





**Legend**

 DD7 Floodwall Repair

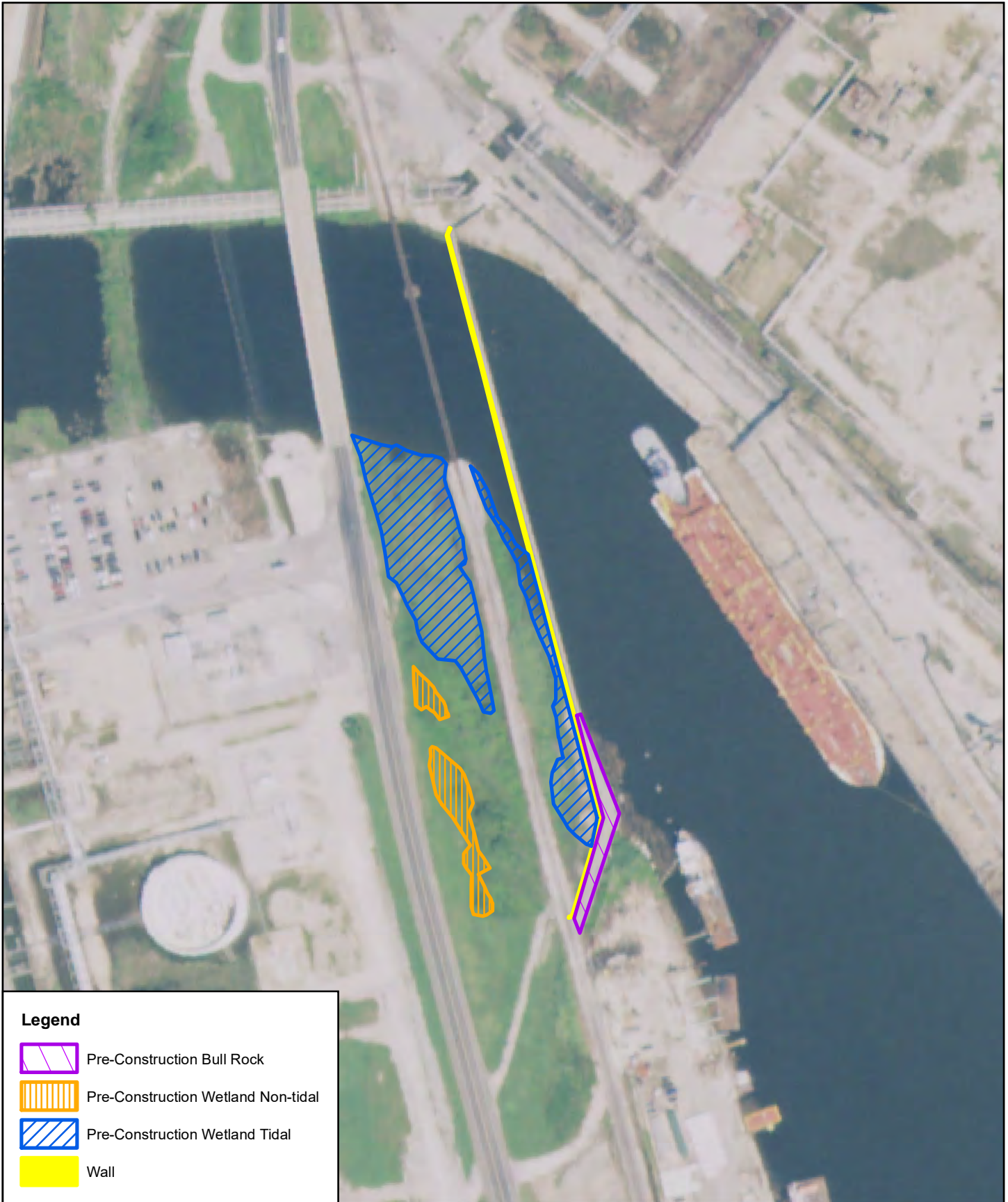
**Horizon**  
Environmental Services, Inc.

Date:	03/5/2018
Drawn:	GLS
HJN NO:	180025 PA
Source:	OSM, 2018





**Figure 1**  
Vicinity Map  
Hurricane Protection Flood Wall Repair  
Port Arthur, Jefferson County, Texas



0 1,000 2,000  
Feet




**Legend**

-  Pre-Construction Bull Rock
-  Pre-Construction Wetland Non-tidal
-  Pre-Construction Wetland Tidal
-  Wall

**Horizon**  
Environmental Services, Inc.

Date:	03/5/2018
Drawn:	GLS
HJN NO:	180025 PA
Source:	USDA, 2016

**Figure 2**  
Pre-Construction Jurisdictional Waters  
Hurricane Protection Flood Wall Repair  
Port Arthur, Jefferson County, Texas



0 100 200  
Feet

180025PA\_03A\_DroneImagery.dwg | GLS | 03/7/2018


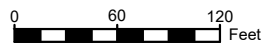


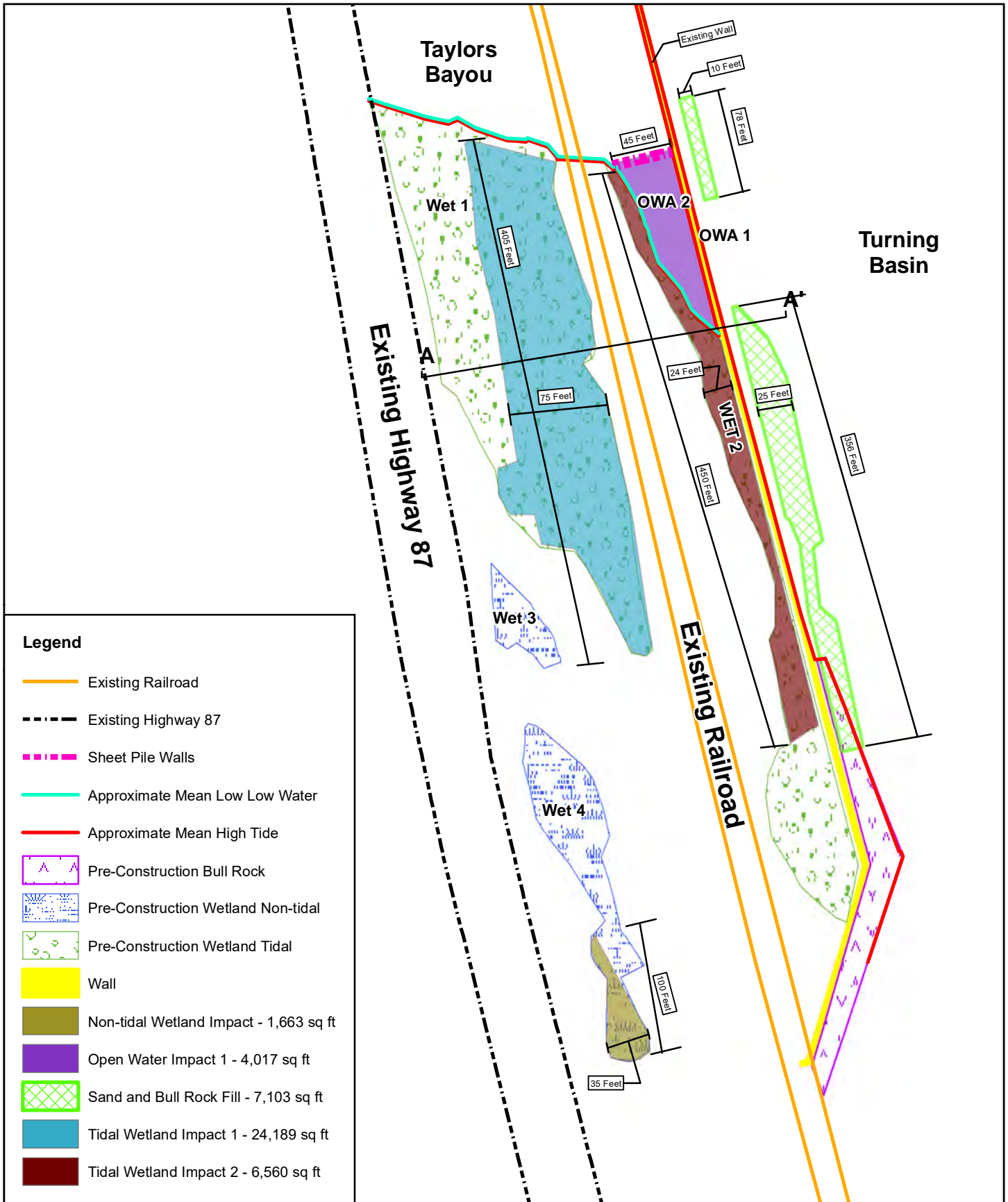
Legend	
<span style="color: green;">█</span>	Pre-Construction Bull Rock
<span style="color: blue;">█</span>	Pre-Construction Wetland Non-tidal
<span style="color: orange;">█</span>	Pre-Construction Wetland Tidal
<span style="color: pink;">█</span>	Wall

**Horizon**  
Environmental Services, Inc.

Date:	03/7/2018
Drawn:	GLS
HJN NO:	180025 PA
Source:	Client Provided

Figure 3  
2018 Drone Imagery Map  
Hurricane Protection Flood Wall Repair  
Port Arthur, Jefferson County, Texas



Legend	
	Existing Railroad
	Existing Highway 87
	Sheet Pile Walls
	Approximate Mean Low Low Water
	Approximate Mean High Tide
	Pre-Construction Bull Rock
	Pre-Construction Wetland Non-tidal
	Pre-Construction Wetland Tidal
	Wall
	Non-tidal Wetland Impact - 1,663 sq ft
	Open Water Impact 1 - 4,017 sq ft
	Sand and Bull Rock Fill - 7,103 sq ft
	Tidal Wetland Impact 1 - 24,189 sq ft
	Tidal Wetland Impact 2 - 6,560 sq ft

**Horizon**  
Environmental Services, Inc.

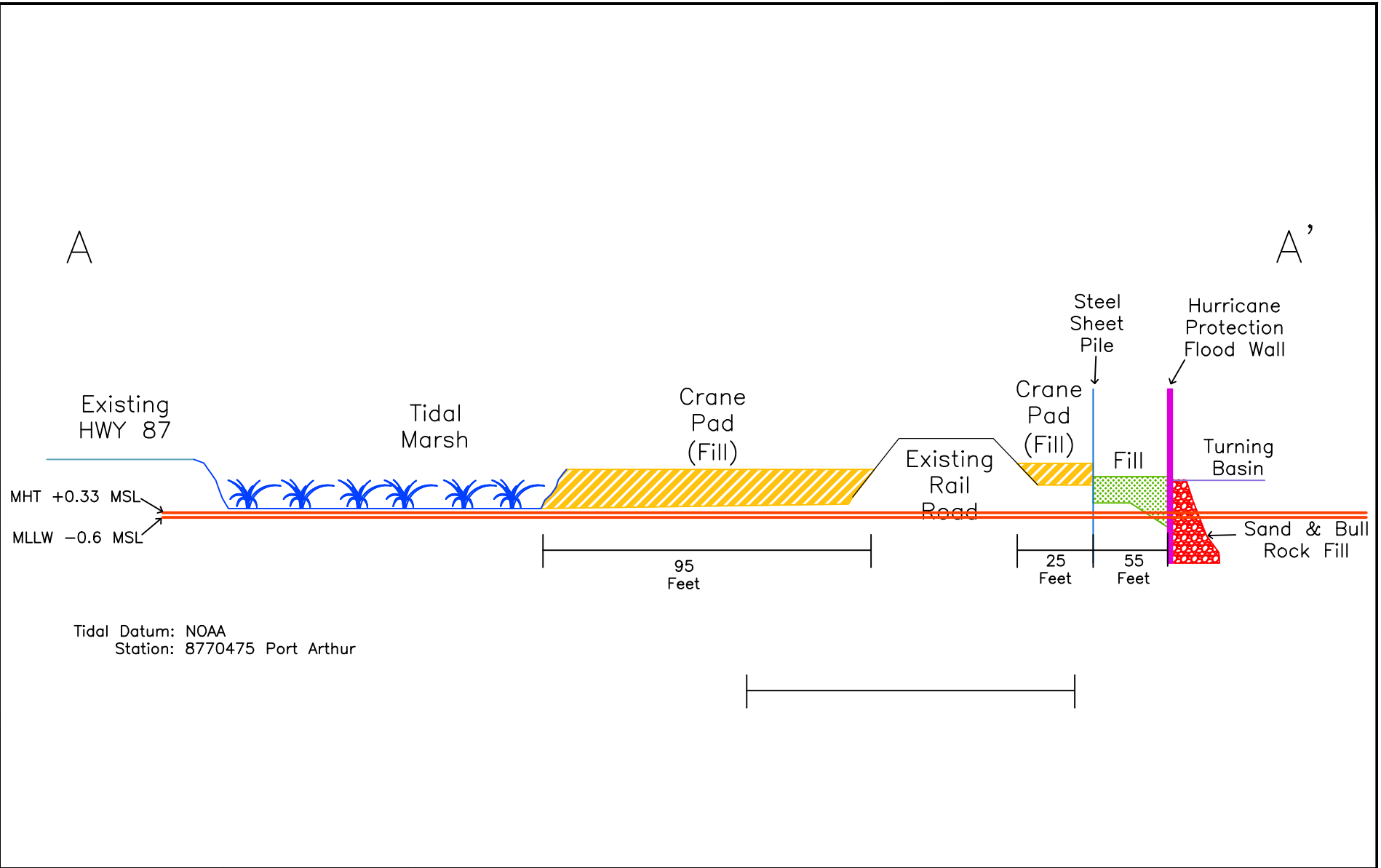
Date:	03/5/2018
Drawn:	GLS
HJN NO:	180025 PA
Source:	USDA, 2016

**Figure 4**  
Impacted Jurisdictional Waters  
Hurricane Protection Flood Wall Repair  
Port Arthur, Jefferson County, Texas

0 50 100  
Feet

"Do Not Scale This Drawing"

180025PA\_05A\_XCrossSection.dwg | GLS | 03/8/2018



Tidal Datum: NOAA  
Station: 8770475 Port Arthur

C:\Users\gherron\Desktop\Marion SHUFFLETON STUFF\MSL_Log_Sheet_04.dwg	Date: 03/8/2018
	Drawn: GLS
	HJN NO: 180025 PA
	Source: Horizon

Figure 5  
Typical Section View  
Hurricane Protection Flood Wall Repair  
Port Arthur, Jefferson County, Texas