



Topic: Manistee North Pierhead Light—Safety Railing
To: State Historic Preservation Office & National Park Service
From: Sable Points Lighthouse Keepers Association (SPLKA)
Date: April 17, 2025

Please accept this letter and the corresponding images as SPLKA's proposal for installing safety railing at the Manistee North Pierhead Light. The purpose of installing the railing going into the lighthouse and up the tower is to increase the overall safety of anyone who enters and climbs to the top.

To secure new railing, SPLKA will be using slide-on framing system fittings. These fittings use an Hex Allen screws to hold pipe in place and will help prevent SPLKA from needing to weld, heavily fabricate railings and spend a large amount on labor hours to increase the overall safety. To secure the slide-on framing to the cement floors, SPLKA will use cement screws to mount base plates. When not securing railing to cement, SPLKA will use existing holes in the lighthouse or when working with non-historical materials, drill new holes to secure the railing (i.e. in existing railing).

SPLKA is open to alterations to this proposal and understands that minimizing impact to the historic structure is of the utmost importance.

I look forward to discussing this proposal with both SHPO and NPS in the near future.

Best regards,

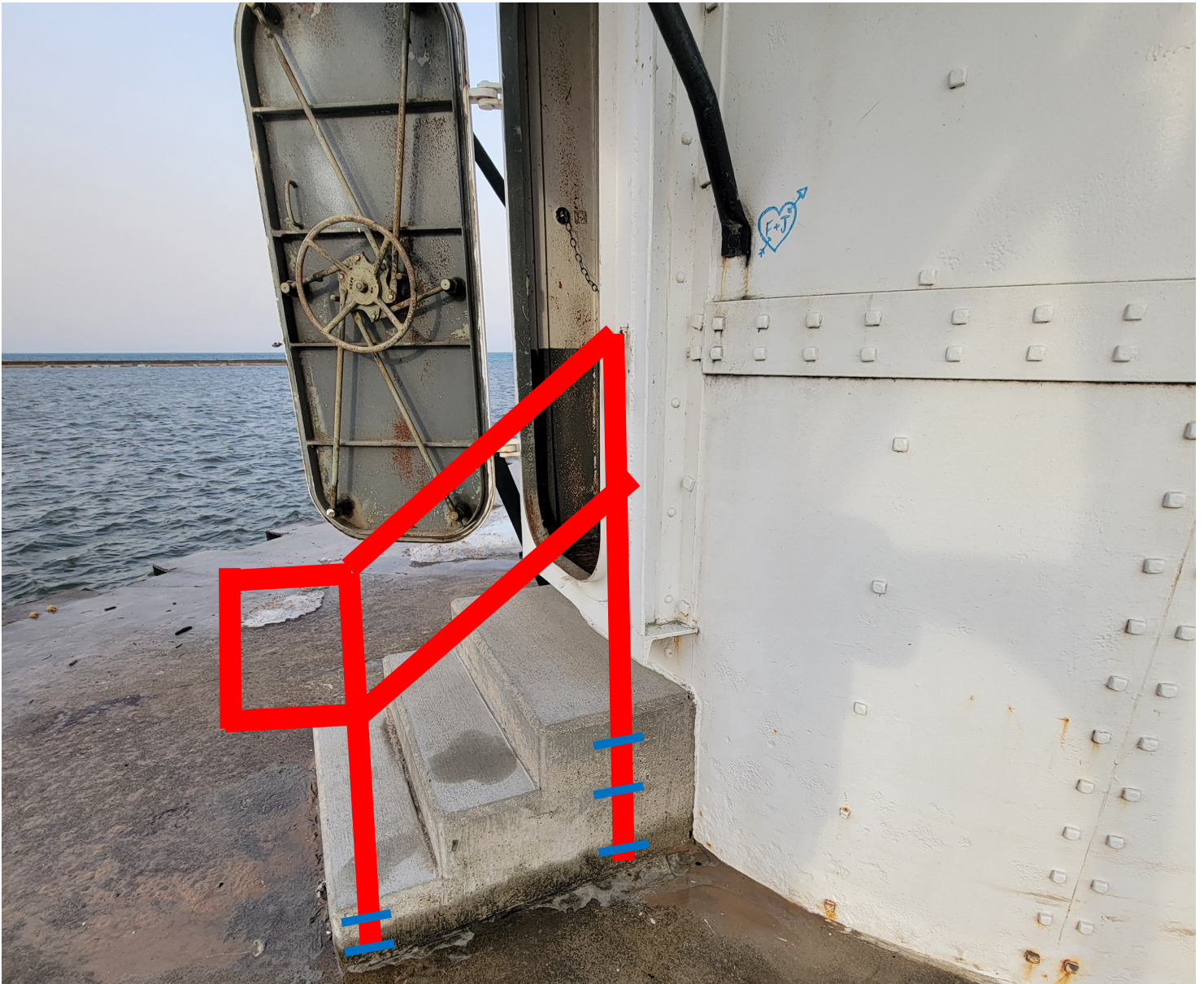
Jack Greve
Executive Director
Sable Points Lighthouse Keepers Association

UPDATED ON: April 30, 2025

Pier to Level 1: Installing a railing that can be removed during the winter season on the right side of the cement steps. Railing will be removed in September and reinstalled in May of every year.

U-brackets will be installed on the side of the steps using cement screws and will be painted black. U-brackets will not collect water and therefore will not expand and break with freezing temperatures.

The exterior railing will be painted black to match the brackets and the exterior catwalk.



Level 1 to Level 2: SPLKA will install a railing 6-8" above the ladder on the right side. By installing the railing on the right, the gap between the ladder and the whole opening will be covered. The railing will be mounted to the cement floor on the first level and will bend at an approximate 135 degree angle. When it reaches the top, the railing will bend at an approximate 135 degree angle, will bend again at a 90 degree and be mounted to the floor on the second level. Keeping the railing low to ground and tucked behind existing railing will prevent a tripping hazard.



Ladder to Level 2: With existing railing, no addition hand grips will be needed for an individual to move from the ladder onto the second level. The ladder from the second to third floor and the current pipe railing will prevent guests from falling to the first level.



Level 2 to Level 3: A similar system from the first to second floor will be used while going from the third to fourth floor. Railing will mounted to the cement floor of the second level, will bend at an approximat 135 degree angle and will be approximately 6-8" above the ladder on the right side. This will prevent a climber from the gap between the ladder and the opening on the third level.



Ladder to Level 3 & Guard Rail: The existing railing will be removed. To match existing levels, new railing will take its place and will be secured to the cement floor.

The section of conduit will be removed from the outer wall. This is shown below at an orange oval.



Level 3 to Level 4: There is not a gap between the ladder and the fourth floor opening. A hand rail along the ladder is not recommended at this section.

Ladder to Level 4: Using existing holes, a handhold will be added to the vertical structural beam. This is indicated in Red in the diagram below.

A middle railing will be added in the existing guard railing seen in Yellow using slide-on fittings.



The equipment bracket that is located on the floor of the fourth level will be removed as outlined in the HSR.

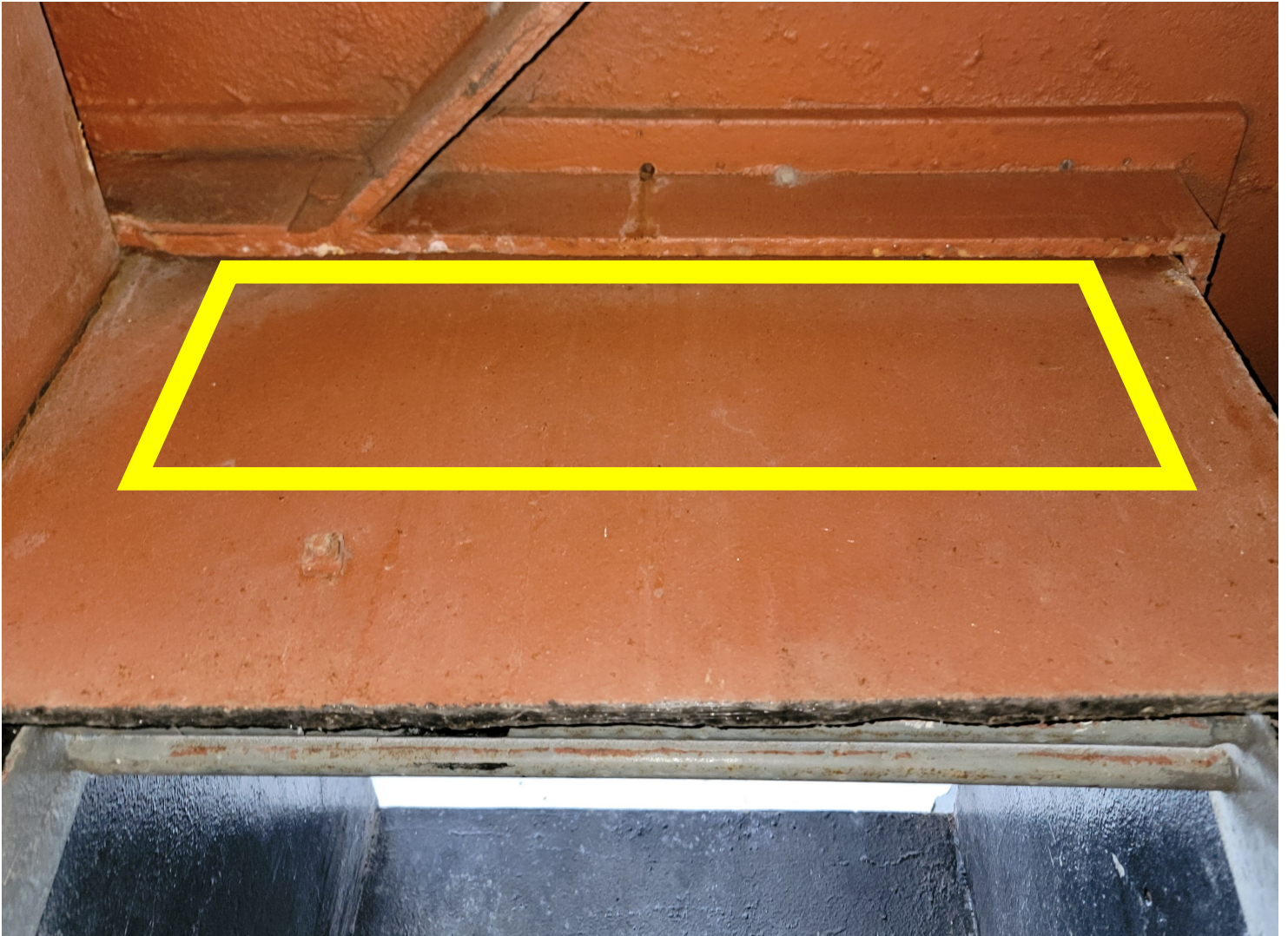


Level 4 to Level 5 (Lantern Room): With no gap between the ladder and the opening, a ladder railing is not recommended. In the image below, take note of the last ladder rung. There is minimal space between this rung and the interior of the hole. To aid in climber safety, please see the next page for outlined plan.



Level 4 to Level 5 (Lantern Room):

A section will be cut (shown in yellow) which will allow for a climbers foot to rest on the last rung.



Ladder to Level 5 (Lantern Room):

To add handholds and guard railing behind the opening the below diagram has been created. Two hole brackets will be used for the vertical posts. These will be new holes. To help secure these brackets, backplates can be added below the floor.

The vertical post at the ladder side of the hole will be shorter than the backside vertical. The shorter vertical will be used as a handhold as well as the attached horizontal. Secondly that attached horizontal in yellow will prevent the hatch from being used as a handhold.

The lantern pedestal will act as the third vertical to stabilize the railing system. The horizontal railing will be attached to the pedestal using a clamping system.



Ladder to Level 5 (Lantern Room):

An additional handhold will be added to the wooden structure on the inside of the lantern room, shown in red.

In the case that USCG or maintenance needs to go outside of the lantern room onto the gallery, the vertical and horizontal railing may be temporarily removed.

