January 7, 2020

CBCA 6593-FEMA

In the Matter of CITY OF LIVERPOOL

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Charles Schexnaildre, Office of Chief Counsel, Federal Emergency Management Agency, Department of Homeland Security, Baton Rouge, LA; and Ramoncito J. deBorja, Office of Chief Counsel, Federal Emergency Management Agency, Department of Homeland Security, Washington, DC, counsel for Federal Emergency Management Agency.

Before the Arbitration Panel consisting of Board Judges SHERIDAN, LESTER, and RUSSELL.

Applicant, City of Liverpool (applicant or City), seeks arbitration over the denial by the Federal Emergency Management Agency (FEMA) of the City's request for public assistance (PA) funding in the amount of \$1,277,705 for the repair of twenty-three roads which the City argued were damaged by Hurricane Harvey. FEMA denied the City's request for several reasons, including that the City's claim for loss of useful life of its roads is ineligible for PA funding. FEMA additionally determined that the City failed to demonstrate that the claimed damage was a direct result of the hurricane, and also failed to provide adequate documentation demonstrating that the roads were not deteriorated or subject to deferred maintenance prior to the hurricane.

The parties agreed to a hearing on the written record pursuant to Board Rule 611 (48 CFR 6106.611 (2019)). For the following reasons, we uphold FEMA's determination and deny the City's claim.

Background

A. The City's PA Request

During the incident period of August 23 to September 17, 2017, Hurricane Harvey struck the coast of Texas, bringing with it high winds, heavy rains, and storm surge. The President issued a major disaster declaration for the state of Texas on August 25, 2017, which FEMA docketed as FEMA-4332-DR; Texas; Major Disaster and Related Determinations, 82 Fed. Reg. 42,691 (Sept. 11, 2017). The disaster declaration for the hurricane included Brazoria County, in which the City of Liverpool is located. As such, the City is an eligible applicant for the declared disaster.

Following the hurricane, the City submitted a request for PA funding to FEMA for \$1,277,705 for repairs to twenty-three roads damaged by Hurricane Harvey due to standing flood waters. The City claimed that the standing flood waters undermined the road base, and heavy traffic damaged the road surface due to a soft road base. FEMA denied the request, determining that the City presented no supporting documentation showing the claimed damage was a result of Hurricane Harvey as opposed to pre-existing conditions in the form of surface cracking, longitudinal cracking, rutting of the roadway, and grass intrusion. The City appealed, and, on June 25, 2019, FEMA denied the appeal.

B. <u>FEMA's Decision Denying the City's Appeal</u>

In its decision denying the City's appeal, FEMA explained that it conducted multiple site inspections and, based on its inspections, concluded that damage to the City's roads appeared to be normal age-related deterioration. FEMA also reviewed pre-disaster Google Maps Street imagery and post-disaster photographs of the roads to assess the disaster-related damage. FEMA determined that the pre-disaster photographs showed significant longitudinal and edge cracking on roads throughout the applicant's jurisdiction and that the post-disaster photographs showed more advanced damage with little or no indication of maintenance or repairs performed. FEMA concluded that, without documentation demonstrating that a routine road maintenance program was in effect prior to the disaster, the City failed to show that the damage to the roads was disaster-related.

Following FEMA's decision denying the appeal, the City filed this request for arbitration with the Board, reiterating its position that FEMA should provide PA funding for the requested road repair.

Discussion

A. FEMA's Public Assistance Policy

To be eligible for PA funds, the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. §§ 5121-5207 (2012), and FEMA's implementing regulations require that an eligible facility must have been damaged or destroyed by a major disaster. 42 U.S.C. § 5172, 44 CFR 206.223(a)(1) (2017). Additionally, FEMA's Public Assistance Program and Policy Guide (PAPPG or Guide) states that FEMA does not provide PA funding for repair of damage caused by deterioration, deferred maintenance, failure to protect the facility from further damage, or negligence. PPAPG, FP 104-009-02, ver. 3.1, at 19 (April 2018). The PAPPG also states that:

[An] incident may cause minor damage to roads that result in damage similar to that which may occur over time from other causes, such as the age of the road, traffic flow, and frequent rain. Therefore, distinguishing between pre-existing damage and damage caused by the incident is often difficult. For the repair of this type of damage to be eligible, the Applicant must demonstrate that the damage was directly caused by the incident.

When evaluating eligibility of reported road damage, in addition to evaluating how the incident caused the damage, FEMA reviews maintenance records or documentation establishing that the Applicant has a routine maintenance program. In the absence of maintenance records, FEMA reviews material purchase invoices and activity logs and inspects other sections of the Applicant's road system to confirm the performance of normal maintenance activities.

Id. at 116.

The PAPPG states that FEMA applies version 3.1 of the guide to "incidents declared on or after August 23, 2017 or, with respect to the changes made in this version, any application for assistance that was pending before FEMA as of August 23, 2017 and has not been finally resolved as of January 1, 2018." The incident at issue in this arbitration was declared on August 25, 2017.

The applicant has the burden to demonstrate that damage was directly caused by the declared incident. *Id.* After reviewing the evidence submitted in this arbitration, we cannot find that the City of Liverpool is eligible for PA funding.

B. Record Does Not Support the City's Request for PA Funding

1. Loss of Useful Life of Roads

The City did not submit a formal arbitration memorandum but did submit an expert report in support of its requested relief in this arbitration. Mr. Jim Clements, the City's expert, stated that "the City of Liverpool's streets were compromised by extended submersion following the massive rains of Hurricane Harvey" and "the only way to fully restore [the] streets would be to completely reconstruct them." He noted that standing water is among the biggest threats to the type of pavement at issue here and that, because the City's roads were submerged for five days following Hurricane Harvey, the life of the pavement was significantly shortened. However, FEMA's PAPPG states the following on the loss of the useful life of a facility:

FEMA cannot provide PA funding for the projected loss of useful service life of a facility. For example, if a road has been inundated by flood waters for an extended period of time, FEMA cannot provide PA funding for the value of the projected loss of useful life of the road due to the long-term effects the inundation might have on the road.

PAPPG at 42.

Thus, the circumstances at issue in this matter as described by Mr. Clements in his expert report involve the type of situation that is ineligible for PA funding.

2. Pre- and Post-Disaster Data on City Road Conditions

Even if the City's request is construed as one solely for damage caused by Hurricane Harvey, and not a request for funding for loss of useful life of City roads, the City's evidence does not support a finding of entitlement to PA funding. Mr. Clements, the City's expert, was constrained in his ability to determine road damage directly caused by Harvey. Specifically, he did not have the benefit of pre-disaster photographs or significant pre-disaster data from the City on the condition of the roads at issue which he acknowledged would have been helpful to his pre- and post-disaster analysis. Mr. Clements did use Google images to conduct his before and after storm analysis. Mr. Clements found evidence of accelerated street failure by comparing Google Earth images taken around November 2013

or June 2015 to photos taken on August 1, 2019. Mr. Clements noted that clay soils with high shrink-swell properties swell when wet and then shrink when dry and that such cycling of moisture variation leads to cracking of flexible pavements like those at issue here. He added that the roads in the City would have been compromised by extended inundation and saturation in the wake of Hurricane Harvey, although he admitted that the extent of damage may be difficult to quantify.

Dr. Randy Ahlrich, FEMA's expert, also attempted to determine whether the City's post-disaster road conditions were the specific result of Hurricane Harvey conditions by comparing pre-disaster and post-disaster pavement conditions. Due to the lack of any pre-disaster photographs of the roads and limited documentation showing road conditions immediately prior to Hurricane Harvey, Dr. Ahlrich, like Mr. Clements, relied on Google imagery to compare pre-disaster images of City roads with more current roadway conditions. Dr. Ahlrich opined that the City's roadway "conditions and distresses indicate that some of the post-disaster (current distresses) were influenced by pre-disaster pavement conditions." With respect to the City's submerged subgrade soils, Dr. Ahlrich explained that when designing pavement structure, designers consider wet and saturated (underwater for four days) subgrade conditions when determining pavement structure thickness to prevent subgrade deformation.

Given the opinions of both experts, we cannot find that the road damage serving as the basis for the City's claim was directly caused by Hurricane Harvey. Mr. Clements, the City's expert, admits that the extent of any damage from Hurricane Harvey is difficult to quantify. The City did not have photographs of pre- and post-disaster conditions of the roads, nor did it have any significant data on the conditions of the roads for relevant periods, diminishing the value of any conclusions that the damage sustained to its roads was directly caused by Hurricane Harvey. Further, Dr. Ahlrich, FEMA's expert, opined that pre-disaster pavement conditions were the cause of certain of the post-disaster distresses, and that pavement designers consider wet and saturated conditions of up to four days when determining pavement thickness, casting doubt upon the view that saturation of five days was incontrovertibly the cause of the degradation of the City's roads.

Mr. Clements, in his report, noted that Brazoria County uses lime treatment to stabilize road subgrade during and after construction. He opined that, because the City's roads were submerged for five days following Hurricane Harvey, lime leached out of the pavement, shortening pavement life due to destabilization of the clay subgrade from expansion and contraction. However, Dr. Randy Ahlrich, FEMA's expert, disputed that the lime treatment had such an impact. He stated that lime leaching from road subgrade is dependent upon the percentage of lime used for subgrade stabilization during road construction and that the 7% lime used for Brazoria County pavement construction would

have minimal effect on the roadways even after a five-day submergence. Thus, given Dr. Ahlrich's assessment, we cannot find that the lime treatment used by Brazoria County had such a destabilizing effect on the roadways directly due to Hurricane Harvey.

3. The City's Records on Maintenance Activities

FEMA's policies do recognize that distinguishing between pre-existing damage and damage caused by a disaster-related incident is often difficult. Nevertheless, where there is pre-existing damage to a facility, an applicant must distinguish the disaster-related damage for which its seeks PA funding from the pre-existing damage. This can be accomplished by the applicant presenting documentation, primarily in the form of pre- and post-disaster maintenance-related records, evidencing that the damage claimed was a result of the disaster and not deterioration or deferred maintenance. Thus, in addition to evaluating how the incident caused the damage, FEMA will consider whether the applicant has a routine maintenance program or, in the absence of such maintenance records, will consider pertinent material purchase invoices and activity logs so that FEMA can confirm that the applicant has performed normal maintenance activities. As part of its review, FEMA will also inspect other sections of the applicant's road system to confirm the performance of normal maintenance activities.

As part of its PA application, the City stated that it has an interlocal agreement with Brazoria County to provide maintenance for all roads within the City limits. The interlocal agreement stipulates that maintenance and repair requests from the City to the County must be in writing. Although requested by FEMA during its review of the City's PA application, the documentation showing the City's repair requests to the County was not provided. The City did provide FEMA with county work order logs, but those logs were not probative of a routine maintenance program. They only showed nine occurrences where pot holes were repaired, four occurrences of crack sealing, one occurrence of patching, one occurrence of grading, and two occurrences of pavement overlay. However, as noted by FEMA, "[c]onsidering the [City] is responsible for approximately 10 miles of roads, the limited work represented in the log does not sufficiently demonstrate the implementation of a routine road maintenance program and does not substantiate the pre-disaster condition of the roads under appeal."

The City also provided material invoices and budget information to support its PA application. However, FEMA found that the invoices failed to indicate where or in what manner the materials purchased were used, and that the budget information, provided for years ending in September 2015, 2016, and 2017, did not indicate a robust pre-disaster road maintenance program. As for the latter, Mr. Clements, the City's expert, opined that the City's budget of 10.4% towards street maintenance is appropriate to regularly maintain its

roads, and thus, is likely evidence of a routine maintenance program. However, neither Mr. Clements nor the City provided documentation to show the percentage or amount of the budget actually spent on road maintenance and repair. Absent such documentation, we cannot find that City's annual budgets for "street & drainage" and "road improvements" are a reasonable indicia of a routine maintenance program.

Here, we agree with FEMA that the City's claim equates to one for loss of useful life of its roads, which is ineligible for PA assistance. Even if the City's claim is construed as a request for funding for damage solely caused by Hurricane Harvey, and not for loss of the useful life of its roads, the City failed to provide proof that any alleged damage to its roads was a direct result of Hurricane Harvey, and failed to show that it performed normal routine maintenance activities.

Decision

The panel affirms FEMA's denial of the City of Liverpool's request for public assistance.

Beverly M. Russell
BEVERLY M. RUSSELL
Board Judge

Patricia J. Sheridan
PATRICIA J. SHERIDAN
Board Judge

Harold D. Lester, Jr.
Harold D. Lester, Jr.
Board Judge