If this item is pulled from the Consent Agenda the following motion is suggested:

POSSIBLE MOTION

I MOVE TO approve a transfer of up to \$150,000 from the CPET funds to the Sea Walk Capital Project Fund and authorize its expenditure for the construction of a safety railing along the boardwalk.

Memo

Thru: Mark Gorman, Municipal Administrator

To: City and Borough of Sitka Assembly

From: Jay Sweeney, Acting Municipal Administrator

Date: 12/17/2013

Re: Transfer of Funds and Approval of Construction of Safety Railing On Sea Walk Rip Rap

Boardwalk

Mayor McConnell and Assembly Members,

A safety inspection by the City and Borough of Sitka's insurance carriers has identified the boardwalk on the rip rap near the hatchery as a potential safety hazard. The attached memorandum discusses that liability insurance may not cover injuries sustained by a citizen falling over the side of the boardwalk.

Accordingly, Staff is recommending the Assembly (1) approve the transfer up to \$150,000 from the Commercial Passenger Excise Tax Fund to the Sea Walk Capital Project Fund, and (2) authorize the expenditure of up to \$150,000 for the construction of safety railing along the boardwalk.

It is important to have this railing constructed and put in place before cruise ship passengers arrive this season.



City and Borough of Sitka

PUBLIC WORKS

100 LINCOLN STREET • SITKA, ALASKA 99835 PHONE (907) 747-1804 • FAX (907) 747-3158

March 19, 2014

Mr. Steve Johnson Senior Loss Control Consultant Alaska National Insurance Company 1111 Third Avenue, Suite 2600 Seattle, Washington 98101-3219

Subject: Sitka Sea Walk Breakwater Spur Trail – Guardrail Concerns

Dear Mr. Johnson:

This letter is in response to your letter to Sitka Municipal Administrator Mark Gorman dated March 6, 2014 in which you expressed concern with the absence of guardrail along the newly constructed walkway on the Crescent Harbor breakwater. Your letter cites several standards in defense of the recommendation to add guardrail to the breakwater spur trail and the seating wall at the end of the trail. However, the referenced standards are applicable for facilities which are intended for both pedestrians and bicycles. The Sea Walk was planned and designed for pedestrian use and is not intended for bicycles.

We feel that the Federal Highway Administration (FHWA) *Best Practices Design Guide for Designing Sidewalks and Trails for Access* is a more applicable criterion for the Sea Walk. FHWA recommends a minimum 3" high edge protection for pedestrian use only sidewalks and trails where edge protection is required. That recommendation is intended to protect wheelchairs from rolling over the edge. The breakwater spur trail is fully compliant with this standard as it includes a 12" high bull rail along the entire length on both sides and an 18" high concrete seating wall at the end. Chapter 15, Recreation Trail Design is included as an attachment to this correspondence for your reference (see page 15-39). The entire FHWA standard can be found at the following link: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/pdf.cfm

Understanding the motivation behind your concern, the City and Borough of Sitka proposes to add signage periodically along the Sea Walk to inform users that the Sea Walk is intended for pedestrian use only. An example of the proposed signage is attached to this correspondence. These signs will be posted on 4" x 4" posts at reasonable intervals on either side of the breakwater spur trail to help ensure that the FHWA standard is met. We will also post warning signs at the end of the breakwater regarding the potential danger of climbing on the rocks past the seating wall. Public Works will advertise public service announcements on local radio and newspaper informing the public about the prohibited uses of the Sea Walk. Public Works believes firmly that these measures meet the goals outlined in the attached design standards utilized during the development of the project. To further address this safety concern beyond the FHWA requirements, we are looking at options to place railing on the boardwalk portion of the breakwater spur.

Public Works would be happy to meet with representatives from Alaska National to go over the intended use for the Sea Walk and our plan to ensure that it can be enjoyed safely by pedestrians for years to come. We appreciate your consideration of our position. Please feel free to contact us with any questions.

Regards,

Michael Harmon, P.E., Public Works Director

cc: Mark Gorman, Municipal Administrator Robin Koutchak, Municipal Attorney Mike Venneberg, Venneberg Insurance



March 6, 2014

Mark Gorman Sitka City Administrator City and Borough of Sitka 100 Lincoln Street Sitka, Alaska 99835

Dear Mark:

I visited Sitka the week of February 18th. While there, I noticed the new walkway located on the breakwater at Crescent harbor. The new walkway is a great addition for locals as well as visitors to enjoy the beauty of Sitka. I believe the walkway needs guard rails to prevent a fall accident from this raised structure. I have found a number of standards addressing this issue.

 The American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design and Operation of Pedestiran Facilities Standard includes a section (3.3.14) on Off-Road and Shared-Use Paths. This calls for a minimum 2 ft. graded area adjacent to both sides of the trail and a minimum separation of 5 ft. between the edge of the path and the top of a slope that is more than 1V:3H.

(The slopes adjoining the trail appear to be much steeper than 1V:3H.)

• The following is from the Municipality of Anchorage's design guidelines.

http://www.muni.org/Departments/works/project_management/Design%2

OCriteria%20Manual/DCM%204%20Trails.pdf

Provide trails with minimum 2-foot wide graded shoulders on each side of the trail, measured from the edge of the paved surface, with a preferred slope of 3-5%. Wider shoulders of three feet are appropriate for trails that have a high percentage of use by runners and joggers since they often prefer a soft surface. A clear zone of 3 feet from the edge of the traveled surface or pavement should be maintained from trees, poles, walls, signs, or other potential obstructions. Where slopes are adjacent to canals, streams, or similar open water, or are steeper than 3H:1V, a wider shoulder, not less than 5 feet, should be provided (AASHTO, 1999). A physical barrier may also be warranted in certain situations. Side slopes of embankments should slope at 3H:1V or flatter, and never steeper than 2H:1V.

 Another standard, the Vermont Pedestrian and Bicycle Facility Planning and Design Manual says (section 3.4.8):

http://vtransengineering.vermont.gov/sites/aot program developmen t/files/documents/ltf/PedestrianandBicycleFacilityDesignManual.pd f

Hand Rails, Bridge Railings and Vehicle Barriers

With the exception of sidewalks on bridges, most walkways do not require the use of handrails or vehicle barriers immediately adjacent to the facility. However, there are some cases where a protective handrail is required to protect pedestrians from adjacent hazards. There are also some situations where a vehicle barrier may be needed between a roadway and a walkway.

Hand RailsWhere a sidewalk is located in close proximity to a hazard as described below, a protective handrail should be provided along the full extent of the hazard.

Protection is required when:

- A vertical drop along a sidewalk is more than 0.8 m (30 in) in height.
- The drop exceeds a slope grade of greater than 1:4.
- The hazard at the base of the slope is particularly dangerous (i.e., large boulders, rip rap, fast moving water or deep water).

To meet ADAAG guidelines, handrails should meet the following design standards. The top of the gripping surface of the rail should be a minimum of 865 mm (34 in) and maximum of 965 mm (38 in) above adjacent walkway surfaces. To provide for children, an additional railing can be provided at a maximum height of 685 mm (27 in). From the surface of the sidewalk to the top of the lower rail, all elements of the rail assembly shall be spaced such that a 150 mm (6 in) sphere cannot pass through any opening. For elements between 685 mm (27 in) and the top of the handrail, spacing shall be such that an 200 mm (8 in) sphere cannot pass through any opening. Pedestrian railings provided on bridge sidewalks shall meet the standards outlined in the AASHTO Standard Specifications for Highway Bridges, which are also shown in Chapter 5, section 5.3.6, Barriers, Bridge Railings, and Fencing.

The steep slopes and rip rap immediately adjoining the breakwater trail greatly increase the risk of serious injury should anyone fall near the trail edge. The standards above indicate that the best solutions are either to provide broad shoulders adjoining the trail, or to install railings. In this case, railings appear to be the most practical option.

The walkway ends at the turn of the breakwater in a round resting area. This area currently provides access to the rock breakwater allowing for climbing and sitting. This area also needs a rail to encourage the public to stay on the structure and not venture or climb or sit on the breakwater.

Please feel free to contact me with any questions on the above recommendations. My direct line is 206-515-1824.

Sincerely

Steve Johnson

Senior Loss Control Consultant Alaska National Insurance Company

Seattle, Division

Cc: Mark Danielson Venneberg Insurance Kevin Korynta/UW

Terry Kordewick/Sr VP Loss Control

The purpose of our visit to your business establishment is to evaluate the potential risk Alaska National Insurance Company has assumed under the terms of the referenced policy. We cannot, as a result of this survey, or the recommendations made, warrant that your business operations, work practices, and/or premises are safe and healthful, or that they are in compliance with all occupational safety laws, regulations, codes or standards. The maintenance of a safe and healthful workplace is the responsibility of the employer, and the completion of this survey is not an undertaking on our part to assume that responsibility.