


NEWPCC Secondary Clarifier #1
Examination
December 03, 2010

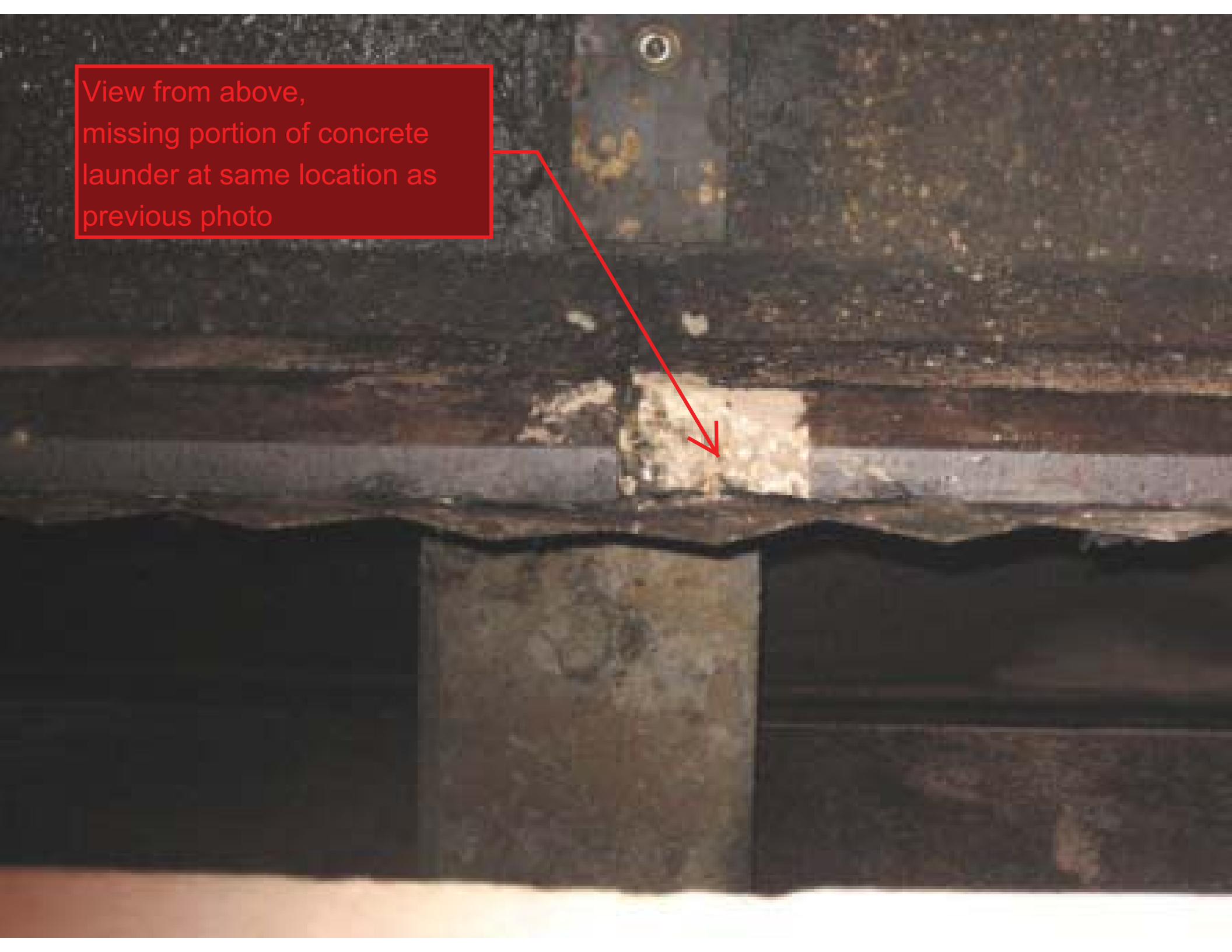






localized short circuit flow
through weir when in operation
(picture taken in October)

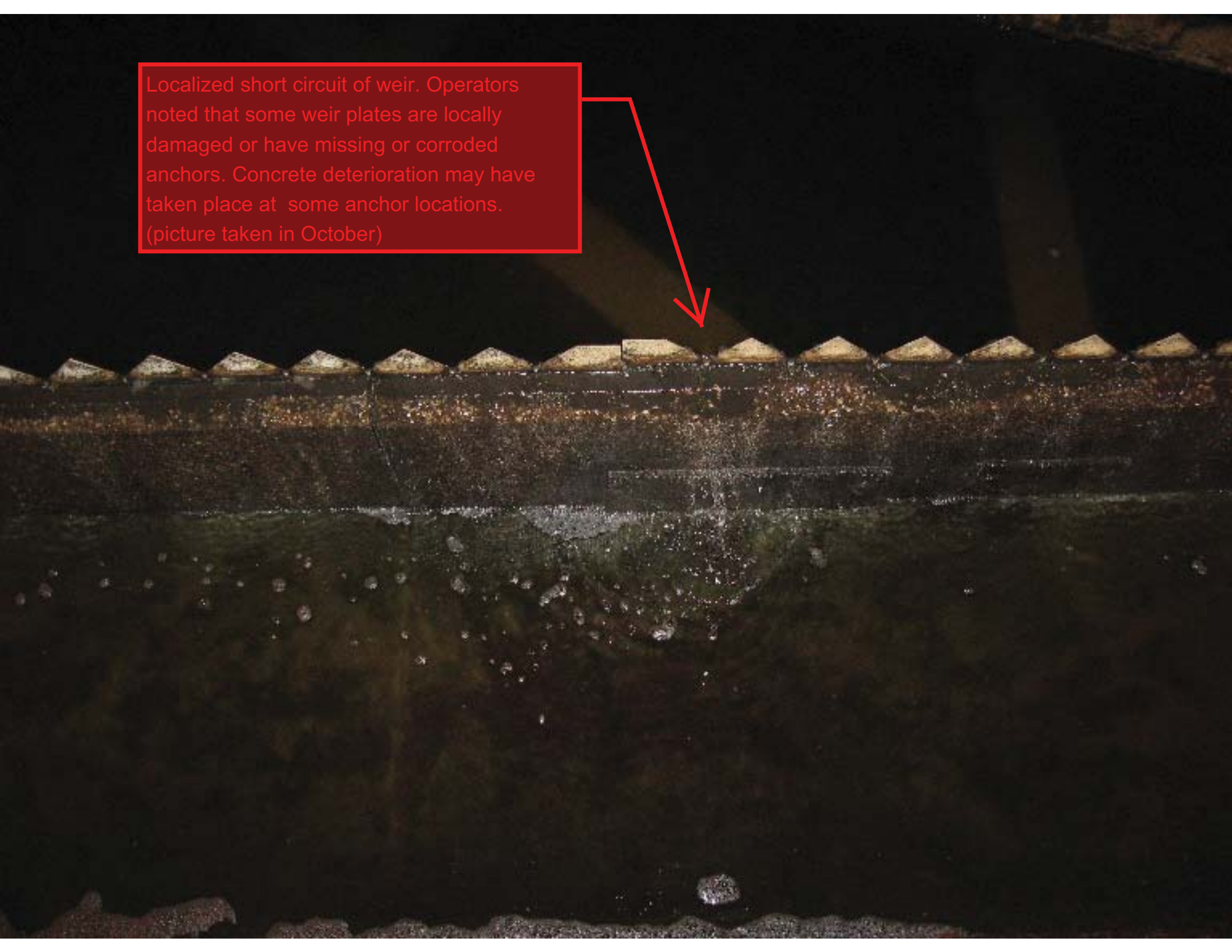
View from above,
missing portion of concrete
laundry at same location as
previous photo



laundry from below, some
exposed steel

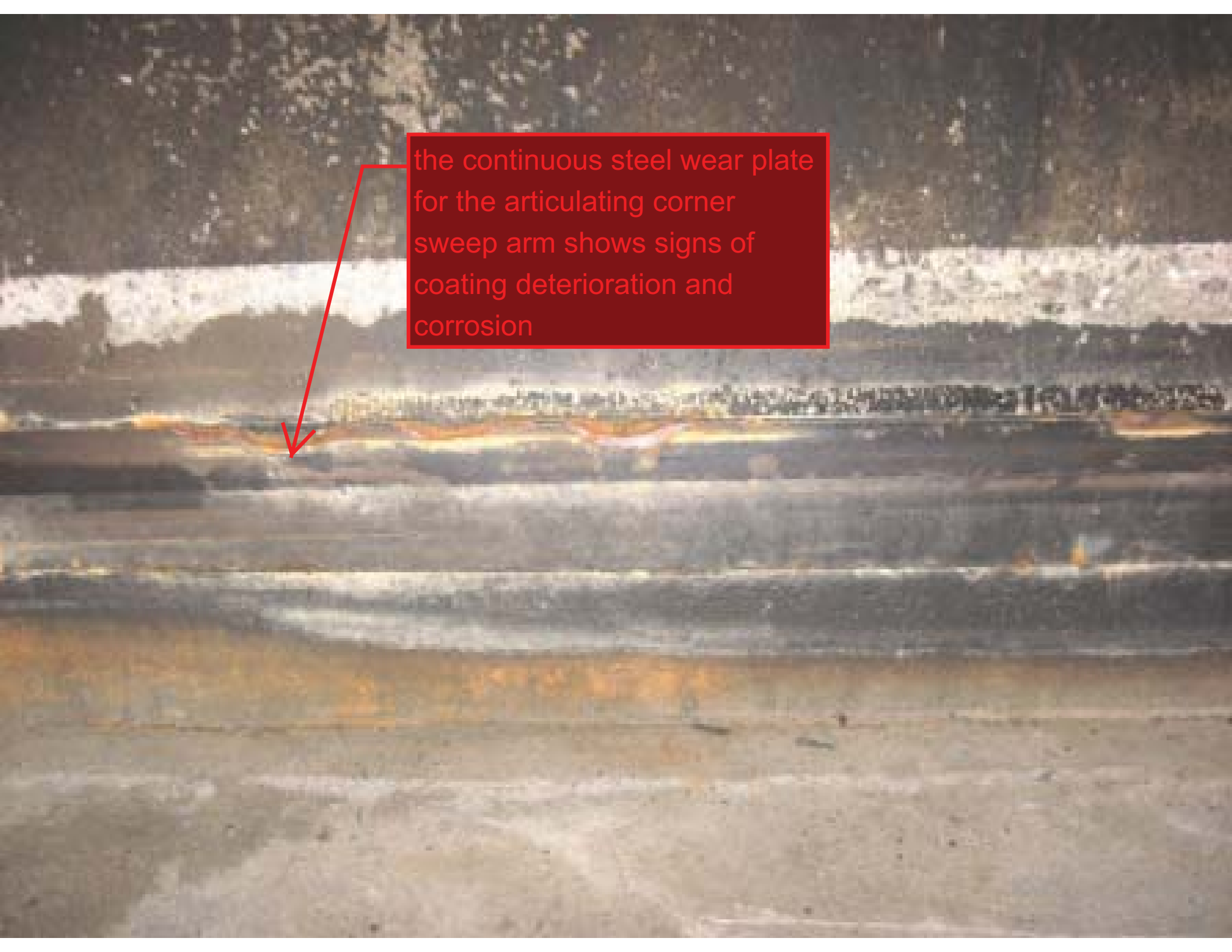


Localized short circuit of weir. Operators noted that some weir plates are locally damaged or have missing or corroded anchors. Concrete deterioration may have taken place at some anchor locations. (picture taken in October)




tar has been applied to weir plates and concrete launder





the continuous steel wear plate
for the articulating corner
sweep arm shows signs of
coating deterioration and
corrosion

A photograph showing a close-up of a corner sweep arm assembly. The assembly consists of a long, dark metal arm with a circular end piece. It is connected to a larger metal structure via a joint. A red arrow points from a text box to this joint. The background is a concrete floor with some debris.

Operators note that the corner sweep arms have a tendency to get stuck/damaged and along with counterweight system is problematic to operations and maintenance



Operators noted that the corner sweep arm wheel can move vertically off the wear plate on occasion and subsequently may get caught on the wear plate edge. It was felt that this was due to some twisting or bending of the main mechanism arm members when the corner sweep becomes stuck or damaged. Follow up repairs have not always removed all member misalignments.

coating deterioration

wear plate corrosion



previously repaired member,
realignment of all steel truss
components is not always achieved
causing corner sweep arm
misalignment on wear bar in places





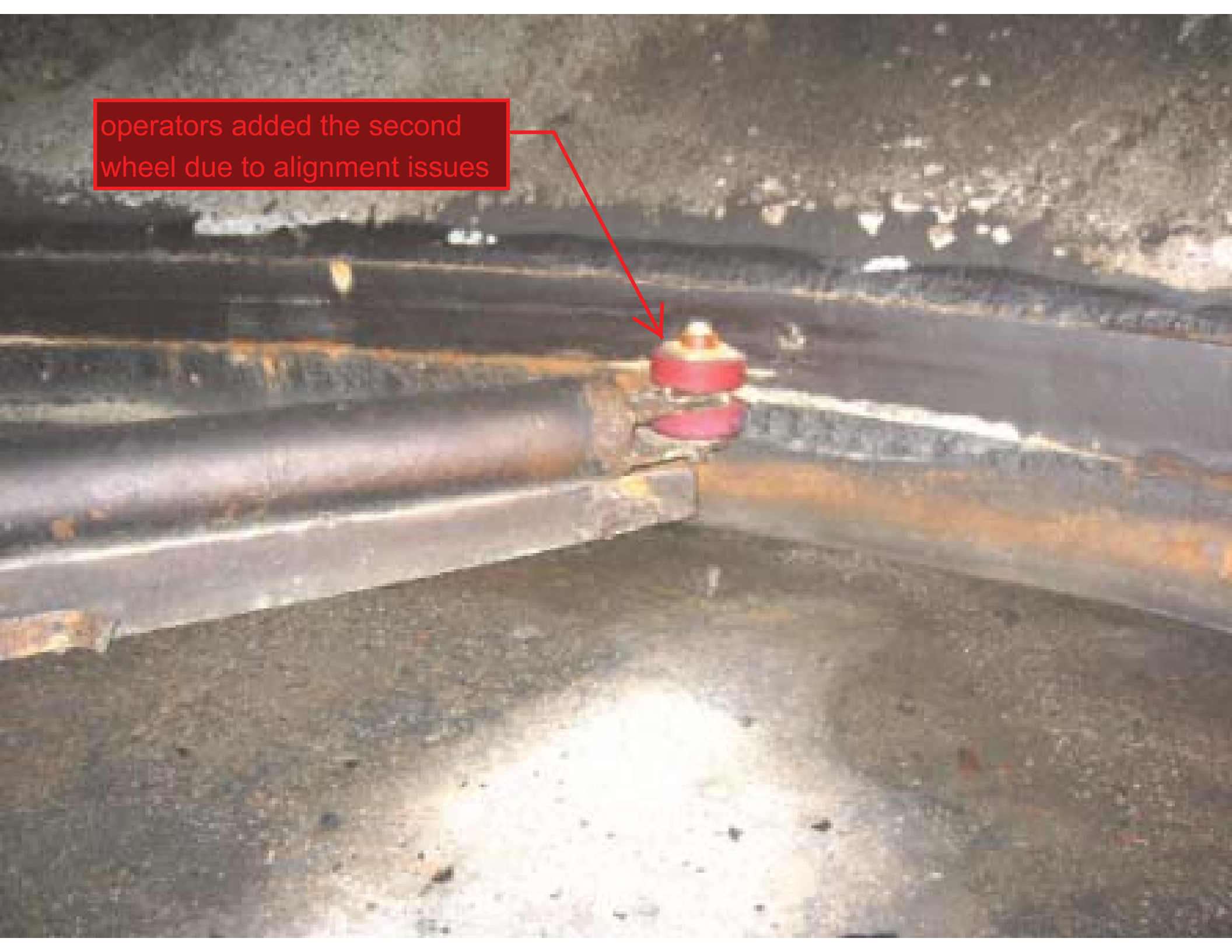
bent counterweight cable
attachment plate





wear plate corrosion through to concrete

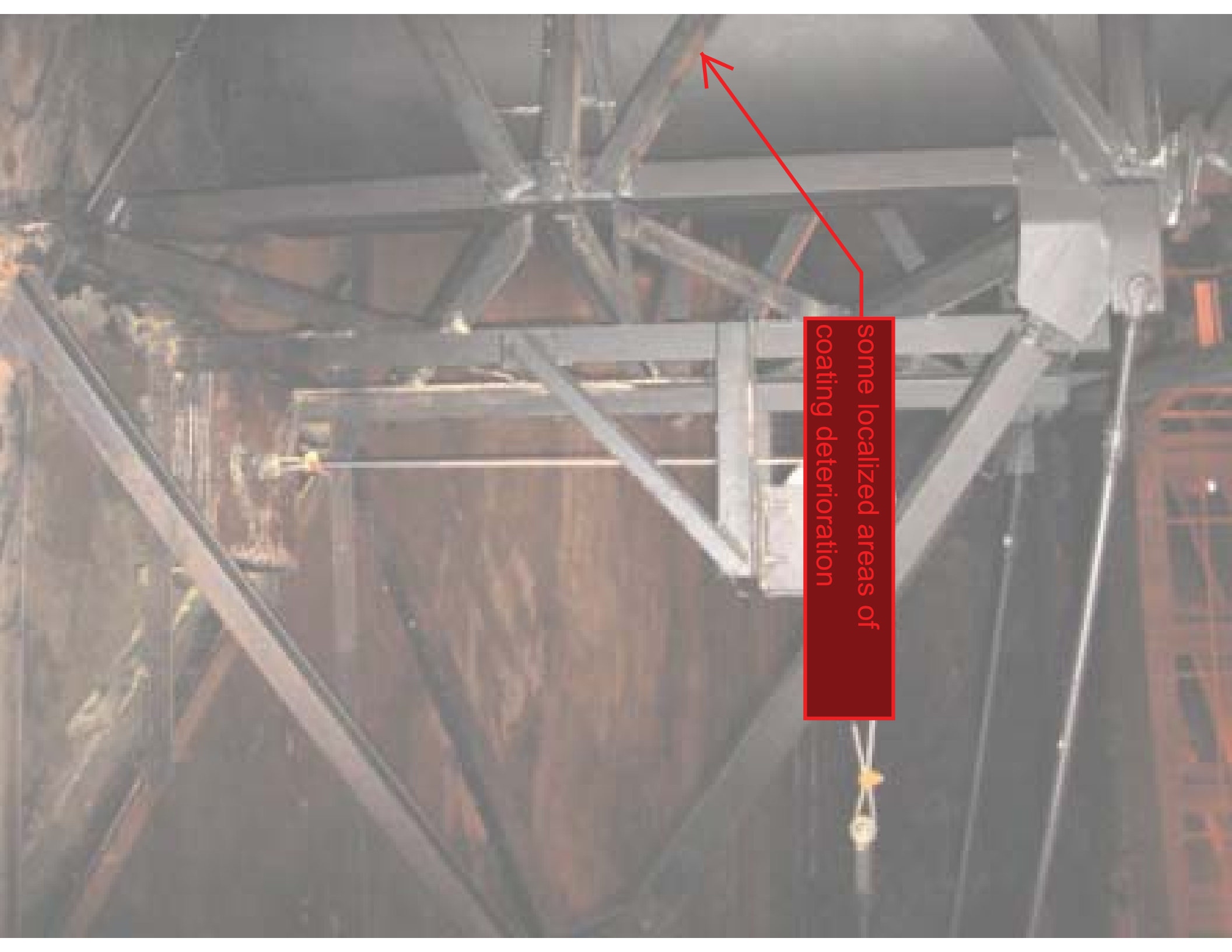
operators added the second wheel due to alignment issues



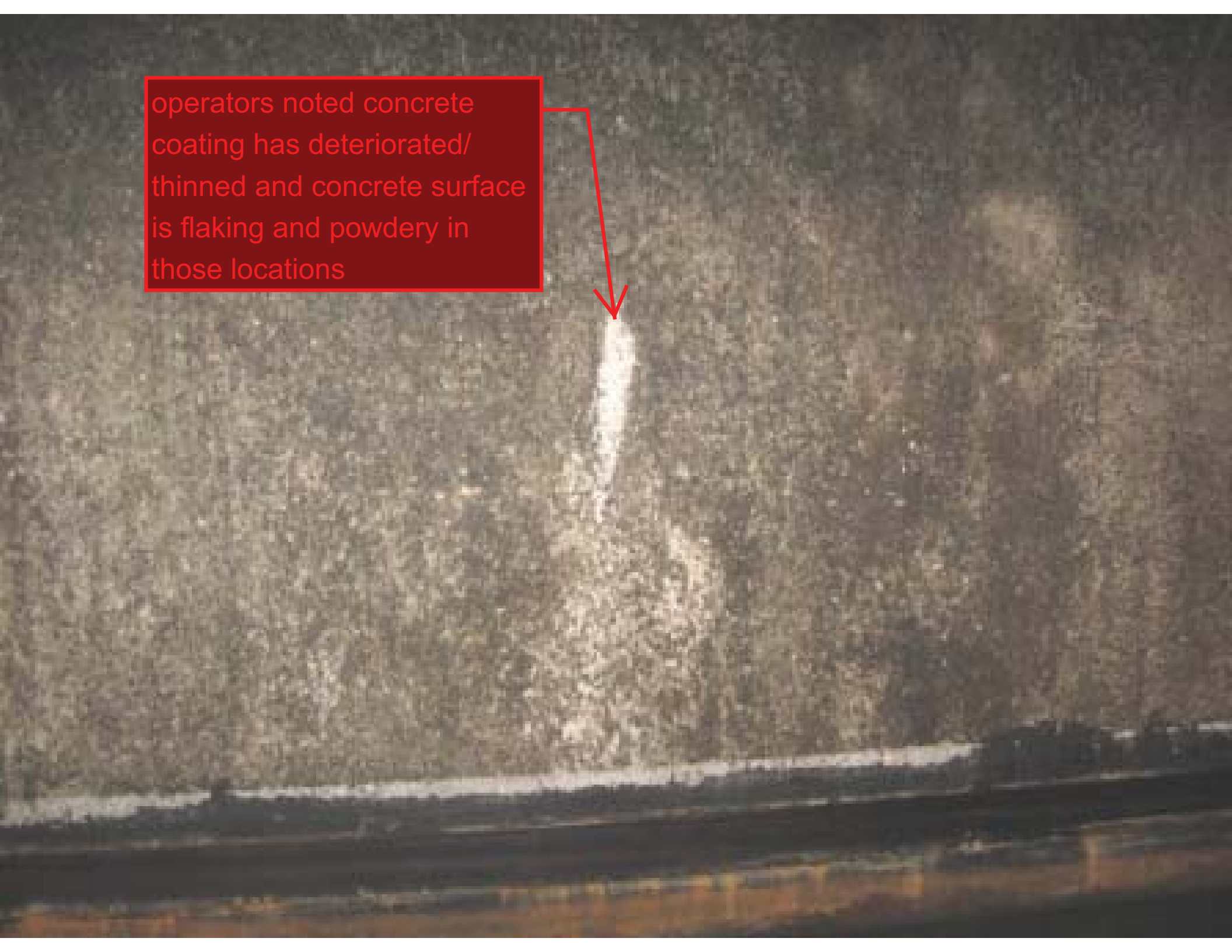
operators suggest that all
mechanism arm steel members
be sandblasted and re-coated



some localized areas of
coating deterioration



operators noted concrete coating has deteriorated/ thinned and concrete surface is flaking and powdery in those locations



operators noted concrete coating has deteriorated/ thinned and concrete surface is flaking and powdery in those locations

