

ELECTRIC UTILITY DEPARTMENT 1900 2nd Ave N LAKE WORTH BEACH, FL 33461

Change of Scope

TO: All Interested Parties

FROM: Jakub Pajak

DATE: May 11, 2023

REF: Justification of Change of Scope for Project: 7th Ave. N. Circuits 0702, 0703 and 0704

Storm Hardening & Voltage Conversion

SUBJECT: Justification of Change of Scope

Project generally described as 7th Ave N Circuits 0702, 0703 and 0704 Storm Hardening & Voltage Conversion was proposed and quoted by L.E. Myers Co. on March 4th, 2021. The construction design for storm hardening consists of overhead utility pole replacement with larger and stronger structures to mitigate any damage and eliminate long duration outages caused by large storms such as hurricanes. The voltage conversion reduces overloading as identified in a system study performed on the distribution system. In preparations for voltage conversion from 4kV to 26kV the original scope included hardening and tie-connection to circuit 3N11 in order for the conversion to place load on the 0703 circuit. The location of this circuit hardening and tie-connection is directly over I-95 and spans parallel to 7th Ave. North. Additionally, circuit 1E09 was also hardened as it is attached to the same utility poles as circuit 3N11.

On January 22^{nd,} 2022 the overhead conductors directly over I-95 along 7th Ave. N. failed and ripped apart to fall down onto the highway at 11:39 AM. Specifically this was the location where circuit 0703 connected to 3N11 that failed. This situation created a serious safety risk to the public traveling on the highway, as large metal conducing wires landed perpendicular to the traveling directions of the highway.

The original project construction included the overhead section over I-95 for system hardening by replacing utility structure on both sides of the highway and adding spacers between the conductors. This work was originally quoted for \$195,757.28. Due to the failure of the wire over I-95 the plans and scope changed to include the repair of the overhead equipment. The cost of the overhead repair was not insignificant when compared to underground and the long-term benefits analysis for underground versus over I-95 were not comparable. City of Lake Worth Beach was inclined to change the design for safety and reliability and convert the section of 0703 that ties to 3N11 from overhead to underground that is over the highway. The change will also include undergrounding a section of 1E09 to completely eliminate any overhead wires spanning over the highway. This will eliminate any future possible failure and greatly increase the safety to the public traveling on the highway.

The revised scope of work will cost an additional \$504,009.20 to be implemented. Since L.E. Myers was already contracted for all 7th Ave. N storm hardening and voltage conversion which included the tie-point of 3N11 and 0703 circuits, City of Lake Worth Beach chose to keep the contractor for the modified scope.