

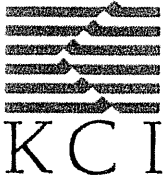
**ITEM #45<sup>(2)</sup>**  
(Parking Garage List)

# **ADDITIONAL MATERIAL**

**Regular Meeting**  
**FEBRUARY 26, 2019**

**SUBMITTED AT THE REQUEST OF**

**REGIONAL EMERGENCY SERVICES**  
**AND COMMUNICATIONS**



ISO 9001:2008 CERTIFIED

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

4505 Falls of Neuse Rd., Suite 400 • Raleigh, NC 27609 • Phone 919-783-9214 • Fax 919-783-9266

February 25, 2019

## CIRC HOTEL FEASIBILITY STUDY

### 30 DAY UPDATE

#### EXECUTIVE SUMMARY

The following update is solely for the engineering study for the Circ Residence/Hotel, located at 1780 Polk Street, Hollywood, Florida. Motorola Solutions, Broward County, Mission Critical Partners and KCI have had several site visits to the CIRC Hotel post the January 29 County Commission meeting. These site visits have answered many of the open questions, but have led to some new concerns that will need to be resolved. The hotel may be a viable option, but a few more items need to be closed and the final, estimated construction cost needs to be calculated.

#### FINDINGS TO DATE

- The team visited the building on several occasions
  - January 11 – initial site survey was performed by KCI and County.
  - February 4 – Examined several different generator locations and the power routing from the generator through to the equipment room. End result was that the generator location and the high and low voltage were still unknown. Another visit with the building's electrical contractors for both high and low voltage installations was still required to show the proper routing through all of the floors and into the FPL vaults.
  - February 5 – Microwave vendor surveyed the rooftop. County advised that the building's representative, Dimitris Papikononou, advised County that building owners were not please with the first four options. A new option was provided, 2 spaces on the 4<sup>th</sup> floor parking garage, for County to evaluate. County requested a follow up meeting to be held on February 8. On February 8, Circ advised that the follow up meeting would be scheduled on February 14.
  - February 14 – A follow up visit occurred with the building's electrical contractors, which provided a more definitive routing solution. Circ representative, Dimitris Papakononou, advised County that County would need to evaluate the five generator options and to determine which location would work best for the County's generator.
  - February 21 – A surveyor from KCI conducted a 2C survey (GPS coordinate) of the rooftop to be utilized in the FAA filing.

(10)

- During the February 14 visit, new challenges with the power and telco conduit routing up to the roof were discovered. The following bullet items detail these challenges.
  - Many of the electrical closets don't have existing cutouts in the floors for future conduits, in a straight path, or there are obstructions throughout the path, such as communication hubs/cabinets installed, other rigid conduits, that would not allow a straight path.
  - Several of the floors have tenant storage facilities with cages set up that will need to be relocated by the owner to allow for the passage of the required power and telco conduits.
  - The electrical contractor advised the team that there are numerous small conduits running through the slab to each apartment. These floors will need to be properly located utilizing x-ray device to confirm that the conduit path for power and telco is not obstructed. The floors will need to be X-Rayed from the 5<sup>th</sup> Floor to the 27<sup>th</sup> floor to identify a clear routing for the conduits through the electrical and tenant storage rooms to clear the small resident conduits and concrete slab reinforcement. This was not included in the original scope of the study prepared by Motorola Solutions. Any obstructions on these floors will render the floor as not penetrable and would result in a significant loss of time to determine a new path with the building's ownership and contractors.
  - There are three 2-inch conduits running from the 27<sup>th</sup> floor electrical room on the main roof that lead to the telecom closet on the 24<sup>th</sup> floor. These are the only available conduits between the 27<sup>th</sup> floor electrical room and the 24<sup>th</sup> floor telecom closet. The building owner will need to grant Broward County sole use of those three conduits. If Broward County is granted use of these conduits, the building owner must understand that there will be no spare conduits available between these floors.
- The initial search of the historical database revealed a historic district and several buildings within 250-ft of the hotel, which then triggers the requirement for a NEPA/SHPO investigation. This is part of the FCC documentation.
- The omni antennas will be elevated 10-ft above the parapet, so combined with the 20-ft height of the antennas, we will be significantly higher than the current top of the roof and given the proximity to the airport determined that a new FAA filing will be necessary. The FAA website showed that our location needed additional accuracy for review/approval, so a 2C survey was completed on February 21.
- Based on the location of the County's preferred generator location to be in the parking garage, we will be able to use the FPL vault that serves the garage. Motorola Solutions has begun contacting FPL to determine the ability to utilize this vault for our primary commercial power service to the equipment room. This will be a stand-alone metered power service request to FPL.
- We still need to determine the availability of fiber and the ability to extend to the top of the building. County was advised that the building does not have any AT&T presence within the building. Building owner will need to provide access to AT&T to provide County with the required services.

(3)

- Microwave vendor has completed path study and resulted in very minor differences in the heights of the antennas. Structural design of mounting systems is moving forward to final plans.
- We still need to review the complete RF antenna design to determine the impact of rooftop shadowing on the performance of the antenna network.

### FUTURE ACTIONS

- KCI has addressed some loading concerns with the boiler room's floor slab and reached out to an expert in post-tensioned concrete to complete a comprehensive analysis of the floor slab.
- Validate the location and complete preliminary design of the "fuel pumping station" for the generator.
- Finalize generator specifications, e.g. size/space requirements, meeting local acoustical ordinances, etc.
- X-Ray or GPR of floor slab to determine conduit routing path.
- Incorporate findings of routing into more detailed electrical drawings to be utilized by contractor for cost estimate purposes.
- Complete grounding design of equipment room and antennas for contractor cost estimate purposes.
- Complete civil/structural design drawings sufficient for contractor to provide cost estimates.
- Provide drawing package sufficient to demonstrate intent to owner for lease execution.
- Response from the FAA, estimated April 8 (based on the typical 45 day response time).
- Response from the FCC, estimated May 29 (NEPA/SHPO response required to submit to FCC).
- Circ ownership approval of all design aspects of the County's engineering requirements and specifications.

An engineering report with all available information and commensurate design will be provided by March 29, 2019. However, construction cannot commence until all agencies and stakeholders have provided their approvals and all required agreements and permits have been executed.

Sincerely,



Eric Kohl, P.E.  
Practice Leader

(3)