It is common practice not to specify the completion of geotechnical testing as part of a Request for Proposal (RFP) for design work for infrastructure improvements of the type described in LFUCG RFP 42-2019. Engineering Services for Jacobson Park roadway widening. It has commonly been found by the LFUCG Parks department that inclusion of this specification in an RFP will often cause the selected vendor to perform the work even if in the opinion of the design team that the work is not required. By not specifying, this work in an RFP LFUCG has often saved money, as the work was not required. When the work is found to be desirable, the cost of that work is outside of the original design contract and is handled as specified in the RFP. In this case, this additional cost, once the need for Geotechnical work was determined to be desirable is handled as specified in the RFP. In this case RFP #42-219 Section A. Paragraph 1 Scope of Work and Consultant Services Agreement Section 2 – Additional Services by Consultant 2.1.

This cost, beyond that specified in Bell Engineering's response to LFUCG RFP 42-2019, is driven by the need for additional testing. This testing was deemed necessary due to the following factors:

Working with the Parks Department and attempting to meet the desired appearance of the finished structure the use of a precast box culvert, which was the expected culvert solution, was determined to not be the best option for this project. The use of a precast arch, which will result in the desired final appearance while maintaining required water flow characteristics.

Due to limitations on adding fill to the existing lake and the prohibitive cost of moving fill material the use of a Precast Box culvert did not meet the structural requirements of the roadway. The precast arch is recommended, as this structure will meet the design requirements of the project considering the limited overburden that can be placed above the top of the arch.

The precast arch solution, while providing a structurally superior solution creates high point loads on the smaller resulting bearing surface. This higher loading requires a foundation, material capable of supporting the higher loads. This requirement necessitates further geotechnical testing that was not initially indicated based on the draft design proposal submitted along with the original RFP.