

# FATALITY NARRATIVE

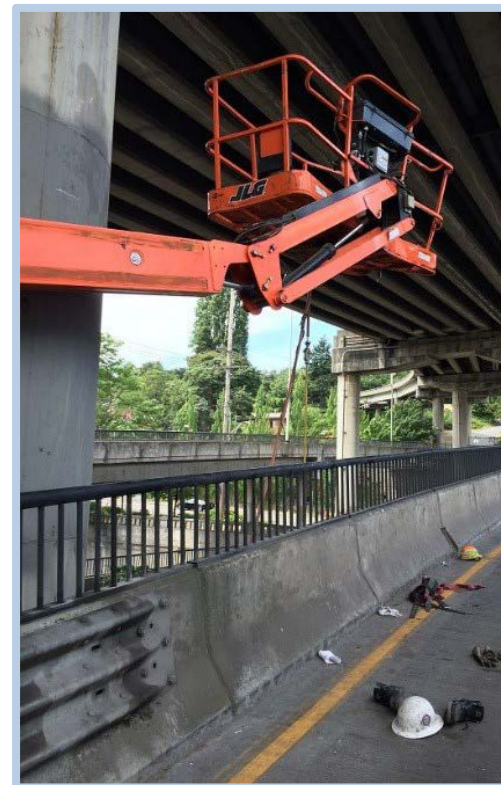
## Foreman and Laborer Fall when Aerial Lift Struck by Vehicle

**Industry:** Highway, Street, and Bridge Construction

**Task:** Installing retaining rods on bridge

**Occupations:** Foreman and laborer

**Type of Incident:** Fall





# *FATALITY NARRATIVE*

In July 2016, a 40-year-old construction foreman died and a 57-year-old laborer was injured when a truck struck the elevated aerial lift platform they were working in, ejecting them from the platform.

The two men worked for a civil construction contractor that does, among other projects, bridge construction. The Seattle Department of Transportation (SDOT) hired the contractor to replace rubber bearing pads on an expressway bridge.

Their task that day was to install replacement retaining rods underneath the bridge. Also known as seismic restrainers, these rods prevent excess movement of bridge elements. They were using a self-propelled telescopic boom-supported elevating work platform or aerial lift. They positioned the lift underneath the bridge in a dirt median between two roadway ramps.



# *FATALITY NARRATIVE*

After loading equipment, they both stood on the platform while the foreman raised it and boomed out so that they could access the work area between girders on the bridge above. The work area was about 30 feet above a single lane of an elevated exit ramp.

As the foreman was positioning the platform, it was struck by a box truck traveling in the lane below. The impact spun the platform 180 degrees and ejected the workers from the platform. The foreman was thrown 50 feet horizontally, landing on a railroad track 48 feet below. He died of his injuries. The laborer fell about 10 feet and dangled from his lanyard above the road until the truck driver and a passerby helped him down. Emergency responders took him to a hospital where he received treatment for abdominal injuries.



# ***FATALITY NARRATIVE***

The investigation determined

- (1) temporary traffic controls were not used, exposing the two workers to an open traffic lane,
- (2) traffic controls had been used on this project by the employer previously, though ramp closure was not permitted on business days, per the contract with SDOT,
- (3) though the two workers were wearing full body harnesses, neither of them fixed their lanyards to the manufacturer's provided and approved attachment points. The foreman's lanyard was not attached to anything, the laborer tied off to the platform's handrail.



Incident scene showing the exit ramp under the bridge and the approximate height and position of the aerial lift when it was struck by a box truck and how it came to rest afterwards. The arrow indicates the direction in which the truck was traveling.

# FATALITY NARRATIVE



Anchor lanyard connection point

Harness anchor lanyard

Hard hat, boots, gloves, and fall protection harness

Incident scene showing the aerial lift and the injured laborer's PPE.





Incident scene showing the aerial lift positioned in a median under the bridge.



Incident scene showing the location under the bridge where the workers were using the lift to access the work area. No traffic controls were used.





# *FATALITY NARRATIVE*

## **Requirements**

Apply the requirements of WAC chapter 296-155 Part E, Signaling and Flaggers. Then use temporary traffic controls according to the guidelines and recommendations in Part 6 of the [Manual on Uniform Traffic Control Devices](#) when operating an elevated work platform over a roadway.

See [WAC 296-155-305\(1\)\(a\)](#)



# *FATALITY NARRATIVE*

## **Requirements**

Take special precautions to meet the requirements of local ordinances or workplace safety standards, and use warnings such as flags, roped-off areas, flashing lights and barricades when setting up an elevated work platform when other moving equipment or vehicles are present.

See [WAC 296-869-60020\(2\)](#)



# *FATALITY NARRATIVE*

## **Requirements**

Ensure all persons on the platform of boom-supported elevating work platforms wear a full body harness and lanyard fixed to manufacturer provided and approved attachment points.

See [WAC 296-869-60040\(2\)](#)



# ***FATALITY NARRATIVE***

## **Recommendations**

- Employers should provide adequate on-site supervision to ensure that employees consistently follow safe work practices.
- Perform a job hazard analysis (JHA) to identify site safety hazards and ensure that workers are protected from those hazards.

# FATALITY NARRATIVE



When a truck struck the aerial lift, the foreman was ejected from the lift's platform. Though he was wearing a full body harnesses with a lanyard, the lanyard was not attached to anything. He was thrown 50 feet horizontally, landing 48 feet below on railroad tracks.



Photo 1



Photo 2

**Photo 1** shows the laborer's lanyard attached to the handrail of the aerial lift.

**Photo 2** shows the manufacturer's provided and approved lanyard attachment point.





# ***FATALITY NARRATIVE***

## **Resources**

Highway Work Zones and Signs, Signals, and Barricades. OSHA  
[www.osha.gov/doc/highway\\_workzones/index.html](http://www.osha.gov/doc/highway_workzones/index.html)

Falls from Elevating Work Platforms. Washington State Dept. of Labor and Industries.  
[www.lni.wa.gov/Safety/HazardAlerts/ElevatingWorkPlatforms.pdf](http://www.lni.wa.gov/Safety/HazardAlerts/ElevatingWorkPlatforms.pdf)



# ***FATALITY NARRATIVE***

*This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.*

Developed by Washington State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), Washington State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 2U60OH008487). For more information, contact the Safety and Health Assessment and Research for Prevention (SHARP) Program, 1-888-667-4277, or visit [www.lni.wa.gov/Safety/Research/FACE](http://www.lni.wa.gov/Safety/Research/FACE).