

BOPC Received
5-16-2024

MEMORANDUM



To: All District Employees
From: Denis J. Mulligan, General Manager
Date: March 27, 2024
Subject: March 27th Update

A handwritten signature in blue ink that reads "Denis J. Mulligan".

Ship Collision Protection at the Golden Gate Bridge

Yesterday, a horrific accident happened when a large container ship struck the Francis Scott Key Bridge near Baltimore, resulting in a collapse of the Bridge into the water. Six construction workers are presumed dead after they plunged into the cold water when the Bridge collapsed. It is a heart-wrenching tragedy.

Such an incident naturally raises questions about what might happen at the Golden Gate Bridge if a large ship were to lose power and drift toward one of the Golden Gate Bridge towers.

Please know that the Golden Gate Bridge is different from the Francis Scott Key Bridge in many ways. The Francis Scott Key Bridge does not appear to have any fendering or sacrificial protection around the pier where the large ship struck the bridge.

Meanwhile, the Golden Gate Bridge has the most robust ship collision protection of any bridge on the West Coast.

The North Tower of the Golden Gate Bridge is half on land and half in the water, so a large vessel would run aground before colliding with the pier. The South Tower, which is also anchored to bedrock beneath the water, is protected by a concrete fender ring extending over 40 feet deep, the same depth drawn by many large ships. The concrete fender is filled with sand, similar to a highway crash barrel, and the concrete is 10 feet thick at the top and increases in thickness to 27.5 feet thick about half-way down, providing significant protection against collisions.

The web link below is to an artist rendering from the 1930s prepared for the Bridge District to inform the public about the then upcoming construction.

https://www.goldengate.org/assets/1/6/ggb-exhibit3-1_4-4.jpg

Please let me know if you have any questions or concerns. Thanks.