

Audubon High School Grandstand

Audubon, New Jersey

ARCHITECT – Garrison Architects, Bala Cynwyd, PA
STRUCTURAL ENGINEER – Orndorf Associates, Ardmore, PA
RESTORATION CONTRACTOR – JTB Masonry, Inc., Hatboro, PA

**Concrete Repair
and Protection**
Winter 2004 – Spring 2005

PROJECT TASK

This historic high school grandstand required significant repair and protection to extend its useful life.

PROJECT SOLUTION

Repair spalling concrete, resurface and install protective wear surface.

PRODUCTS

ECB, Conpro Set, Conpro Primer, Conpro One Shot 2C, Color Coat, Elastideck, Super Color Stain HR



Top three photographs and bottom left are "before" and "during"; the bottom center and right were taken after the work was completed.



PROJECT HISTORY

Audubon High School grandstand was built in 1936. The cast-in-place concrete structure served the school well through many championship seasons. Physical wear, corrosion of steel reinforcing, deicing salts, acid rain and freeze/thaw cycling all played a role in the spalling and deterioration of concrete surfaces. Water consistently leaked into storage and concession areas under the grandstand. The architect, structural engineer and school district formulated a repair strategy designed to restore the structural elements,

update the appearance and incorporate protective measures to extend the useful life of the stadium. Two other significant considerations were budget and the need to have the facility ready for the May 2005 graduation ceremony.

Extensions to widen each of the steps on the main stair aisles were poured to bring them up to current code. Conpro Primer was applied first to the existing concrete to improve adhesion. The bleachers were cut back along these aisles to accommodate the new, wider stairs. The lowest treads

and risers were filled with concrete to make a doublewide tread area for wheelchair use.

Once the repairs and reconfiguration was complete Elastideck and Super Color Stain HR system was used on the treads and risers of the seating area to prevent water entry and provide an attractive wear surface.

Color Coat was used to coat the soffit (underside) of the grandstand, the concrete columns supporting the grandstand, and the various knee walls and vomitory (openings into the seating area) walls around the grandstand.