

## Wrangell Ferry Terminal

**Owner:** 

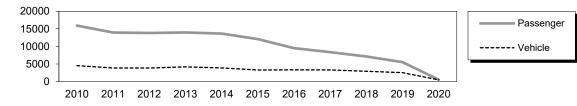
**Terminal Manager:** 

John Archambeau - 907-874-2021

**Terminal Description:** The Wrangell Ferry Terminal is located at the north end of town, along Stikine Avenue. Wrangell is a side-loading facility consisting of a transfer bridge, cable supported bridge lift (Syncrolift), (10) steel pile dolphins and associated catwalks/gangways for line-handling access

State of Alaska

Summary of passenger and vehicle traffic volumes (source: <u>https://dot.alaska.gov/amhs/reports.shtml</u>):



The most recent fracture critical bridge inspection occurred May 3, 2021, under water inspection on August 11, 2021 and above water inspection on May 17, 2021. Copies are available upon request from ADOT&PF – Marine Design Department.

Vessels				
Name Berthing, Alignment				
All AMHS/IFA Vessels	Port/Starboard			
FVF	Starboard			

Tidal Data (MLLW 0.0 feet)			
EHW 22.0			
MHHW	15.7		
MHW	14.8		
ELW	-5.5		

Terminal Building				
Year Built:	1984			
Square Footage:	1408 s.f.			
Heating System:	Furnace			
Fuel Storage:	UST			
Fire Protection:	Alarm Pyrotronics			
Condition:	Good			

<b>Generator &amp; Building</b>				
Building / Generator:	1987			
Square Footage:	224 s.f.			
Heating System:	Electric			
Fuel Storage:	UST			
Fire Protection:	Halon			
Condition:	Fair			

Uplands				
Short-Term Parking:	5			
Long-Term Parking:	15			
Staging Area	640 lineal feet; 60 lineal			
Staging Area:	feet-buses/trucks			
Paint Striping:	Yes			
Driving Surface:	Asphalt			

Vehicle Transfer Bridge - #0801				
Туре:	16'x140' twin box beam			
Year Built:	1987			
Shoreward support:	Concrete abutment			
Seaward support:	Steel Lift Beam-Syncrolift			
Coating:	Wasser Paint			
Pedestrian Access:	Concrete 4' wide on bridge			
Lighting:	None			
Condition:	Good			
Load Posting Sign: N/A				
Original Design Load: HS 20-44				
IItilities				

	Utilities	
	at Terminal	at Ramp
Electrical:	Yes, city &	backup power
Water:	Yes	Yes
Sewer:	Yes (Septic)	Yes
Telephone:	Yes	Yes
Cable TV:	No	No
Fuel:	Yes, UST	No
Wireless Bridge:	Yes	-

2021 Shore Facilities Condition Survey Report

	Dolphins							
Dolphins	Dolphin Piles	Fender Support	Fender Face	Anodes	Built	Cond.	Notes	
N5	4B, 2V	5V	Ekki Timber	Yes	1994	Fair	Nav Light	
N4	2B, 1V	4V	Ekki Timber	Yes	1994	Fair		
N3	2B, 1V	2V	Ekki Timber	Yes	1994/2013	Fair		
N2	2B, 1V	2V	Ekki Timber	Yes	1994/2013	Fair		
N1	2B, 1V	2V	Ekki Timber	Yes	1987/2013	Poor		
S1	2B, 1V	2V	Ekki Timber	Yes	1987/2013	Fair		
S2	2B, 1V	2V	Ekki Timber	Yes	2013	New		
S3	2B, 1V	4V	Ekki Timber	Yes	1987	Fair	Bent Ladder	
S4	2B, 1V	4V	Ekki Timber	Yes	1978	Fair		
S5	4B, 2V	5V	Ekki Timber	Yes	1987	Fair	Nav Light	
ST	4V	-	-	Yes	1987	Fair	Light Pole & Windsock	
NT	4V	-	_	Yes	1987	Fair	Light Pole	

**LEGEND** 

 $\overline{\text{ET} = \text{East}}$  Lift Tower G1 = Gangway V = Vertical Steel Pipe Piling EBP = East Bridge Platform B = Battered Steel Pipe Piling

	Catwalks / Gangways								
#	From Struc.	To Struc.	Length / Style / Main Members	Built	Safety Chains?	Cond.	Lighting	Notes	
C1	N5	N4	59' / Catwalk / 12"x12" Tube Girders	1994	Yes	Good	Jelly Jars		
C2	N4	N3	59' / Catwalk / 12"x12" Tube Girders	1994	Yes	Good	Jelly Jars		
C3	N3	N2	47' / Catwalk / 12"x12" Tube Girders	1994	Yes	Good	Jelly Jars		
C4	N2	N1	59' / Catwalk / 12"x12" Tube Girders	1994	Yes	Good	Jelly Jars		
Gl	ET	EBP	53' / Gangway / S 4x9.5 Bottom Chord	1984	Yes	Good	Jelly Jars		
G2	WT	WBP	53' / Gangway / S 4x9.5 Bottom Chord	1984	Yes	Good	Jelly Jars		
C5	S2	S1	36' / Catwalk / 10"x10" Tube Girders	1987	Yes	Good	Jelly Jars		
C3	S3	S2	65' / Catwalk / 10"x10" Tube Girders	1987/2013	Yes	Good	Jelly Jars		
C2	S4	S3	48' / Catwalk / 10"x10" Tube Girders	1987	Yes	Good	Jelly Jars		
C1	S5	S4	91' / Catwalk / 10"x10" Tube Girders	1987	Yes	Good	Jelly Jars		

	Terminal Projects						
Year	Project #	Project Name	Description				
1963	N/A	WRG Ferry Terminal	Original construction of the terminal structures: timber vehicle bridge, timber lift towers & counterweight system, timber dock & timber mooring dolphins.				
1978	RS-0943(14)	Ferry Terminal Facilities at Wrangell	Replace two timber dolphins with steel dolphins, retrofit the dock, install new catwalk.				
1984	H78017	WRG Marine Terminal Building	Extension of uplands, construction of the current terminal building.				
1987	A70022/F-095-3 (1)	WRG Ferry Terminal	Removed all timber structures and replaced with steel: new vehicle bridge, new lift towers and syncrolift system, new dolphins and catwalks.				

	Terminal Projects (continued)						
Year	Project #	Project Name	Description				
1994	75279 / STP- 095-3 (2)	WRG Ferry Terminal Fendering & Mooring Improvements	Installed steel dolphins, and catwalks, extending the north fender line and providing port/starboard mooring. Retrofit and upgraded southern mooring dolphin fender panels and batter piles. Improved the rock armor shore protection.				
2006	67927 / CA- 0003 (69)	WRG Ferry Terminal Modifications	Connected the transfer bridge to City sewer and water and installed hawse masts for the IFA vessel use. Installed fender panel extensions to dolphins S1-S3 for FVF vessels.				
2008	73003(3)	Wrangell FT Carpet Replacement	Replaced carpet in the terminal building.				
2008	69050 / SHAK - 0005 (575)	Wrangell - Ferry Dock Hoist Upgrade	Replaced the existing relay-based control panel for the transfer bridge lift system with a PLC-based control panel.				
2008	73741(4)	WRG Ferry Terminal Transfer Bridge Repairs	Repaired failed welds between the first floor beam and girders of the Transfer Bridge. Work completed under a maintenance contract in October, '08.				
2013	69432 / SHAK- MGE-STP- 0943(25)	WRG Ferry Terminal Transfer Bridge Repairs	Replaced fender panels on dolphins N1-3, S1; replaced dolphin S2; refurbished transfer bridge lift beam; replaced the pursers shelter; installed a security gate at the head of bridge; installed anodes on all dolphins, shortened the catwalk to dolphin S3; reconstructed the catwalk lighting system.				

## **General Facility Evaluation**

Facility Component	Rating
Bridge	5
Abutment & lift system	7
Apron	6
Mooring Structures	5
Uplands Staging area	7
Uplands Terminal Building	7
Utilities	6

9	EXCELLENT CONDITION
8	VERY GOOD CONDITION - no problems noted
7	GOOD CONDITION - some minor problems.
6	SATISFACTORY CONDITION - structural elements show minor deterioration
5	FAIR CONDITION - all primary structural elements are sound but may have minor corrosion, cracking or chipping. May include minor erosion on bridge piers.
4	POOR CONDITION - advanced corrosion, deterioration, cracking or chipping. Also significant erosion of concrete bridge piers.
3	SERIOUS CONDITION - corrosion, deterioration, cracking and chipping, or erosion of concrete bridge piers have seriously affected deck, superstructure, or substructure. Local failures are possible.
2	CRITICAL CONDITION - advanced deterioration of deck, superstructure, or substructure. May have cracks in steel or concrete, or erosion may have removed substructure support. It may be necessary to close the bridge until corrective action is taken.
1	"IMMINENT" FAILURE CONDITION - major deterioration or corrosion in deck, superstructure, or substructure, or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put back in light service.
0	FAILED CONDITION - out of service - beyond corrective action
N	Not applicable