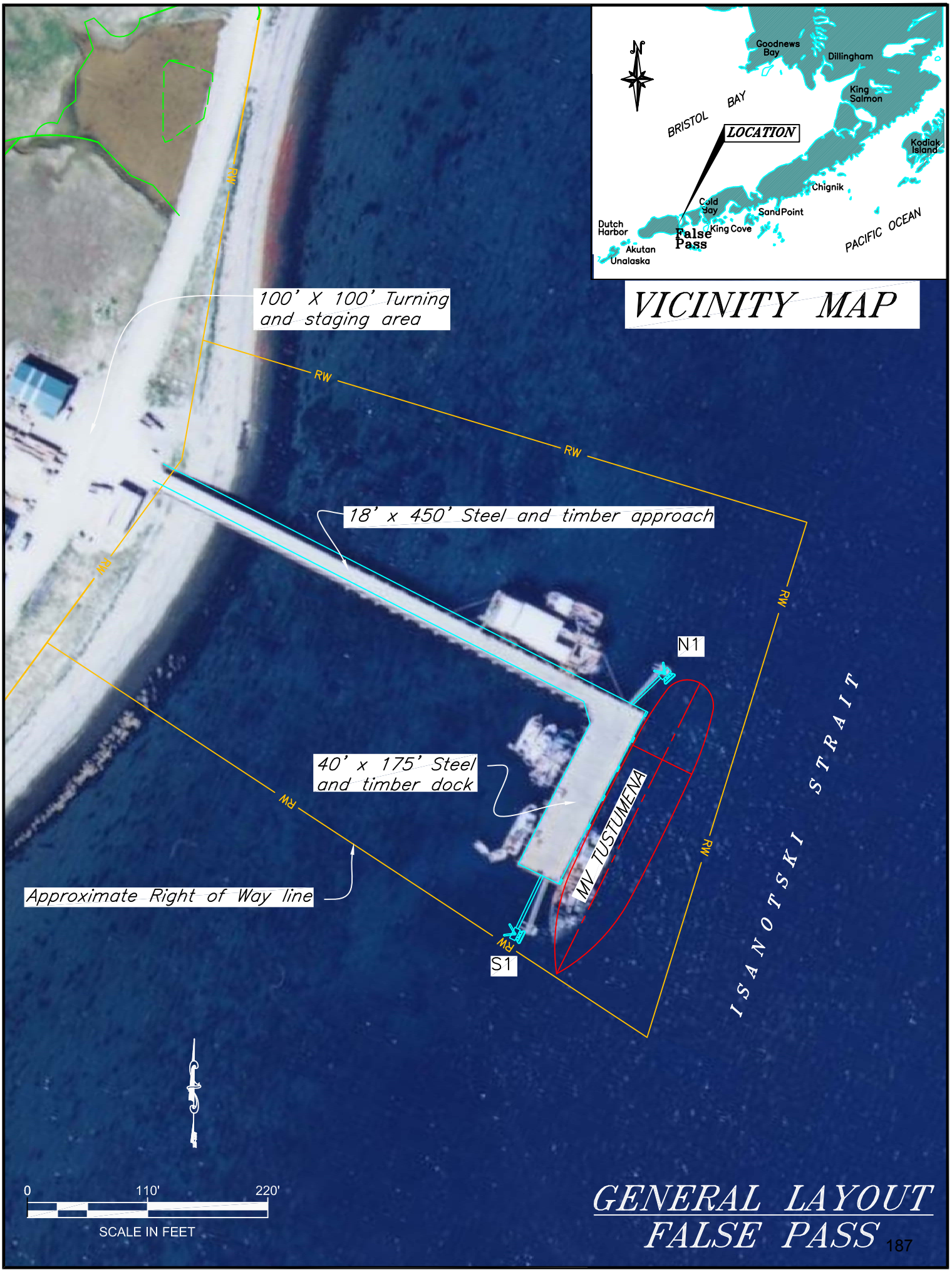
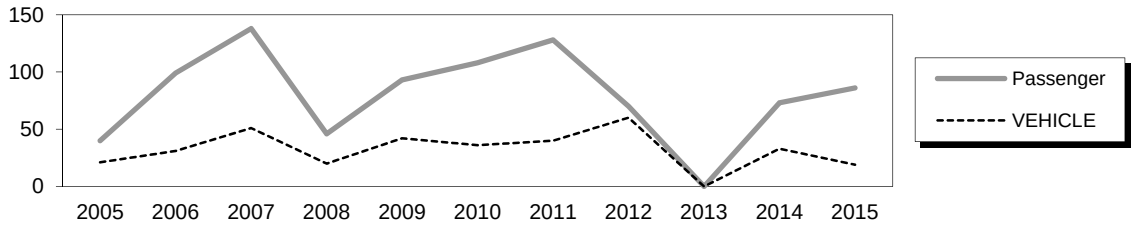

VICINITY MAP
Goodnews Bay
Dillingham
King Salmon
BRISTOL BAY
LOCATION
Kodiak Island
Chignik
Cold Bay
Sand Point
Dutch Harbor
False Pass
King Cove
Akutan
Unalaska
PACIFIC OCEAN
100' X 100' Turning and staging area
RW
18' x 450' Steel and timber approach
N1
40' x 175' Steel and timber dock
MV TUSTUMENA
Approximate Right of Way line
S1
ISANOTSKI STRAIT
0
110'
220'
SCALE IN FEET
GENERAL LAYOUT
FALSE PASS

False Pass Dock

Owner: Village of False Pass

Contact Person: Tom Hoblet, 907-548-2319

Terminal Description: The M/V Tustumena docks at the False Pass Dock during its East/West passage through the Aleutian Chain. Service to False Pass was initiated in 1993.The False Pass facility consists of an L-shaped 175' x 40' dock, 450' long approach trestle, with a mooring dolphin located on each end of the dock and connected via a steel catwalk. There is a 100' x 100' staging area upland of the dock. The facility is a multi-purpose facility and could be in use by other vessels when the ferry arrives. AMHS is not in control of the operation or maintenance of this facility. The past 10 years of total passenger and vehicle traffic at False Pass is shown below. False Pass had no ferry service in summer 2013 while the M/V Tustumena was in the shipyard for repairs.



The most recent above water survey was completed on September 17, 2014. The underwater inspection occurred on July 16, 2014. The most recent fracture critical inspection was on September 6, 2014.

Vessels	
Name	Berthing, Alignment
Tustumena	Starboard

Tidal Data (MLLW=0.0 feet)	
Highest Observed	7.0
MHHW	4.4
MHW	3.5
Lowest Observed	-3.0

Terminal Building
This facility does not have a terminal building.

Generator & Building
This facility does not have a generator on-site.

Utilities @ Dock	
Water:	Yes
Fuel:	No

Uplands	
Short-Term Parking:	N/A
Long-Term Parking:	N/A
Staging Area:	900 lineal feet

L-Shaped Dock - #1945	
Year Built:	1993
Dock Stucture:	Galvanized steel pipe piles with steel WF pile caps, treated glulam stringers and heavy timber decking.
Pile Coating:	Galvanized
Fenders:	7 fenders along face of dock, each with 16" dia. Pipe pile and vertically oriented rubber cylinder.
Anodes:	No
Lighting:	Yes, jelly jar fixtures along the bullrails.
Condition:	Good
Notes:	Red navlights on either end of dock.
Load Posting Sign:	N/A
Original Design Load:	HS 20-44 / 350 psf / Cat 980 Loader (reference plans for other loads)

Dolphins							
Dolphin	Dolphin Piles	Fender Support	Fender Face	Anodes	Built	Cond.	Notes
N1	2B, 2V	2V	Timber	Yes	1993	Fair	Does not have tire fenders on the upper sections
S1	2B, 2V	2V	Timber	No	1993	Fair	

LEGEND
V = Vertical Steel Pipe Piling B = Battered Steel Pipe Piling

Catwalks / Gangways							
#	From Struc.	To Struc.	Length / Style	Built	Safety Chains?	Cond.	Lighting
C1	Dock	N1	54' / Catwalk / W21x55 Girders	1993	No	Good	None
C2	Dock	S1	54' / Catwalk / W21x55 Girders	1993	No	Good	None

Observations

1. The decking is 6x12 planks over glue-laminated timber beams. The city maintains a crab pot storage yard near the dock approach and transferring the pots across the dock has worn the deck. The City has banned pot hauling across the dock.

   The deck planking is in fair condition with signs of wear. There is a large area of damage to the decking with up to 1-1/2" gouges, a portion of which is within the vehicle path for the Tustumena. Typical wear consists of intermittent areas of up to ½" deep surface checking.
2. The superstructure consists of ten adjacent timber 8¾" x 27" glulam beams in the approach trestle and twenty-one glulam beams in the main dock section. The beams are supported on rolled steel bent caps with supplemental welded bearing stiffeners.

   The glulam beams are in good condition, with minor damages from boat impacts along the north (harbor) side beams of the approach trestle. The most recent inspections also found a 1/4"-3/8" deep split, roughly 15' long, in a glulam beam on the north side of the approach trestle between the barge mooring dolphins but does not seem to be affecting structural capacity. Further investigation could be warranted.
3. The bent caps consist of a rolled steel W18x76 beam with welded bearing stiffeners supported by two vertical and one battered steel pipe pile in the approach trestle. In the main dock section the W18x76 steel caps are supported by three vertical and one battered steel pipe pile. The pipe piles are beveled and fillet-welded directly to the steel cap bottom flanges.

   The bent caps are in good condition with minor surface corrosion occurring at the welded connection between pile & cap.
4. The 16"ϕ x ½" wall dock support pipe piles are galvanized and filled with gravel. Without any cathodic protection system (i.e. anodes) installed, the galvanizing has failed within the splash zone. There are several areas of dents & gouges to the dock and fender piles along bent 17 from vessel impacts. There is one missing steel pipe pile at both the North and South gangway support dolphins.
5. The mooring dolphins are in good condition. On the 2009 underwater inspection, the northern batter pile on the north mooring dolphin was found with a dent and scrape at about –10' elevation. The dent is 2" deep, 6" wide and 2' long, probably caused by vessel impact. Anodes were found on the northern mooring dolphin only. These anodes had 60 percent material remaining.

   The M/V Tustumena typically berths starboard, except for windy conditions when they berth portside.
6. The fender/bollard pipe piles and ladders on the face of the dock are in good condition. The northernmost bollard is missing one of its two horns. The fender system is considered marginal for the berthing loads of the M/V TUSTUMENA. Underwater inspection divers reported a stack of crab pots in the water in front of the southernmost dock fender. The pots contain coiled lines and buoys. The top of the pots is located at –20' elevation.

Observations (continued)

7. The southernmost fender on the dock face has been damaged from vessel impact. Additionally, the pile cover plate is missing and the pile is full of water. The third fender from the north end of the dock has been hit hard and the upper portion of the backup structure has been bent.
8. A bolt is missing on the northernmost rubber donut fender mount on dolphin N1.
9. The north barge dolphin does not have tire fenders on the upper section as does the south barge dolphin.
10. The catwalks are welded to the dolphin caps on one end, and slide on a wood skid plate on the dockside end. The guide pin on the catwalk has been torn away, so that now the only guides for the catwalk are the bullrails. There are no safety chains/cables installed to keep the catwalk from falling in the ocean.
11. The opening in the bull rail for the ferry's vehicle-loading ramp is too narrow. The constricted opening makes vehicle loading difficult in all but favorable weather. A ladder near the north corner of the dock has been hit and subsequently cracked the bullrail up on deck.
12. A new fuel line on the approach has reduced the inside curb width to 15'-7". The approach width is still adequate for one-lane ferry traffic. The arctic pipe waterline, mounted beneath the dock, froze in the winter of 05-06 and an elbow, at the junction of the approach and main docks, was damaged. Several utility hangers that are loose, damaged, or missing including two between bents 18 and 19. Eventually the City abandoned the arctic pipe and installed a ½" HDPE plastic waterline to service water to the main dock.
13. Potholing is prevalent where the gravel approach road meets the approach dock. Surface water ponding and heavy dock traffic has worked to erode the gravel above and behind the timber backwall at the head of the dock. A gap has formed and surface water drains freely along the backwall.
14. Heavy chains around the vertical piles in the seaward barge dolphins contribute to corrosion/section loss. All horns on the seaward barge dolphin bollards are missing.
15. Both navigation lights are not functioning. The crane mounted to the main dock is also not functional; signs posted warn of 'electrical shock'.
16. All freight and POL operations have moved to the sheet pile dock near the City Harbor.

Inspection Summary		
Structure	Priority	Recommendations
Category I - Safety Issues		
Nothing required.		
Category II - Rehabilitation Work		
Bottom Debris	1	Remove crab pots from the front of the southernmost fender. The pots, lines, and buoys pose risk of fouling vessels during low tides.
Dock - Misc.	2	Widen bull rail opening to 16 ft. to accommodate M/V TUSTUMENA vehicle-loading ramp. Repair the damaged fender unit on the south dock, pump out the seawater, and re-weld the pile cover plate. Repair the upper bent portion of the third fender from the north end of the dock. Repair damaged bullrail near the north corner of the dock.
Anodes	3	Install anodes on dock support piling and dolphin S1.
Dock planks	4	Install timber wearing surface to protect timber planking of deck.
Catwalks	5	Install guide pins on the dock mounting plate connection.
Mooring Dolphins	6	Monitor the damaged batter pile of dolphin N1 and program the pile for replacement. Also install a bolt that is missing on the northern-most rubber donut fender mount on dolphin N1.
Barge Dolphins	7	Install tire fenders over the king pole of the north barge dolphin. Install chafe protection between heavy chains and vertical piles in the seaward barge dolphins. Repair mooring bollards on the seaward barge dolphins by installing full pipe section horns.

Inspection Summary (continued)		
Structure	Priority	Recommendations
Category II - Rehabilitation Work		
Mooring Bollard	8	Repair broken horn on northernmost bollard.
Approach Transition	9	Repair gravel-to-timber transition at head of dock.
Category III - Upgrades Needed		
None noted.		