BRIDGE CONSTRUCTION FOR LITTLE BYTHAM

Part 2 – Painting & Weathering

By David Wager

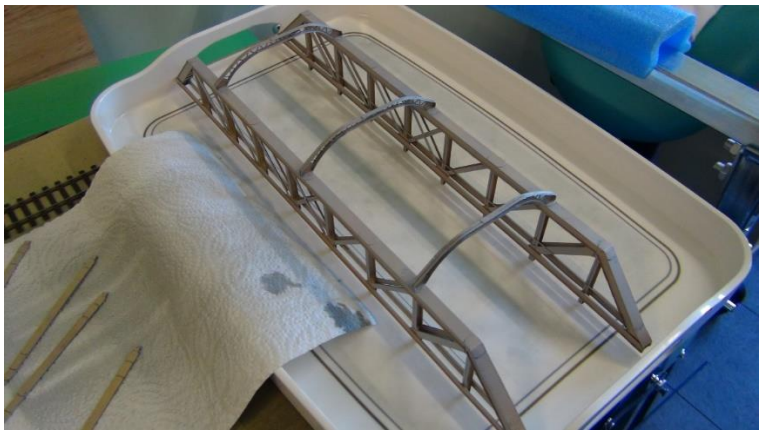
Painting could be started following completion of top cross brace to truss soldering, and a jolly good clean up. The remaining sub-assembly parts consisting of below deck cross members, smoke deflectors and hangers would be glued into place.

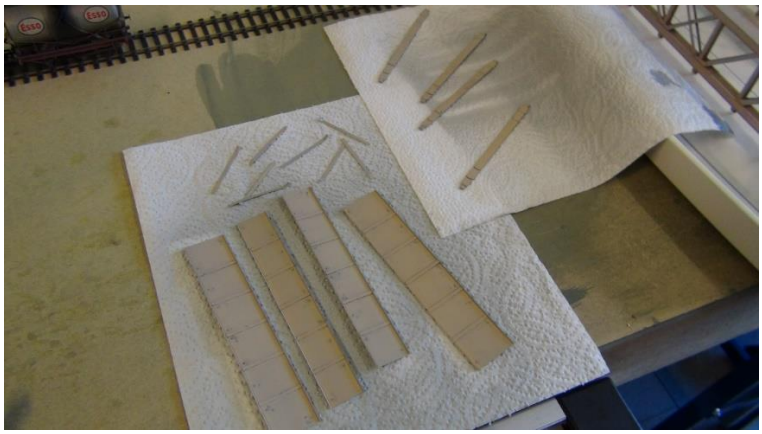
Etch Primer

All parts were sprayed with a Pheonix Precision grey etch primer using the 'Ian Rathbone' mix of:

2 parts **thinner** (PQ2) + 1 part cellulose **thinner** + 1 part paint **primer** (PQ31A)

Needless to say the 'best' air brushes <u>were not</u> used for this!





Painting of the trusses and sub-assemblies

A primer coat was applied, followed by a top coat mix to get the desired colour. This was an acrylic based application (with a better air brush!)

Primer (neat application) – Vallejo surface **primer** Grey 74.601

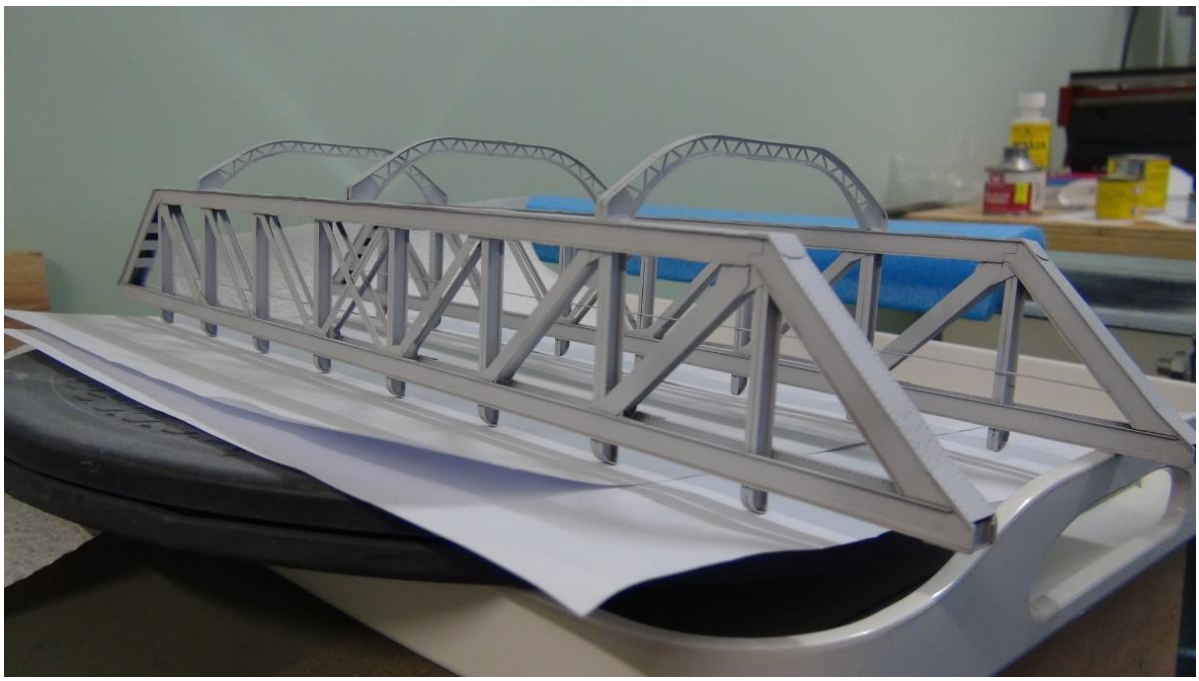
Top coat mix in air brush cup:

8 drops Ultimate airbrush **thinner** +

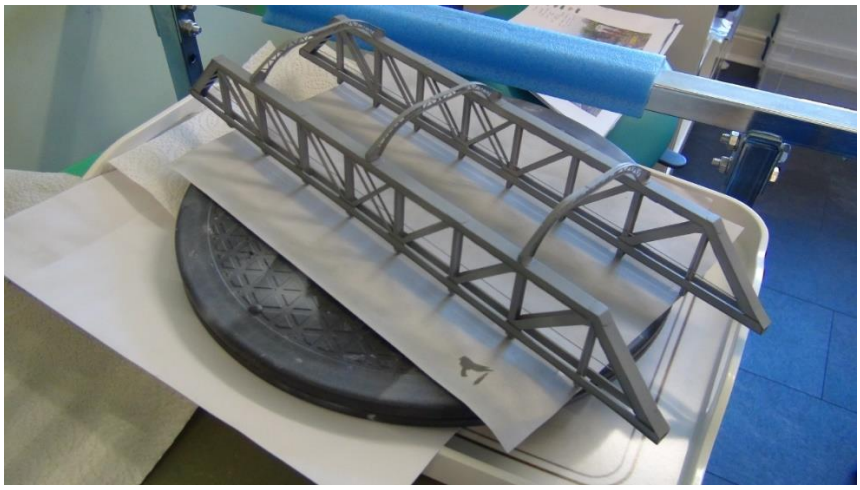
12 drops AK Interactive Battleship Grey **paint** AK 2284 +

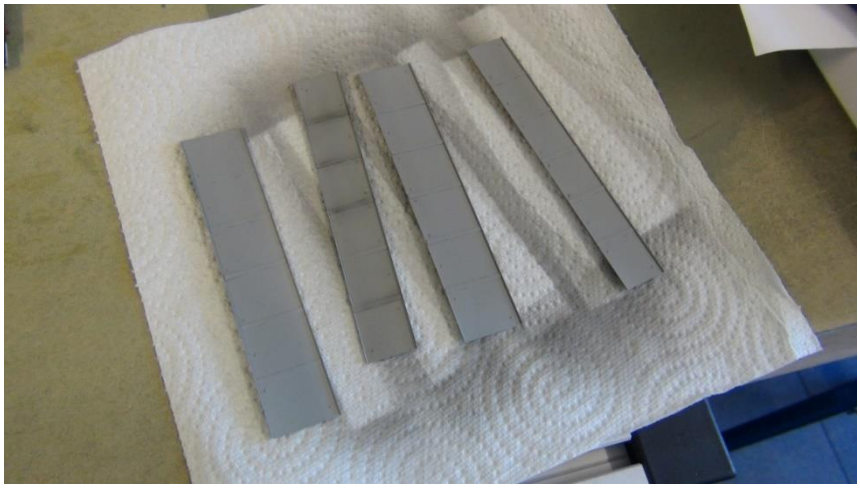
2 ½ brush fills of Railmatch Flint Grey **paint** 2245

Primer applied



Top coat applied





Painting and weathering of the deck and connector strips

The original deck was reused but needed to be painted and weathered, plus some additional parts constructed from styrene sections to enable a realistic connection between the deck and the bridge trusses. These were made to represent painted steelwork (possible coated with pitch) on either side of the deck plates. Quite a lot of different paints and pigments were needed to achieve a realistic result.

First the underside of the deck was sprayed with Life Colour Weathered Black **paint** UA723

Then pigments were applied to the deck to represent rust and coal dust

Abteilung 502 ABTP023 Black Smoke **pigment**

Abteilung 502 ABTP414 Track Rust **pigment**

And the sleepers hand painted using Life Colour Sleeper Grime **paint** UA701

The surface was then toned down and the colours blended using

Abteilung 502 ABTP039 Urban Industry Dirt **pigment**

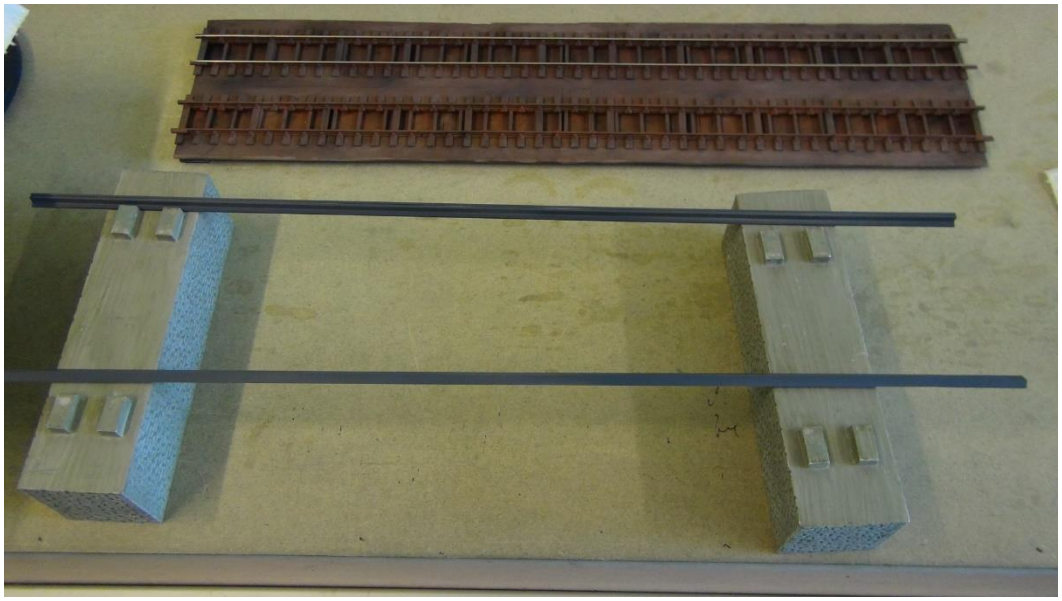
Initial deck weathering complete. Note that one track was not in use hence heavily rusted relative to the other.

Next was painting of the white styrene connector pieces

First preparation of the surface with Testors Dullcote

Then primer (neat application) – Vallejo surface **primer** Grey 74.601

Followed by top coat (neat application) – Vallejo Dark Grey Blue 71.054



Rusting of the steelwork

The ‘chipping fluid’ technique was used for this, but with a variation on how the rust and patches were applied. For the trusses which have a large area and relatively little rust, patches were selected and photographed so the whole area did not require the treatment.

The smaller components were fully sprayed

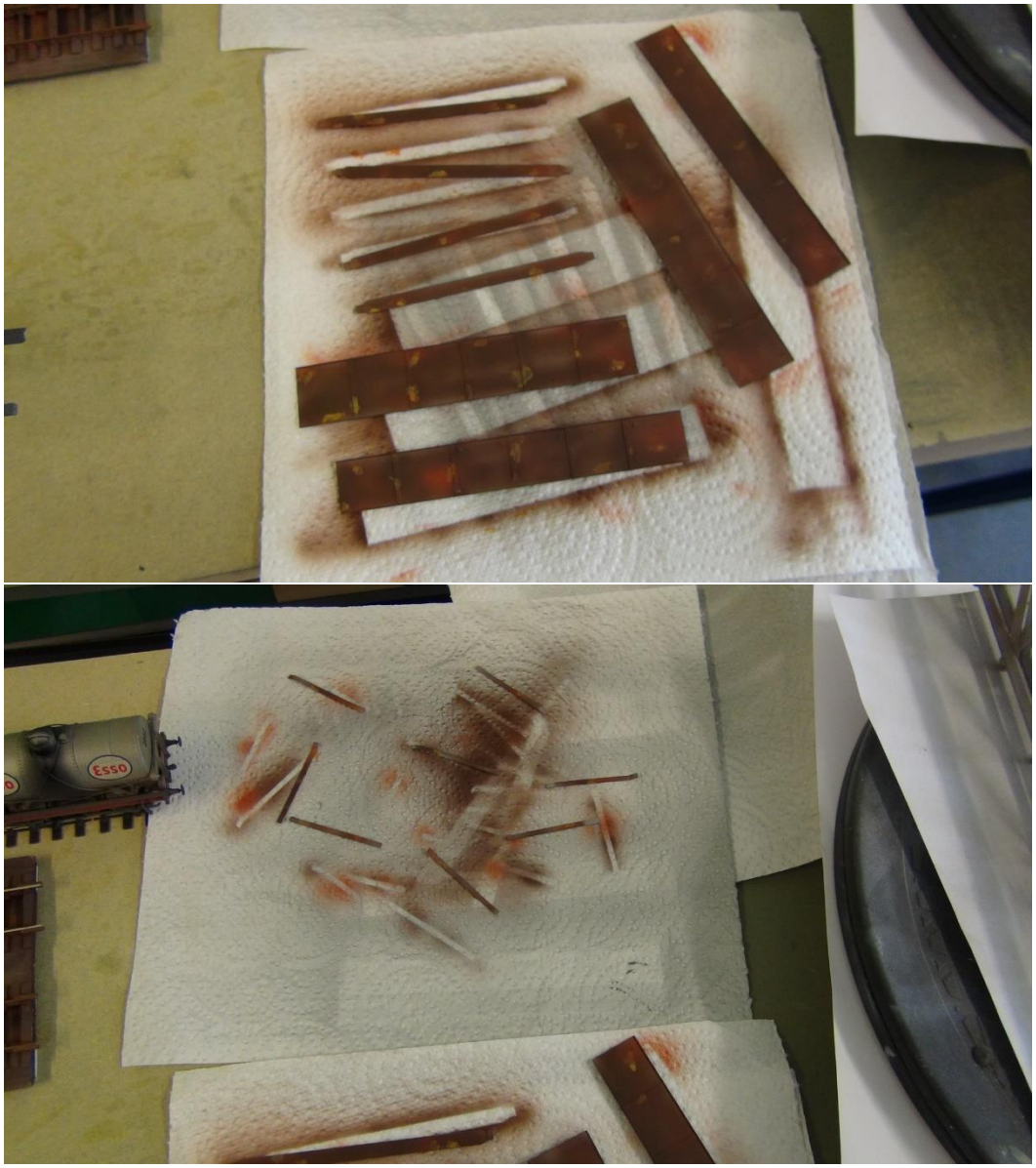
First, patches of rust colours in sequence applied:

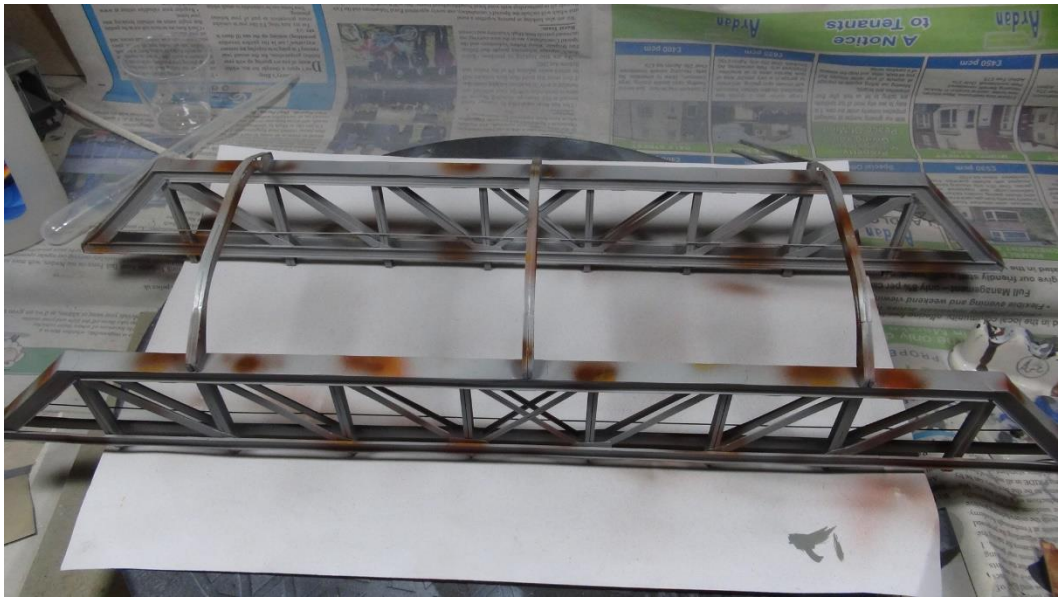
a) MIG 0042 Old Rust - Airbrushed

b) MIG 0041 Dark Rust – Airbrushed

c) MIG 0040 Medium Rust and MIG 0039 Light Rust mixed in a palette and hand painted

The resultant coatings and patches





Chipping method

a) 2 thin coats of Klear (now Pledge revive it), airbrushed over the rust to help protect the rust coating during the chipping process. Left overnight to dry.

b) MIG Heavy Chipping Effects AMIG 2011 **fluid** airbrushed over the rust (3 medium coats). Left to dry for between 40 minutes and an hour

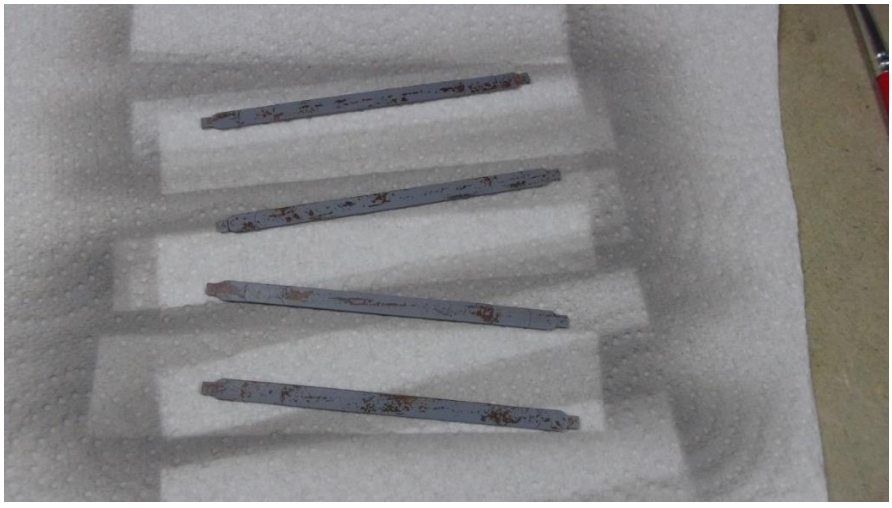
c) Airbrush a grey top coat (same as above) again, to cover the rust colours completely. Left to dry for between 30 and 40 minutes

d) Use the stippling brush dipped in water to chip away at the top coat until the desired rust effect is achieved

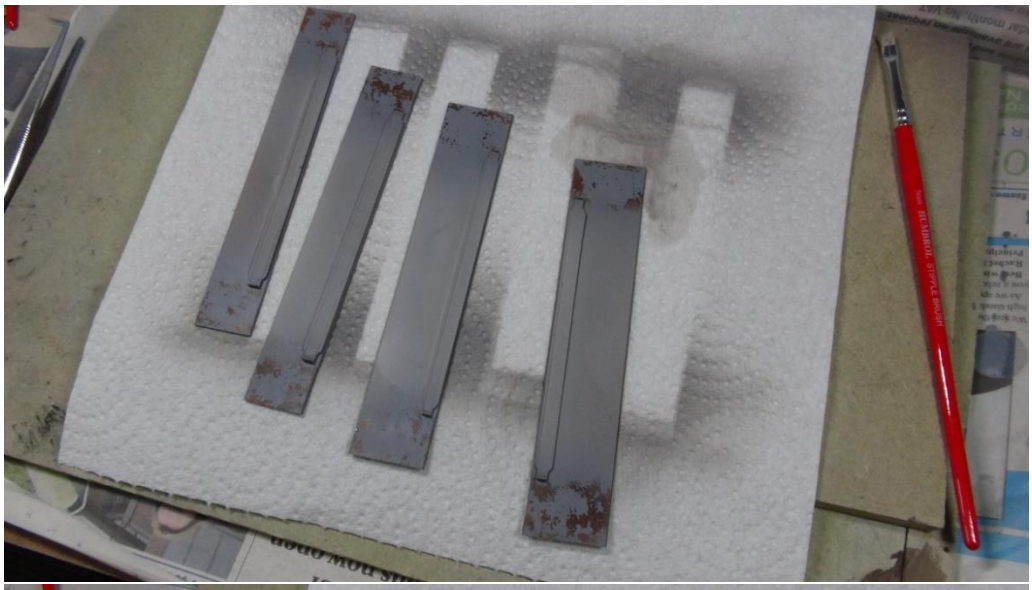
Clearly with many components and large areas, this process has to be done in stages (not one shot), as the top coat will be near impossible to remove when it is too dry.

This is the result:

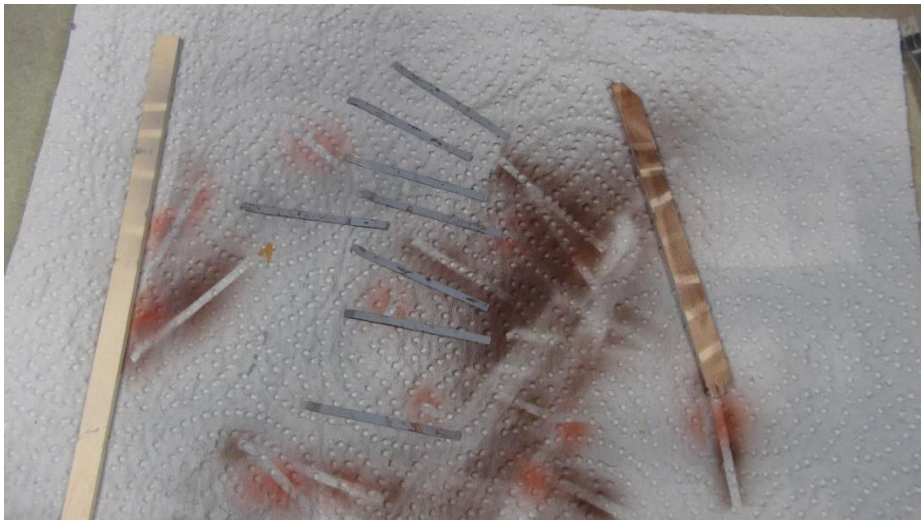
Cross beams



Smoke deflector plates

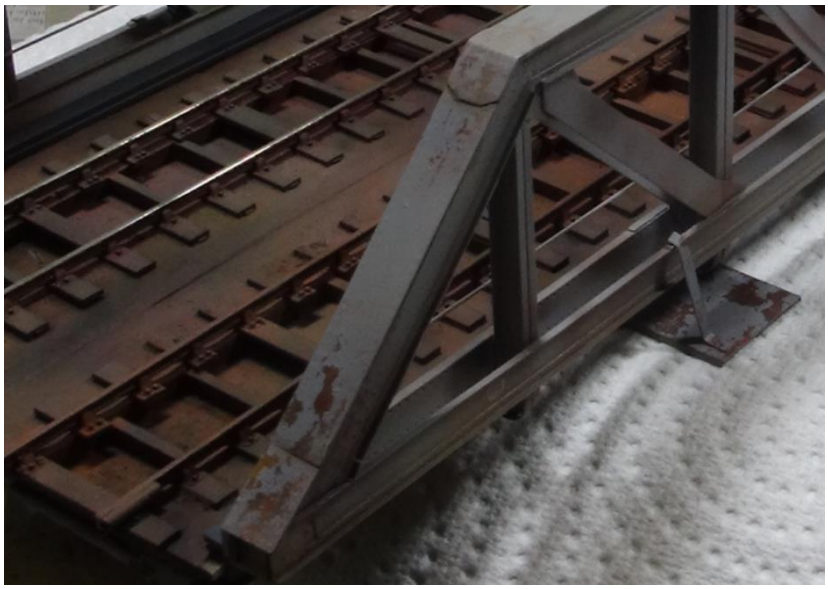


Straps



Truss assembly

Parts assembled



Finishing Touches

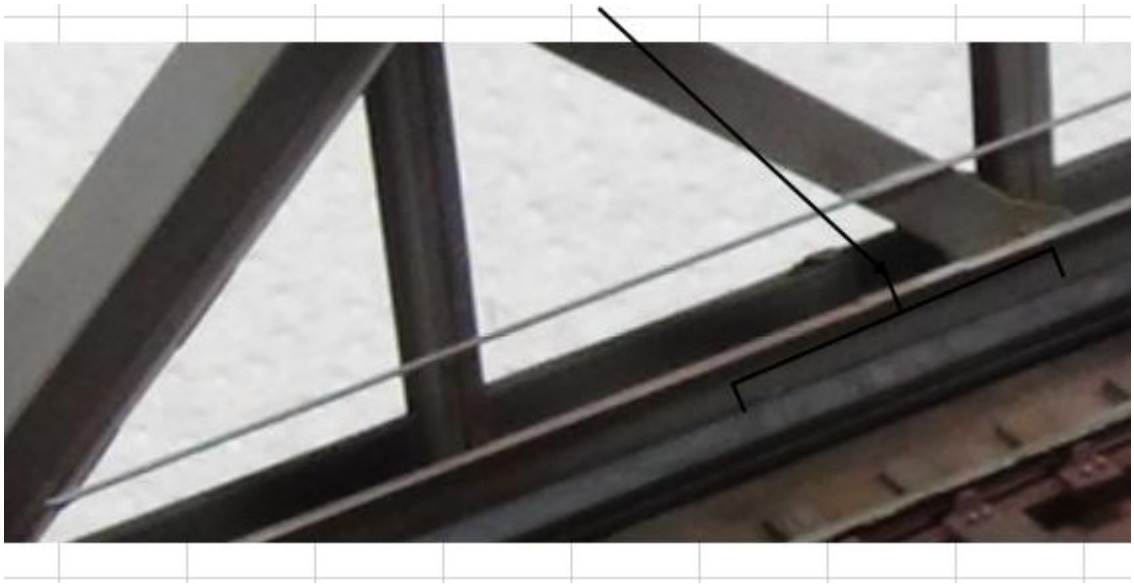
After assembly final weathering was done.

The bridge deck to truss connectors. Weathered to represent accumulated dirty rain water and staining

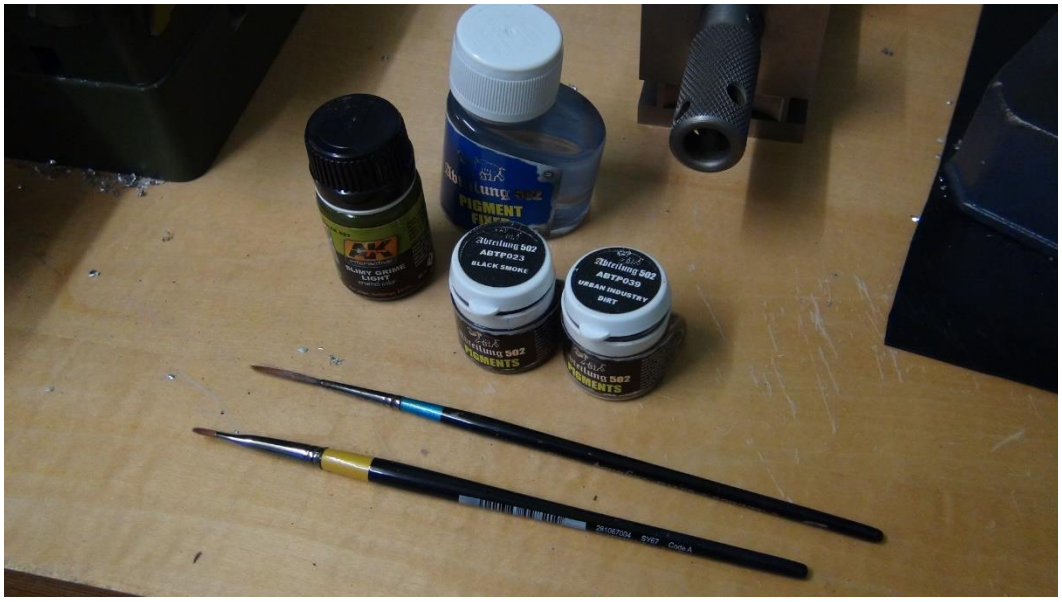
A MIG 1602 PLW Deep Grey **wash** followed quickly (before the wash was dry) with

AK Interactive Rainwater Marks for Nato Tanks AK074

Giving this effect



Deck Grime and Dirt



Black Smoke and Urban Industry pigment + Abteilung 502 **pigment fixer** > variable mix applied to the deck to represent dirt / grime accumulation

AK Interactive Slimy Grime Light AK 027 **wash** to represent moss and damp areas

Giving this effect

Finally, the effect of smoke by passing trains both over and under the bridge, especially around the smoke deflectors and the top cross braces. Plus a very light dusting over the remainder of the steelwork. This was airbrushed using

Life Colour Weathered Black UA723 **paint**

Some more pictures of the finished bridge

Thanks to Tony Wright and Jamie Guest for giving me the opportunity to learn new skills throughout the process of constructing this bridge. Great to see it on the layout.