO STAY IN COMPLIANCE WITH THE MBTA. THE CONTRACTOR CAN DISCUSS OTHER PREVENTATIVE MEASURES WITH THE PROJECT ENGINEER AND/OR DISTRICT ENVIRONMENTAL STAFF.
2. WEST INDIAN MANATEES MAY APPROACH THE PROJECT AREA AND ARE VULNERABLE TO BOAT STRIKES. THE SILT CURTAIN SHALL REMAIN IN PLACE AS BARRIER TO ENTRY TO THE WORK AREA WHILE WORK IS BEING COMPLETED IN THE WATER. DO NOT FEED OR WATER MANATEES. IF A MANATEE REMAINS IN THE PROJECT AREA, THEN CONTACT THE USFWS AT 361–533–6765 AND/OR THE TEXAS MARINE MAMMAL STRANDING NETWORK AT 800–962–6625. THE USFWS RECOMMENDS THE CONTRACTOR PROVIDE MATERIALS TO ASSIST WITH THESE INSTRUCTIONS PREFERABLY IN BOTH ENGLISH AND SPANISH.

LIST OF ABBREVIATIONS

BMP: BEST MANAGEMENT PRACTICE
CGP: CONSTRUCTION GENERAL PERMIT
DSHS: TEXAS DEPARTMENT OF STATE HEALTH SERVICES
FHWA: FEDERAL HIGHWAY ADMINISTRATION
MOA: MEMORANDUM OF AGREEMENT
MOU: MEMORANDUM OF UNDERSTANDING
MS4: MUNICIPAL SEPARATE STORMWATER SEWER SYSTEM
MBTA: MIGRATORY BIRD TREATY ACT
NOT: NOTICE OF TERMINATION
NWP: NATIONWIDE PERMIT
NOI: NOTICE OF INTENT
SPCC: SPILL PREVENTION CONTROL AND COUNTERMEASURE
SW3P: STORM WATER POLLUTION PREVENTION PLAN
PCN: PRE–CONSTRUCTION NOTIFICATION
PSL: PROJECT SPECIFIC LOCATION
TCEQ: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
TPDES: TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM
TPWD: TEXAS PARKS AND WILDLIFE DEPARTMENT
TxDOT: TEXAS DEPARTMENT OF TRANSPORTATION
T&E: THREATENED AND ENDANGERED SPECIES
USACE: U.S. ARMY CORPS OF ENGINEERS
USFWS: U.S. FISH AND WILDLIFE SERVICE

6. HAZARDOUS MATERIAL OR CONTAMINATION ISSUES

GENERAL (APPLIES TO ALL PROJECTS):
COMPLY WITH THE HAZARD COMMUNICATION ACT (THE ACT) FOR PERSONNEL WHO WILL BE WORKING WITH HAZARDOUS MATERIALS BY CONDUCTING SAFETY MEETINGS PRIOR TO BEGINNING CONSTRUCTION AND MAKING WORKERS AWARE OF POTENTIAL HAZARDS IN THE WORKPLACE. ENSURE THAT ALL WORKERS ARE PROVIDED WITH PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR ANY HAZARDOUS MATERIALS USED.
OBTAIN AND KEEP ON–SITE MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL HAZARDOUS PRODUCTS USED ON THE PROJECT, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING CATEGORIES: PAINTS, ACIDS, SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES, FUELS AND CONCRETE CURING COMPOUNDS OR ADDITIVES. PROVIDE PROTECTED STORAGE, OFF BORE GROUND AND COVERED, FOR PRODUCTS WHICH MAY BE HAZARDOUS. MAINTAIN PRODUCT LABELING AS REQUIRED BY THE ACT.
MAINTAIN AN ADEQUATE SUPPLY OF ON–SITE SPILL RESPONSE MATERIALS, AS INDICATED IN THE MSDS. IN THE EVENT OF A SPILL, TAKE ACTIONS TO MITIGATE THE SPILL AS INDICATED IN THE MSDS, IN ACCORDANCE WITH SAFE WORK PRACTICES, AND CONTACT THE DISTRICT SPILL COORDINATOR IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CONTAINMENT AND CLEANUP OF ALL PRODUCT SPILLS.

CONTACT THE ENGINEER IF ANY OF THE FOLLOWING ARE DETECTED:
* DEAD OR DISTRESSED VEGETATION (NOT IDENTIFIED AS NORMAL)
* TRASH PILES, DRUMS, CANISTERS, BARRELS, ETC.
* UNDESIRABLE SMELLS OR ODORS
* EVIDENCE OF LEACHING OR SEEPAGE OF SUBSTANCES

DOES THE PROJECT INVOLVE ANY BRIDGE CLASS STRUCTURE REHABILITATION OR REPLACEMENTS (BRIDGE CLASS STRUCTURES NOT INCLUDING BOX CULVERTS)?

☐ YES ☑ NO

IF "NO", THEN NO FURTHER ACTION IS REQUIRED.

IF "YES', THEN TxDOT IS RESPONSIBLE FOR COMPLETING ASBESTOS ASSESSMENT/INSPECTION.
ARE THE RESULTS OF THE ASBESTOS INSPECTION POSITIVE (IS ASBESTOS PRESENT)?

☐ YES ☑ NO

IF "YES", THEN TxDOT MUST RETAIN A DSHS LICENSED ASBESTOS CONSULTANT TO ASSIST WITH THE NOTIFICATION, DEVELOP ABATEMENT/MITIGATION PROCEDURES, AND PERFORM MANAGEMENT ACTIVITIES AS NECESSARY. THE NOTIFICATION FORM TO DSHS MUST BE POSTMARKED AT LEAST 15 WORKING DAYS PRIOR TO SCHEDULED DEMOLITION.

IF "NO", THEN TxDOT IS STILL REQUIRED TO NOTIFY DSHS 15 WORKING DAYS PRIOR TO ANY SCHEDULED DEMOLITION.

IN EITHER CASE, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE DATE(S) FOR ABATEMENT ACTIVITIES AND/OR DEMOLITION WITH CAREFUL COORDINATION BETWEEN THE ENGINEER AND ASBESTOS CONSULTANT IN ORDER TO MINIMIZE CONSTRUCTION DELAYS AND SUBSEQUENT CLAIMS.

ANY OTHER EVIDENCE INDICATING POSSIBLE HAZARDOUS MATERIALS OR CONTAMINATION DISCOVERED ON SITE. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES SPECIFIC TO THIS PROJECT:

☑ NO ACTION REQUIRED ☐ REQUIRED ACTION

ACTION NO.

1.
2.
3.

7. OTHER ENVIRONMENTAL ISSUES

(INCLUDES REGIONAL ISSUES SUCH AS EDWARDS AQUIFER DISTRICT, ETC.)

☑ NO ACTION REQUIRED ☐ REQUIRED ACTION

1.
2.
3.

REVISION NO.	DATE	BY	DESCRIPTION

PROJECT No.: C275–21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

ENVIRONMENTAL PERMITS ISSUED & COMMENTS (EPIC)

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275–21184

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SITE DESCRIPTION

PROJECT LIMITS: THE MARISOL BOAT RAMP PROJECT WILL BE LOCATED AT 1705 LAGUNA BLVD., SOUTH PADRE ISLAND, TX 78597 (SEE SHEET C4).

- LATITUDE. 26°05'48" N
- LONGITUDE 97°10'04" W

PROJECT DESCRIPTION: PROJECT SITE IS LOCATED AT THE END OF WEST MARISOL STREET AND SOUTH OF LAGUNA BOULEVARD. THE IMPROVEMENTS CONSIST OF REMOVING 60 LINEAR FEET OF EXISTING BULKHEAD AND INSTALLATION OF NEW BOAT RAMP FACILITIES INCLUDING DRAINAGE, PAVING, LIGHTING, SIDEWALK, ATTENDANT DOCK, UTILITIES, AND FISH CLEANING STATION.

MAJOR SOIL DISTURBING ACTIVITIES: SOIL DISTURBING ACTIVITIES WILL INCLUDE INSTALLATION OF SEDIMENT AND EROSION CONTROL BMPs. EXCAVATION/DEMOLITION OF EXISTING BULKHEAD, GRADING PREPARATION, AND CONSTRUCTION OF NEW BOAT RAMP, ATTENDANT DOCK, AND PARKING LOT AMENITIES.

TOTAL PROJECT AREA: APPROXIMATELY 0.78 ACRES

TOTAL AREA TO BE DISTURBED: APPROXIMATELY 0.70 ACRES

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): THE WEIGHTED RUNOFF FOR PAVED AREAS WILL BE 0.85

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: THE EXISTING SOIL IS TYPICALLY LEAN CLAY AND SILTY SAND. MOST OF THE LAND REMAINS CLEARED WITH VERY MINIMAL VEGETATION ON THE OUTER EDGES OF THE PROPERTY.

NAME OF RECEIVING WATERS: THE RECEIVING WATERS FOR THE STORM WATER RUNOFF FROM THIS PROPERTY IS THE LAGUNA MADRE DRAINAGE BASIN, SEGMENT 2491. THE TCEQ HAS CLASSIFIED THESE WATERS AS BAY AND ESTUARY. THE TCEQ HAS CLASSIFIED THE WATER BODY USES AS AQUATIC LIFE USE, CONTACT RECREATION USE, GENERAL USE, FISH CONSUMPTION USE, OYSTER WATERS USE.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- [x] TEMPORARY SEEDING
- [x] PERMANENT PLANTING, SODDING, OR SEEDING
- [ ] MULCHING
- [ ] SOIL RETENTION BLANKET
- [ ] BUFFER ZONES
- [x] PRESERVATION OF NATURAL RESOURCES

OTHER:

STRUCTURAL PRACTICES:

- [x] SILT FENCES
- [x] HAY BALES
- [ ] ROCK BERMS
- [ ] DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- [ ] DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- [ ] DIVERSION DIKE AND SWALE COMBINATIONS
- [ ] PIPE SLOPE DRAINS
- [ ] PAVED FLUMES
- [ ] ROCK BEDDING AT CONSTRUCTION EXIT
- [ ] TIMBER MATTING AT CONSTRUCTION EXIT
- [ ] CHANNEL LINERS
- [ ] SEDIMENT TRAPS
- [ ] SEDIMENT BASINS
- [ ] STORM INLET SEDIMENT TRAP
- [ ] STONE OUTLET STRUCTURES
- [ ] CURBS AND GUTTERS
- [ ] STORM SEWERS
- [ ] VELOCITY CONTROL DEVICES
- [ ] EROSION CONTROL LOGS

OTHER: STABILIZED CONSTRUCTION ENTRANCE AND EXIT.

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

REFER TO PLAN SHEET C24.

STORM WATER MANAGEMENT: THE CONTRACTOR SHALL ABIDE BY THE PROVISIONS OF TCEQ STORM WATER POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS CONCERNING PERMITS FOR CONSTRUCTION ACTIVITIES, INCLUDING IMPLEMENTATION OF THE POLLUTION PREVENTION PLAN AND BEST MANAGEMENT PRACTICES. FUELING AND MAINTENANCE OF VEHICLES AND EQUIPMENT SHALL BE PERFORMED IN COMPLIANCE WITH EPA AND ALL OTHER FEDERAL AND STATE REGULATIONS. NATURAL AND CULTIVATED VEGETATION SHALL BE LEFT UNDISTURBED AS MUCH AS POSSIBLE. THE CONTRACTOR SHALL CONSTRUCT STRUCTURAL BEST MANAGEMENT PRACTICES AS NEEDED AND AS REQUIRED TO PREVENT SILT AND DEBRIS FROM ENTERING INTO THE STORM SEWER SYSTEM. THE CONTRACTOR SHALL BE REQUIRED TO SPRINKLE FOR DUST CONTROL AS DIRECTED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL INSPECT TEMPORARY EROSION/SEDIMENTATION CONTROLS PERIODICALLY TO ENSURE THAT THE CONTROLS HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY SEDIMENT OR DEBRIS THAT HAS ACCUMULATED SHALL BE REMOVED AND PLACED IN A DESIGNATED SPOILS DISPOSAL SITE. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING OR OTHER APPROVED MEANS. WHERE CONDITIONS PREVENT INSTALLING TEMPORARY FENCING AT LEAST 4 FEET FROM THE TREE TRUNK, THE CONTRACTOR SHALL PROTECT THE TREE TRUNK WITH STRAPPED-ON PLANKING. USE OF NAILS IS PROHIBITED. THE CONTRACTOR SHALL NOT USE MECHANICAL EXCAVATORS, TO THE MAXIMUM EXTENT PRACTICAL, WITHIN THE CRITICAL ROOT ZONE OF TREES TO AVOID DAMAGE TO THE TREE'S ROOT SYSTEM. THE CONTRACTOR SHALL DIRECTIONAL BORE UTILITY LINES OR HAND DIG UTILITY LINES WITHOUT DAMAGING ROOTS.

OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE: ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER, IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE. ACCUMULATIONS OF SEDIMENT WILL BE REMOVED BEFORE OR AS INDICATED BY THE RESULTS OF REGULAR SITE INSPECTIONS AND IMMEDIATELY BEFORE THE ACCUMULATION REACHES 50% OF DESIGN CAPACITY. SEDIMENT ACCUMULATED IN THE STREET WILL BE REMOVED AND DISPOSED OF PROPERLY FROM THE SITE AS INDICATED IN THE BMP.

INSPECTION: INSPECTIONS WILL BE PERFORMED BY THE CONTRACTOR AND/OR THE CITY EVERY FOURTEEN (14) DAYS AND WITHIN 24 HOURS OF A 0.5-INCH OR MORE RAIN EVENT (AS RECORDED ON A RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE). SITE INSPECTION REPORTS WILL BE COMPLETED AND THE ORIGINAL KEPT WITH THE SWPPP. COPIES OF INSPECTION REPORTS AND OTHER SWPPP DOCUMENTATION SHALL BE PROVIDED TO THE CITY INSPECTOR.

WASTE MATERIALS: TRASH, CONSTRUCTION DEBRIS AND CONSTRUCTION CHEMICALS WILL BE REMOVED BEFORE OR AS INDICATED BY THE RESULTS OF THE REGULAR SITE INSPECTIONS. SUBCONTRACTORS USING CONSTRUCTION CHEMICALS WILL REMOVE ALL UNUSED CONTAINERS. EMPTY CONTAINERS WILL BE DISPOSED OF IN ACCORDANCE WITH TCEQ REGULATIONS.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): SPILL RESPONSE BULLETINS SHALL BE POSTED ON SITE OR AVAILABLE IN THE SITE SUPERINTENDENT'S VEHICLE. PAINTS, THINNERS, ACIDS, AND SOLVENTS SHALL BE STORED IN A STRUCTURE SECURED FROM STORM WATER EXPOSURE, OR IN THE CONTRACTOR'S VEHICLES. THESE ITEMS SHALL BE REMOVED FROM THE WORK SITE DAILY. NO WASTE PRODUCTS SHALL BE PERMITTED IN THE DUMPSTER. ON SITE FUELING TANKS, IF USED, SHALL BE EQUIPPED WITH POLLUTION DAMS CAPABLE OF HOLDING CAPACITY EQUAL TO THE TANK. AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ADHESIVES, PETROLEUM PRODUCTS, CLEANING SOLVENTS, ASPHALT PRODUCTS, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE SPILL COORDINATOR SHALL BE CONTACTED IMMEDIATELY. ALL PRODUCTS USED SHALL BE STORED IN PROPERLY LABELED CONTAINERS, AND REMOVED FROM THE JOBSITE WHEN NO LONGER NEEDED.

SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS AS NECESSARY; OR AS REQUIRED BY LOCAL REGULATION, BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

OFFSITE VEHICLE TRACKING:

- [x] HAUL ROADS DAMPENED FOR DUST CONTROL
- [x] LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- [x] EXCESS DIRT ON ROAD REMOVED DAILY
- [x] STABILIZED CONSTRUCTION ENTRANCE

OTHER: ALL TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED IMMEDIATELY AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY CONTROLS ARE NO LONGER NEEDED, WHICHEVER IS LATER. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DEBRIS BOOM/SILT CURTAIN SHALL BE INSTALLED AROUND THE WETTED PERIMETER OF ALL ACTIVE DEMOLITION, EXCAVATION, FILLING AND MATERIAL OFFLOADING WORK AREAS. CONTRACTOR SHALL MAINTAIN THE BOOM THROUGHOUT DURATION OF ALL IN-WATER CONSTRUCTION ACTIVITIES. ALL CONTRACTOR VESSELS SHALL BE MOORED INSIDE THE BOOM. SILT CURTAINS SHALL BE DEPLOYED AROUND EXCAVATION AND OFFLOADING WORK AREAS AS DICTATED BY WATER QUALITY REQUIREMENTS. DURING MATERIAL DEWATERING OPERATIONS, THE CONTRACTOR SHALL IMPLEMENT SEDIMENT CONTROL BMPS (SILT FENCING, MULCH SOCKS, OR APPROVED EQUIVALENT) TO MANAGE SEDIMENT RUNOFF.

REMARKS: DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS, DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, STREAMBED OR WATER BODY. CONSTRUCTION STAGING AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR. CONSTRUCTION SHOULD BE ACCOMPLISHED IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEARED OF TEMPORARY EMBANKMENT, TEMPORARY MATTING, FALSE WORK, OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT PART OF THE FINISHED WORK. NO CONSTRUCTION WASTE WILL BE ALLOWED TO BE BURIED WITHIN THE LIMITS OF THE RIGHT OF WAY.

PERMITS:

CONTRACTOR SHALL UTILIZE THE STORM WATER POLLUTION PREVENTION PLAN AND SHALL OBTAIN ALL PERMITS AND FULFILL ALL PERMIT REQUIREMENTS, INCLUDING FEES, FOR T.C.E.Q. GENERAL PERMIT NO. TXR 150000 RELATING TO DISCHARGES FROM CONSTRUCTION ACTIVITIES. THESE ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO NOTICE OF INTENT (NOI, REQUIRED SITE POSTINGS AND NOTICE OF TERMINATION (NOT). ALL ACTIVITIES WILL BE PERFORMED AT THE MILESTONES REQUIRED BY THE T.C.E.Q. NO SEPARATE PAYMENT WILL BE MADE FOR SUCH PERMITS.

R:\CLIENTS\CITY OF SOUTH PADRE - 275\2184 - Marisol Boat Ramp Project\CAD\STORMWATER POLLUTION PREVENTION PLAN NOTES.dwg mdavera Fri, Dec 22, 2023 @ 4:41:15 pm

PROJECT No.: C275-21184

STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED
PROFESSIONAL ENGINEER
December 22, 2023

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

STORMWATER POLLUTION PREVENTION PLAN NOTES

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275-21184

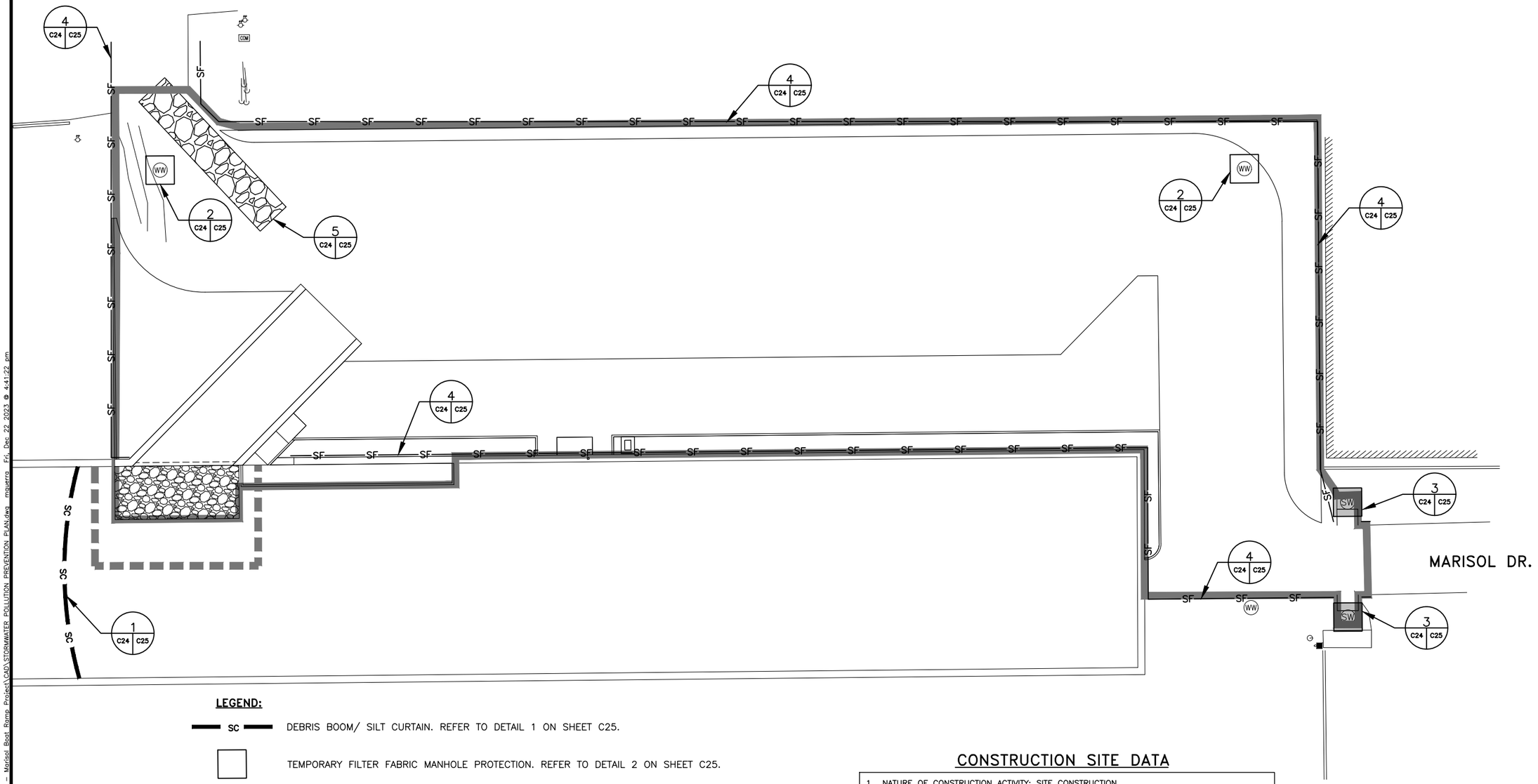
C23

GRAPHIC SCALE
0 15' 30' 45' 60'

N

LAGUNA BLVD.

MARISOL DR.



LEGEND:

- SC — DEBRIS BOOM/ SILT CURTAIN. REFER TO DETAIL 1 ON SHEET C25.
- TEMPORARY FILTER FABRIC MANHOLE PROTECTION. REFER TO DETAIL 2 ON SHEET C25.
- CURB INLET PROTECTION. REFER TO DETAIL 3 ON SHEET C25.
- SF — TEMPORARY SEDIMENT CONTROL FENCE. REFER TO DETAIL 4 ON SHEET C25.
- STABILIZE CONSTRUCTION ENTRANCE. REFER TO DETAIL 5 ON SHEET C25.
- COFFERDAM LIMITS
- PROJECT LIMITS

CONSTRUCTION SITE DATA

1. NATURE OF CONSTRUCTION ACTIVITY: SITE CONSTRUCTION.
2. TOTAL AREA OF PROJECT: APPROX. .078 ACRES
3. TOTAL AREA OF SITE EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES: APPROX. .070 ACRES
4. ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: UNCHANGED.
5. EXISTING SOIL IS TYPICALLY LEAN CLAY & SILTY SAND.
6. DISCHARGE FROM THE SITE WILL BE FILTERED.
7. WATER BODY RECEIVING STORMWATER RUNOFF IS LAGUNA MADRE.

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STATE OF TEXAS
YESENIA SINGLETON
102398
LICENSED PROFESSIONAL ENGINEER
December 22, 2023

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South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

STORMWATER POLLUTION PREVENTION PLAN

REVISION NO.	DATE	BY	DESCRIPTION

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
JOB NO. C275-21184

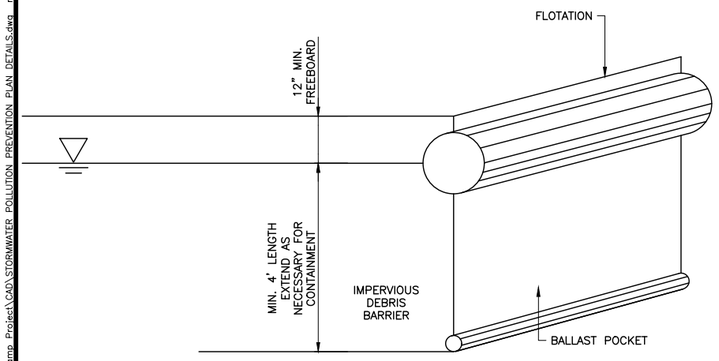
C24
46

P:\CLIENTS\CITY OF SOUTH PADRE - 275\21184 - Marisol Boat Ramp Project\CAD\STORMWATER POLLUTION PREVENTION PLAN.dwg mquerro Fri, Dec 22, 2023 @ 4:41:22 pm

BEST MANAGEMENT PRACTICES NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF A SWPPP AND FILING A NOTICE OF INTENT WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND OBTAINING A TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE TPDES PERMIT ON SITE AT ALL TIMES DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL ABIDE BY THE PROVISIONS OF TCEQ STORM WATER POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS CONCERNING PERMITS FOR CONSTRUCTION ACTIVITIES, INCLUDING IMPLEMENTATION OF THE POLLUTION PREVENTION PLAN AND BEST MANAGEMENT PRACTICES.
3. FUELING AND MAINTENANCE OF VEHICLES AND EQUIPMENT SHALL BE PERFORMED IN COMPLIANCE WITH EPA AND ALL OTHER FEDERAL AND STATE REGULATIONS.
4. ALL TEMPORARY EROSION/SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE EROSION/ SEDIMENTATION CONTROL MEASURES TO PROTECT ADJACENT PROPERTIES, STORM SEWERS AND DRAINAGEWAYS.
5. NATURAL AND CULTIVATED VEGETATION SHALL BE LEFT UNDISTURBED AS MUCH AS POSSIBLE.
6. THE CONTRACTOR SHALL CONSTRUCT STRUCTURAL BEST MANAGEMENT PRACTICES AS NEEDED AND AS REQUIRED TO PREVENT SILT AND DEBRIS FROM ENTERING INTO THE STORM SEWER SYSTEM.
7. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT SUFFICIENT LOCATIONS (AS NEC.) TO PREVENT VEHICLES AND EQUIPMENT FROM TRACKING MUD ONTO EXISTING STREETS.
8. THE CONTRACTOR SHALL BE REQUIRED TO SPRINKLE FOR DUST CONTROL AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
9. THE CONTRACTOR SHALL INSPECT TEMPORARY EROSION/SEDIMENTATION CONTROLS PERIODICALLY TO ENSURE THAT THE CONTROLS HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY SEDIMENT OR DEBRIS THAT HAS ACCUMULATED SHALL BE REMOVED AND PLACED IN A DESIGNATED SPOILS DISPOSAL SITE.
10. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING OR OTHER APPROVED MEANS. WHERE CONDITIONS PREVENT INSTALLING TEMPORARY FENCING AT LEAST 4 FEET FROM THE TREE TRUNK, THE CONTRACTOR SHALL PROTECT THE TREE TRUNK WITH STRAPPED-ON PLANKING. USE OF NAILS IS PROHIBITED.
11. THE CONTRACTOR SHALL NOT USE MECHANICAL EXCAVATORS, TO THE MAXIMUM EXTENT PRACTICAL, WITHIN THE CRITICAL ROOT ZONE OF TREES TO AVOID DAMAGE TO THE TREE'S ROOT SYSTEM. THE CONTRACTOR SHALL DIRECTIONAL BORE UTILITY LINES OR HAND DIG UTILITY LINES WITHOUT DAMAGING ROOTS.
12. ALL DISTURBED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED IN ALL DISTURBED AREAS. THE CONTRACTOR SHALL BEGIN RESTORATION AS SOON AS FINAL SHAPING OR USE OF THE AREA IS COMPLETE, PRIOR TO FINAL COMPLETION OF ALL IMPROVEMENTS. RESTORATION SHALL INCLUDE HYDRO MULCHING, SEEDING OR SODDING, FERTILIZING, FIBER MULCHING AND WATERING. RESTORATION SHALL BE ACCEPTABLE ONLY WHEN THE GRASS HAS REACHED A HEIGHT OF AT LEAST 1 INCH WITH 85 PERCENT COVERAGE, AND NO BARE SPOTS GREATER THAN 10 SQUARE FEET EXIST.
13. ALL NEW GRASS SOD AREAS SHALL BE IRRIGATED OR SPRINKLED IN A MANNER WHICH WILL NOT ERODE THE TOPSOIL BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF 6 INCHES.

CONTRACTOR/OPERATOR IS RESPONSIBLE FOR PREPARATION AND IMPLEMENTATION OF A SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH TCEQ REQUIREMENTS PRIOR TO COMMENCING WORK. THE SWPPP SHOULD INCLUDE THIS SHEET TO DEFINE THE TYPE AND LOCATION OF PROPOSED BMP'S.

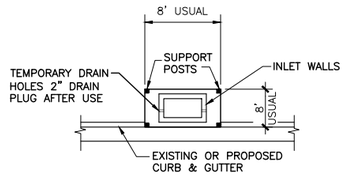


1 C24 C25 DEBRIS BOOM/SILT CURTAIN DETAIL

NOT TO SCALE

DEBRIS BOOM & SILT CURTAIN NOTES:

1. DEBRIS BOOM/SILT CURTAIN SHALL BE INSTALLED AROUND THE WETTED PERIMETER OF ALL ACTIVE DEMOLITION, EXCAVATION, FILLING AND MATERIAL OFF LOADING WORK AREAS
2. CONTRACTOR SHALL MAINTAIN THE BOOM THROUGHOUT DURATION OF ALL IN WATER CONSTRICTION ACTIVITIES.
3. ALL CONTRACTOR VESSELS SHALL BE MOORED INSIDE THE BOOM. SILT CURTAINS SHALL BE DEPLOYED AROUND EXACTION AND OFFLOADING WORK AREAS AS DIRECTED BY WATER QUALITY REQUIREMENTS.
4. DURING MATERIAL DEWATERING OPERATIONS, THE CONTRACTOR SHALL IMPALEMENT SEDIMENT CONTROL BMPS (SLIT FENCE, MULCH SOCKS, OR APPROVED EQUIVALENT) TO MANAGE SEDIMENT RUNOFF.
5. ALL EXCAVATION AND FILLING ACTIVITIES SHALL BE CONDUCTED IN A MANNER THAT WILL MINIMIZE TURBIDITY AND SEDIMENTATION. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING TURBIDITY LEVELS DURING EXCAVATION AND FILLING ACTIVITIES TO MINIMIZE TURBIDITY.

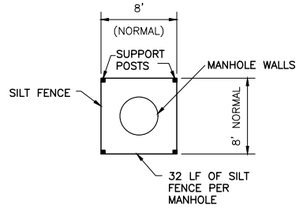


NOTE:

TYPICAL SILT FENCE INSTALLATION AT CURB INLET PRIOR TO PLACEMENT OF CURB AND INLET TOP.

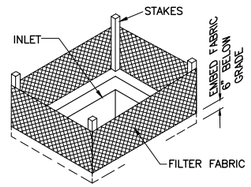
CURB INLET - PLAN

NOT TO SCALE



MANHOLE - PLAN

NOT TO SCALE

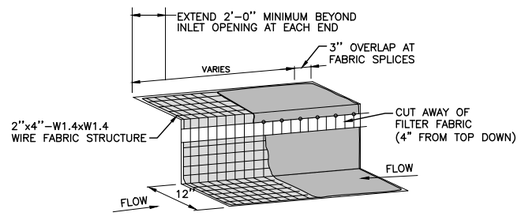


NOTES:

1. FILTER FABRIC INLET PROTECTION SHALL BE USED DURING CONSTRUCTION TO CONTROL SEDIMENTATION.
2. PERIMETER SILT FENCING AROUND INLET LOCATIONS SHALL BE INSTALLED AFTER PIPE IS PLACED.
3. FABRIC MATERIAL SHALL BE A NET-REINFORCED FENCE, USING WOVEN GEOTEXTILE FABRIC.
4. FENCE SHOULD BE REMOVED UPON COMPLETION OF CONSTRUCTION.

2 C24 C25 TEMPORARY FILTER FABRIC INLET PROTECTION DETAIL

NOT TO SCALE



NOTES:

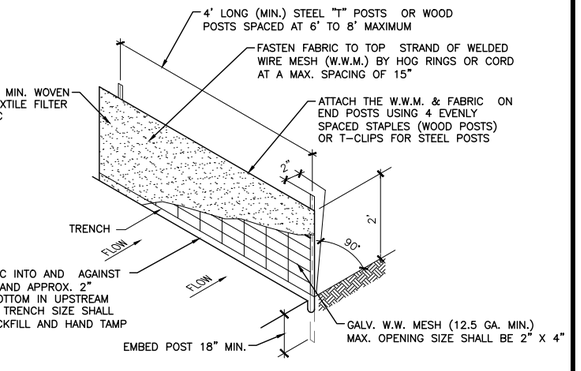
TYPICAL EROSION CONTROL INSTALLATION AT CURB INLET AFTER PLACEMENT OF CURB AND INLET TOP.

3 C24 C25 CURB INLET PROTECTION DETAIL

NOT TO SCALE

CURB INLET PROTECTION NOTES:

1. TO HOLD THE FILTER DIKE IN PLACE, 20 LB SANDBAGS SHALL BE USED AT 3' O.C. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1"X4" BOARD, SECURED WITH 1/4" OR 3/8" CONCRETE SCREWS. THE 1/4" OR 3/8" CONCRETE SCREWS SHALL BE ATTACHED TO THE GUTTER BY DRILLING AN APPROPRIATE PILOT HOLE WITH A CONCRETE BIT AND INSERT PLASTIC FASTENERS. THE TOP OF THE SCREW SHALL BE RECESSED BELOW THE TOP OF THE BOARD. THE SCREWS SHALL BE PLACED ON 3' O.C. THIS METHOD IS USED IN LIEU OF SANDBAGS, IN THE GUTTER ONLY, TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, EITHER LEAVE THE PLASTIC FASTENERS IN PLACE, OR REMOVE THE PLASTIC FASTENERS, CLEAN ANY DIRT/DEBRIS FROM THE SCREW LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON-SHRINK GROUT FLUSH WITH THE SURFACE OF THE GUTTER. THIS METHOD SHALL NOT BE USED ON THE INLET IN LIEU OF SANDBAGS.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2". INLET PROTECTION SHALL BE REPLACED AS NECESSARY DURING CONSTRUCTION DUE TO DAMAGE OR DETERIORATION (SUBSIDIARY TO INLET PROTECTION).
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND ONLY REMOVE INLET PROTECTION IF DIRECTED BY THE CITY OF PORTLAND, OR IF CONTRACTOR OBSERVES AN IMMINENT THREAT OF FLOODING OF SURROUNDING PROPERTY.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.



4 C24 C25 TEMPORARY SEDIMENT CONTROL FENCE DETAIL

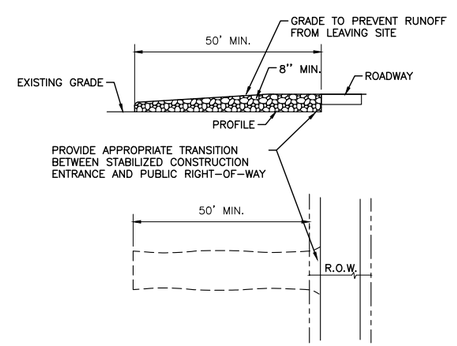
NOT TO SCALE

SEDIMENT CONTROL FENCE USAGE GUIDELINES:

SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAX. FLOW THROUGH RATE OF 100 GPM/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE LARGER THEN 2 ACRES.

* THE GUIDELINES SHOWN HERE ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



5 C24 C25 STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: 3-5" OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 50'.
3. THICKNESS: NOT LESS THAN 8".
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

PROJECT No.: C275-21184

STATE OF TEXAS · YESENIA SINGLETON · 102398 · LICENSED PROFESSIONAL ENGINEER

December 22, 2023

REVISION NO. | DATE | BY | DESCRIPTION

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

STORMWATER POLLUTION PREVENTION PLAN DETAILS

SCALE: AS NOTED
DRAWN BY: MF
APPROVED BY: YS
DATE: 12/22/2023
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C25
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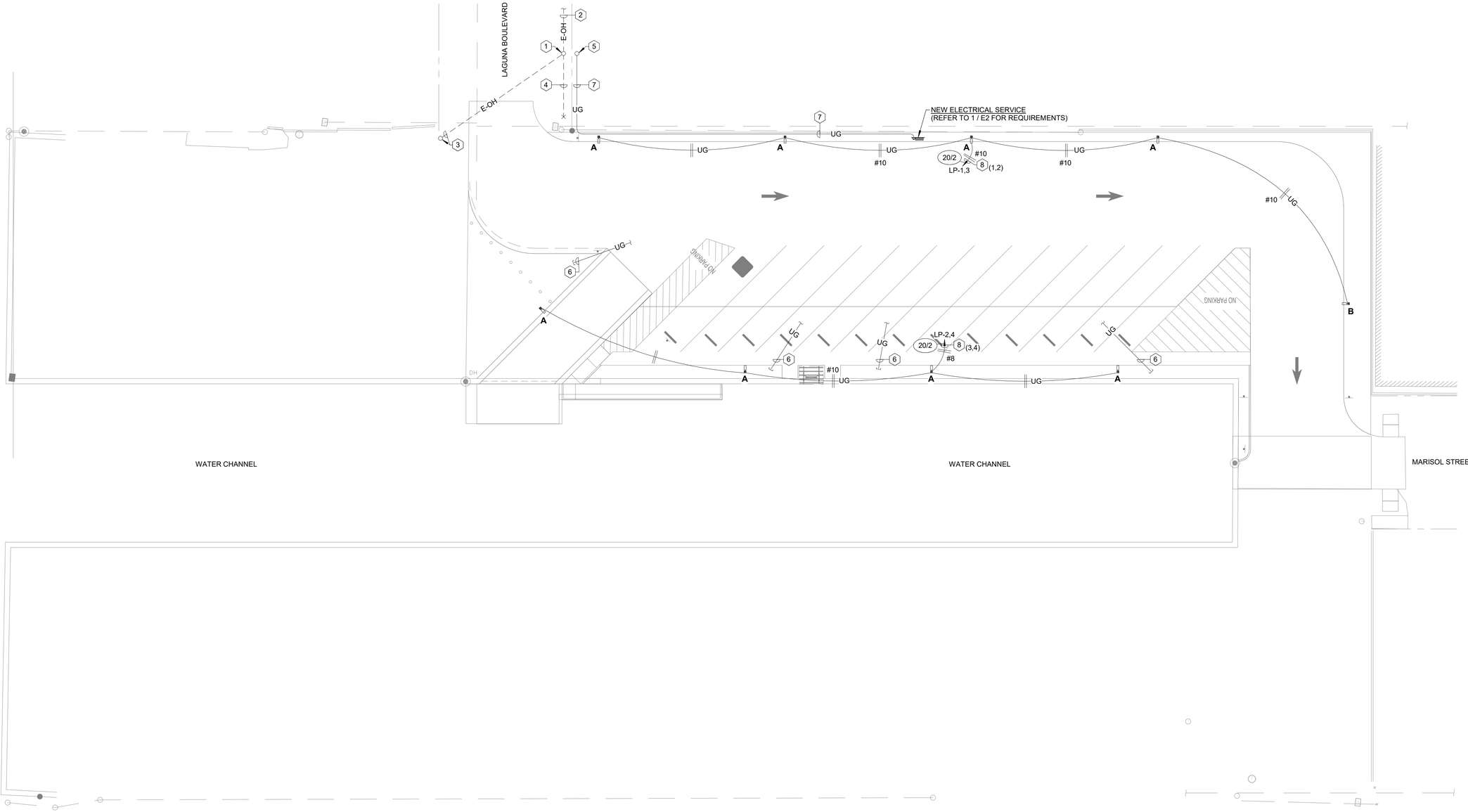


1 ELECTRICAL SITE PLAN
1" = 20'-0"

GENERAL NOTES:

A. INFORMATION INCLUDED ON THIS DRAWING IS INTENDED TO INDICATE THE GENERAL CHARACTER AND EXTENT OF WORK REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
B. DESIGN IS BASED UPON THE 2014 NFPA 70 AND 2015 IECC.
C. MOST EXISTING UNDERGROUND UTILITIES ARE NOT INDICATED ON THIS DRAWING. CONTRACTOR SHALL JOBSITE LOCATE AND PROTECT ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING, DRILLING, AND/OR EXCAVATING.

KEYED NOTES:

1. EXISTING AEP POWER POLE TO REMAIN.
2. EXISTING OVERHEAD ELECTRICAL PRIMARY SERVICE TO REMAIN.
3. EXISTING AEP LEASE LIGHTING POLE TO REMAIN OR BE RELOCATED AT THE DISCRETION OF AEP. JOBSITE COORDINATE REQUIREMENTS WITH AEP.
4. EXISTING UTILITY GUY CABLE TO REMAIN OR BE REWORKED AT THE DISCRETION OF AEP. JOBSITE COORDINATE REQUIREMENTS WITH AEP.
5. APPROXIMATE LOCATION OF NEW TRANSFORMER / DIP POLE BY AEP. COORDINATE LOCATION WITH AEP.
6. ONE (1) - 1" SPARE CONDUIT (WITH PULLCORD) STUBBED AND CAPPED BELOW GRADE FOR FUTURE USE BY OWNER. ROUTE CONDUIT BELOW GRADE TO NEW PANEL ENCLOSURE AND TERMINATE AS REQUIRED. REFER TO 1 / E2 FOR ADDITIONAL REQUIREMENTS. REFER TO SPECIFICATIONS FOR STUB/CAP REQUIREMENTS.
7. NEW SECONDARY SERVICE BY CONTRACTOR. REFER TO 1 / E2 FOR ADDITIONAL REQUIREMENTS.
8. ROUTE CONDUIT AND CONDUCTORS THROUGH LIGHTING CONTACTOR LOAD POLES (INDICATED).

STATE OF TEXAS
SCOTT E. STRIDDE
84831
LICENSED
PROFESSIONAL ENGINEER

10/18/2023

STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
(361) 883-9199
Fax (361) 883-9177
342 S. Navigation Blvd.
Corpus Christi, TX 78405-3618
Registration # F-006328

PROJECT No.: C275-21184

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

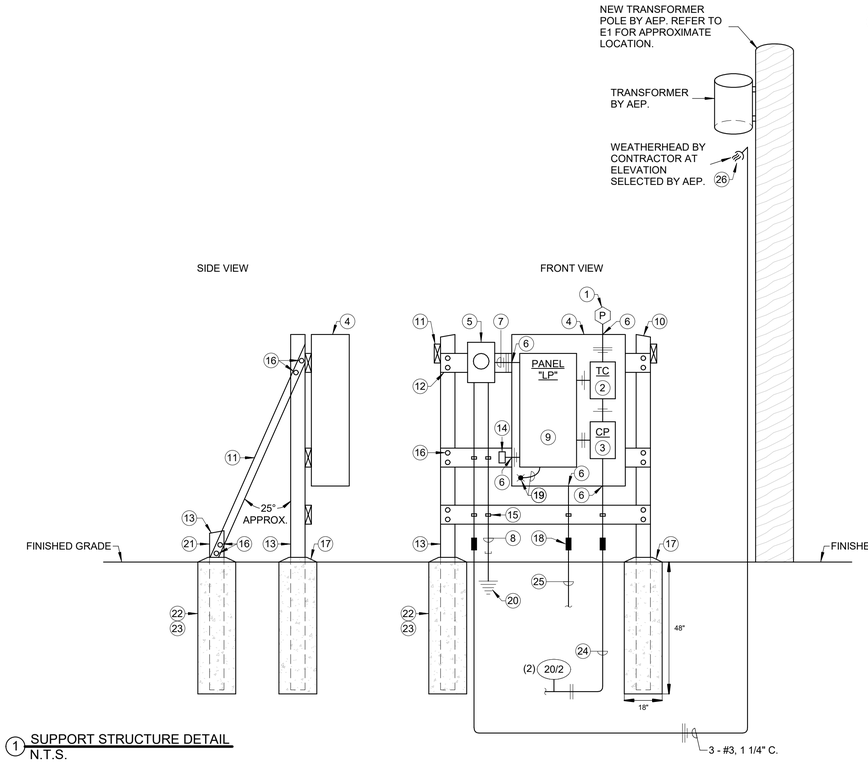
South Padre ISLAND

DESCRIPTION | DATE | BY | REVISION NO.

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

SCALE: AS NOTED
DRAWN BY: B.T.
APPROVED BY: S.S.
DATE: 10/18/2023
JOB NO. C275-21184

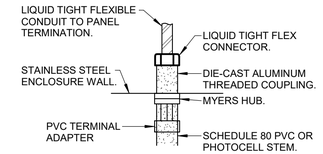
E1



1 SUPPORT STRUCTURE DETAIL
N.T.S.

KEYED NOTES: (support structure detail)

1. PHOTO-ELECTRIC SENSOR SHALL BE INTERMATIC CAT. NO. K4421M. SERIES CONNECT WITH TIME CLOCK AS REQUIRED FOR PHOTOCELL "ON" / TIME CLOCK "OFF" OPERATION.
2. TIME CLOCK "TC" SHALL BE INTERMATIC CAT. NO. T171CR.
3. LIGHTING CONTACTOR "CP" SHALL BE SQUARE D, CLASS 8903, TYPE LG60VO2CP1. CONNECT CONTROL COIL TO LOAD SIDE OF TIME CLOCK CONTACT.
4. PROVIDE ONE (1) - HOFFMAN CAT. NO. WS483616SS (48"H. X 36"W. X 16"D.) STAINLESS STEEL RAINTIGHT LOCKABLE ENCLOSURE WITH VENTED DOOR.
5. METER CAN (BY CONTRACTOR) FOR FEED THRU SELF CONTAINED METER BY AEP.
6. REFER TO 2 / E2 FOR TERMINATION REQUIREMENTS.
7. ONE (1) - 1 1/2" CONDUIT WITH THREE (3) - #3, #6 GROUND.
8. #6 GROUND, 1/2" CONDUIT.
9. PANEL "LP" SHALL BE RACK MOUNTED, 120/240V., 1Ø, 3W., 100A. MAIN CIRCUIT BREAKER, SQUARE D TYPE NQ PANELBOARD. REFER TO PANEL SCHEDULE FOR CIRCUIT BREAKER QUANTITIES AND ARRANGEMENT.
10. TYPICAL: CUT POST TOP WITH MINIMUM 10" PITCH.
11. TYPICAL: 2" X 8" PTP TOE BRACE.
12. TYPICAL: 2" X 8" PTP LATERAL SUPPORT.
13. TYPICAL: MINIMUM 6" X 6" SQUARE PTP POST.
14. COMMERCIAL GRADE, 120V, 20A, GFCI RECEPTACLE IN DIRECT ALUMINUM OUTLET BOX WITH SPECIFIED COVERPLATE.
15. TYPICAL: STAINLESS STEEL TWO (2) HOLE CONDUIT STRAP.
16. TYPICAL: (2) - 1/2" 316 STAINLESS STEEL ALL-THREAD WITH NUT / FLAT WASHER FRONT AND BACK (ALL 316 STAINLESS STEEL). 316 STAINLESS STEEL BOLTS MAY BE SUBSTITUTED.
17. TYPICAL: CHAMFER PERIMETER.
18. TYPICAL: EXPANSION FITTING AS SPECIFIED.
19. #6 GROUND. GROUND BOND / LUG TO ENCLOSURE.
20. 5/8" X 8' COPPER GROUND ROD.
21. TOE BRACE STUB-HEIGHT ABOVE GRADE AS REQUIRED.
22. TYPICAL: 2,500 PSI CONCRETE.
23. TYPICAL: PROVIDE (8) - #7 VERTICAL BARS WITH #3 HOOP TIES 12" O.C. WITH MINIMUM CONCRETE COVER OVER STEEL OF 2 1/2". SET POST INSIDE FOOTING STEEL.
24. TWO (2) CONDUITS TO POLE MOUNTED LIGHTING FIXTURES.
25. FOUR (4) - SPARE CONDUIT STUBBED BELOW GRADE FOR FUTURE USE BY OWNER. REFER TO E1 FOR STUB LOCATION.
26. PROVIDE 3' LENGTH OF CONDUCTORS BEYOND WEATHERHEAD FOR TERMINATION BY AEP.



2 ENCLOSURE TERMINATION
N.T.S.

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	CATALOG REFERENCE	LAMPS	DRIVER VOLTAGE	FINISH		MOUNTING	REMARKS
				BODY	DIFFUSER		
A	LITHONIA CAT. NO. DSX2 LED P4 30K 80CRI T5M RPA PIR HS CCE DNAXD	L.E.D. FURNISHED 273 [W], 30K	MVOLT	NATURAL ALUMINUM	PRECISION MOLDED ACRYLIC	POLE	PROVIDE WITH HOUSE SIDE SHIELD, COASTAL CONSTRUCTION (GREY NATURAL EXPOSED AGGREGATE FINISH WITH AMERSHIELD COATING) AND AMERON POLE PRODUCTS CAT. NO. MBR07SPL 20'-0" (113I) MEDIUM BASE PLATED ROUND POLE. REFER TO SPECIFICATIONS FOR POLE REQUIREMENTS. FIXTURE EMBEDDED MOTION / AMBIENT SENSOR SHALL BE PROGRAMMED TO REDUCE LIGHT OUTPUT BY 30% WHEN NO MOTION IS DETECTED AFTER15 MINUTES FROM DUSK TO DAWN.
B	LITHONIA CAT. NO. DSX2 LED P4 30K 80CRI T2M RPA PIR HS CCE DNAXD	L.E.D. FURNISHED 273 [W], 30K	MVOLT	NATURAL ALUMINUM	PRECISION MOLDED ACRYLIC	POLE	PROVIDE WITH HOUSE SIDE SHIELD, COASTAL CONSTRUCTION (GREY NATURAL EXPOSED AGGREGATE FINISH WITH AMERSHIELD COATING) AND AMERON POLE PRODUCTS CAT. NO. MBR07SPL 20'-0" (113I) MEDIUM BASE PLATED ROUND POLE. REFER TO SPECIFICATIONS FOR POLE REQUIREMENTS. FIXTURE EMBEDDED MOTION / AMBIENT SENSOR SHALL BE PROGRAMMED TO REDUCE LIGHT OUTPUT BY 30% WHEN NO MOTION IS DETECTED AFTER15 MINUTES FROM DUSK TO DAWN.

PANELBOARD SCHEDULE

JOB: MARISOL BOAT RAMP CABINET: SURFACE MAINS: BREAKER VOLTAGE: 120/240 SINGLE PHASE CAPACITY: 100 A.

PANEL: LP SPECIAL FEATURES: SQUARE D, TYPE NQ PANELBOARD IN NEMA-3R ENCLOSURE

CKT	LOAD	C/B	LIGHTING	MISC 1Ø	MISC. EQPM.	KITCHEN EQPM.	WELDING EQPM.	A/C COOLING	A/C HEATING	CKT	LOAD	C/B	LIGHTING	MISC 1Ø	MISC. EQPM.	KITCHEN EQPM.	WELDING EQPM.	A/C COOLING	A/C HEATING
1	LIGHTING - NORTH	20/2	1,365							2	LIGHTING - SOUTH	20/2	1,095						
3										4									
5	TIME CLOCK - P.E.S.	20/1		20						6	RECEPTACLE - RACK	20/1		200					
7	SPARE	20/1								8	SPARE	20/1							
9	SPARE	20/1								10	SPARE	20/1							
11	SPARE	20/1								12	SPARE	20/1							
13	SPACE									14	SPACE								
15	SPACE									16	SPACE								
17	SPACE									18	SPACE								
19	SPACE									20	SPACE								
21	SPACE									22	SPACE								
23	SPACE									24	SPACE								
25	SPACE									26	SPACE								
27	SPACE									28	SPACE								
29	SPACE									30	SPACE								
	SUBTOTAL		1,365	20	0	0	0	0	0		SUBTOTAL		1,095	200	0	0	0	0	0
											TOTAL LOAD		2,460	220	0	0	0	0	0
													W=> DIV	220	W=> DIV	0	0		

TOTAL CONNECTED LOAD (VA) 2,680
DEMAND LOAD (VA) 2,680
AMPACITY DEMAND 11.2 A

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	RACEWAY WITH NUMBER OF CONDUCTORS INDICATED
IG	RACEWAY IN CONCRETE FLOOR SLAB AND/OR WALLS WITH NUMBER OF CONDUCTORS INDICATED
UG	UNDERGROUND RACEWAY
LA1,2	PANEL AND CIRCUIT NUMBERS
	ARROWS INDICATE HOME RUN TO PANEL
1"	CONDUIT SIZE IF INDICATED
30/2	BRANCH CIRCUIT BREAKER SIZE IN PANEL INDICATED IF OTHER THAN 1P20A
	NEUTRAL CONDUCTOR
	UNGROUNDED CONDUCTORS
#10	CONDUCTOR SIZE INDICATED IF OTHER THAN NO. 12 AWG
	CONDUCTORS SHALL BE SIZE INDICATED FOR ENTIRE LENGTH OF CIRCUIT
C	CONTROL SYSTEM RACEWAY AND/OR CONDUCTORS - REFER TO SPECIFICATIONS FOR REQUIREMENTS
	CONDUIT CONTINUATION TO POINT NOTED
	ELECTRICAL BRANCH CIRCUIT PANEL AS NOTED
WP	WEATHERPROOF DEVICE OR ENCLOSURE
	CEILING OUTLET WITH FIXTURE AS SCHEDULED
CR	CONTACTOR - C, RELAY - R
	DISCONNECT SWITCH
P	PHOTOELECTRIC SWITCH - REFER TO DRAWING NOTES FOR REQUIREMENTS
T	CONTROL TIME CLOCK - REFER TO DRAWING NOTES FOR REQUIREMENTS
J	JUNCTION BOX
	120 VOLT SINGLE PHASE CONNECTION TO EQUIPMENT NOTED
	208 VOLT OR 240 VOLT SINGLE PHASE CONNECTION TO EQUIPMENT NOTED
	CONTROL OUTLET AND CONNECTIONS AS REQUIRED

10/18/2023

STRIDDE, CALLINS & ASSOCIATES INC.
CONSULTING ENGINEERS
MECHANICAL ELECTRICAL
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South Padre ISLAND

MARISOL BOAT RAMP PROJECT
1705 LAGUNA BOULEVARD
SOUTH PADRE ISLAND, TEXAS 78597

REVISION NO.	DATE	BY	DESCRIPTION
			DESCRIPTION
	DATE		
		BY	

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E2

CONSTRUCTION PLANS FOR

LANDSCAPE & IRRIGATION

TO SERVE

MARISOL BOAT RAMP

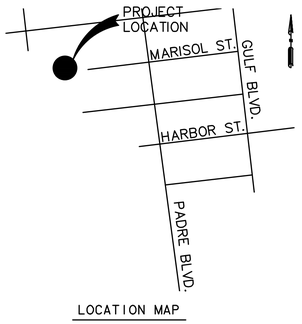
CITY OF SOUTH PADRE ISLAND CAMERON COUNTY,TEXAS

JOB NO. C275-21184 **DATE: NOVEMBER 03, 2023**

Planning + Landscape Architecture

INDEX OF DRAWINGS

L-0.0	GENERAL NOTES
L7-00	LANDSCAPE PLAN
L8-01	LANDSCAPE DETAILS
L9-00	IRRIGATION PLAN
L10-01	IRRIGATION DETAILS



LOCATION MAP

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
(713) 223-4567 (IN HOUSTON)
(NEW STATEWIDE NUMBER OUTSIDE HOUSTON)
1-800-545-6005

APPROVED FOR CONSTRUCTION

BY _____ DATE _____

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS
11.3.23

Project #: C275-21184

Date: NOVEMBER 03, 2023

Revision	Date	Remarks

PROJECT: MARISOL BOAT RAMP LANDSCAPE & IRRIGATION

Date/Time - Fri, 03 Nov 2023 - 8:51am User Name - rbeatty
Path/Name - P:\03_LandscapeArchitecture\Projects\CityofSouthPadreIsland_C275\21184_MarisolBoatRamp\8.0-CD\8.22-BASE\20230501_MarisolBoatRamp_CoverSheet.dwg

IRRIGATION NOTES

A. Except as otherwise provided, the contractor shall procure all permits and licenses, pay all charges & fees and give all notices necessary & incidental to the due lawful prosecution of the work.

B. The contractor shall follow the local municipal Public Works specifications for hot taps & installation of irrigation system.

C. The contractor shall notify pertinent utility companies 48 hours prior to construction for current utility locations. Extreme care shall be exercised in excavating and working near existing utilities. The contractor shall verify the location & condition of all utilities and be responsible for any damage to such.

D. The contractor shall not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that obstructions, grade differences or differences in the area's dimensions exist that might not have been considered in the engineering. Such obstructions or differences shall be brought to the attention of the Owner. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

E. The drawings are diagrammatic. All irrigation mainlines, lateral lines, valves, wire, and fittings shall be placed in landscape areas. Gate valves, and remote control valves shall be placed in shrub beds whenever possible.

F. Avoid existing or future locations of trees and tree root balls when laying pipe.

G. The contractor shall clearly mark all exposed excavations, materials and equipment. Cover or barricade trenches when the contractor is not on site.

H. The contractor shall adjust the arc angle of the irrigation heads for even cover. Head layout shall be head to head coverage. All nozzles shall have matching precipitation rates.

I. The contractor shall at all times protect his work from damage and theft. In the event of damage or theft, the contractor shall replace all damaged or stolen parts until the work is accepted in writing by Owner.

LANDSCAPE NOTES

A. The contractor shall supply photos or samples of each plant species indicated on the planting legend, to Landscape Architect, to serve as min. requirements of each species type.

B. The contractor shall obtain an agricultural soils analysis by an approved lab for soils amendments and planting media recommendations. provide one copy to the Landscape Architect for approval prior to installation of soil mix.

C. The contractor shall be responsible for verifying all utility locations in the field prior to installation and shall be responsible for any damage to utilities.

D. Tree material shall be planted a min. of 3' from walkways, streets, or buildings unless otherwise noted on the drawings.

E. The contractor shall stake all tree locations and planting beds, and verify limits of turf in the field for approval by the Landscape Architect prior to installation.

F. Finish grade of all planting beds adjacent to buildings shall have a min. of 4-6' clearance from top of slab.

G. Existing soil shall be removed from planting holes, see specifications for appropriate backfill mix.

H. Stabilize soil below root ball prior to planting to prevent tree or shrub from settling.

I. The contract or is responsible for fine grading any areas disturbed by construction on site.

J. Contractor to repair or replace all disturbed turf areas from landscape construction outside and within limit of work, with solid sod of matching existing species.

LJA Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

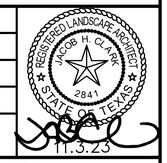
LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND,
CAMERON COUNTY, TEXAS

DATE	ISSUE

Drawn RB

Checked JC



Project #: C275-21184

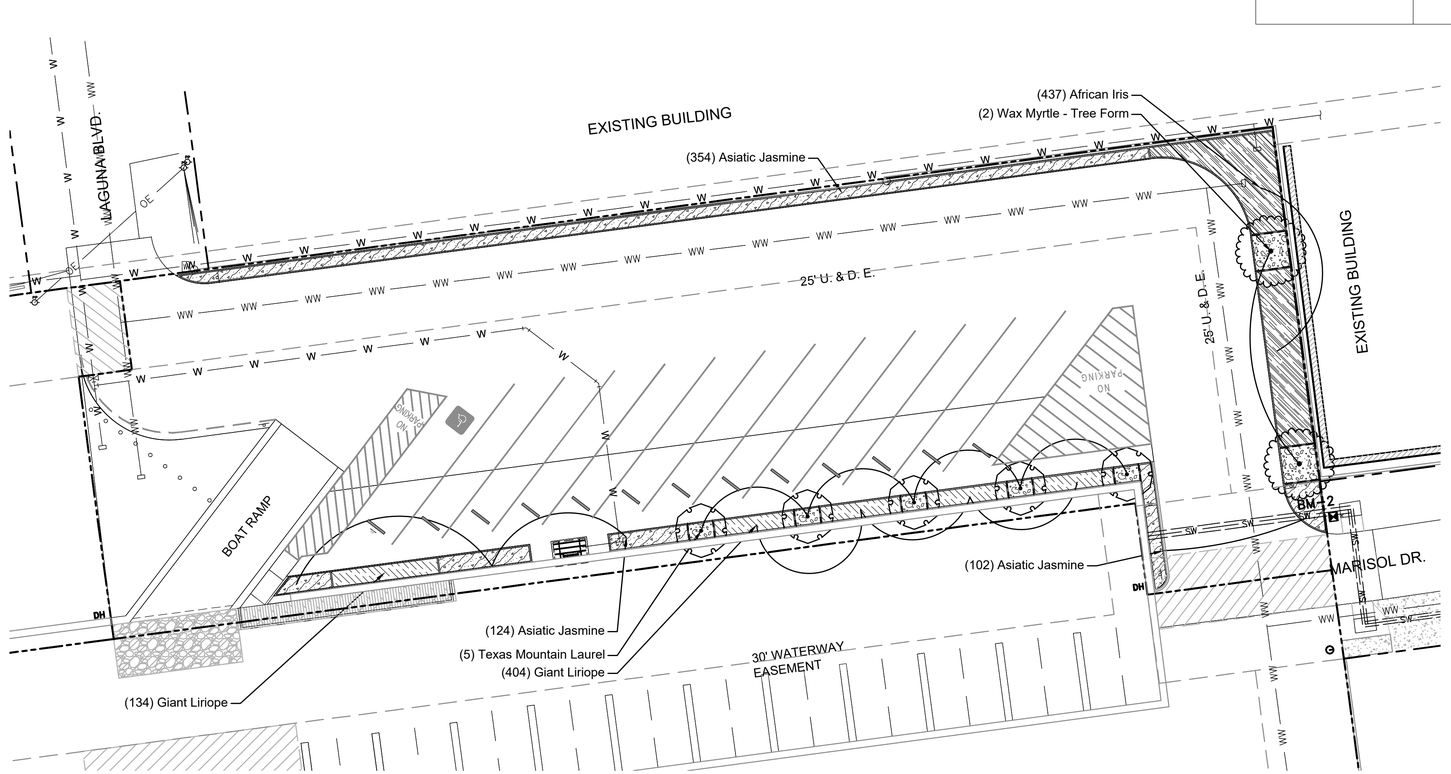
Date: NOVEMBER 03, 2023

Revision	Date	Remarks

Sheet Title:
GENERAL NOTES

Sheet Number
L0-00

PLANT SCHEDULE								
TREES	CONT	CAL	HEIGHT	SPREAD	SPACING		QTY	REMARKS
Texas Mountain Laurel	45 gal	2"		6`	4`		5	Container Grown, Well Rooted, Full Straight Trunk
EVERGREEN TREES	CONT	CAL	HEIGHT	SPREAD	SPACING		QTY	REMARKS
Wax Myrtle - Tree Form	30 gal		8` - 10`	6` - 8`			2	Multi trunk, matching, container grown
GROUND COVERS	CONT	HEIGHT	SPREAD			SPACING		
African Iris	3 gal	24"	12"			18" o.c.	437	full pot, container grown
Asiatic Jasmine	flat	4"	6"			18" o.c.	580	full pot, container grown
Giant Liriope	1 gal	8"	8"			12" o.c.	538	full pot, container grown
MISCELLANEOUS	CONT	HEIGHT	SPREAD			SPACING		
Blackstar Gravel	SF						343 sf	4" Depth; Installed Complete, Refer to Details and Specifications



PLANT SCHEDULE

TREES	COMMON NAME
	Texas Mountain Laurel
EVERGREEN TREES	**COMMON NAME**
	Wax Myrtle - Tree Form
GROUND COVERS	**COMMON NAME**
	African Iris
	Asiatic Jasmine
	Giant Liriope
MISCELLANEOUS	**COMMON NAME**
	Blackstar Gravel

LJA Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND, CAMERON COUNTY, TEXAS

DATE	ISSUE

0 10 20 40ft

Drawing Scale is 1" = 20'
(Original size is 24 x 36")

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS
11.3.23

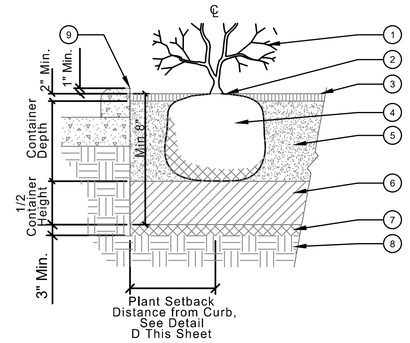
Project #: C275-21184

Date: NOVEMBER 03, 2023

Revision	Date	Remarks

Sheet Title:
LANDSCAPE LAYOUT

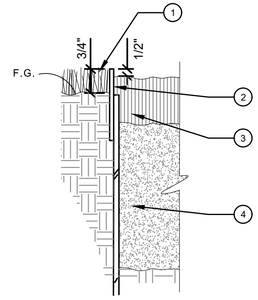
Sheet Number
L7-00



DETAIL CALLOUT LEGEND

1. Plant
2. Top of rootball to be flush with grade
3. 2" shredded hardwood mulch
4. Rootball
5. Planting mix per soils analysis
6. Compacted prepared planting mix with parent material
7. 3" scarification layer
8. Undisturbed soil
9. Concrete curb or sidewalk (if applicable)

D SHRUB/GROUNDCOVER PLANTING DETAIL
SCALE: NTS



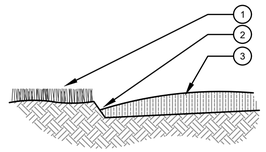
DETAIL CALLOUT LEGEND

1. Turf
2. 4" tall steel edging w/ ¾" of steel edging to be above finished grade and steel stakes 36" O.C., max. alternate sides black color
3. 2" shredded hardwood mulch
4. 8" min. prepared soil mix
5. Contractor shall place steel edging at all shrub beds adjacent to turf, unless otherwise noted on plans

NOTES:

1. Contractor shall place steel edging at all shrub beds adjacent to turf, unless otherwise noted on plans

C STEEL EDGING DETAIL
SCALE: NTS



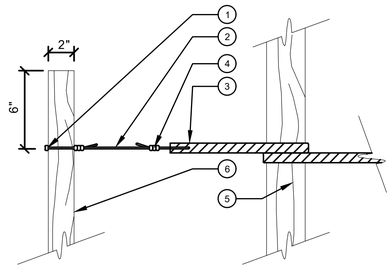
DETAIL CALLOUT LEGEND

1. Lawn
2. Shovel cut bed edge
3. Prepared bed

NOTES:

1. Contractor shall edge at all shrub beds adjacent to turf, unless otherwise noted on plans

F SHOVEL CUT EDGING DETAIL
SCALE: NTS

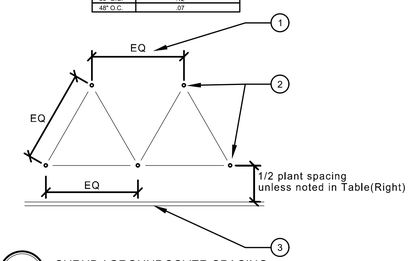


DETAIL CALLOUT LEGEND

1. Staple nail
2. ⅛" aircraft cable tree guy 7x7 strands
3. Rubber tie, black
4. Double crimped clamp
5. Trunk
6. Lodge pole pine stake

B TREE TIE DETAIL
SCALE: NTS

SPACING	PLANTS REQUIRED PER SQ/FT
4" O.C.	4.61
6" O.C.	2.60
9" O.C.	1.78
10" O.C.	1.66
12" O.C.	1.15
18" O.C.	.5
24" O.C.	.28
30" O.C.	.18
36" O.C.	.12
48" O.C.	.07



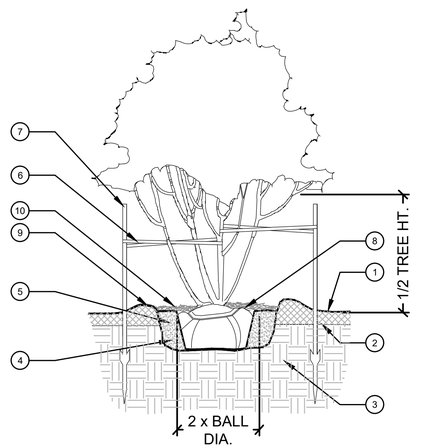
DETAIL CALLOUT LEGEND

1. Spacing as noted
2. Typical plant location
3. Edge of planting (Steel edging, curb, walls, ...etc) as defined on plan see detail D, this sheet for Steel edge planting section

NOTES:

1. Contractor shall use this spacing chart to determine total quantities of shrubs and groundcover. Contractor shall round total up to nearest whole plant. The contractor shall be responsible for providing all plantings necessary to fill all planting areas shown on the plans, based upon plant spaces provided by the spacing diagram and chart. Any quantities given by the owner or landscape architect, or determined by the contractor shall be for reference only. The contractor shall be responsible for all costs associated with underestimates

E SHRUB / GROUNDCOVER SPACING
SCALE: NTS



DETAIL CALLOUT LEGEND

1. Finished grade
2. Rough grade
3. Native subsoil
4. Backfill with 50% excavated soil and 50% prepared soil mix. Water and tamp to remove air pockets
5. Tree pit to be height of rootball
6. Polypropylene flat-woven tie, Figure 8 and tied to stake
7. Two (2) "T" post stakes, painted black, driven (min. 30") firmly into subgrade prior to backfilling
8. Set top of rootball 2" above the finished grade
9. Form saucer w/topsoil 4" height
10. Mulch 3" depth

A T-POST MULTI TRUNK
SCALE: NTS

Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND, CAMERON COUNTY, TEXAS

DATE	ISSUE

Drawn RB

Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS

11.3.23

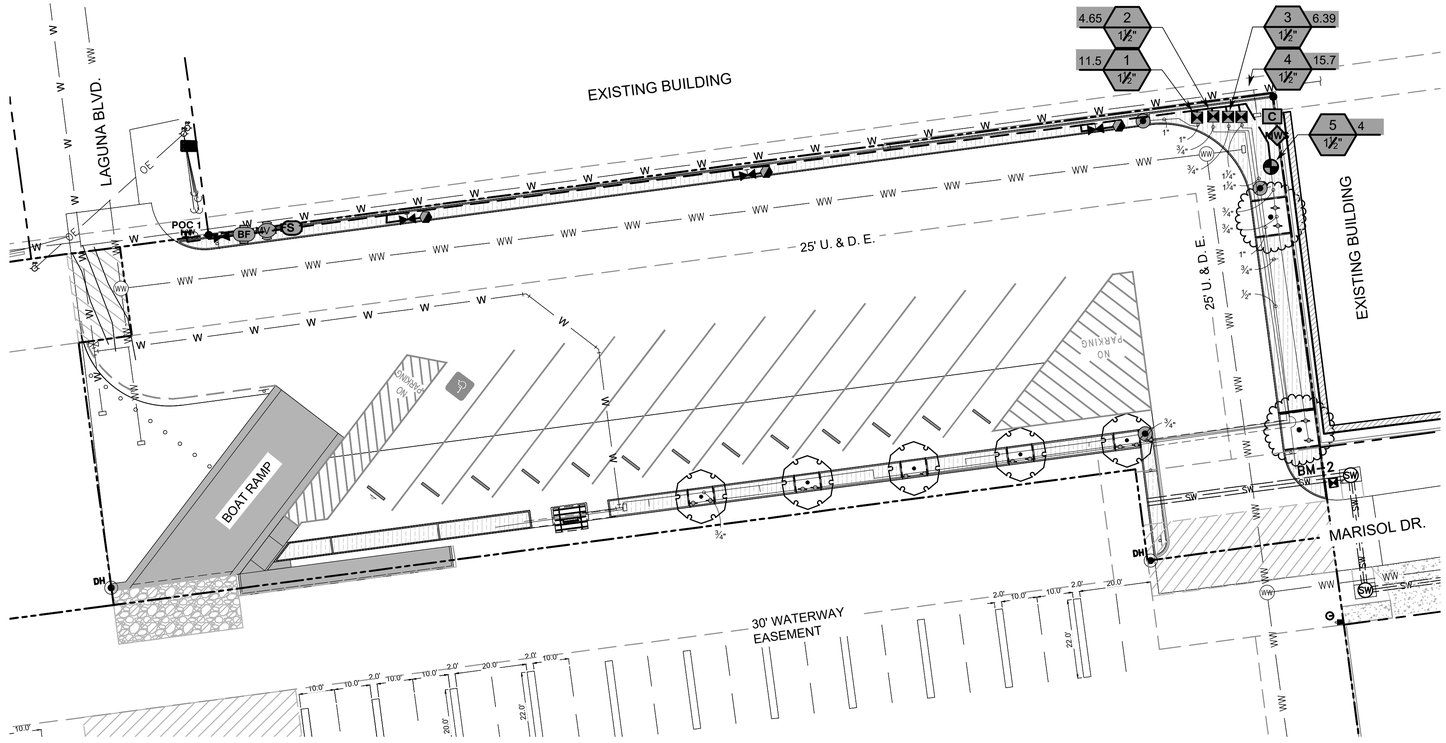
Project #: C275-21184

Date: NOVEMBER 03, 2023

Revision	Date	Remarks

Sheet Title:
LANDSCAPE DETAILS

Sheet Number
L8-01



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
25 50 10 20	Hunter PROS-06-PCN Flood Bubbler, 6.0" pop-up.	14

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICZ-151-40 Drip Control Zone Kit. 1-1/2" ICV Globe Valve with 1" HY100 filter system. Pressure Regulation: 40psi. Flow Range: 20 GPM to 60 GPM. 120 mesh stainless steel screen. 1-1/2" inlet x dual 1" outlets	4
	Pipe Transition Point in Drip Box Pipe transition point from PVC lateral to drip tubing with riser in 6in. drip box.	3
	Area to Receive Dripline Hunter HDL-09-12-PC HDL-09-12-PC: Hunter Dripline with 0.9 GPH flow. Light brown tubing with black striping. Emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. Install with Hunter PLD barbed or PLD-LOC fittings.	2,710 l.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICV-G - Remote Control Valve 1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	1
	Hunter HQ-44LRC-AW Quick coupler valve, yellow rubber locking cover, red brass and stainless steel, with 1in. NPT inlet, 2-piece body. Acme Key with Anti-Rotation Wings.	3
	LASCO Fittings TUBV-SC 1", 1-1/2", 2", and 3" Plastic Full Block True Union Ball Valve. Shut Off/Isolation Valve to Eliminate Water Hammer. Install same size as mainline.	4
MV	Hunter Master Valve ICV-G 1-1/2" 1", 1-1/2", 2", and 3" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	1
MV	Hunter Master Valve ICV-G 1-1/2" 1", 1-1/2", 2", and 3" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	1
BF	Febco 825Y 1-1/2" Reduced Pressure Backflow Preventer	1
C	Hunter PHC-1200 Wi-Fi enabled, full-functioning controller with touchscreen, 12-Station fixed controller, 120 VAC, Outdoor model.	1
MWS	Hunter MWS-FR Weather Station with rain sensor, wind sensor and freeze sensor, 120 VAC, 5 amp. 5 year warranty.	1
S	Hunter FLOW-CLIK-200 Flow Sensor SOV with Interface Panel, 2" Schedule 40 Sensor Body, 24 VAC, 2 amp, install Interface Panel as required.	1
POC 1	Point of Connection 3" CONNECT PROPOSED ISOLATION VALVE, BACKFLOW, MASTER VALVE, AND FLOW SENSOR TO EXISITNG WATER METER.	1
	Irrigation Lateral Line: PVC Schedule 40	888.6 l.f.
	Irrigation Mainline: PVC Schedule 40	367.8 l.f.
	Pipe Sleeve: (2) 6" PVC Sleeves - Schedule 40	62.8 l.f.

Valve Callout
Valve Number
Valve Flow
Valve Size

Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND,
CAMERON COUNTY, TEXAS

DATE	ISSUE

0 10 20 40ft
Drawing Scale is 1" = 20'
(Original size is 24 x 36")

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS
11.3.23

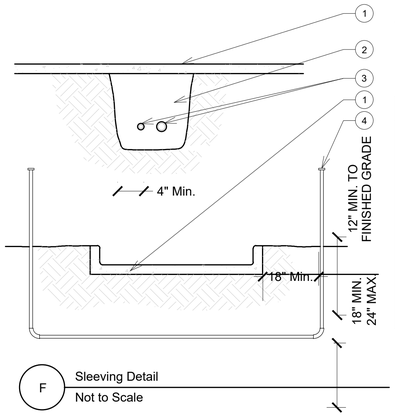
Project #: C275-21184

Date: NOVEMBER 03, 2023

Revision	Date	Remarks

Sheet Title:
IRRIGATION LAYOUT

Sheet Number
L9-00



F Sleeving Detail
Not to Scale

DETAIL CALLOUT LEGEND

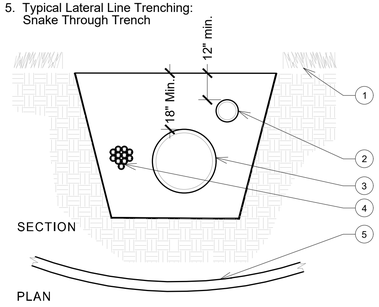
1. Paving
2. Trench
3. Sleeves
4. PVC Cap, Typ.

Notes:

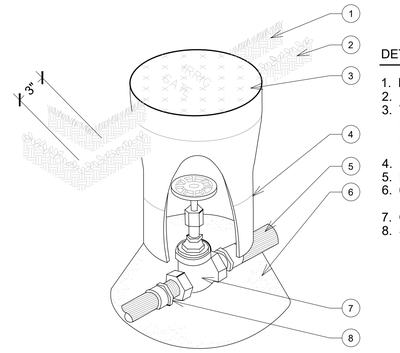
1. All PVC Irrigation Sleeves To be Sch. 40 PVC Pipe.
2. All Elbows To Be lose fit and watertight.
3. Where There Is More Than One Sleeve, Extend The Smaller Sleeve 12" Minimum Above Finished Grade.
4. Mechanically Tamp soil around each sleeve To 95% Proctor.

DETAIL CALLOUT LEGEND

1. Finished Grade.
2. Lateral Line Size As Per Plan.
3. Mainline Size as Per Plan.
4. Tubing Or Wiring: Tape And Bundle At 10'-0" Intervals.
5. Typical Lateral Line Trenching: Snake Through Trench



C Wiring In Trench
Not to Scale

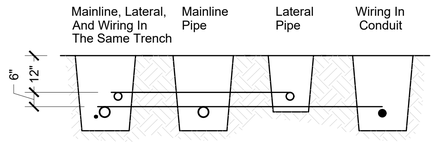


DETAIL CALLOUT LEGEND

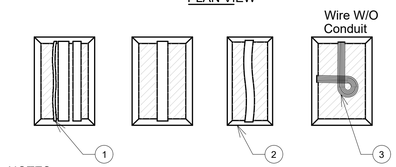
1. Finished Grade Lawn Areas.
2. Finished grade Shrub Areas.
3. Top Of Valve Box To be Flush With Finished Grade in seeded areas (Sodded Areas 1" Above Finished Grade, Shrub areas set flush with top of mulch).
4. Box Extension.
5. Mainline.
6. 6" depth min. of 3/4" washed gravel with commercial grade weed barrier
7. Gate Valve.
8. Sch. 80 PVC Male Adapter.

E Gate Valve
Not to Scale

SECTION VIEW



PLAN VIEW



NOTES:

1. Sleeve Below All Hardscape Elements With Class 200PVC Twice The Diameter Of The Pipe Or Wire Bundle Within.
2. For Pipe And Wire Burial Depths See Specifications.

DETAIL CALLOUT LEGEND

1. Run Wiring Above or Beside Mainline. Tape And Bundle At 10Ft Intervals.
2. All Solvent Weld Plastic Piping To Be Snaked In Trench As Shown.
3. Tie 24" Loop In All Wiring At Changes Of Direction Of 30° Or Greater. Untie After all Connections Have Been Made.

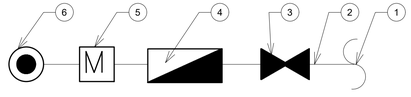
B Pipe & Wire Trenching
Not to Scale

DETAIL CALLOUT LEGEND

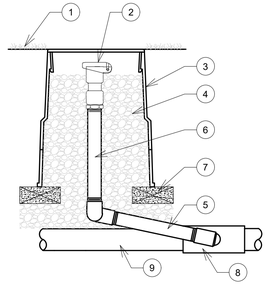
1. To Valves.
2. Irrigation Mainline (See Legend For Size).
3. Gate Valve or Master Valve (Mainline Size) (See plan).
4. Backflow Prevention As Approved Per City Requirements.
5. Water Meter As Approved Per City Requirements.
6. Point Of Connection. Verify Location In Field.

NOTE:

See Irrigation Legend For Full Details, Sizing And Requirements.



G Typical Diagram - Point of Connection
Not to Scale



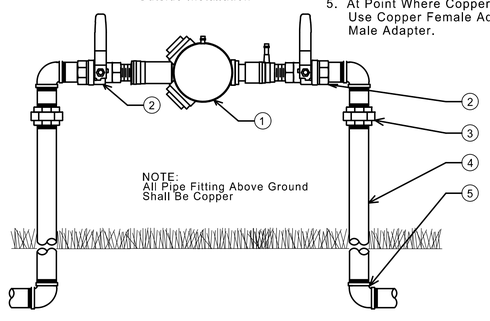
DETAIL CALLOUT LEGEND

1. Finished Grade/Top of Mulch.
2. Quick Coupling Valve: Hunter HQ-33DLRC-R 3/4", Two Piece Body with 3/4" inlet and 3/4" key outlet
3. Valve Box with purple cover
4. 6" depth min. of 3/4" washed gravel with commercial grade weed barrier
5. Hunter HSJ-0 Series Swing Joint, size as required
6. PVC Sch. 80 Nipple 3/4" (Length as Required)
7. Brick Supports (2)
8. PVC Sch. 40 Tee Or Ell. 3/4" etc.
9. PVC Mainline Pipe.

NOTE: Furnish fittings and piping nominally sized identical to nominal quick coupling valve inlet size.

D HQ33 Quick Coupling Valve
Not to Scale

FEBCO MODEL 825Y
Reduced Pressure Zone Assembly
Outside Installation



DETAIL CALLOUT LEGEND

1. Reduced Pressure Zone Assembly
2. Gate Valves.
3. Brass Union.
4. Copper Pipe, Wrap With Thermo Wrap For Protection.
5. At Point Where Copper Meets PVC, Use Copper Female Adapter & PVC Male Adapter.

A BACKFLOW PREVENTION
Not to Scale

Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND, CAMERON COUNTY, TEXAS

DATE	ISSUE

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT JACOB H. CLARK 2841 STATE OF TEXAS
11.3.23

Project #: C275-21184

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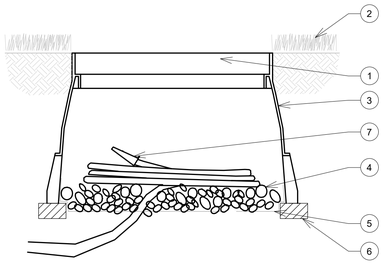
Sheet Title:
IRRIGATION DETAILS

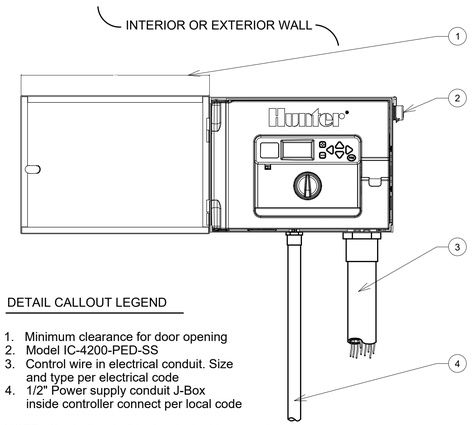
Sheet Number
L9-01



DETAIL CALLOUT LEGEND

1. Top Of Valve Box To Be Flush With Finished Grade marked "2W" in white paint (3" ht. min.).
2. Finished Grade
3. Valve Box
4. 3/8" Dia. Gravel 6" Min. Depth.
5. Filter Fabric.
6. Brick Supports Min. (4) Per Valve Box.
7. Wires to Controller, 36" MIN.
8. Lateral Line

C Two Wire Terminus Box
Not to Scale

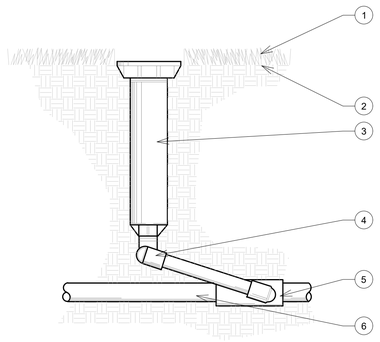


DETAIL CALLOUT LEGEND

1. Minimum clearance for door opening
2. Model IC-4200-PED-SS
3. Control wire in electrical conduit. Size and type per electrical code
4. 1/2" Power supply conduit J-Box inside controller connect per local code

NOTE: Controller shall be hard-wired to grounded 110 VAC power source

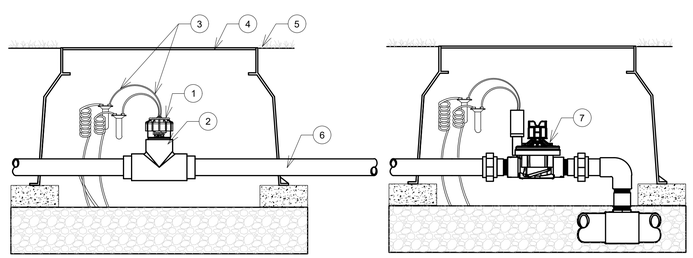
E Irrigation Controller (ICC2-PED-SS)
Not to Scale



DETAIL CALLOUT LEGEND

1. Turf Area.
2. Finished Grade.
3. Pro-Spray 6" Sprinkler body with PCN-25 Bubbler Nozzle
4. Hunter HSJ Series swing joint, size as required
5. Sch. 40 PVC Tee Or Elbow.
6. PVC Lateral Line (12" Min. Cover As Noted In Legend).

B Tree Bubbler Pop-Up Detail
Not to Scale



DETAIL CALLOUT LEGEND

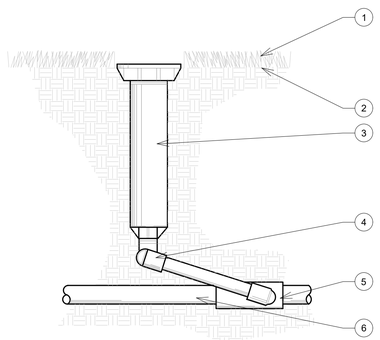
1. Model Flow-Clik - xxx
2. Model FCT-XXX (See Plan to Size)
3. Min. 18/2 wire to interface panel maximum wire distance run of 1,000'
4. Standard Valve Box
5. Finished Grade
6. Mainline Pipe
7. Master Valve

FCT FITTING SELECTION

FCT100	1 INCH	SCH. 40
FCT150	1.5 INCH	SCH. 40
FCT158	1.5 INCH	SCH. 80
FCT200	2 INCH	SCH. 40
FCT208	2 INCH	SCH. 80
FCT300	3 INCH	SCH. 40
FCT308	3 INCH	SCH. 80
FCT400	4 INCH	SCH. 40

NOTE INLET PIPE LENGTH OF SENSOR MUST BE MIN. 10X PIPE DIA. STRAIGHT, CLEAN RUN OF PIPE, NO FITTINGS OR TURNS. OUTLET PIPE LENGTH OF SENSOR MUST BE MIN. 5X PIPE DIA. OF STRAIGTH CLEAN RUN OF PIPE, NO FITTINGS OR TURNS.

D Flow-Clik
Not to Scale



DETAIL CALLOUT LEGEND

1. Turf Area.
2. Finished Grade.
3. Pro-Spray 6" Sprinkler body, See Plan for specific nozzle types
4. Hunter HSJ Series swing joint, size as required
5. Sch. 40 PVC Tee Or Elbow.
6. PVC Lateral Line (12" Min. Cover As Noted In Legend).

A Turf Pop-Up Spray Detail
Not to Scale

Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND, CAMERON COUNTY, TEXAS

DATE	ISSUE

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS
11.3.23

Project #: C275-21184

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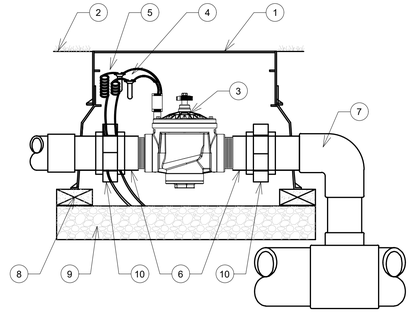
Revision	Date	Remarks

Sheet Title:
IRRIGATION DETAILS

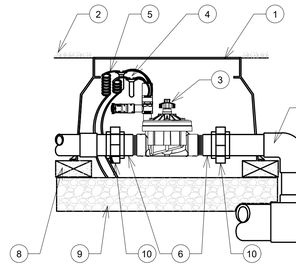
Sheet Number
L9-02



DETAIL CALLOUT LEGEND

1. Jumbo box with extension
2. Finish grade
3. Remote control valve model ICV-301g with filter sentry
4. DBRY Waterproof connectors (2)
5. 18-24" Coiled Wire
6. Sch 80 t.o.e. nipple
7. Main line pipe & fittings
8. Brick supports (4)
9. 3" depth min. of 3/4" washed gravel with commercial grade weed barrier
10. PVC slip unions

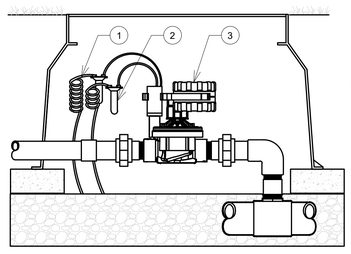
C ICV 3" Globe Valve
Not to Scale



DETAIL CALLOUT LEGEND

1. Standard valve box
2. Finish grade
3. Remote control valve model ICV-151g & ICV-201g with filter sentry
4. DBRY Waterproof connectors (2)
5. 18-24" Coiled Wire
6. Sch 80 t.o.e. nipple
7. Main line pipe & fittings
8. Brick supports (4)
9. 3" depth min. of 3/4" washed gravel with commercial grade weed barrier
10. PVC slip unions

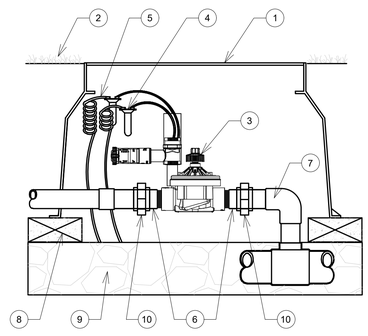
B ICV 1 1/2" - 2" Globe Valve
Not to Scale



DETAIL CALLOUT LEGEND

1. 18-24" coiled wire
2. DBRY Waterproof connectors (2)
3. Node-x00

D Node Controller
Not to Scale



DETAIL CALLOUT LEGEND

1. Standard valve box
2. Finish grade
3. Remote control valve model ICV-101g with filter sentry
4. DBRY Waterproof connectors (2)
5. Standard valve box
6. Sch 80 t.o.e. nipple
7. Main line pipe & fittings
8. Brick supports (4)
9. 3" depth min. of 3/4" washed gravel with commercial grade weed barrier
10. PVC slip unions

A ICV 1" Globe Valve
Not to Scale

LJA Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND, CAMERON COUNTY, TEXAS

DATE	ISSUE

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS
11.3.23

Project #: C275-21184

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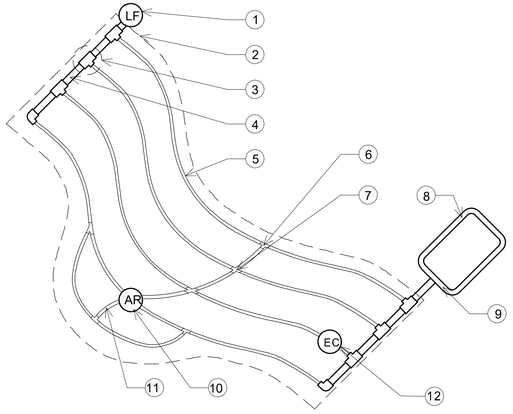
Sheet Title:
IRRIGATION DETAILS

Sheet Number
L9-03



H Irrigation Layout Typical Irregular Planting Area
Not to Scale

DETAIL CALLOUT LEGEND

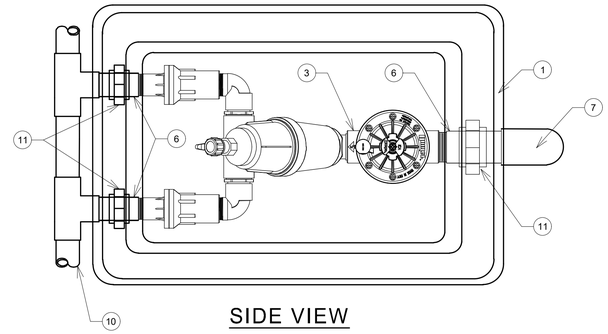
1. Line Flushing Valve Plumbed To Techline Or Poly.
2. Planting Bed/Area Perimeter.
3. Techline Start Connection.
4. 1" PVC Or Poly Exhaust Header
5. Techline Tubing Lateral, 18" O.C. with .9 GPH Emitters @ 18" O.C.
6. Techline Tee.
7. Techline Cross.
8. Remote Control Valve With Disc Filter And PRV, See Irrigation Plan For Size.
9. 1" PVC Supply Header, Unless Noted As Otherwise On Plans.
10. Air/Vacuum Relief Valve, Locate At High Point Of Zone.
11. Blank Tubing Centered On Mound Or Berm.
12. Eco Indicator, by Hunter to be installed in each drip zone.

NOTE:

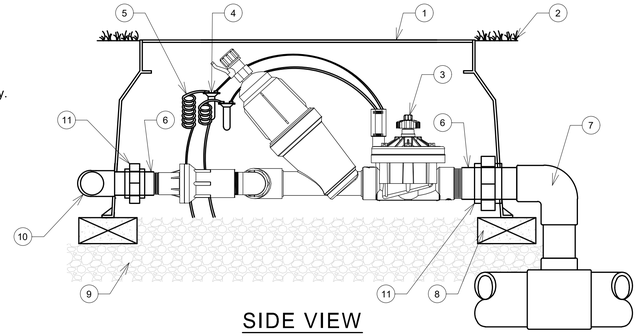
Netafim, Or approved Equal, Drip Irrigation Shall Be Installed As Per Manufacturers Guidelines And Specifications For Local Soil. All Drip Tubing To be Installed 4" Below Finished Grade And Staked Every 3'-0", And Before And After Every Turn.

DETAIL CALLOUT LEGEND

1. Super jumbo valve box
2. Finish grade
3. Drip zone kit model ICZ-151-40 with filter (tip 45 degrees) regulator 40 psi
4. DBRY Waterproof connectors (2)
5. 18-24" coiled wire
6. Sch 80 t.o.e. nipple
7. Main line pipe & fittings
8. Brick supports (4)
9. 3" depth min. of 3/4" washed gravel with commercial grade weed barrier
10. Lateral pipe and fittings
11. Pvc slip unions (2)



SIDE VIEW

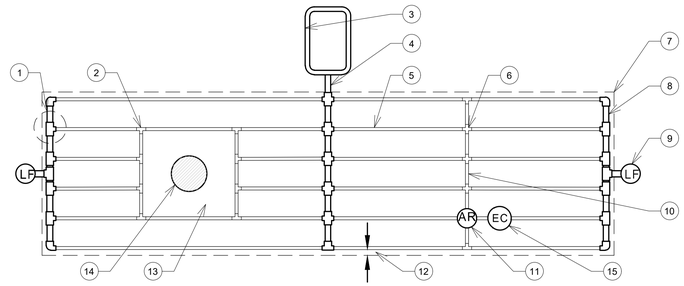


SIDE VIEW

B ICZ 151-40 Drip Control Kit - Flow 20 to 60 GPM
Not to Scale

DETAIL CALLOUT LEGEND

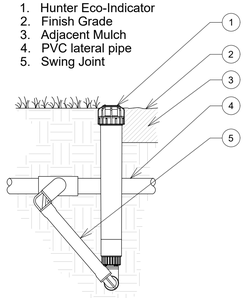
1. Techline Start Connection.
2. Techline Tee.
3. Remote Control Valve With Disc Filter And PRV, See Irrigation Plan For Size.
4. 1" PVC Supply Header, Unless Noted As Otherwise On Plans.
5. Techline Tubing Lateral, 18" O.C. with .9 GPH Emitters @ 18" O.C.
6. Techline Cross.
7. Planting Bed/Area Perimeter.
8. 1" PVC Or Poly Exhaust Header.
9. Line Flushing Valve Plumbed To PVC Or Poly.
10. Blank Techline Tubing (@ 50' O.C.).
11. Air/Vacuum Relief Valve, Locate At High Point Of Zone.
12. Perimeter Laterals 6" From Hard Edge.
13. Tree Opening In Drip Line.
14. Tree/Palm, See Planting Plans.
15. Eco Indicator, by Hunter to be installed in each drip zone.



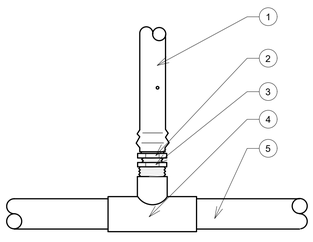
G Irrigation Layout Typical Regular Planting Area
Not to Scale

DETAIL CALLOUT LEGEND

1. Hunter Eco-Indicator
2. Finish Grade
3. Adjacent Mulch
4. PVC lateral pipe
5. Swing Joint



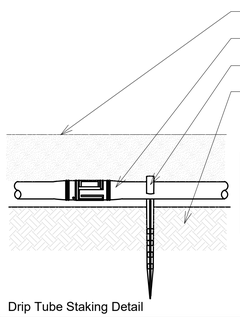
J Eco Indicator - Swing Joint
Not to Scale



DETAIL CALLOUT LEGEND

1. Techline Tubing.
2. 3/4" Male Adapter.
3. 3/4" Male x 1/2" Female Reduction Bushing.
4. PVC Tee (SxSxT).
5. PVC Lateral (Or Exhaust Header).

F Typical Dripline Start Connection
Not to Scale



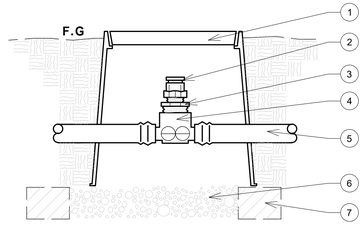
DETAIL CALLOUT LEGEND

1. Top Of Mulch.
2. Landscape Dripline Tubing.
3. Tie Down Stake: Rain Bird LD16STK.
4. Finish Grade.

NOTE:

Drip Irrigation To Be Staked Every 3'-0", And Before And After Every Turn.

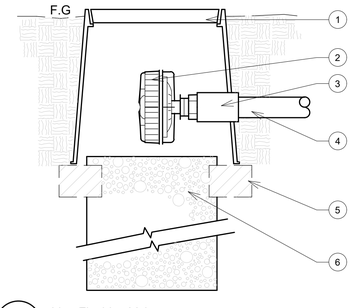
E Drip Tube Staking Detail
Not to Scale



DETAIL CALLOUT LEGEND

1. 6" Round Valve Box With Cover.
2. Air/Vacuum Relief Valve Hunter PLD-AVR 3/4".
3. 3/4" Male x 1/2" Female Reduction Bushing.
4. Techline 180 2-Way Adapter Tee.
5. Techline Tubing.
6. 3/4" Crushed Gravel Sump.
7. Brick Supports (Three).

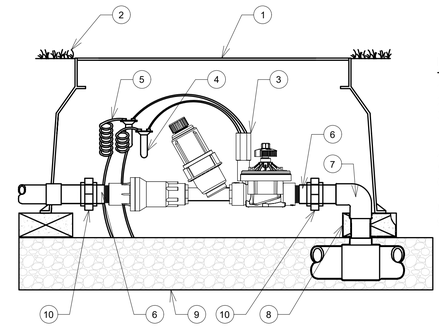
D Typical Air/Vaccum Relief
Not to Scale



DETAIL CALLOUT LEGEND

1. 6" Round Valve Box With Cover.
2. Line flushing Valve by Hunter AFV-T .
3. PVC Reducer Adapters S x 1/2"FTP (Size As Required).
4. PVC Lateral (Or Exhaust Header).
5. Brick Supports (Three).
6. 3/4" Crushed Gravel Sump (1 Cubic Ft).

C Line Flushing Valve
Not to Scale



DETAIL CALLOUT LEGEND

1. Jumbo valve box
2. Finish grade
3. Drip zone kit model ICZ-101-xx with filter (tip 45 degrees) regulator 25 or 40 psi
4. DBRY Waterproof connectors (2)
5. 18-24" coiled wire
6. Sch 80 t.o.e. nipple
7. Main line pipe & fittings
8. Brick supports (4)
9. 3" depth min. of 3/4" washed gravel with commercial grade weed barrier
10. PVC slip unions (2)

A ICZ 101 Drip Control Kit - Flow 2 to 20 GPM
Not to Scale

Planning + Landscape Architecture

Key Map

MARISOL BOAT RAMP

LANDSCAPE & IRRIGATION DRAWINGS

THE CITY OF SOUTH PADRE ISLAND,
CAMERON COUNTY, TEXAS

DATE	ISSUE

Drawn RB
Checked JC

REGISTERED LANDSCAPE ARCHITECT
JACOB H. CLARK
2841
STATE OF TEXAS
11.3.23

Project #: C275-21184

Date: NOVEMBER 03, 2023

Revision	Date	Remarks

Sheet Title:
IRRIGATION DETAILS

Sheet Number
L9-04

Appendix B

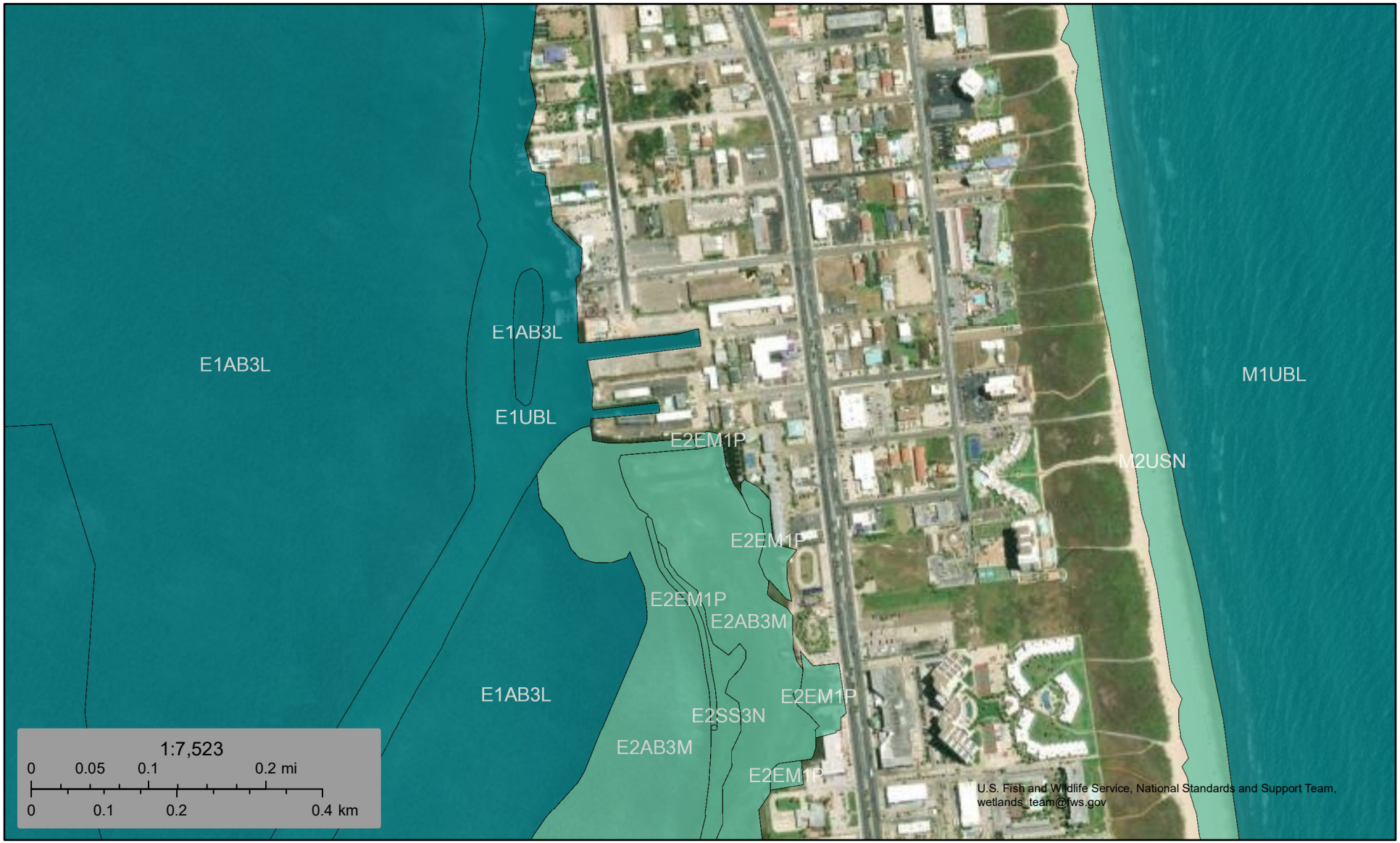
Figure 1: Photo of the unvegetated parking lot area facing northeast.

Figure 2: View of the proposed boat dock area and associated attendant dock facing west.

Appendix C

U.S. Fish and Wildlife Service
National Wetlands Inventory

Marisol Boat Ramp NWI



February 4, 2025

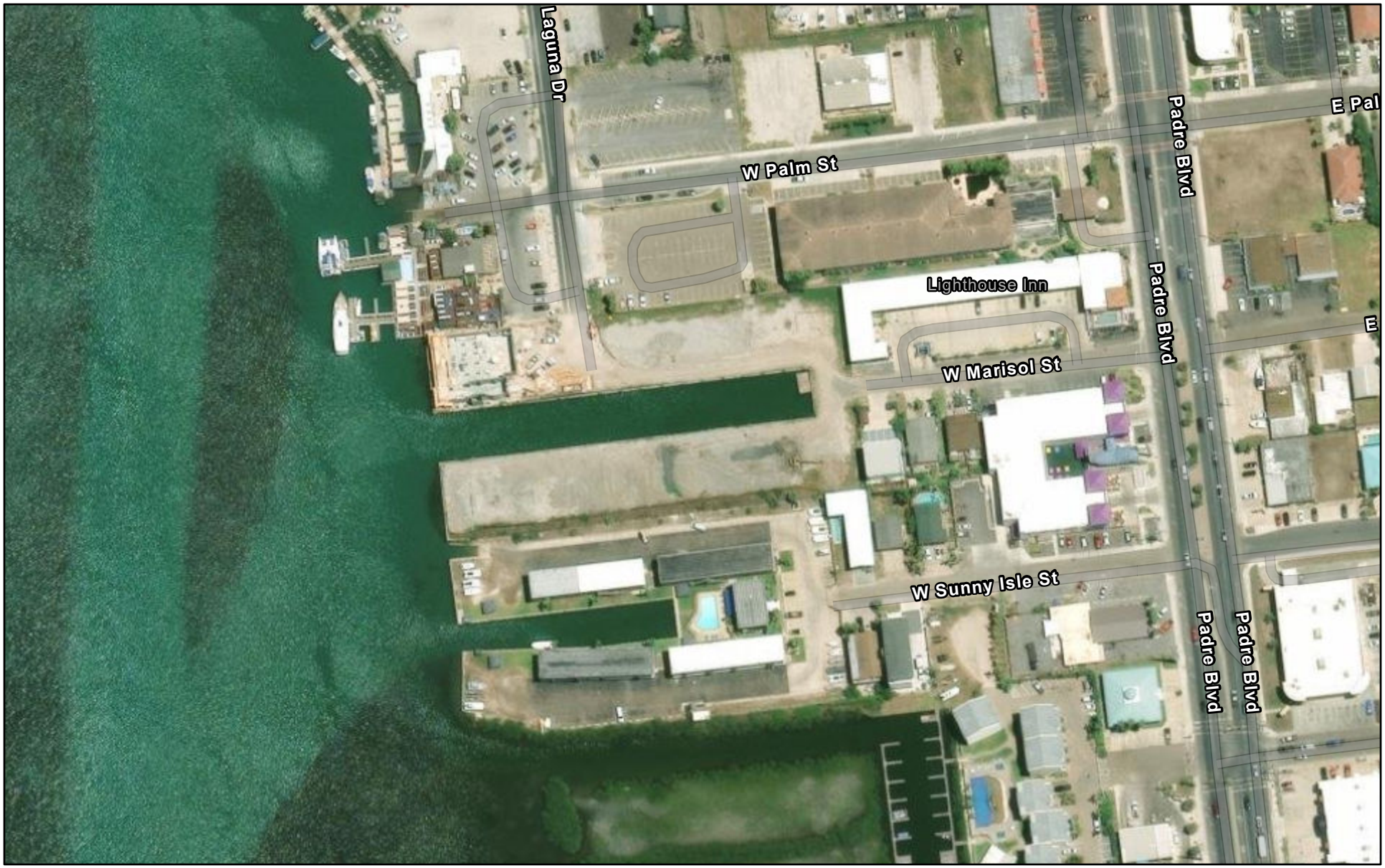
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Appendix D

Marisol Boat Ramp



2/10/2025

1:2,237

0 0.01 0.03 0.06 mi

0 0.03 0.06 0.11 km

World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

60cm Resolution Metadata

Appendix E

Soil Map—Cameron County, Texas
(Marisol Boat Ramp, South Padre Island, Texas)

Map Scale: 1:890 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 40 80 160 240

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cameron County, Texas
Survey Area Data: Version 21, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 21, 2021—Mar 2, 2022

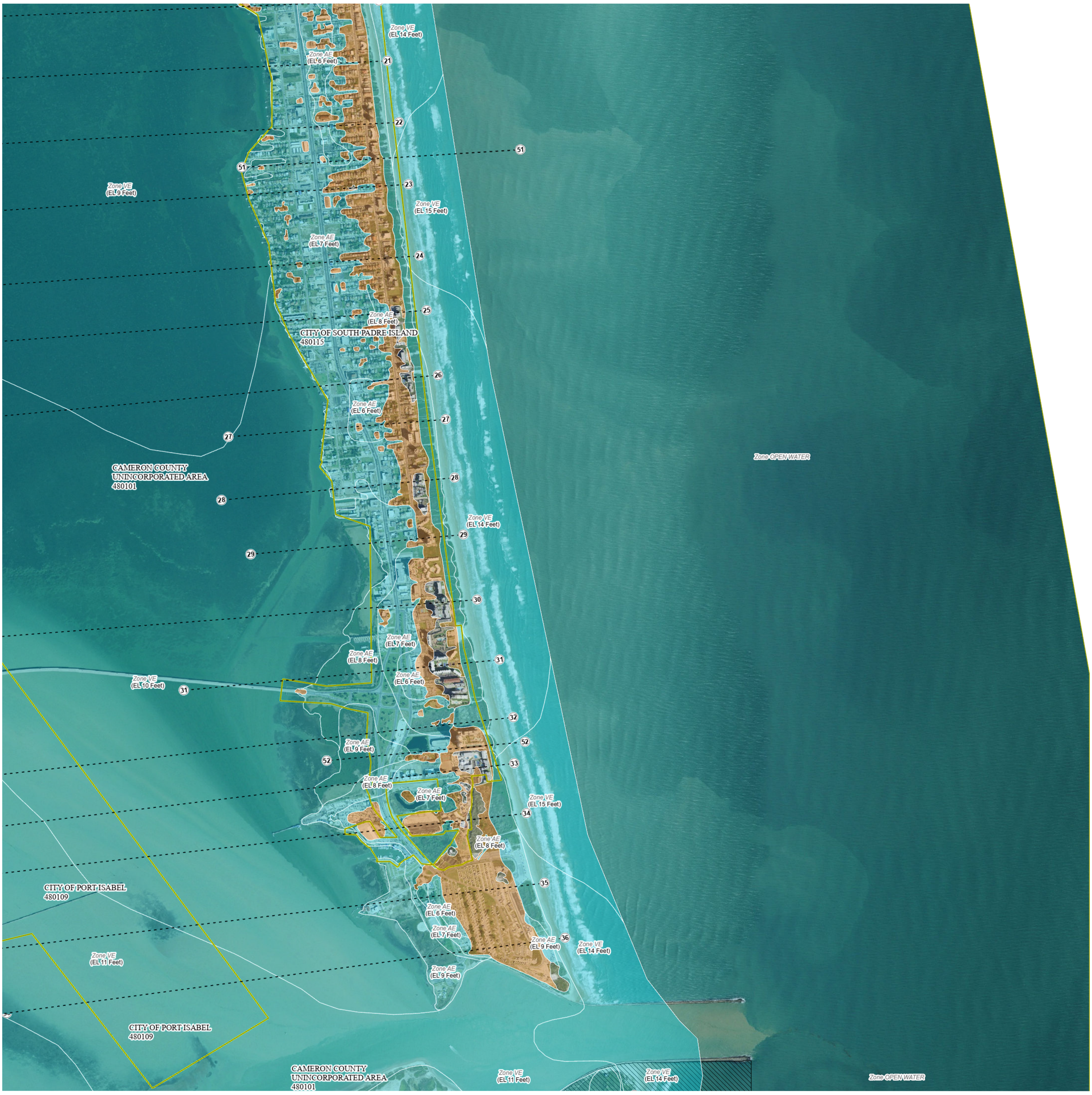
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GA	Galveston fine sand, hummocky, occasionally flooded	0.1	7.9%
MU	Mustang fine sand, saline, frequently flooded	0.9	62.4%
W	Water	0.4	29.7%
Totals for Area of Interest		**1.4**	**100.0%**

Appendix F

97°11'15.88"W 26°7'43.2"N



97°7'29.17"W 26°3'31.84"N

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- 8 Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **2/4/2025 10:24 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

COASTAL BARRIER RESOURCES SYSTEM (CBRS)

This map includes approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see http://www.fws.gov/cbra, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.

CBRS AREA OTHERWISE PROTECTED AREA

SCALE

Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: NAVD88
For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

N

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 3,000 4,000 Feet

0 105 210 420 630 840 Meters

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

PANEL **510** OF **700**

Panel Contains:

COMMUNITY	NUMBER	PANEL
CAMERON COUNTY	480101	0510
CITY OF PORT ISABEL	480109	0510
CITY OF SOUTH PADRE ISLAND	480115	0510

MAP NUMBER
48061C0510F
EFFECTIVE DATE
February 16, 2018

Appendix G

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Tier I (Small Projects)
Checklist

Incorporation of Best Management Practices (BMPs) into a proposed project will allow an individual Section 404 permit application to proceed without further review by the Texas Commission on Environmental Quality (TCEQ). The basic standards for the BMPs described in items I-III are included in this packet. Tier I projects are those which will result in a direct impact of three acres or less of waters in the state or 1500 linear feet of streams. If a project has a combination of impacts that exceed the threshold or is submitted after the fact, it does not qualify as a Tier I project (one acre of impact is considered equal to 500 linear feet of stream). The provisions of the checklist, including BMPs selected by an applicant, will become part of the Section 404 permit. If an applicant fails to implement these provisions and BMPs, the permit is subject to enforcement. Applicants who do not wish to incorporate all the provisions of the checklist into their project or desire to use alternatives may seek individual 401 review and certification from the TCEQ.

Exceptions: Projects that impact certain types of rare or ecologically significant wetlands are not eligible for inclusion in Tier I and will require individual review, even if under the size threshold. These wetlands are identified by the Corps in its regional conditions to the Nationwide Permits in Texas, and include the following habitats:

Pitcher plant bogs, swamps dominated by bald cypress and tupelo gum tree species, the area of Caddo Lake within Texas that is designated as a Ramsar Wetland of International Importance, mangrove marshes and coastal dune swales.

I. Erosion Control

Disturbed areas must be stabilized to prevent the introduction of sediment to adjacent wetlands or water bodies during wet weather conditions (erosion). *At least one* of the following BMPs must be maintained and remain in place until the area has been stabilized. Please check the BMP(s) you will incorporate into your project.

- ☐ Temporary Vegetation
- ☐ Blankets/Matting
- ☐ Mulch
- ☒ Sod

☐ Interceptor Swale

☐ Diversion Dike

☐ Erosion Control Composts*

☐ Compost Filter Berms and Socks*

☐ Mulch Filter Berms and Socks*

II. Post-Construction TSS Control

After construction has been completed and the site is stabilized, total suspended solids (TSS) loadings shall be controlled by *at least one* of the following BMPs. Please check the BMP(s) you will incorporate into your project.

☐ Retention/Irrigation Systems

☐ Extended Detention Basin

☐ Vegetative Filter Strips

☒ Grassy Swales

☐ Erosion Control Compost

☐ Compost Filter Socks

☐ Constructed Wetlands

☐ Wet Basins

☐ Vegetation-lined drainage ditches

☐ San Filter Systems

☐ Mulch Filter Socks

☐ Sedimentation Chambers*

*Only to be used when there is no space available for other approved BMPs.

III. Sedimentation Control

Prior to project initiation, the project area must be isolated from adjacent wetlands and water bodies by the use of BMPs to confine sediment. *At least one* of the following BMPs must be maintained and remain in place until project completion. Please check the BMP(s) you will incorporate into your project.

- ☐ Sand Bag Berm
- ☒ Silt Fence
- ☐ Triangular Filter Dike
- ☐ Rock Berm
- ☐ Hay Bale Dike
- ☐ Brush Berms
- ☐ Sediment Basins
- ☐ Erosion Control Compost*
- ☐ Compost Filter Berms and Socks*
- ☐ Mulch Filter Berms and Socks*

Dredged material shall be placed in such a manner that prevents sediment runoff into water in the state, including wetlands. Water bodies can be isolated by the use of one or more of the required BMPs identified for sedimentation control. These BMPs must be maintained and remain in place until the dredged material is stabilized.

Hydraulically dredged material shall be disposed of in contained disposal areas. Effluent from contained disposal areas shall not exceed a TSS concentration of 300 mg/L.

IV. Contaminated Dredge Material

If contaminated dredge material that was not anticipated or provided for in the permit application is encountered during dredging, operations shall cease immediately. Pursuant to § 26.039 (b) of the Texas Water Code, the individual operating or responsible for the dredging operations shall notify the commission's emergency response team at (512) 463-7727 as soon as possible, and not later than 24 hours after the discovery of the material. The applicant shall also notify the U.S. Army Corps of Engineers (Corps) that activities have been temporarily halted. Contaminated

dredge material shall be remediated or disposed of in accordance with TCEQ rules. Dredging activities shall not be resumed until authorized in writing by the Commission.

"Contaminated dredge material" is defined as dredge material which has been chemically, physically, or biologically altered by man-made or man-induced contaminants which include, but not limited to "solid waste", "hazardous waste", and "hazardous waste constituent" as those terms are defined by 30 Texas Administration Code (TAC) Chapter 335, "Pollutants" as defined by Texas Water Code § 26.001 and "Hazardous Substances" as defined in the Texas Health and Safety Code, §361.003.

V. Wetland Mitigation Requirements

Where wetland mitigation is determined to be necessary by the Corps, the applicant must satisfy the minimum success criteria established by the Corps including wetland hydrology, hydrophytic vegetation, and two years of monitoring. If that criteria includes less than two years of monitoring, the applicant may request water quality certification under Section 401.

*VI. Compost Requirements

New types of erosion control compost (ECC) and compost and mulch filter berms and socks are continuously being developed. The Texas Department of Transportation (TxDOT) has established minimum performance standards which must be met for any products seeking to be approved for use within any of TxDOT's construction or maintenance activities. Material used within any TxDOT construction or maintenance activities must meet material specifications in accordance with current TxDOT specifications. TxDOT maintains a website at https://www.dot.state.tx.us/business/contractors_consultants/recycling/compost_row.htm that provides information on Use of Compost and Shredded Wood on Rights of Way. This website also contains information on areas where the TCEQ restricts the use of certain compost products.

ECC and compost and mulch filter berms and socks used for projects not related to TxDOT should also be of quality materials by meeting performance standards and compost specification data. To ensure the quality of compost used as an ECC, products should meet all applicable state and federal regulations, including but not limited to the United States Environmental Protection Agency (USEPA) Code of Federal Regulations (CFR), Title 40, Part 503 Standards for Class A biosolids and Texas Natural Resource Conservation Commission (now named TCEQ) Health and Safety Regulations as defined in the TAC, Chapter 332, and all other relevant requirements for compost products outlined in TAC, Chapter 332. Testing requirements required by the TCEQ are defined in TAC Chapter 332, including Sections §332.71 Sampling and Analysis Requirements for Final Products and §332.72 Final Product Grades. Compost specification data approved by TxDOT are appropriate to use for ensuring the use of quality compost materials or for guidance.

Testing standards are dependent upon the intended use for the compost and ensures product safety, and product performance regarding the product's specific use. The appropriate compost sampling and testing protocols included in the United States Composting Council (USCC) Test Methods for the Examination of Composting and Compost (TMECC) should be conducted on

compost products. TMECC information can be found at https://www.compostingcouncil.org/page/tmecc The USCC Seal of Testing Assurance (STA) program contains information regarding compost STA certification. STA program information can be found at https://www.compostingcouncil.org/page/CompostManufacturersSTA

VII. Coastal Zone Management Act

In accordance with 31 TAC § 506, all projects located in the coastal zone boundary shall be consistent with the Texas Coastal Management Program.

Applicant should sign and return the original statement and completed checklist to the the TCEQ and send a copy to the U.S. Army Corps of Engineers . Questions regarding the checklist should be directed to the TCEQ.

Standards Implementation Team- 401 Coordinator
MC 150
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Or by e-mail at 401CERTS@tceq.Texas.gov

Applicant's Name (please print): Randy Smith

Corps Project Manager or Regulatory Specialist (if known): Amanda Barker

Permit Number (if known): SWG-2022-00301

I will incorporate all of the above requirements and selected BMPs (Items I, II, and III) into my proposed project. I understand that these requirements and BMPs as described above will be part of my Section 404 permit, and failure to implement any of them will constitute a permit violation.

Date: 5-8-2023

Applicant Signature: Randy Smith

Appendix H

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

Please note that the Federal Highways Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bat Determination Key is temporarily offline for updates and will be available soon. We apologize for any inconvenience this may cause. ×

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bel ... t
that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Cameron County, Texas

Local office

Texas Coastal & Central Plains Esfo

(281) 286-8282
(281) 488-5882

79

MAILING ADDRESS

17629 El Camino Real, Suite 211
Houston, TX 77058-3051

PHYSICAL ADDRESS

17629 El Camino Real
Houston, TX 77058-3051

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
West Indian Manatee Trichechus manatus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4469	Threatened Marine mammal

Birds

NAME	STATUS
Cactus Ferruginous Pygmy-owl Glaucidium brasilianum cactorum Wherever found There is **final** critical habitat for this species. https://ecos.fws.gov/ecp/species/1225	Threatened
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Northern Aplomado Falcon Falco femoralis septentrionalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1923	Endangered
Piping Plover Charadrius melodus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot Calidris canutus rufa Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle Chelonia mydas There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6199	Threatened
Hawksbill Sea Turtle Eretmochelys imbricata Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3656	Endangered
Kemp's Ridley Sea Turtle Lepidochelys kempii Wherever found There is **proposed** critical habitat for this species. https://ecos.fws.gov/ecp/species/5523	Endangered

Clams

NAME	STATUS
Salina Mucket Potamilus metnecktayi Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8753	Proposed Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Flowering Plants

NAME	STATUS

South Texas Ambrosia Ambrosia cheiranthifolia Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3331

Texas Ayenia Ayenia limitaris Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4942

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management

- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
American Golden-plover Pluvialis dominica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31

Audubon's Shearwater Puffinus lherminieri — Breeds Mar 1 to Aug 5

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Black Scoter Melanitta nigra — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black-legged Kittiwake Rissa tridactyla — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Brown Pelican Pelecanus occidentalis — Breeds Jan 15 to Sep 30

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/6034

Chimney Swift Chaetura pelagica — Breeds Mar 15 to Aug 25

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Loon gavia immer — Breeds Apr 15 to Oct 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/4464

Cory's Shearwater Calonectris diomedea — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Dickcissel Spiza americana — Breeds May 5 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Double-crested Cormorant phalacrocorax auritus — Breeds Apr 20 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/3478

Forster's Tern Sterna forsteri — Breeds Mar 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Gull-billed Tern Gelochelidon nilotica — Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9501

Hudsonian Godwit Limosa haemastica — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

King Rail Rallus elegans — Breeds May 1 to Sep 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8936

Least Tern Sternula antillarum antillarum — Breeds Apr 25 to Sep 5

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Long-billed Curlew Numenius americanus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Painted Bunting Passerina ciris — Breeds Apr 25 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Pectoral Sandpiper Calidris melanotos — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Pomarine Jaeger Stercorarius pomarinus — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Prairie Loggerhead Shrike Lanius ludovicianus excubitorides — Breeds Feb 1 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8833

Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red Knot Calidris canutus roselaari — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8880

Red-breasted Merganser Mergus serrator — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Reddish Egret Egretta rufescens — Breeds Mar 1 to Sep 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/7617

Ring-billed Gull Larus delawarensis — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Royal Tern Thalasseus maximus — Breeds Apr 15 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Ruddy Turnstone Arenaria interpres morinella — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Sandwich Tern Thalasseus sandvicensis — Breeds Apr 25 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Sooty Tern Onychoprion fuscatus — Breeds Mar 10 to Jul 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Surf Scoter Melanitta perspicillata — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Swallow-tailed Kite Elanoides forficatus — Breeds Mar 10 to Jun 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8938

Whimbrel Numenius phaeopus hudsonicus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

White-winged Scoter Melanitta fusca — Breeds elsewhere
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wilson's Plover Charadrius wilsonia — Breeds Apr 1 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

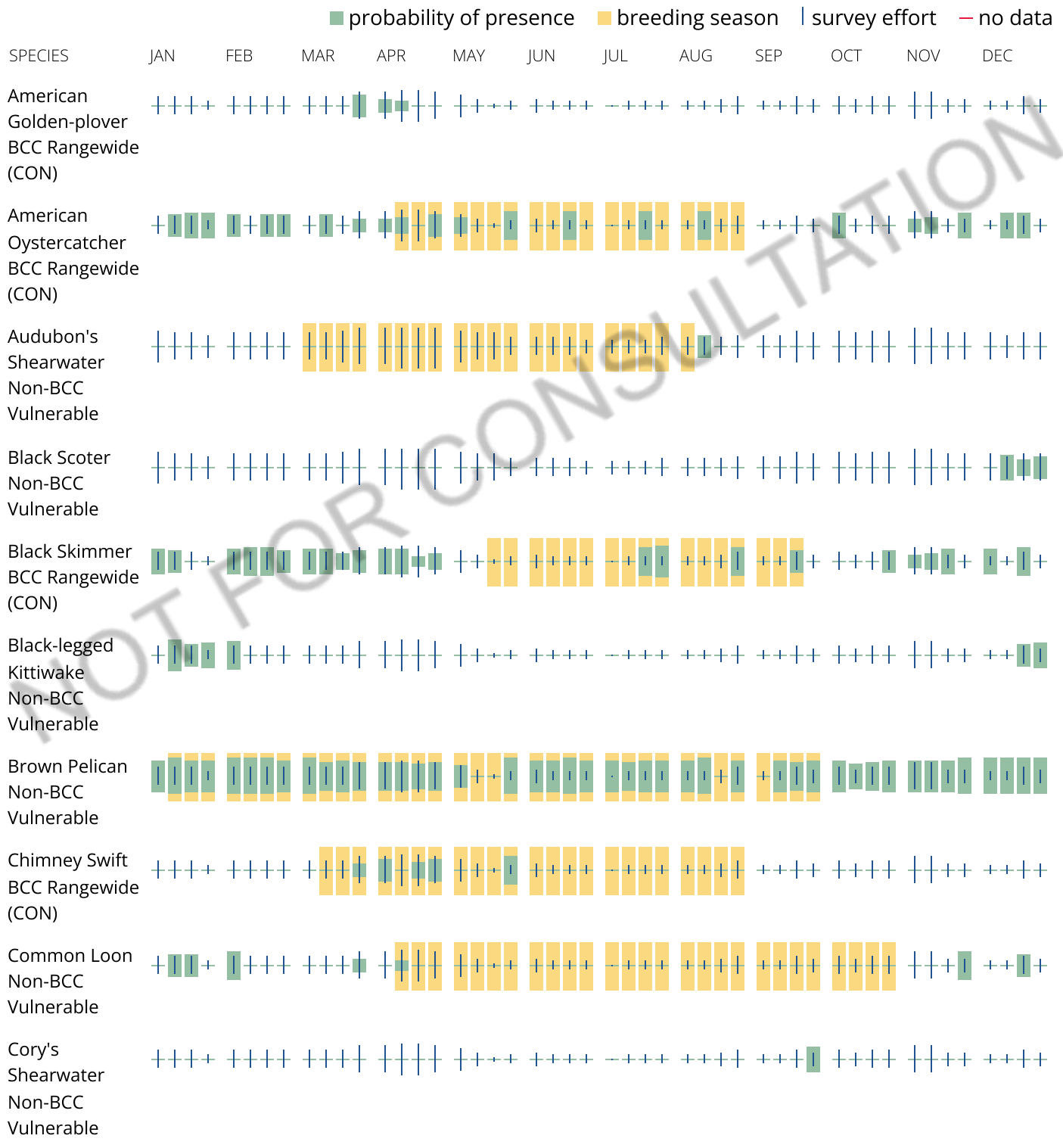
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

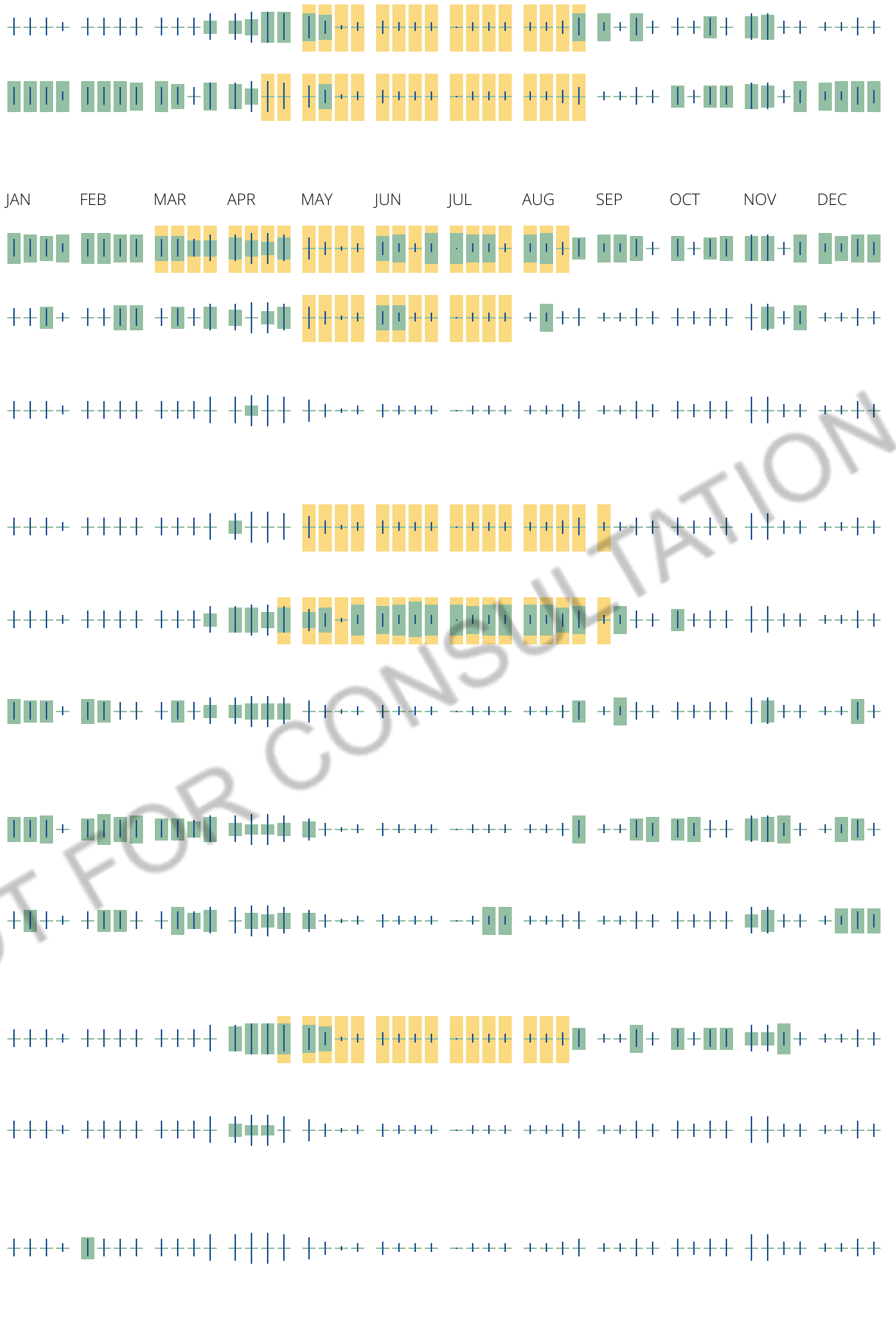
No Data (–)

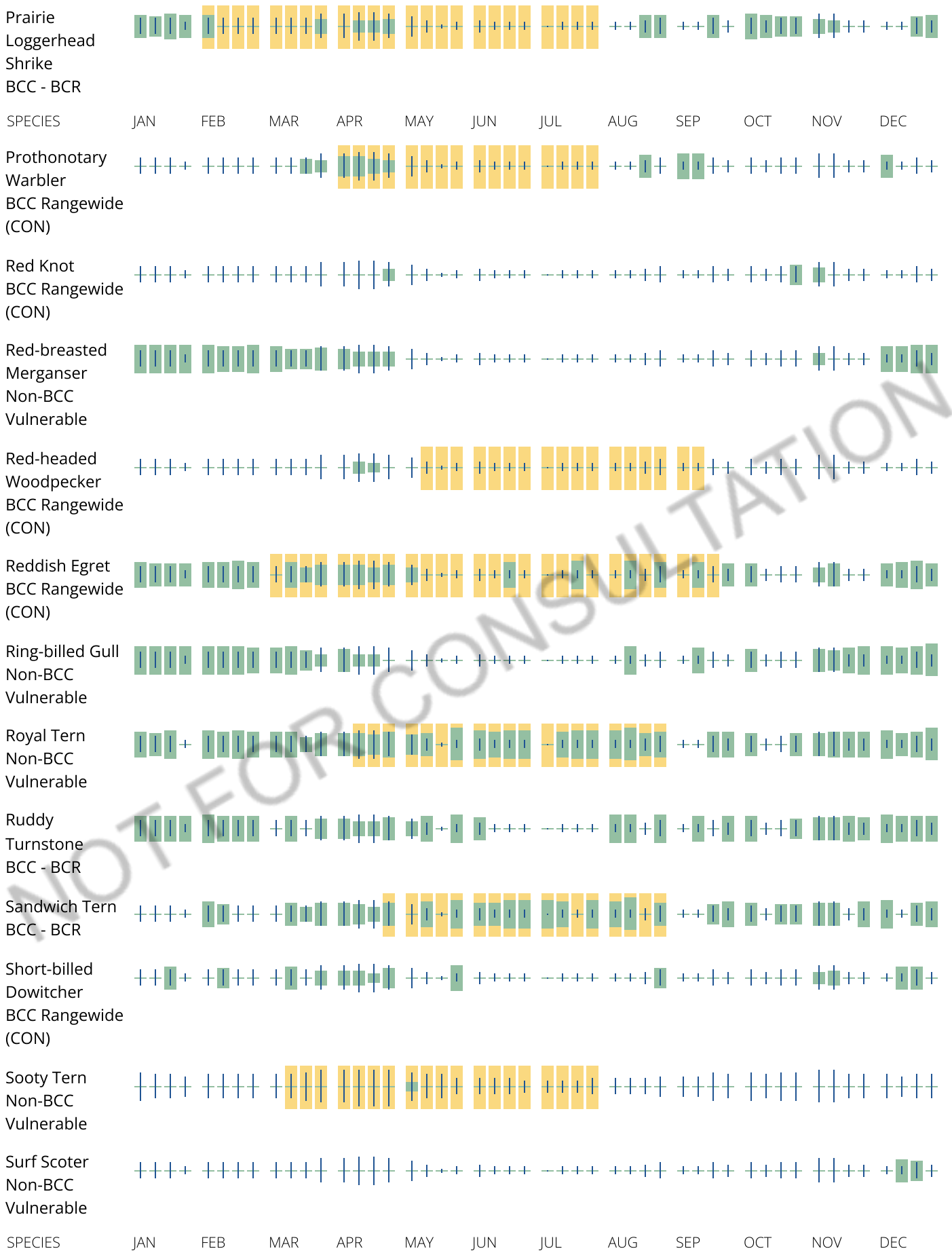
A week is marked as having no data if there were no survey events for that week.

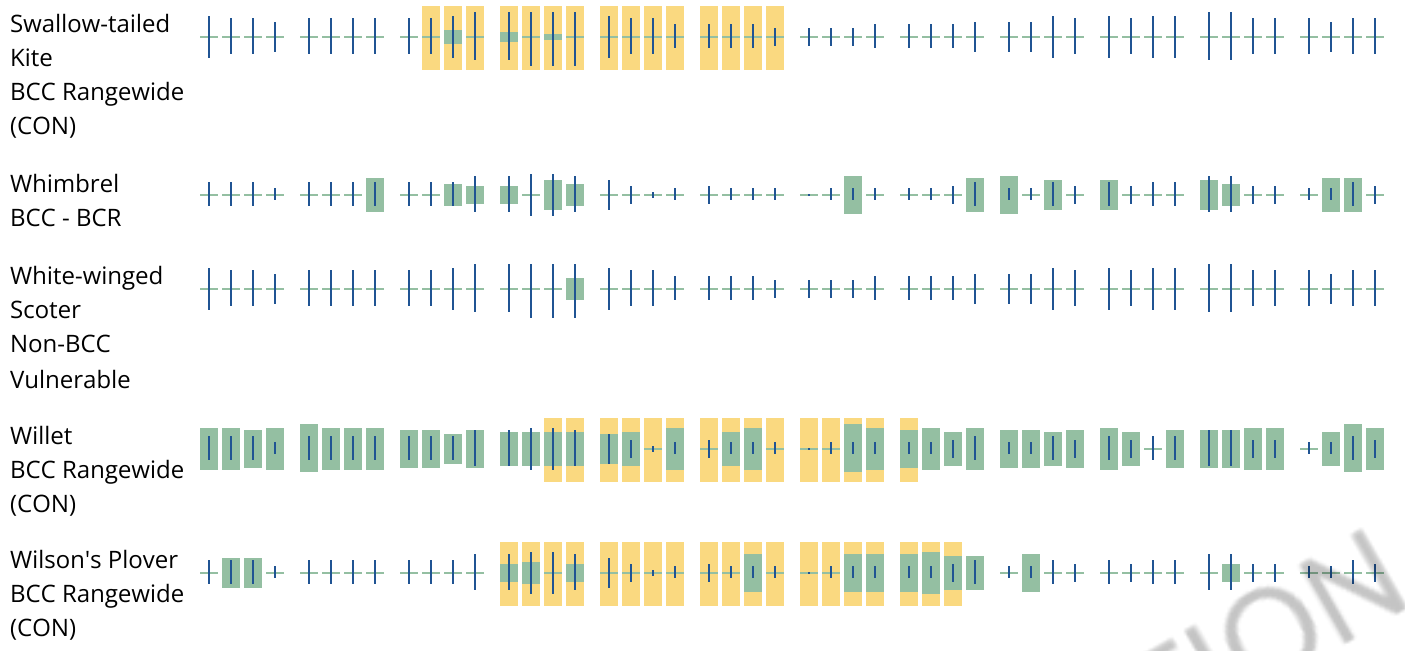
Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.









Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee *Trichechus manatus*
https://ecos.fws.gov/ecp/species/4469

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER

E1UBL

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

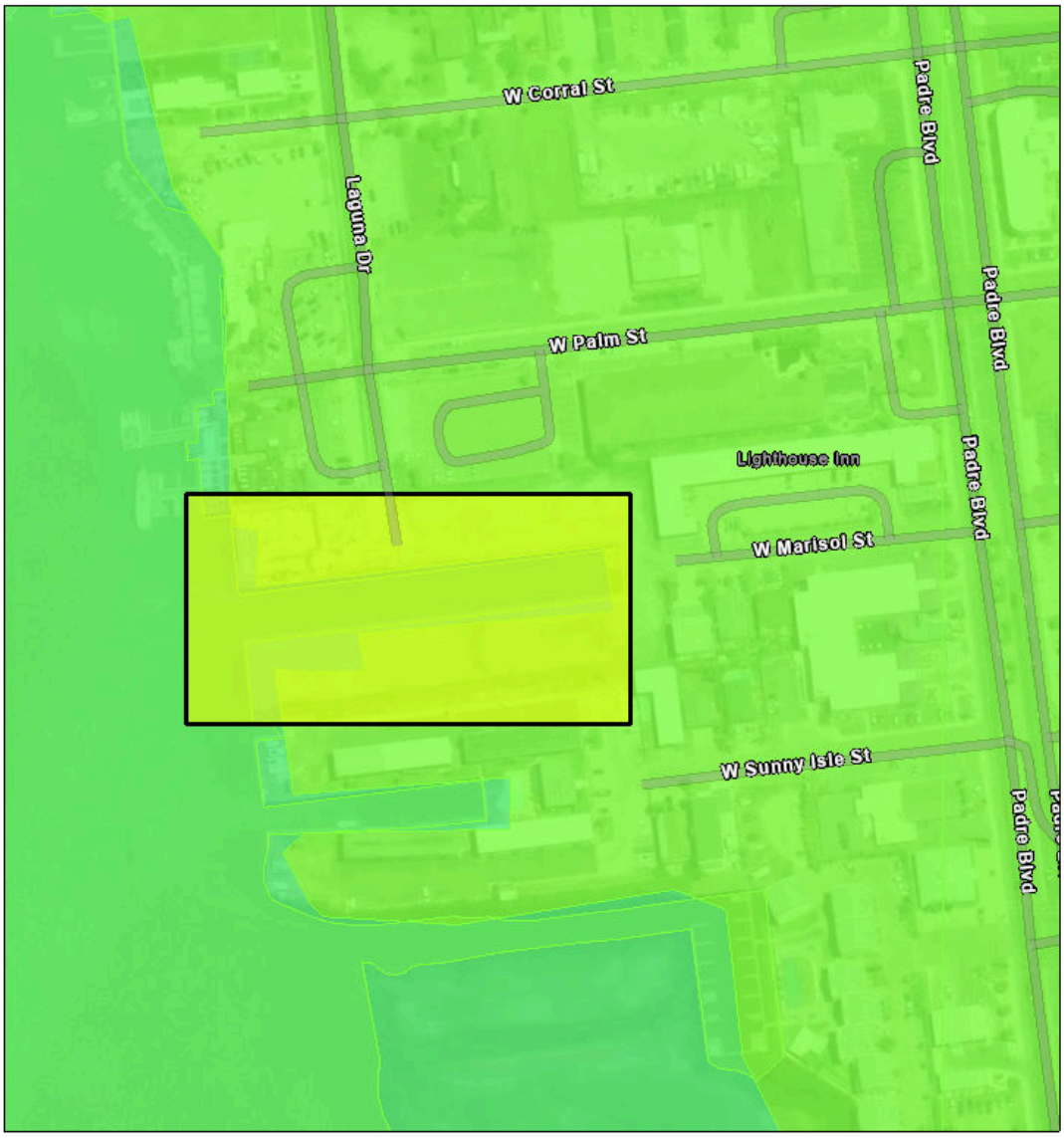
Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 7,737,580.53 ft²

Feb 7 2025 8:19:20 Central Standard Time



Sea Turtles
Sharks, Rays, Sawfish
Critical Habitat (polygons)

1:2,257
0 0.01 0.03 0.06 mi
0 0.03 0.06 0.11 km

Summary

Name	Count	Area(ft²)	Length(ft)
Conchs	0	0	N/A
Corals	0	0	N/A
Sea Turtles	10	45,859,319.81	N/A
Sharks, Rays, Sawfish	4	15,782,417.73	N/A
Grouper and Sturgeon	0	0	N/A
Whales	0	0	N/A
Critical Habitat (linear)	0	N/A	0
Critical Habitat (area)	1	3,533,069.09	N/A
Critical Habitat (lines as polygons)	0	0	N/A
Miscellaneous	0	0	N/A

Sea Turtles

#	Species	Status	Life Stage	Behavior	Zone
1	Green Sea Turtle	Threatened	Adults and Neritic Juveniles	Foraging/Resting	Sea Turtle, Green, Proposed Critical Habitat: Texas
2	Green Sea Turtle	Threatened	Adults	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
3	Green Sea Turtle	Threatened	Neritic Juveniles	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
4	Green Sea Turtle	Threatened	Adults	Nesting	Texas Coastal Counties
5	Kemp's Ridley Sea Turtle	Endangered	Adults and Neritic Juveniles	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
6	Kemp's Ridley Sea Turtle	Endangered	Adults	Nesting	Texas Coastal Counties
7	Loggerhead Sea Turtle	Threatened	Adults and Neritic Juveniles	Migrating & Foraging	Gulf of Mexico Tidally-Influenced Inshore
8	Loggerhead Sea Turtle	Threatened	Adults	Nesting	Texas Coastal Counties

#	Sub-ZONE	Date From	Until	Date From (2)	Until (2)
1	Unit TX01: Texas (Mexico border to and including Galveston Bay)	1/1	12/31	*No Data*	*No Data*
2	*No Data*	01/01	12/31	*No Data*	*No Data*
3	*No Data*	01/01	12/31	*No Data*	*No Data*
4	Galveston, Brazoria, Matagorda, Calhoun, Aransas, Nueces, Kleberg, Kenedy, Willacy, Cameron	1/1	12/31	*No Data*	*No Data*
5	*No Data*	01/01	12/31	*No Data*	*No Data*
6	Galveston, Brazoria, Matagorda, Calhoun, Aransas, Nueces, Kleberg, Kenedy, Willacy, Cameron	01/01	12/31	*No Data*	*No Data*
7	*No Data*	01/01	12/31	*No Data*	*No Data*
8	Galveston, Brazoria, Matagorda, Calhoun, Aransas, Nueces, Kleberg, Kenedy, Willacy, Cameron	01/01	12/31	*No Data*	*No Data*

#	Notes	Feature ID	Area(ft²)
1	*No Data*	GRN_GPT_ANJ_FAR	3,533,069.37
2	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GRN_GTD_ADU_MAF	7,737,580.53
3	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GRN_GTD_NJV_MAF	7,737,580.53
4	Nesting beaches for this species occur in this county. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction for sea turtles on the beach and NOAA Fisheries has jurisdiction for sea turtles in the marine environment. Please contact the USFWS if a project may affect sea turtles or nests on the beach.	GRN_TCC_ADU_NST	3,791,976.12
5	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	KMP_GTD_ANJ_MAF	7,737,580.53
6	Nesting beaches for this species occur in this county. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction for sea turtles on the beach and NOAA Fisheries has jurisdiction for sea turtles in the marine environment. Please contact the USFWS if a project may affect sea turtles or nests on the beach.	KMP_TCC_ADU_NST	3,791,976.06
7	The mapped boundary for inshore areas includes some areas (e.g., saltmarsh, uplands) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	LOG_GTD_ANJ_MAF	7,737,580.53
8	Nesting beaches for this species occur in this county. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction for sea turtles on the beach and NOAA Fisheries has jurisdiction for sea turtles in the marine environment. Please contact the USFWS if a project may affect sea turtles or nests on the beach.	LOG_TCC_ADU_NST	3,791,976.12

Sharks, Rays, Sawfish

#	Species	Status	Life Stage	Behavior	Zone
1	Giant Manta Ray	Threatened	Adults	Migrating & Foraging	Ray, Giant Manta, Inshore Gulf of Mexico
2	Giant Manta Ray	Threatened	Adults	Mating	Ray, Giant Manta, Inshore Gulf of Mexico
3	Giant Manta Ray	Threatened	Juveniles	Migrating & Foraging	Ray, Giant Manta, Inshore Gulf of Mexico
4	Giant Manta Ray	Threatened	YOY	Migrating & Foraging	Ray, Giant Manta, Inshore Gulf of Mexico

#	Sub-Zone	Date From	Until	Date From (2)	Until (2)
1	*No Data*	01/01	12/31	*No Data*	*No Data*
2	*No Data*	01/01	12/31	*No Data*	*No Data*
3	*No Data*	01/01	12/31	*No Data*	*No Data*
4	*No Data*	01/01	12/31	*No Data*	*No Data*

#	Notes	Feature ID	Area(ft²)
1	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_ADU_MAF	3,945,604.43
2	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_ADU_MAT	3,945,604.43
3	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_JUV_MAF	3,945,604.43
4	The mapped boundary for inshore areas includes some areas (e.g., freshwater lakes and rivers, tidal and non-tidal marshes, mangroves, riparian areas) that are not habitat for this species. Please consider various factors such as habitat type, sighting information, and project details when determining whether to consult on this species in this area.	GMR_RIG_YOY_MAF	3,945,604.43

Critical Habitat (area)

#	Species	CH Status	CH Unit	Area(ft²)
1	Sea turtle, green [North Atlantic DPS]	Proposed	TX01: Texas (Mexico border to and including Galveston Bay)	3,533,069.09

DISCLAIMER: Use of this App does NOT replace the Endangered Species Act (ESA) Section 7 consultation process; it is a first step in determining if a proposed Federal action overlaps with listed species or critical habitat presence. Because the data provided through this App are updated

regularly, reporting results must include the date they were generated. The report outputs (map/tables) depend on the options picked by the user, including the shape and size of the action area drawn, the layers marked as visible or selectable, and the buffer distance specified when using the "Draw your Action Area" function. Area calculations represent the size of overlap between the user-drawn Area of Interest (with buffer) and the specified S7 Consultation Area. Summary table areas represent the sum of these overlapping areas for each species group.

Appendix I

Corpus Christi Regulatory Field Office

SUBJECT: Permit No. SWG-2022-00301; Nationwide Permit Verification

City of South Padre
ATTN: Randy Smith
4601 Padre Blvd
South Padre Island, TX 78597

Dear Mr. Smith:

This is in reference to your request, dated October 11, 2022, submitted on your behalf by LJA Environmental Services, LLC, to construct a public boat ramp. The boat ramp will be 20 feet by 59 feet and will be constructed from what is currently uplands. Approximately 13.3 cubic yards of rock rip rap will be placed at the bottom of the boat ramp in 32 feet by 15 feet area for scour protection. A cofferdam will be constructed, and the area will be dewatered prior to the construction of the boat ramp. The dewatering area will be surrounded with a silt curtain to prevent total suspended solids from entering the neighboring waterways. The construction of the boat ramp and placement of scour protection will result in approximately 0.02 acres of temporary impacts and 0.01 acres of permanent impacts to waters of the United States. The project site is located in an artificial canal within the Laguna Madre at the southern end of Laguna Blvd., on South Padre Island, Cameron County, Texas.

Based on available information, there appear to be "waters of the United States" and/or "navigable waters of the United States" on the project site. Therefore, your letter resulted in the initiation of the Nationwide Permit (NWP) pre-construction notification (PCN) procedures. Your application was considered complete on December 16, 2022. The specified 45-day time period to process the PCN expired on January 29, 2023. Since you did not receive written notice from the Corps within this time period, according to the NWP regulations, you may begin the proposed activity.

You may proceed with the boat ramp construction, as shown on the enclosed project plans in three sheets, dated November 1, 2022 and December 16, 2022. This Nationwide Permit (NWP) 36 verification is valid provided the activity is compliant with the NWP General/Regional Conditions, Section 401 Water Quality Certification, and the Coastal Management Program, which can be found at: https://www.swg.usace.army.mil/Missions/Regulatory/Permits/Nationwide-General-Permits/. A hard copy can be provided to you upon request.

NWP 36. Boat Ramps: Activities required for the construction of boat ramps.

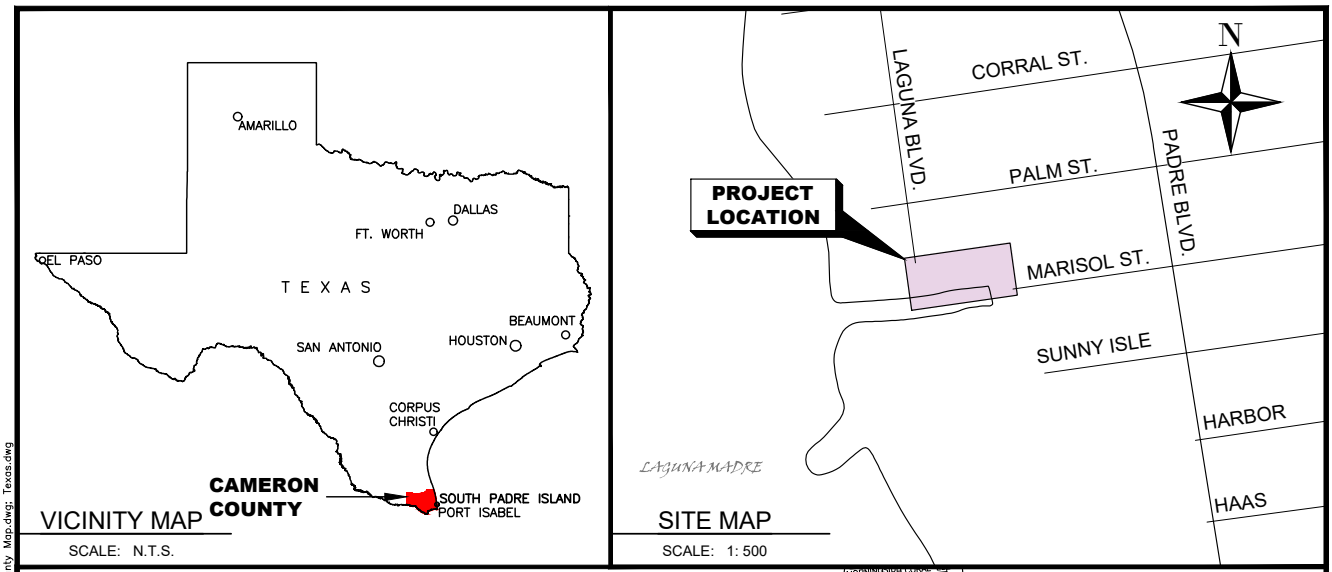
The NWP verification is valid until the NWP is modified, reissued, or revoked. The subject NWPs authorized in 2021 are scheduled to be modified, reissued, or revoked prior to March 15, 2026. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

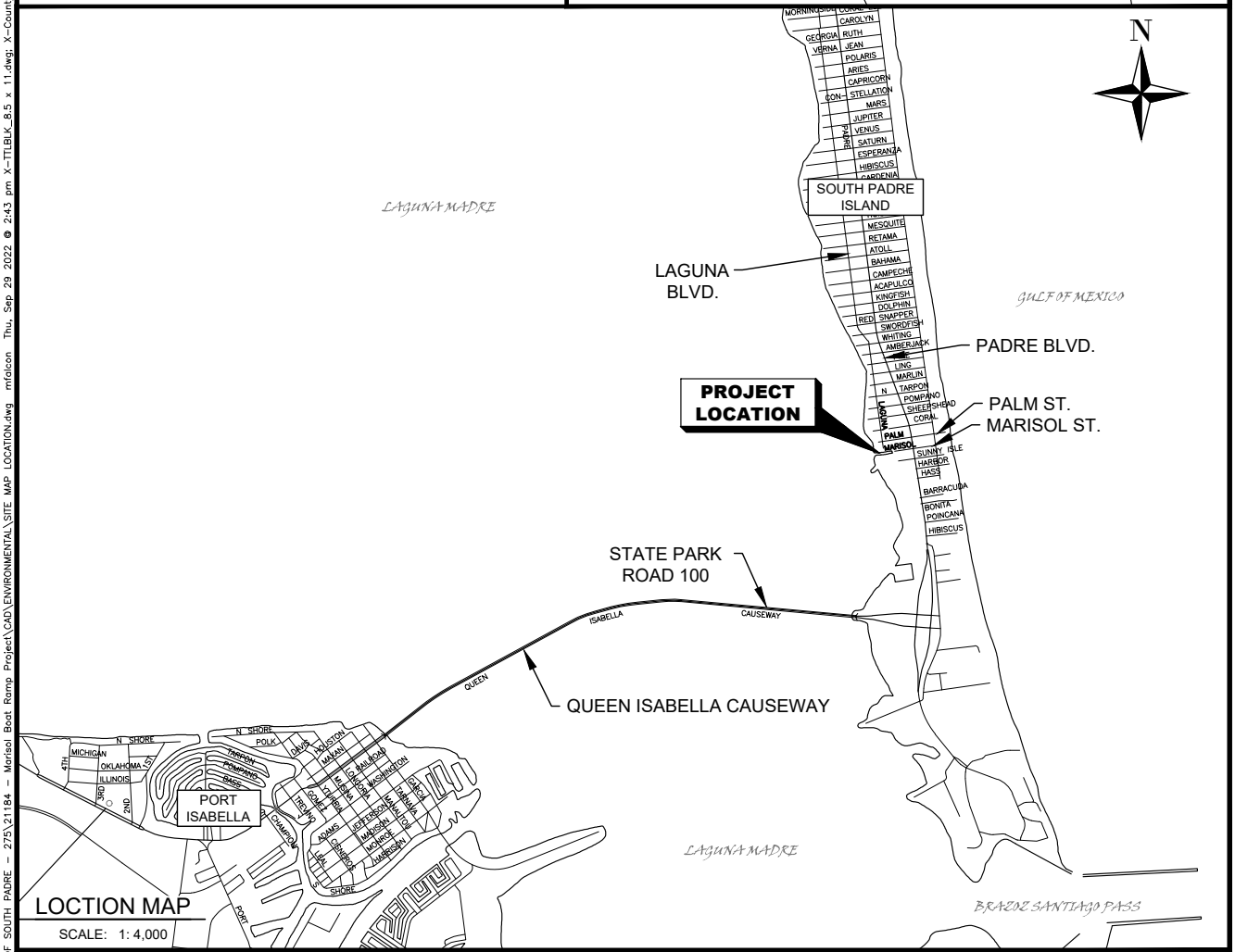
This letter does not address nor include any consideration for geographic jurisdiction on aquatic resources and shall not be interpreted as such. If you have any question regarding this verification, please contact Amanda Barker at the letterhead address or by telephone at 361-814-5847 ext. 1009. Please notify the Corpus Christi Regulatory Field Office in writing at the letterhead address, upon completion of the authorized project.

FOR THE DISTRICT COMMANDER:

Kristie A. Wood
Supervisor
Corpus Christi Regulatory Field Office

cc w/Encls.
Jay Gardner, LJA Environmental Services, LLC, jgardner@lja.com





LJA ENVIRONMENTAL

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

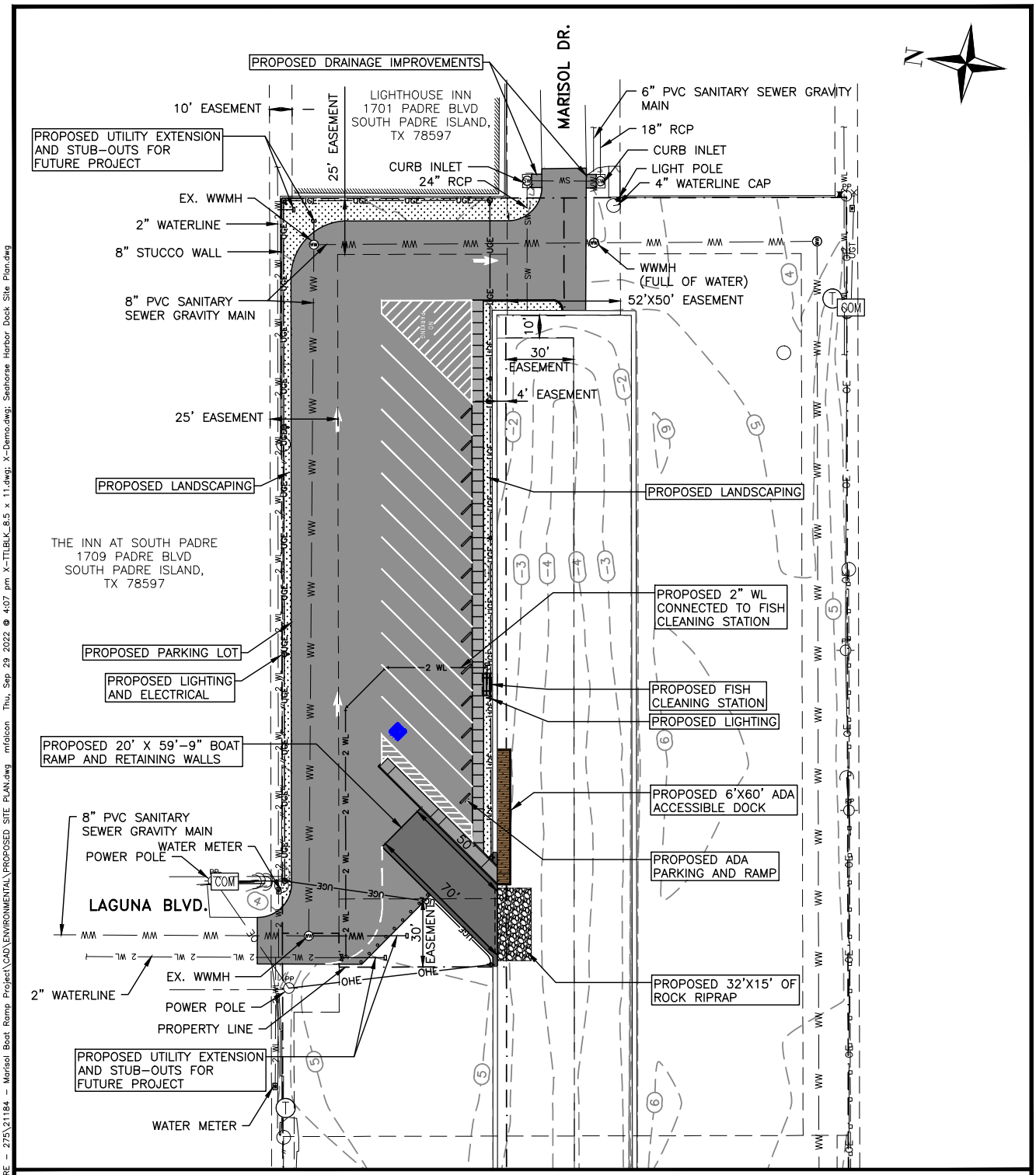
CITY OF SOUTH PADRE ISLAND
MARISOL BOAT RAMP PROJECT

SITE MAP LOCATION

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	JG
DATE:	9/29/2022
JOB NO.	C275-21184
SHEET NO.	1

LJA ENGINEERING, Inc. 5350 S. Staples Street, Suite 425, Corpus Christi, Texas 78411 phone: 361.991.8550 fax: 361.887.8855 www.LJA.com

LJACC NAME: R:\CLIENTS\CITY OF SOUTH PADRE - 275\21184 - Marisol Boat Ramp Project\CAD\ENVIRONMENTAL\SITE MAP LOCATION.dwg mfalcon Thu, Sep 29 2022 @ 2:43 pm X-TTLBLK_8.5 x 11.dwg; X-County Map.dwg; Texas.dwg



LJACC NAME: R:\CLIENTS\CITY OF SOUTH PADRE - 275\21184 - Marisol Boat Ramp Project\CAD\ENVIRONMENTAL\PROPOSED SITE PLAN.dwg mfalcon Thu, Sep 29 2022 @ 4:07 pm X-TTLBLK_8.5 x 11.dwg; X-Demo.dwg; Seahorse Harbor Dock Site Plan.dwg

LJA ENVIRONMENTAL

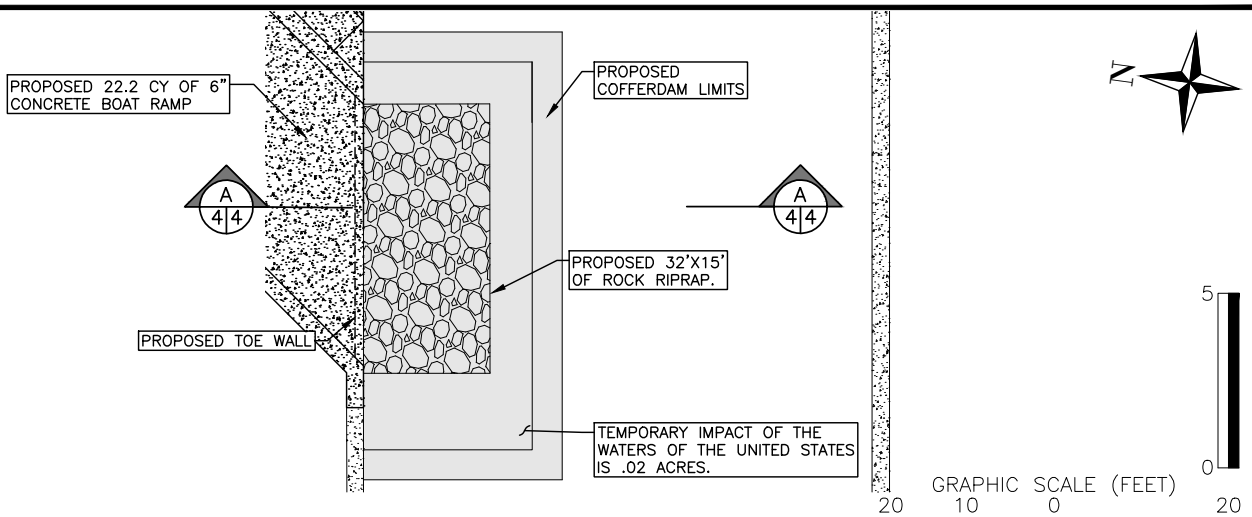
LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

CITY OF SOUTH PADRE ISLAND
MARISOL BOAT RAMP PROJECT

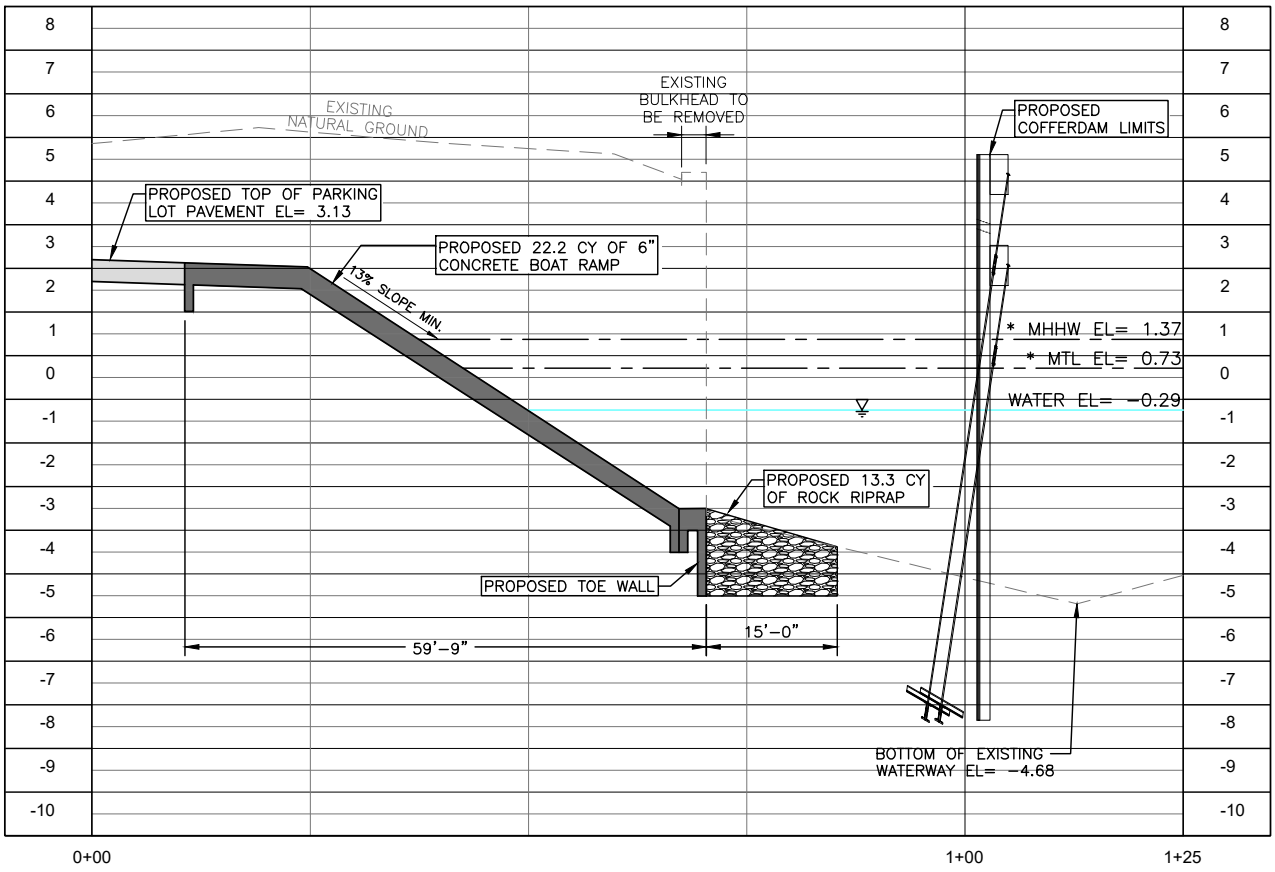
PROPOSED SITE PLAN

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	JG
DATE:	9/29/2022
JOB NO.	C275-21184
SHEET NO.	3

LJA ENGINEERING, Inc. 5350 S. Staples Street, Suite 425, Corpus Christi, Texas 78411 phone: 361.991.8550 fax: 361.887.8855 www.LJA.com



PLAN VIEW



PROFILE VIEW

A 4|4

LJA ENVIRONMENTAL

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

CITY OF SOUTH PADRE ISLAND
MARISOL BOAT RAMP PROJECT

PROPOSED BOAT RAMP PROFILE

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	JG
DATE:	12/16/2022
JOB NO.	C275-21184
SHEET NO.	4

LJA ENGINEERING, Inc. 5350 S. Staples Street, Suite 425, Corpus Christi, Texas 78411 phone: 361.991.8550 fax: 361.887.8855 www.LJA.com

Corpus Christi Regulatory Field Office

SUBJECT: Permit No. SWG-2022-00301; Letter of Permission

City of South Padre
ATTN: Randy Smith
4601 Padre Blvd
South Padre Island, TX 78597

Dear Mr. Smith:

This is in reference to your October 11, 2022 request, submitted on your behalf by LJA Environmental Services LLC, to construct an ADA compliant 6 ft. by 60 ft. wooden attendant dock parallel to the existing bulkhead. The spacing between deck boards will be ½ inch. A total of 18 12-in. timber piles will be installed from land by jetting. The project site is located in a previously dredged and bulkheaded inlet in the Laguna Madre, on South Padre Island, Cameron County, Texas. A copy of your plans in 3 sheets is enclosed.

The dock construction has been authorized by this Letter of Permission (LOP) pursuant to Section 10 of the Rivers and Harbors Act of 1899. All work is to be performed in accordance with the enclosed plans in 2 sheets and the permit conditions. If the authorized work is not completed by December 31, 2028, this authorization expires. The following special conditions have been added to your authorization:

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, Corpus Christi Field Office by electronic mail (email) at CESWGRegulatoryInbox@USACE.Army.Mil 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 U.S. Coast Guard, through regulations or otherwise, on the permittee's fixed structures. To receive a U.S. 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 Eight 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 Eight Coast Guard District web site at: https://www.atlanticarea.uscg.mil/District-8/District-Divisions/Waterways/PATON/.

If you object to the work authorized or the terms and conditions of this LOP, you may request that the LOP be modified (in accordance with 33 CFR 331.6). To object, you must submit a copy of the completed RFA to the District Engineer (DE) at the letterhead address. Your objections must be received by the DE within **60 days** of the date of this notice, noting the NAP date is considered day 1, or you will forfeit your right to appeal the LOP in the future. It is not necessary to submit an RFA form to this office if you accept the LOP's terms and conditions.

If, after review by the DE, you are still unsatisfied with the LOP because of certain terms and conditions therein, you may appeal under the Corps of Engineers Administrative Appeal Process by completing Section II of the attached RFA form and sending it to the following address:

Mr. Jamie Hyslop
Administrative Appeals Review Officer
Southwestern Division USACE (CESWD-PD-O)
U.S. Army Corps of Engineers
1100 Commerce Street, Suite 831
Dallas, Texas 75242-1317
Telephone: 469-216-8324
Email: Jamie.r.hyslop@usace.army.mil

This letter does not address nor include any consideration for geographic jurisdiction on aquatic resources and shall not be interpreted as such. If you have any questions, please contact Amanda Barker by electronic mail (email) amanda.m.barker@USACE.Army.Mil or by telephone at 361-814-5847 ext. 1009. Please notify the Corpus Christi Regulatory Field Office in writing by email at CESWGRegulatoryInbox@USACE.Army.Mil upon completion of the authorized project.

FOR THE DISTRICT COMMANDER:

Kristie A. Wood
Supervisor
Corpus Christi Regulatory Field Office

cc w/Encls.
Jay Gardner, LJA Environmental Services, LLC, jgardner@lja.com
Eighth Coast Guard District, New Orleans, LA
National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Coast & Geodetic Survey, Silver Spring, MD
Texas General Land Office

Conditions for Letter of Permission:

General Conditions:

1. The time limit for completing the activity authorized ends on **31 December 2028**. 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:

See Authorization Letter

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).

   ( ) 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 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 in 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 time limit.

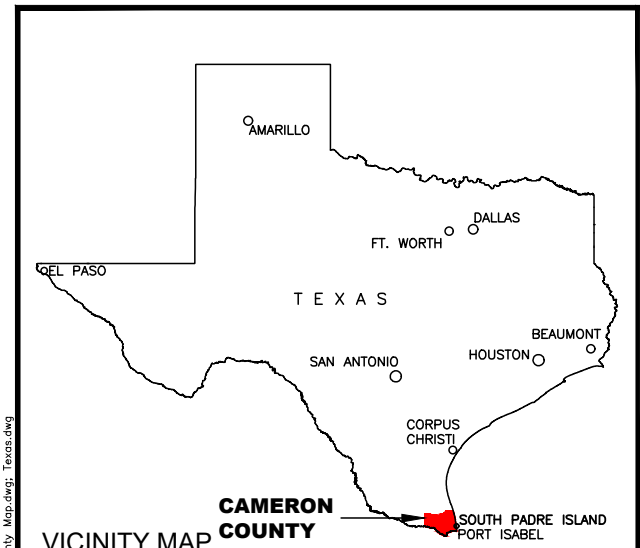
When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated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

_____ _____

(TRANSFEREE – Typed/Printed Name) *(DATE)*

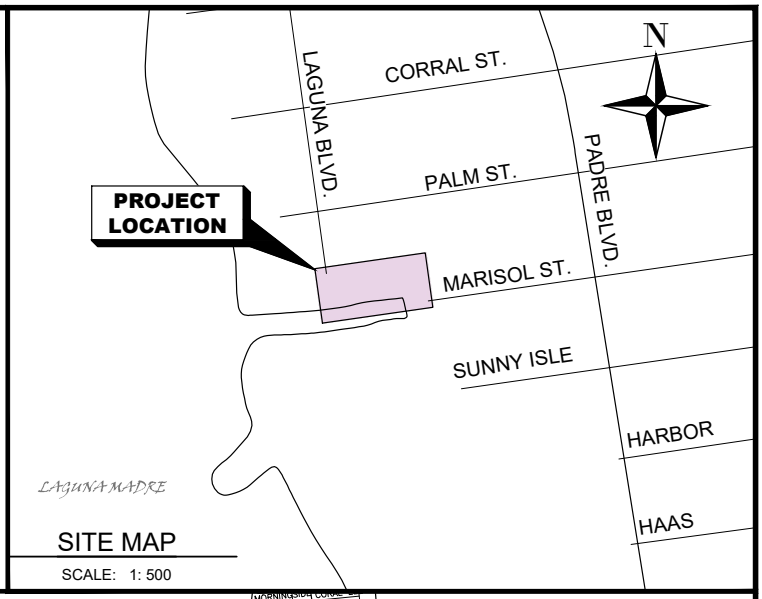
_____ _____

(TRANSFEREE - Signature) (*Mailing Address)*



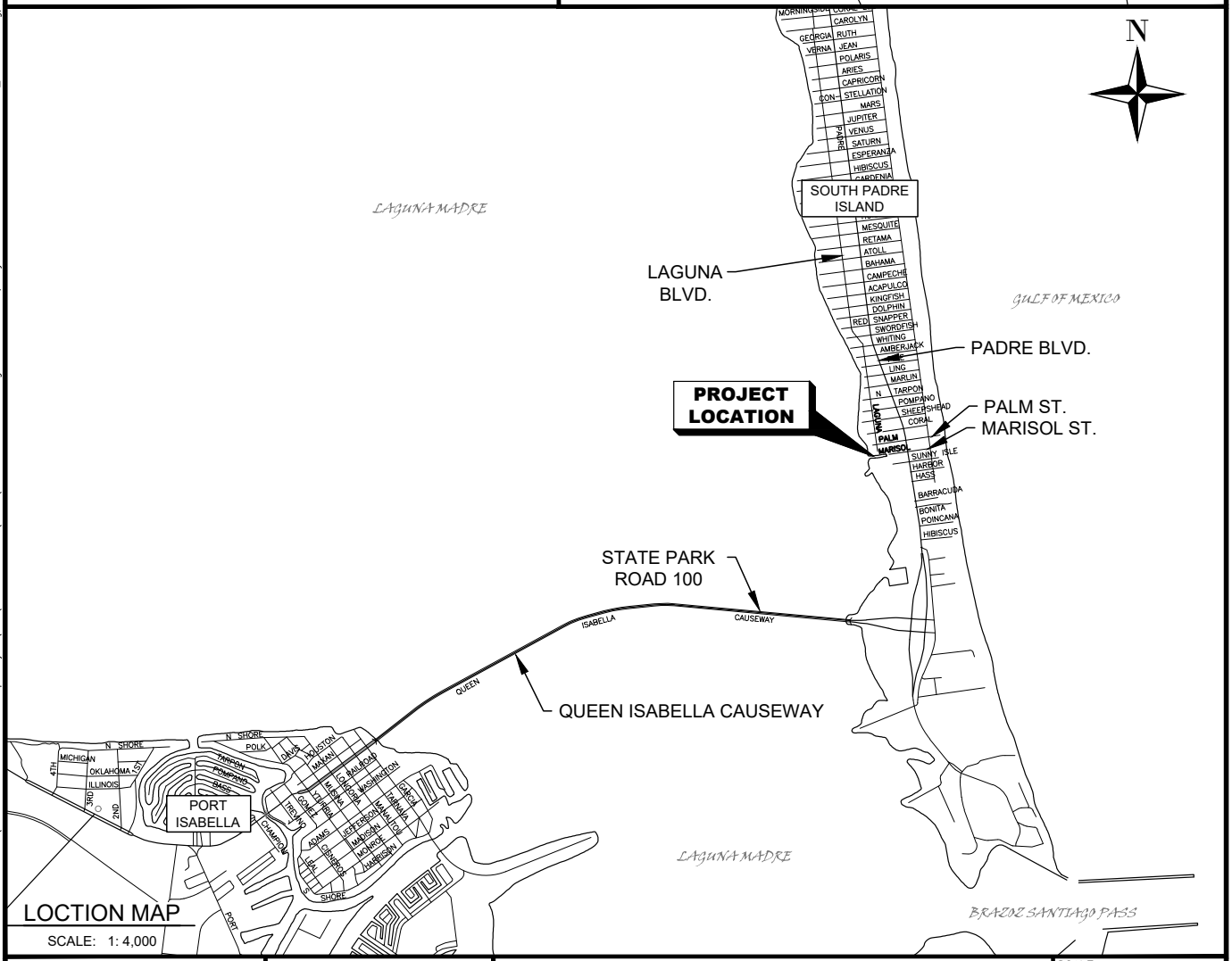
VICINITY MAP

SCALE: N.T.S.



SITE MAP

SCALE: 1: 500



LOCTION MAP

SCALE: 1: 4,000

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LJA ENVIRONMENTAL

LJA ENGINEERING

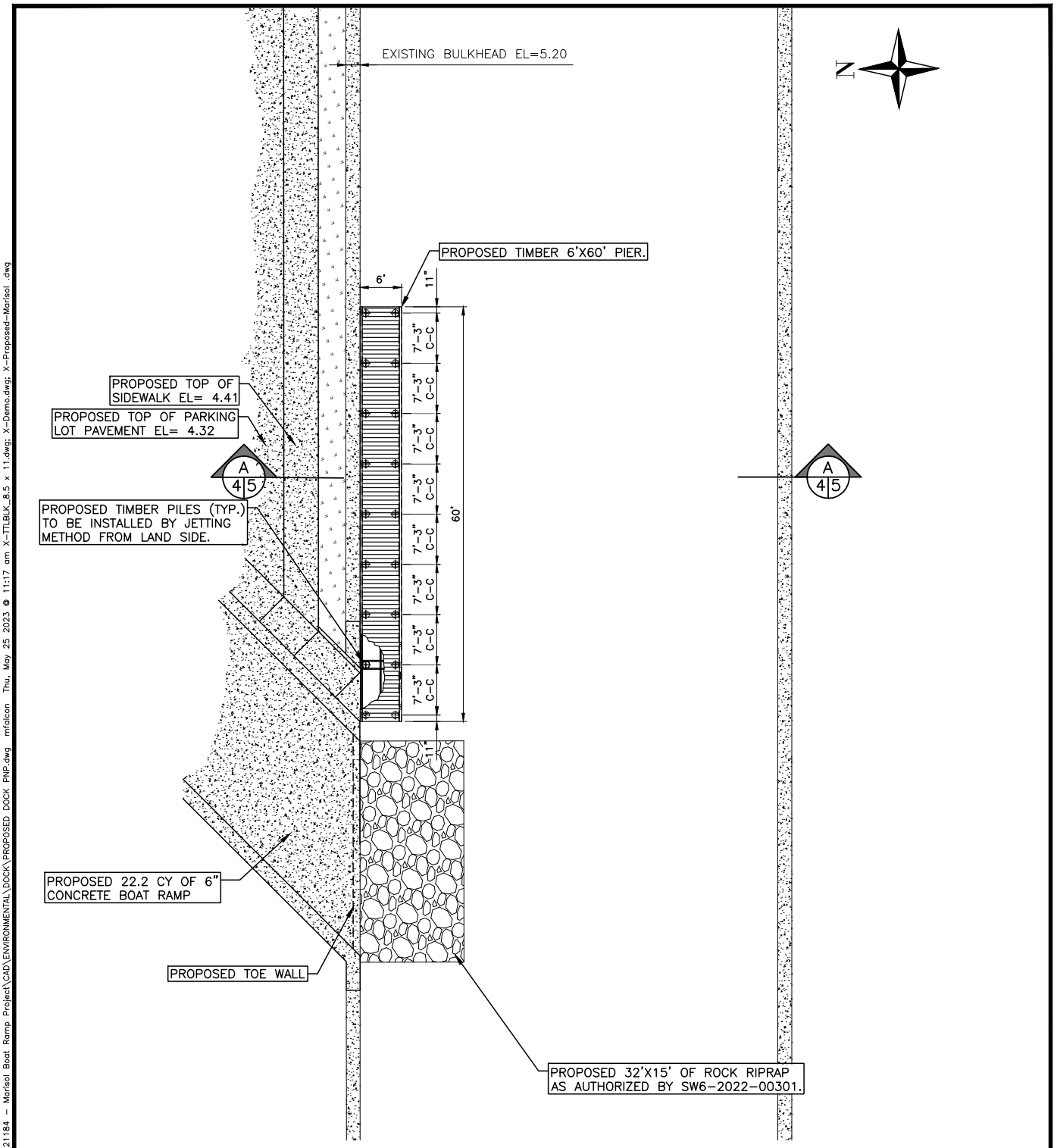
TBPE FIRM REG. NO. F-1386

CITY OF SOUTH PADRE ISLAND

MARISOL BOAT RAMP PROJECT

SITE MAP LOCATION

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	JG
DATE:	5/25/2023
JOB NO.	C275-21184
SHEET NO.	1



PLAN VIEW

GRAPHIC SCALE (FEET)
20 10 0 20
HORIZONTAL SCALE: 1"=20'

LJA ENVIRONMENTAL

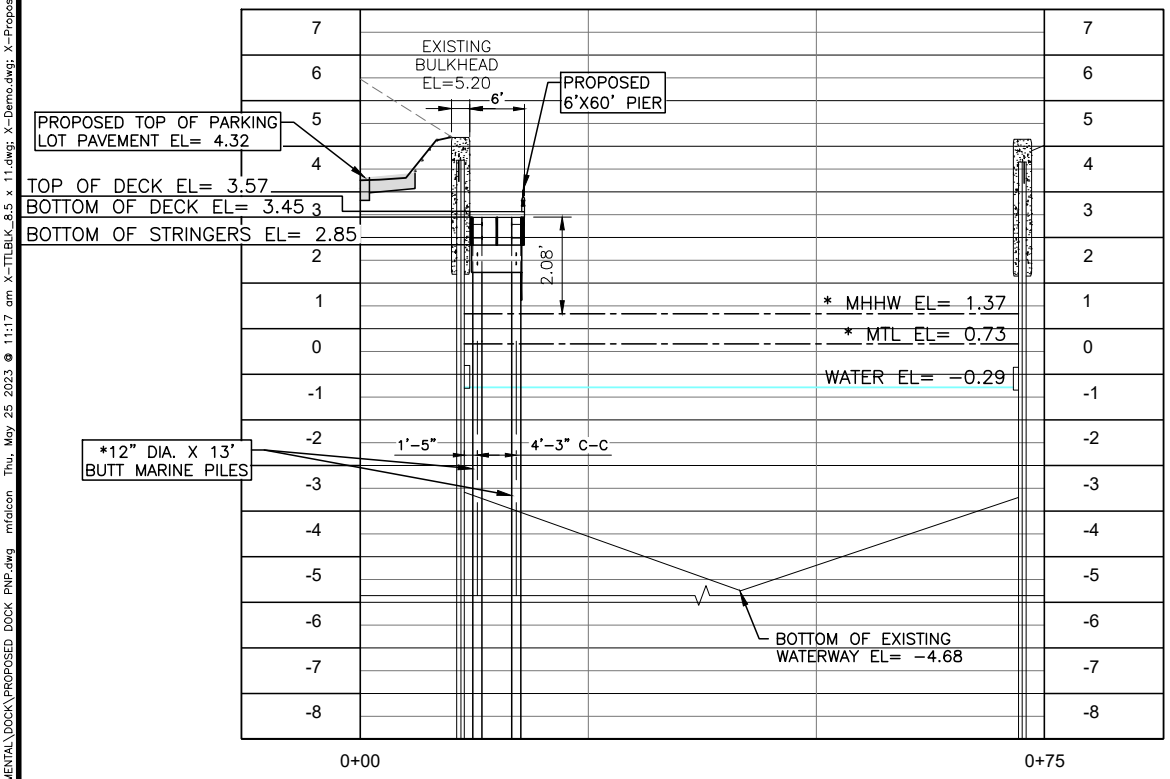
LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

CITY OF SOUTH PADRE ISLAND
MARISOL BOAT RAMP PROJECT

PROPOSED DOCK PLAN VIEW

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	JG
DATE:	5/25/2023
JOB NO.	C275-21184
SHEET NO.	4

LJACC NAME: R:\CLIENTS\CITY OF SOUTH PADRE - 275\21184 - Marisol Boat Ramp Project\CAD\ENVIRONMENTAL\DOCK\PROPOSED DOCK PNP.dwg mfalcon Thu, May 25 2023 @ 11:17 am X-TTLBLK_8.5 x 11.dwg; X-Demo.dwg; X-Proposed-Marisol .dwg



PROFILE VIEW

A
4|5

5
0

GRAPHIC SCALE (FEET)
20 10 0 20

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

LJA ENVIRONMENTAL

LJA ENGINEERING
TBPE FIRM REG. NO. F-1386

CITY OF SOUTH PADRE ISLAND
MARISOL BOAT RAMP PROJECT

PROPOSED DOCK PROFILE VIEW

SCALE:	AS NOTED
DRAWN BY:	MF
APPROVED BY:	JG
DATE:	5/25/2023
JOB NO.	C275-21184
SHEET NO.	5

LJACC NAME: R:\CLIENTS\CITY OF SOUTH PADRE - 275\21184 - Marisol Boat Ramp Project\CAD\ENVIRONMENTAL\DOCK\PROPOSED DOCK PNP.dwg mfalcon Thu, May 25 2023 @ 11:17 am X-TTLBLK_8.5 x 11.dwg; X-Demo.dwg; X-Proposed-Marisol .dwg

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: City of South Padre, Randy Smith	File Number: SWG-2022-00301	Date: 5/31/2023
Attached is:		See Section below
X	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Amanda Barker Regulatory Specialist (CESWG-RDR) U.S. Army Corps of Engineers 5151 Flynn Parkway, Suite 306 Corpus Christi, Texas 78411-4318 361-814-5847 ext. 1009	If you only have questions regarding the appeal process you may also contact: Mr. Jamie Hyslop Administrative Appeals Review Officer Southwestern Division (CESWD-PD-O) U.S. Army Corps of Engineers 1100 Commerce Street, Suite 831 Dallas, Texas 75242-1317 Phone: 469-216-8324 Email: Jamie.r.hyslop@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number: