

(E2.1 Bridge) REPORT No. 415 VIADUCT EXTERNALS N & S DATE: 09.01.14 TO 28.01.14

The annual inspection of both the North and South Viaduct Externals was carried out intermittently between the above dates and the general findings were as follows:

<u>Paintwork:</u> The paintwork throughout the north and south remains generally in a satisfactory condition, however, it should be noted that there is significant paint breakdown evident on the edges of the outriggers and the cycle-track kerb plate with areas of medium corrosion now evident.

Cycle Track/Carriageway Viaduct Deck Soffits: It should be recorded that no work has been carried out on the above. All defective spalled areas on the North East cycle track were removed as recorded by bridge inspectors in 2010. This was to reduce the possibility of loose spalled areas of concrete falling to the ground thus removing all risk of the general public being injured; treatment to corroding exposed reinforcement bars is required before the concrete repairs are carried out. Works to remove defective areas were not completed on the North West cycle track, therefore spalled areas remain and require to be removed and repair works carried out. The implementation of a program of works requires to be considered.

South: Generally the Cycle track/Carriageway viaduct deck soffits remain in a satisfactory condition.

<u>Viaduct Piers:</u> All viaduct piers remain in a satisfactory condition with previously recorded areas of spalling repaired by contractors during the bearing replacement program. Also carried out during the bearing replacement programme was the carriageway drainage system detail located on the viaduct piers & the pier tops. All rainwater carried from the road surface drainage manholes is now conveyed through an external rain water drainage system located on the pier legs.

<u>Viaduct Bearings</u>: All viaduct bearings and strengthening corbel blocks remain in a satisfactory condition with slight venular cracking evident on the finished surface of the concrete.

<u>North & South Abutments:</u> Previous inspections have recorded staining and discolouration and scouring evident on both the north and south abutment wall faces. Carriageway road surface water & road grit was being carried through the carriageway road surface expansion joint. Since the previous inspection a new external rainwater drainage system has been installed to eliminate this problem.



Box Girder Access Hatches: Box girder access side hatches located on both North & South girders still have temporary tube & fitting protection in place. On the last report it was suggested that this be removed and a permanent installation be erected, this has not been actioned to date.

Redundant Platform Steelwork: Located at box girder sections 44 & 44x there are two redundant platforms which were formerly used to access/egress to the viaduct gantries which was noted on the last report and require to be removed.

North Abutment Barrier/Handrail (West Side): It has been recorded previously, as far back as 2004, that the barrier/handrail is severely corroded and many of the posts now have holes and/or completely severed at the bottom of the post. And individual report was submitted to the ESM to review this matter, but to date no progress has been made to refurbish or replace this barrier.

Bridge Inspectors:



INSPECTION DEPARTMENT

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