

815 E. CALTON RD. SUITE 4 LAREDO, TX 78041

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SAN ANTONIO 210.595.0380

License # TECL 30114

September 12, 2018

Webb County Engineering Department Attn: Luis Perez-Garcia, PE, CFM 1620 Santa Ursula, 2nd Floor Laredo. Texas 78040

Reference: Justice Center - 1110 Victoria St. - Tax Assessor Collector's Office Outgage

We are submitting a cost proposal as requested for the emergency repairs at the Tax Assessor collector's office. Below is our scope of work and statement of facts:

Statement of Facts:

- 1. On Monday September 10, 2018 we were contacted at 7:00 am regarding an electrical outage affecting the Webb County Justice Center at 1110 Victoria St.
- 2. LED Electric service technicians arrived on site at 7:30 and discovered an outage affecting the tax assessor collector's office.
- 3. Upon further examination it was discovered that two of the three 800A 480V fuses on the main switch serving the panelboard for the tax office were blown.
- 4. Immediately efforts were coordinated to locate replacement fuses but they could not be sourced locally. Available replacement fuses were sourced from San Antonio and immediately arranged to be delivered to Laredo.
- 5. Replacement fuses arrived in Laredo at 12:00 pm and technicians were back out on site to replace the fuses.
- 6. It was further discovered that the underground conduit feed from the tax office panel to the Main Switchboard had previously been under water due to recent excessive rains.
- 7. The electrical feed is composed of parallel 4" PVC conduits with 4-#600kcmil with 1-#3/0 ground wire.
- 8. Upon further testing it was discovered that one of the two feeds has a short in between phase B and phase C.
- 9. Technicians were able to disconnect these wire feeds from both the Main Switchboard and the tax office panel, replace the fuses and re-energize the panelboard.
- 10. All voltages were tested and the system came back online at approximately 5:00 pm.
- 11. The system has been constantly monitored for the past 24 hours to assess the maximum electrical load registered in the panel. The highest amperage reading has been recorded to be 75A.
- 12. Closely monitoring the system is critical since the current ampacity rating is only 400A maximum not 800A as designed.
- 13. Webb County personnel has been advised that electric duct heater loads will not be operable until further repairs are completed.
- 14. A final examination into the cause of the problem revealed the root of the problem is water coming in from the third and second floor parking garage into the space adjacent to the electrical room and also thru the wall.
- 15. Damaged was observed of water puddling in the room. Also it is evident this issue has been on-going for many years as a 1 ½" gap was observed behind the panelboard between the wall and the concrete foundation.
- 16. It is imperative that this water seepage issue is resolved. The gap is re-grouted as well.
- 17. Based on these facts it is our recommendation that the existing underground PVC conduits be abandoned and new overhead lines are installed with new wiring. The structural integrity of the conduits is can not be guaranteed. It is evident that water is present in the conduits and has damaged the wire insulation.



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Scope of Work:

- 1. Provide and install 2 4" EMT conduits with 4-#600kcmil with 1-#3/0 ground wire from Main Switchboard to Tax office panel located approximately 250' away.
- 2. New conduits will be installed underneath the covered parking garage.
- 3. Provide and install 3 NEMA 1 pull boxes for new wire pulls.
- 4. Dig and trench from southwest corner of parking garage approximately 20' LF from the column into the Main Switchboard.
- 5. Provide and install 2 4" LB condulets and penetrate the Main Switchboard.
- 6. Coordinate with AEP to disconnect and re-connect power to the main Justice center.
- 7. Coordinate shut down of new chiller system and startup once all repairs are complete.
- 8. Terminate all wire conductors at the Main Switchboard and at the tax office panel.
- 9. Verify all voltages, phase rotation and electrical loads at the time the system is re-energized.
- 10. All work to be completed on an emergency basis considering the sensitivity of the system and importance of the tax office.
- 11. Crews are available immediately to begin work.

Emergency Call Work Completed on 9.10.18	\$ 4,142.66
Emergency Repairs to be completed to later than 9.21.18	\$ 93,732.34
Total:	\$ 97,875.00

All work to be completed no later than Friday September 21, 2018.

All work will be performed in a professional and craft-manlike manner and in accordance with local and national code. We look forward to working with you on this project, if you have any questions or need additional information please do not hesitate to contact me.

Respectfully,

LED Electric and Lighting Contractors, LLC

G. UBALIDO PARRA

Ubaldo Parra **General Manager**