PROJECT FILE:

Bridge Access Applications:

Newark Dyke Rail Bridge: Underdeck access platform for bridge construction and maintenance.



The fully modular Steel 3D Truss Frame platform supplied by ALPS & used during the construction of the Newark Dyke Bow String Rail Bridge had dimensions of 14.64M X 4.88M.

The platform capacity was 7000Kgs to include the weight of the new Cross Girder, generator and work force. The platform was powered vertically with a combined lifting capacity of 24-Tons and powered horizontally at a speed of 9mpm using the ALPS "Pull-Wire" system.



The new cross girders were placed onto the platform by crane at a designated loading position, the platform was then traversed out over the river to the required installation location. The platform was then raised to align the cross girder flange with the longitudinal girder flange and the connection made.

The empty platform was then lowered to return for the next cross girder.



In order to monitor all loads placed onto the platform 4 no. custom made digital read out strain gauges were installed replacing the hoist anchor pin.

Prior to the installation of the temporary access platform, support runway beams were examined and proof load tested.

Once the bridge was completed the platform was removed and re-installed with new dimensions of 14.64M X 1.22M.

This was used to inspect the completed bridge and perform minor snagging works.