

WIRE MESH REINFORCEMENT EMBEDDED IN SLAG CONCRETE

PAVEMENT FOR 35 YEARS, ENTIRELY FREE OF CORROSION

A very convincing bit of evidence supporting our contention that blast furnace slag concrete does not cause corrosion of embedded steel, was revealed in a recent examination of specimens taken from a slag concrete pavement constructed in 1923.

When Mr. R. O. Dierker, President of the Duquesne Slag Products Company learned that sections of the pavement were being broken up to permit construction of a new and wider pavement over an improved alignment, he secured several specimens of concrete with embedded wire mesh. In every instance the steel was bright and unaffected by its long service.

Photo of the section which he furnished the Association as a memento, as well as a job report, provide the material for this Master File Release.

---E. W. B.

January 29, 1959

Distributed by

National Slag Association  
613 Perpetual Building      Washington 4, D. C.

# DETAILED REPORT

of

## SLAG ROAD

Completed year 1923.

Name of road or street Monongahela Pike, Eighty-four section, Sta 29+05

Location (between what points) Clekey and Dummingsville, Pa. 505+56

State of Penna. County Washington City \_\_\_\_\_ Township \_\_\_\_\_

Length 21506.5 Width 16' Thickness, Center 8" Edge 6"

Type of road Reinforced concrete. Course One.

What kind of wearing surface Concrete

### MATERIAL

Quantity	Size	Quantity	Size	Quantity	Size
<u>5254</u>					
<u>tons</u>	<u>1" - 2 1/2"</u>				

If concrete, what mix 1 - 2 - 3

Whose specifications Washington County Road Dept.

Engineer in charge George S. Chaney, County Road Engr., Washington, Pa.

Financed by Washington County

Cost of road per mile Price of concrete \$3<sup>37</sup> per square yard.

Weather conditions during construction \_\_\_\_\_

Kind of traffic all kinds.

Volume of traffic (heavy, light, medium) Heavy.

Present condition of road \_\_\_\_\_

Contractor Conner Construction Company,

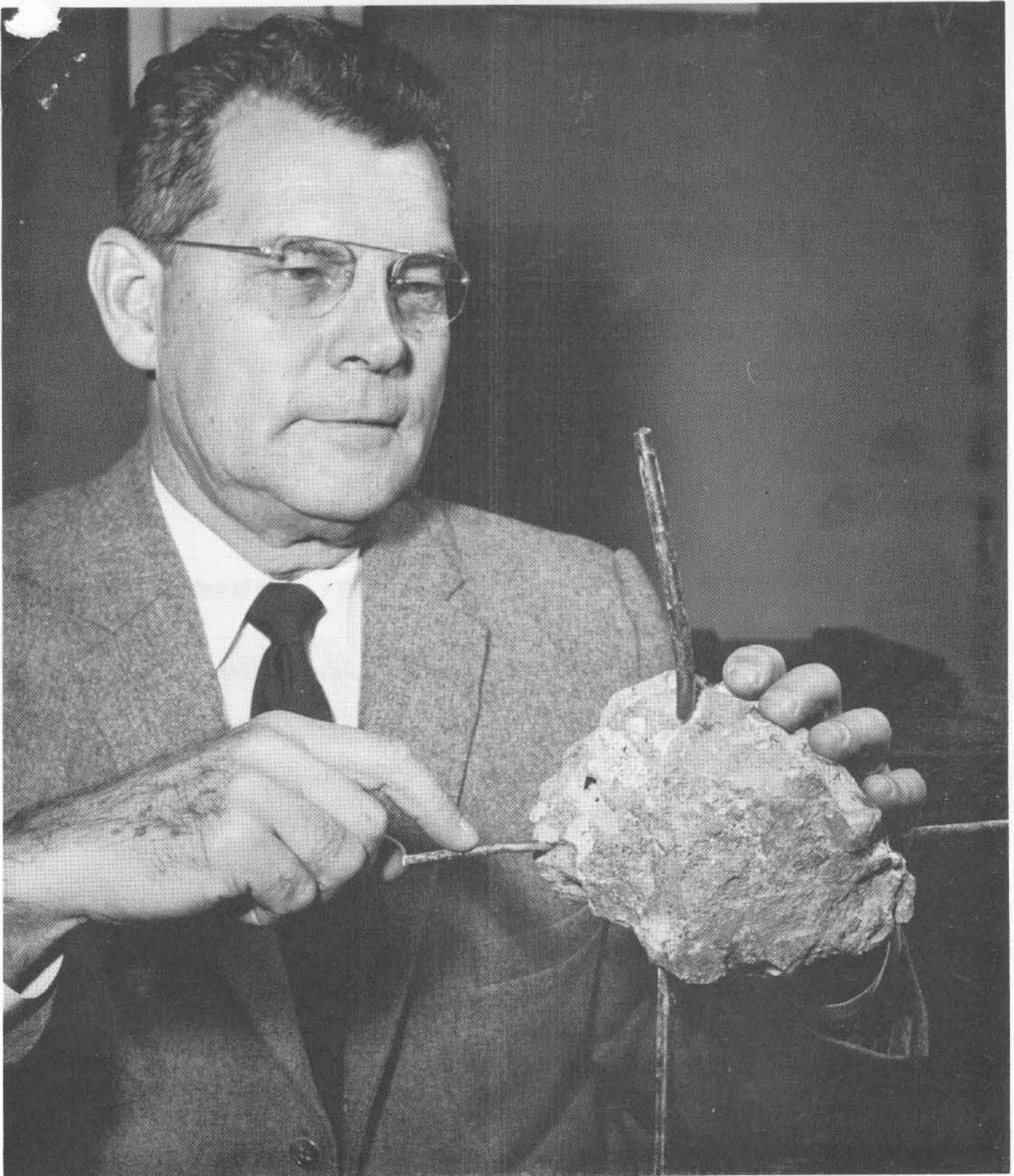
Address Fayette City, Penna.

Comment on details of construction or items of interest Pennsylvania State Highway

Inspection on work.

Subsequent reports as to condition and repairs Oct. 1927: Road in good repair.

No broken edges, no ravelling at joints; some little scaling on surface and a few surface holes. A number of transverse cracks. Heavy traffic.



E. W. BAUMAN, MANAGING DIRECTOR, NATIONAL SLAG ASSOCIATION, POINTS AT REINFORCING STEEL EMBEDDED IN SLAG CONCRETE WHICH WAS TAKEN FROM A CONCRETE PAVEMENT CONSTRUCTED IN 1923 FOR WASHINGTON COUNTY ROAD DEPARTMENT, WASHINGTON, PENNSYLVANIA. AFTER 35 YEARS IN SERVICE, CARRYING A HIGH VOLUME OF TRAFFIC ON PENNSYLVANIA STATE ROUTE 31 THE EMBEDDED REINFORCING WIRES WERE FOUND TO BE "BRIGHT AS A DOLLAR" -- EVEN FREE OF MILL SCALE -- THUS PROVIDING EVIDENCE, BEYOND QUESTION OF A DOUBT, THAT SLAG CONCRETE IS NOT CORROSIVE TO METALS. AT THE TIME THE SPECIMEN WAS OBTAINED IN 1958 CONDITION OF THE SLAG PAVEMENT WAS EXCELLENT AND WAS TORN UP ONLY BECAUSE RELOCATION OF PRESENT SITE WAS INVOLVED. NOTE REPLICA OF ORIGINAL REPORT PERTAINING TO CONSTRUCTION DETAILS, DATE & LOCATION, CARRIED ON REVERSE SIDE HEREOF.