

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Complaint Docket No. 18925

BOROUGH OF HOMEWOOD AND BOROUGH OF BIG BEAVER  
v.  
PENN CENTRAL TRANSPORTATION COMPANY, DEPARTMENT OF  
HIGHWAYS OF THE COMMONWEALTH OF PENNSYLVANIA,  
PENNSYLVANIA TURNPIKE COMMISSION AND COUNTY OF BEAVER

O R D E R

BY THE COMMISSION, JUNE 17, 1974:

This matter is before us upon formal complaint filed by Boroughs of Homewood and Big Beaver, in Beaver County, on May 6, 1970, alleging of dangerous conditions existing at the lengthy viaduct structure which carries an unnumbered public highway (old Traffic Route 18) above the grade of three tracks of Penn Central Transportation Company and the Pennsylvania Turnpike, and connects the two boroughs. The complaint was sustained by prior order of this Commission issued August 23, 1971, which order directed the parties responsible for maintenance of the structure to conduct in-depth inspections and to report the findings thereof. Hearing upon the findings and recommendations resulting from those inspections was held on April 26, 1973. Subsequent to that hearing, a supplemental inspection of the structure was performed by an engineering complement representing all involved parties to the proceeding, including a Commission staff engineer. As a result thereof, this Commission, by Interim Order issued June 29, 1973, directed Penn Central Transportation Company to forthwith erect three-ton vehicular weight limit signs on each approach to the structure, and install supplemental supporting units at two of the most deteriorated substructure units. By letter dated November 29, 1973, this Commission was advised by the railroad company that its Chief Engineer had issued orders to commence the work directed to be done under the terms of the Interim Order.

DUPLICATE RECORD.  
ORIGINAL CERTIFIED  
TO COMMONWEALTH COURT.

At the hearing held April 26, 1973, Penn Central Transportation Company presented testimony and exhibits through S. C. Walker, Civil Engineer, whose functions with the company over the past 24 years have pertained to structures, bridges and rail-highway crossings. The company's Exhibit No. 1, identified by the witness and admitted into the record, consists of 54 sheets, including a location plan, load-rating computations, photographs and descriptions of the inspection findings as performed by the railroad's engineering forces. Based on this inspection, it is the opinion of the company's structural engineers that the bridge has reached such an advanced state of deterioration that it would not be feasible to attempt restoration to its original capacity, and recommend instead that a study be made to replace all but the spans over the railroad and the turnpike, which sections can be salvaged without excessive work. The study should investigate the economics of a combination of structure and/or earth-fill portions, as well as the possibility of realignment of the roadway to best serve traffic flow and to accommodate an existing stream and a borough street presently passing beneath the southerly spans of the viaduct.

The company's witness testified that, if so ordered by the Commission, Penn Central Transportation Company would not object to undertaking the studies and the design of a new structure to replace those existing portions requiring same. It is estimated that preliminary plans could be prepared in approximately five months time, while completed, detail construction plans would require nine months, such plans to be prepared under contract by a consulting engineering firm. The witness was clear, however, that this offer by the company to prepare a reconstruction plan does not infer any willingness on its part to absorb the costs of this work, nor to share in any degree in the performance or costs of eventual construction at this location.

On cross-examination, testimony of the company's witness indicates that visual inspection of the structure reveals that, beyond certain support beams installed in the early 1940's, little routine maintenance has been performed on the bridge by the company since its construction in 1922.

It was stated that since the type of construction involved did not lend itself well to routine maintenance, deterioration has progressed to the point that major reconstruction is suggested as the only economically feasible solution.

Department of Transportation of the Commonwealth of Pennsylvania, through H. A. Sellers, Civil Engineer in its Design Bureau, presented testimony relating to its report of an in-depth inspection of the wearing surface, expansion dams and underlying supporting elements, as submitted to the Commission by its letter of May 8, 1972. According to this report, and as amplified by the witness' testimony, a complete removal and rebuilding of the entire roadway wearing surface, expansion dams, certain concrete stringers and other supportive elements is necessary, at an estimated cost of \$32,200, to attain a safe and proper roadway for the traveling public. It was emphasized, however, that this work can be performed and will be effective, only if extensive structural repairs are made to the concrete deck and its supporting beam system, by those parties responsible for these portions.

In the opinion of the department, through study of the inspection report by Penn Central Transportation Company and through visual confirmations, it does not appear feasible nor economically practicable to attempt restoration of the majority of the viaduct. Accordingly, the department concurs with the railroad's recommendation relating to reconstruction or replacement of the deteriorated concrete spans, in which case the department's estimate for repairs to the wearing surface, at a cost of \$32,200, would no longer be applicable.

G. E. Schwartz, Bridge Engineer for Pennsylvania

Turnpike Commission, testified that his inspection report on the condition of various portions of the viaduct for which the turnpike is responsible, was forwarded to Pennsylvania Public Utility Commission in October of 1972. The conclusion reached in that report is that the three spans and supporting piers maintained by Pennsylvania Turnpike Commission are structurally sound, and require nothing beyond minor maintenance items to continue to carry legal highway loadings. The Turnpike Commission agrees to perform certain miscellaneous repair work under its continuing program of bridge maintenance, in accordance with its obligations at this location under prior Public Utility Commission orders. It has no specific recommendation with respect to portions of the structure currently maintained by others, but agrees that the recommendation made by Penn Central Transportation Company to replace the southerly spans with an earth embankment, is a feasible alternative.

President of Homewood Borough Council, A. E. DeSanzo, testified that the borough's inspection of the land-fill portion of a side ramp serving as a pedestrian walkway, revealed the fill and brick wearing surface to be in excellent condition. It is the borough's position that two structural spans comprising a part of this pedestrian way, connecting the land-fill portion with the main viaduct spans, are the responsibility of Penn Central Transportation Company. According to the witness, Borough of Homewood will not willingly agree to participate in any of the costs of restoration or reconstruction of the bridge, but agrees to continue to maintain the land-fill portion of the ramp as a pedestrian walkway.

D. H. Cunning, Mayor of Big Beaver Borough, testified that the borough has no present recommendation to make with regard to cost allocations for an improvement, but prefers to reserve any such comment until such time as a plan is prepared and presented on the record for review.

Counsel for the two involved boroughs requested for the record that all due haste be pursued in the preparation of whatever plan for improvement may be forthcoming, inasmuch as the structure in question is already limited to a three ton capacity, severely restricting use by heavy traffic, including school buses, fire trucks and other emergency service vehicles.

We have carefully reviewed the record in this proceeding, including the testimony and exhibits presented at the latest hearing, and have studied the information contained in the reports of inspections filed by the various parties. It is evident that there is full concurrence with the railroad company's statement that the existing bridge has deteriorated beyond the point where repairs are practicable, and that reconstruction or replacement is deemed advisable. The observations made by the engineering staff of this Commission confirm the improbability of effectuating a proper remedy through repairs and/or rehabilitation. It is thereby concluded that a plan, for removal of major portions of the structure, and construction of a suitable alternate form of vehicular passage must be prepared, presented on the record for approval, and construction started thereon, as soon as is practicable. All factors being considered, this Commission is of the opinion that such plans should be the responsibility of Penn Central Transportation Company to prepare, and we will so order; THEREFORE,

IT IS ORDERED:

1. That Penn Central Transportation Company, at its initial cost and expense, forthwith undertake design and location studies, and preparation of final detailed construction plans, providing for the removal of all non-salvageable portions of the existing viaduct structure subject hereof; and the construction, in lieu thereof, of a suitable alternate facility to accommodate all legal vehicular and pedestrian traffic over and across its tracks at this location; such plan to provide for the retention of the existing spans over the Pennsylvania turnpike on the northerly end of said viaduct; and, if feasible, the retention and rehabilitation of the existing steel girder spans crossing over the tracks of the company.

2. That the plan herein ordered prepared shall provide, insofar as is feasible, for roadway alignments and gradients on the southerly approach to the crossing, which will accommodate and meet the needs and requirements of all existing roadways in this vicinity, and which will provide for the reasonable free flow of traffic along such roadways; all as to be determined through consultation and cooperation with Boroughs of Homewood and Big Beaver.

3. That during the course of the design studies and preparation of the plan, Penn Central Transportation Company cooperate with all other parties to this proceeding; and to consult with those appropriate parties regarding any features of the planning or design which may affect the interests thereof; and in addition, to keep all parties and this Commission apprised of the status of the work herein ordered performed.

4. That on or before February 1, 1975, Penn Central Transportation Company submit to all parties and to this Commission a copy of the completed detail construction plan herein ordered prepared; and that following receipt thereof, this proceeding be set for further hearing upon the adoption thereof, the allocation of the costs and expenses incident to the construction and maintenance thereof and upon any other matters pertinent to this proceeding.

5. That Penn Central Transportation Company forthwith advise this Commission as to the status of work directed to be performed by it under numbered Paragraph 3 of the Commission's order in this matter issued June 29, 1973, relating to the installation of supplemental supports at piers Nos. 10 and 12 of the existing structure.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

(signed) George I. Bloom

Chairman

ATTEST:

Secretary

ORDER ADOPTED: June 17, 1974

ORDER ENTERED: