

# Senate Transportation Committee

Department of Transportation & Public Facilities

Typhoon Halong

Katherine Keith, PMP, PMI-ACP, Deputy Commissioner

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February 17, 2026



KEEP ALASKA MOVING

# Event Overview & System Exposure

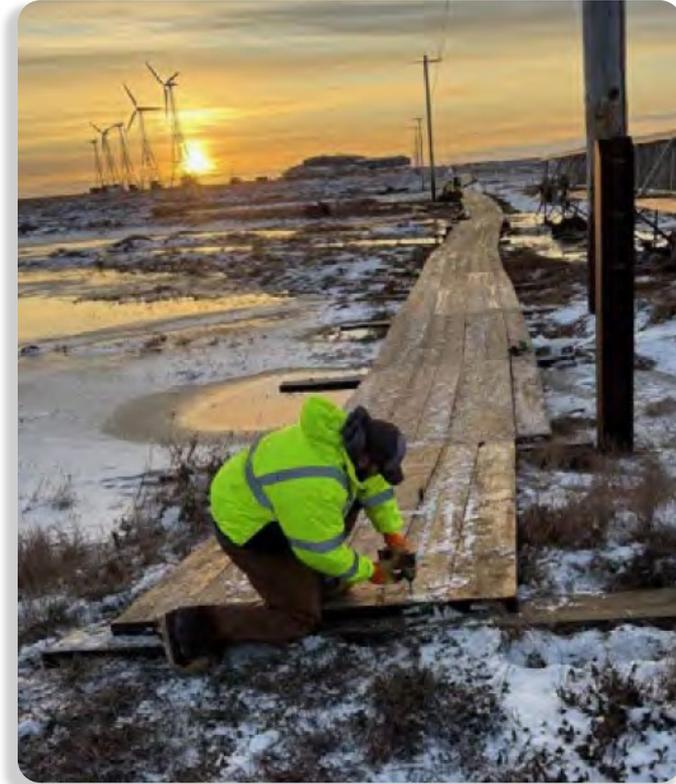
## Scope of Impact

- 50+ communities impacted by two surge events
- ~600+ miles of coastline exposed to surge
- 60–80% of pedestrian access networks damaged in hardest-hit communities
- 6–9 runways overtopped by surge
- 4+ airfield lighting systems damaged
- Power line pole foundations undermined in surge zones
- More than 12 miles of boardroad damage in 13 communities



# Timeline of Response

- Oct. 6** – DOT&PF ICS\* activated, State EOC\* coordination begins, pre-deployment of staff and equipment
- Oct. 7** – First storm hits Bering Sea/Norton Sound communities
- Oct. 10** – Governor Dunleavy issues State Disaster Declaration
- Oct. 11** – Typhoon makes landfall along West Coast
- Oct. 12** – Evacuations begin in Yukon-Kuskokwim Delta
- Oct. 13** – 40+ personnel deployed for damage assessments
- Oct. 15** – Emergency contracting authorities executed for debris removal and access restoration
- Oct. 18** – First large-scale material staging in Bethel
- Oct. 22** – Presidential Disaster Declaration issued
- Oct. 24** – Materials in transit to YK Delta
- Early Nov.** – Winterization measures implemented (insulation, temporary foundations, heating protection)
- Mid-Nov.** – Transition from life-safety to emergency repair phase
- Dec.** – Emergency Temporary Repairs Ongoing
- Jan.** – Pile driving operations begin



**Federal Declarations:**  
**~60 days = typical**  
**16 days = Halong**

# Phase 1 — Field Assessment & Situational Awareness



**50+** Communities impacted by two typhoon surge storms

**300+** Flight Missions

**20** Starlink Panels

**98,324** Images Collected

**540** Full Motion Videos

**34** Communities Mapped

**5TB** Raw Data Collected

**12** Go Pros 360

**1,300** Homes Assessed

**40** Public Facilities Assessed

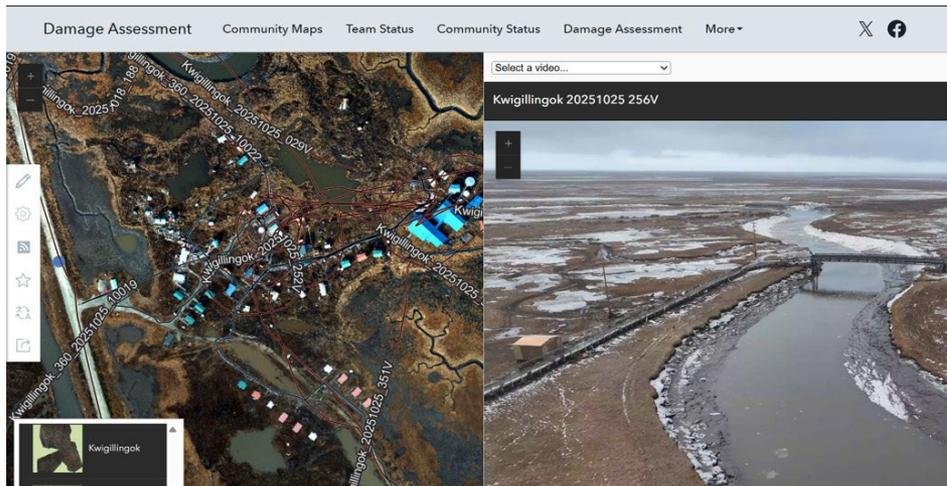
**Over 40 DOT&PF Staff completed assessments for 34 communities in 3 days**

DOT&PF's drone team delivers rapid, agile response during crises—improving safety by deploying remote-operated drones that provide real-time, thermal imaging. This approach accelerates assessments, reduces costs compared to traditional aircraft, and expands equitable access to cutting-edge emergency response tools.

# Digital Command & Control; DOT&PF ICS

## Drone & AI Integration

- Orthomosaics
- Before/After imagery comparison
- Synchronized aerial and ground-based imagery
- AI-assisted home numbering and home damage rating validation



\*Incident Command System (ICS)

## Common Operating Picture

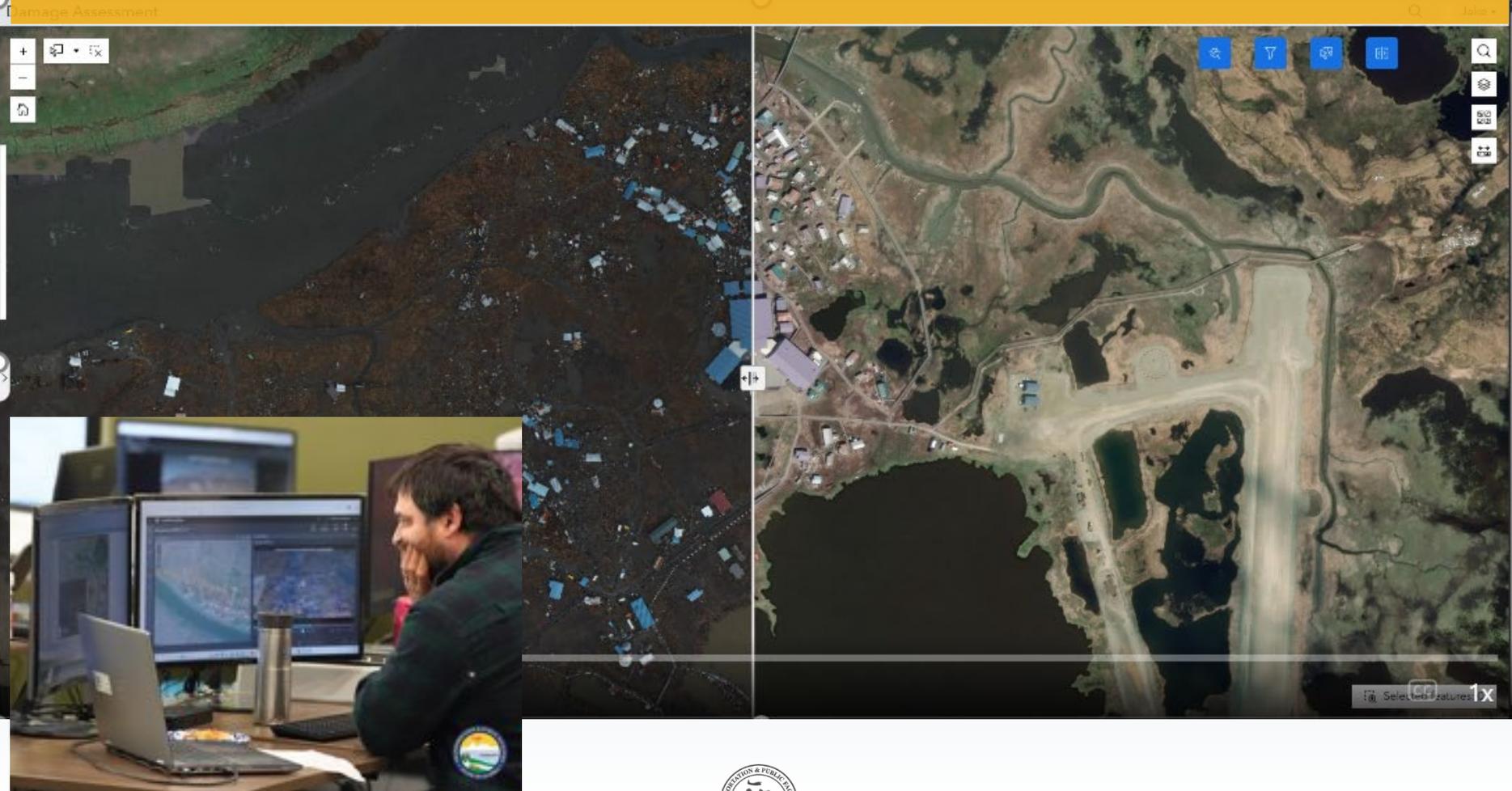
- Applications deployed in real time
- Real time understanding of conditions
- Reduction in duplicated efforts

## This resulted in:

- Faster federal disaster declaration
- Detailed damage assessments that drove emergency repair plans
- FEMA accepting electronic records due to evacuation conditions
- FEMA accepting damage ratings completed by Alaskans

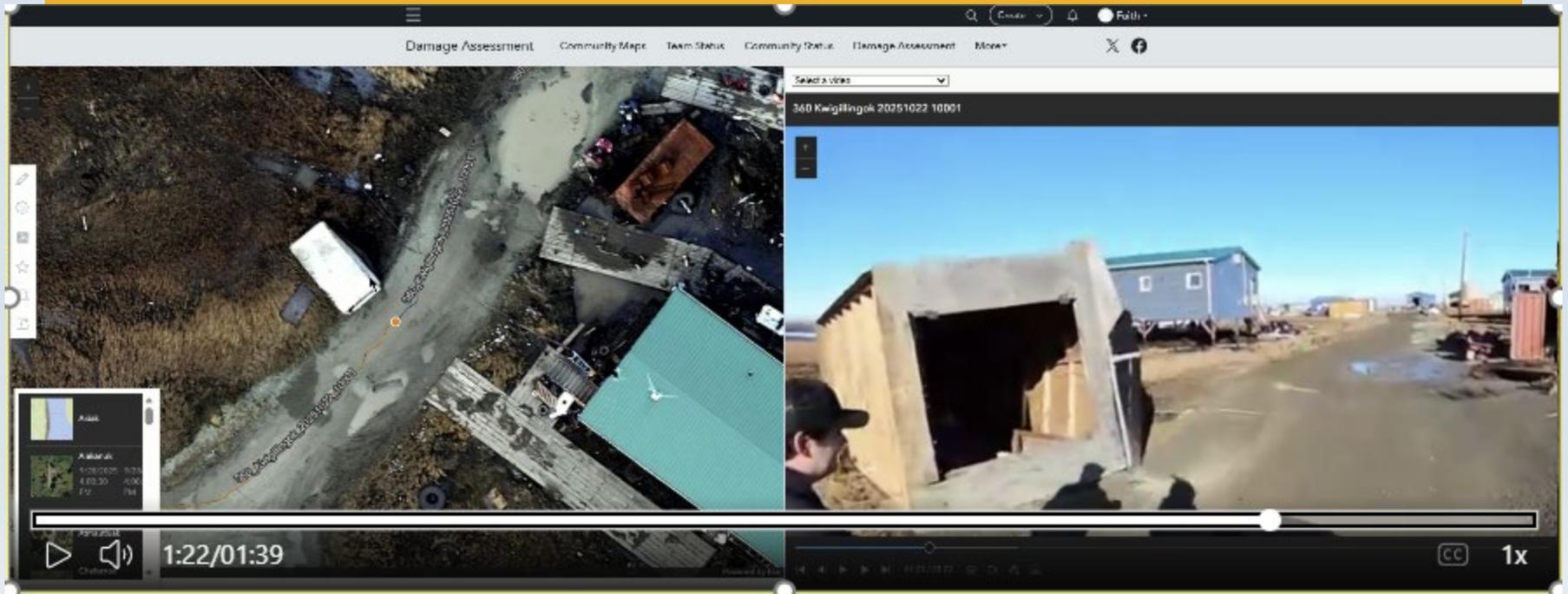
# Before and After Imagery Comparison

Before/after imagery comparison to detect missing, moved, or damaged features not obvious in a single dataset.



# Imagery From Above vs Footage on the Ground

Buildings and roofs viewed from above may look intact but when viewed from the side the level of damage becomes apparent.





# Phase 2 — Immediate Stabilization DOT&PF Response

**250+** DOT&PF Employees Statewide

**15+** Contractors Rebuilding Infrastructure

**15+** Transporters Delivering Critical Supplies

**55+** Suppliers

**100+** Local Hires Rebuilding Communities

**8,000,000+lbs** Materials Delivered to Date



February 17, 2026



Working through the **Statewide Emergency Operations Center**, in collaboration with state agencies, nonprofit and private partners, the Governor's Office, and federal agencies to restore transportation systems and assist affected communities.

# Logistics and Cargo Operations

Method of Transport from Bethel	Average Cost per Pound per Transport Hour from Bethel	Pounds Hauled to Date <i>(Partial List)</i>
Small Fixed Wing Airplanes (Caravan, Navajo)	\$0.86	>965,000
Pisten Bully	\$1.25	>850,000
Heavy Lift Helicopter (Chinook, Blackhawk)	\$1.84	830,000
Snowmachines	\$0.09	>630,000
Light Duty Helicopter (Astar, B212, Robinson 66)	\$4.35	315,000
Large Fixed Wing Airplanes (Casa, DC-3)	\$1.58	181,000
Ice Road Pickup Trucks	\$0.03	>75,000

Type of Material	Pounds Hauled to Date <i>(Partial List)</i>
Food and Water	>190,000
Plywood	>500,000
Lumber	>5,000,000
Insulation	>130,000
Piles	>475,000
Fuel	>60,000



# Phase 3 — Emergency Repairs DOT&PF Response

**\$63M+** Expended to Date

**9** Active Prime Contractors

**500+** Helical Piles Driven

**50+** Homes Moved Back into Place

**170+** Homes Substantially Complete

**160+** Homes in Progress

**14** Communities with Emergency Repairs Mostly Complete



**Repairs Completed:** Bethel, Deering, Emmonak, Hooper Bay, Kaltag, Kotzebue, Nome, Nunam Iqua, Quinhagak, Scammon Bay, Shishmaref, St. Mary's, Teller, Toksook Bay

**Repairs Underway:** Akiak, Atmautluak, Chefornak, Kasigluk, Kipnuk, Kongiganak, Kwigillingok, Napakiak, Napaskiak, Nightmute, Noatak, Nunapitchuk, Tununak, and Tuntutuliak

# Housing Stabilization & Relocation

- >50 homes relocated
- 15 moved >1 mile
- Longest move: 3.5 miles
- >1,000 homes in need of repair



Typical Foundation Bracing (Kwigillinok)



Typical Insulation Replacement (Kongiginak)



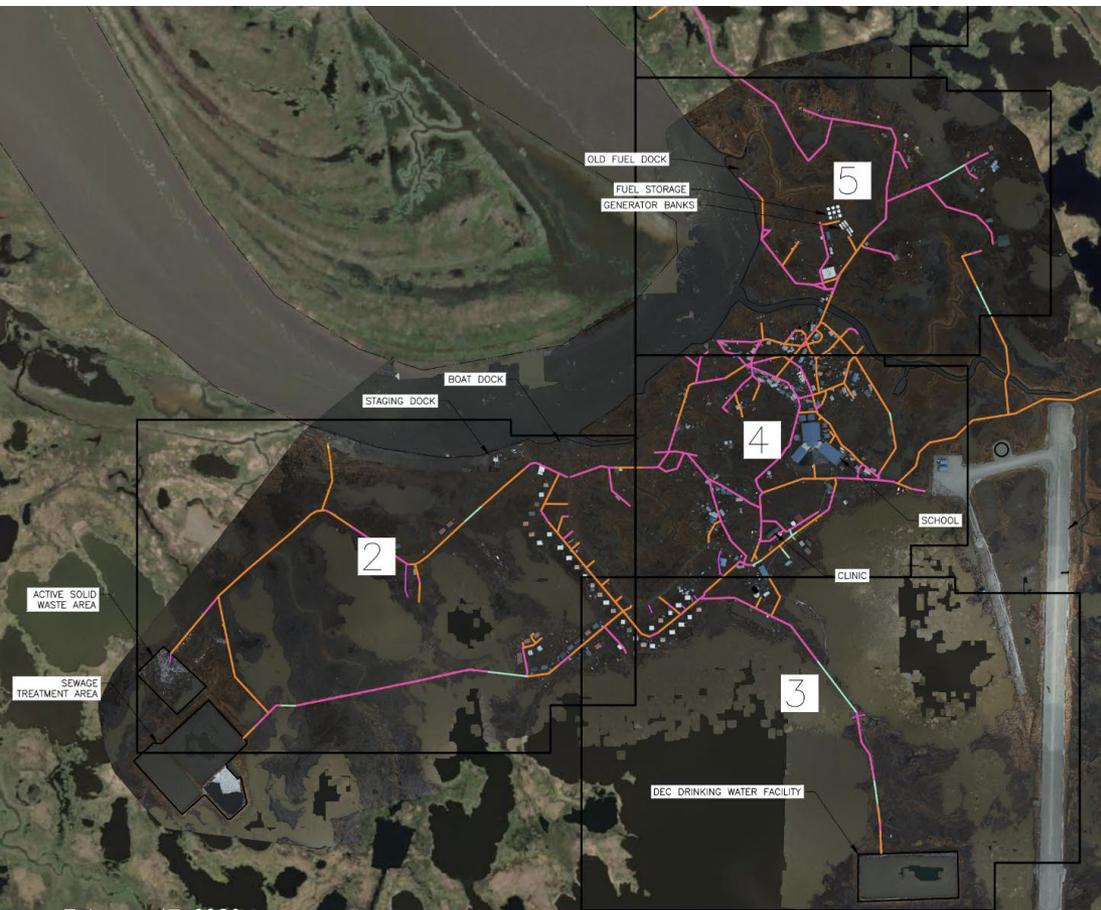
# Kipnuk Emergency Repairs

## COMPLETED

- Powerplant Operational
- Installed 70 transformers and erected power poles
- Teacher housing repaired
- Airport lighting repaired
- AWOS repaired
- School power/sewer/water systems repaired
- Washeteria repaired
- Armory repaired
- Power restored to 39 homes
- Assisted with casket identification
- 4100 cubic yards debris removed
- 2800 cubic yards debris burned
- Repaired Tribal Council Building

## IN PROGRESS/NOT STARTED

- 4.3 miles of boardroad reconstruction
- Water treatment plant repairs; install water treatment reverse osmosis filter
- >50 house relocation
- >50 residential house repairs in progress; >100 not started



KIPNUK, ALASKA  
OCTOBER 2025 EMERGENCY REPAIRS

NOTES:  
THIS FIGURE SHOWS AN ESTIMATED LAYOUT OF DAMAGED BOARDWALKS/ROADS REQUIRING REPLACEMENT IN KIPNUK, ALASKA.  
ESTIMATIONS ARE APPROXIMATE AND ARE PENDING FIELD CONDITIONS.

LEGEND  
 - - - - - DAMAGED BOARDWALK - ELEVATED  
 - - - - - DAMAGED BOARDWALK - AT GRADE  
 - - - - - EXISTING BOARDWALK LOCATION



# Kwigillingok Emergency Repairs

## IN PROGRESS

- Approximately 4 miles of boardroad reconstruction
- Residential utilities (electrical, heating, water, sewer)
- >12 houses to be relocated back into place
- >40 residential houses to be completed
- Raw-water line to water treatment plant
- School sewage treatment system
- Debris removal/appliance crushing

## COMPLETED

- >14 homes relocated back in place over 1 mile
- 26 home relocations total
- >27 homes substantially complete
- School sewer line to the lagoon restored
- School and teacher housing repaired
- Powerplant generator repaired
- Road & airport resurfacing & drainage repaired
- Barge landing 40' river crossing constructed
- Relocated and repaired police station
- Assisted GCI with cell tower repairs
- Assisted with casket identification



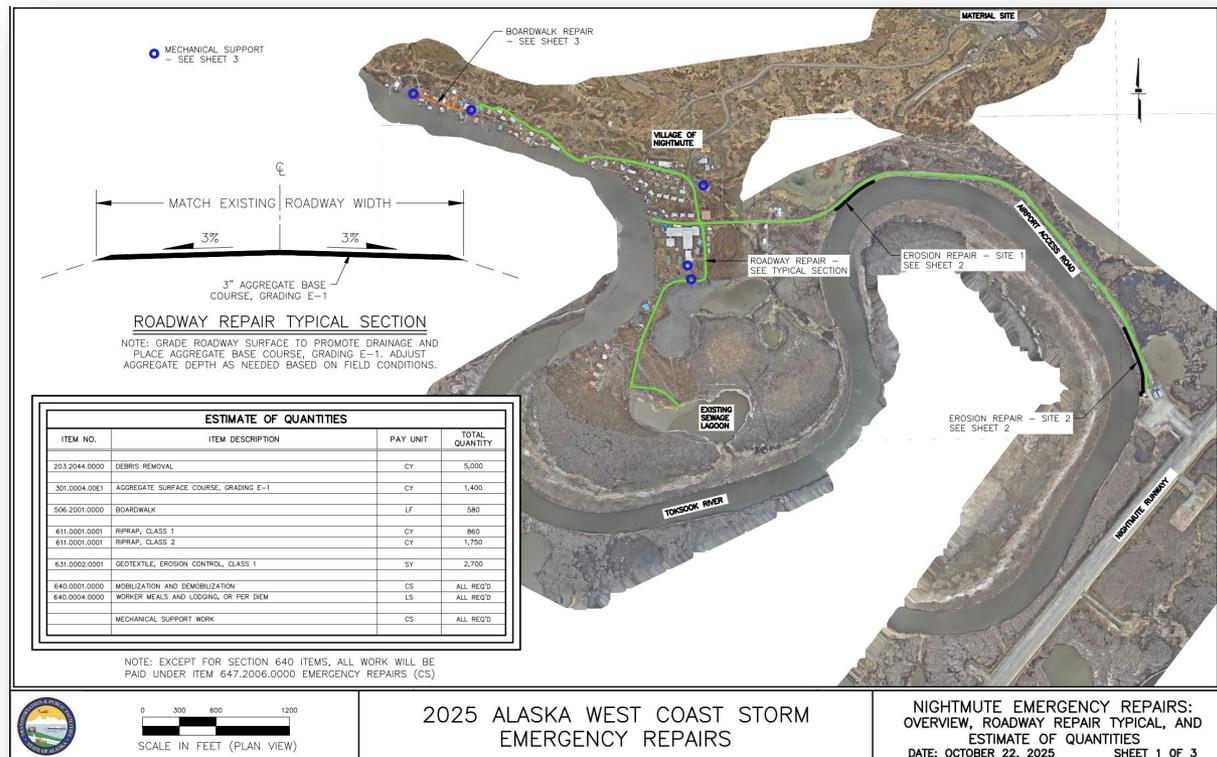
# Nightmute Emergency Repairs

## IN PROGRESS

- Residential utilities (electrical, heating, water, sewer)
- >25 residential home repairs

## COMPLETE

- Temporary landfill constructed with access road
- Sewage lagoon access restored
- Water line to school repaired
- 1.2 miles road repaired
- Airport resurfaced/regraded
- Debris removal/cleanup and relocated to new landfill
- >5 homes over 1 mile relocated back into place
- 21 home relocations total (average 100 feet)
- 17 homes substantially complete



# Emergency Contracting Authority

## DOT&PF operated under statutory framework

- State disaster declaration authority: AS 26.23.020 (c)
- Emergency procurement authority: AS 36.30.310
- Time & Materials/Temporary Work Authorization (TWA) contracting authority: AS 36.30.015 (State Procurement Code)
- Federal Stafford Act coordination with federal agencies: 42 U.S.C. 5174

## Emergency contracting allowed

- Immediate mobilization of 7 contractors within 48 hours
- Material staging prior to formal FEMA reimbursement
- Rapid task order issuance



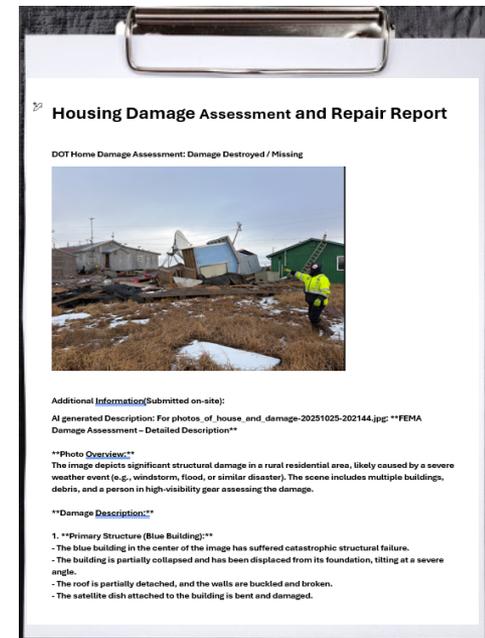
# Near-Term Objectives (30–60 Days)

## Winter Construction

- Complete pile-supported boardwalks
- Maximize overland transport
- Complete house relocations
- Finalize public facility stabilization

## Compliance Controls in Place

- ICS finance tracking
- Early eligibility alignment with SEOC & FEMA Public Assistance staff
- Documentation tied to FEMA categories
- Electronic repair-in-progress records accepted by FEMA
- Daily cost tracking under emergency authority



\* Incident Command System (ICS), State Emergency Operations Center (EOC), Federal Emergency Management Agency (FEMA)

# Thank You.



Katherine Keith, PMP, PMI-ACP, Deputy Commissioner  
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KEEP ALASKA MOVING

Cover photos by Alaska DOT&PF Staff:  
*Sunset departure, Anchorage International Airport.* By Christopher Cummins  
*Alaska Range from the Richardson Highway.* By Dennis Bishop  
*Aboard the MV LeConte sailing Lynn Canal to Juneau from Haines.* By Andrea Deppner