

HISTORIC CATEGORY

Bawdsey Radar Transmitter

FELIXSTOWE, SUFFOLK, ENGLAND

SUBMITTED BY CONCRETE RENOVATIONS LTD.

In 1936, the world's first operational radar transmitter was put into service at RAF Bawdsey, Suffolk, England and has played a pivotal part in the Battle of Britain and ultimately helped to change the course of world history. The Bawdsey Radar array consists of 4 main receiver masts and a transmitter block which is surrounded by 13 ft (4 m) high concrete blast walls with 4 ft (1.2 m) toe and earth banks to the outside elevations. The timber

walls to fall into a state of serious disrepair, leaving much of the top layer of reinforcement exposed to the elements. The restoration plan was to create a long-lasting repair to the concrete blast walls without changing their appearance. In other words, being a National Heritage Site, major structural repairs were completed with products that did not alter the appearance of the 1930s concrete.



Specifically, concrete repairs were modified using colored mortars and washed aggregates to simulate the color of the original concrete. Day joints and shuttering board marks were incorporated into the concrete surface to reproduce the original construction techniques. The 80-year aging process was simulated by flashing the repair surfaces with a fine grit-blasting media. Finally, a migrating corrosion inhibitor and an impregnation cream were installed as part of the 25-year maintenance plan.

masts have long since gone, but the transmitter block is now part of the Bawdsey Radar Trust. Funds were raised by the Trust and the transmitter block is due to be opened to the public in Fall 2017 as a museum and visitors center.

Due to the secretive nature of the work carried out at RAF Bawdsey, little or no maintenance work was performed since the transmitter was taken out of service after WWII. This allowed the concrete blast



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SUBMITTED BY

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OWNER

Bawdsey Radar Trust

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PROJECT ENGINEER/DESIGNER

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REPAIR CONTRACTOR

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MATERIALS SUPPLIER/MANUFACTURER

Remmers UK Ltd.

Crawley, West Sussex