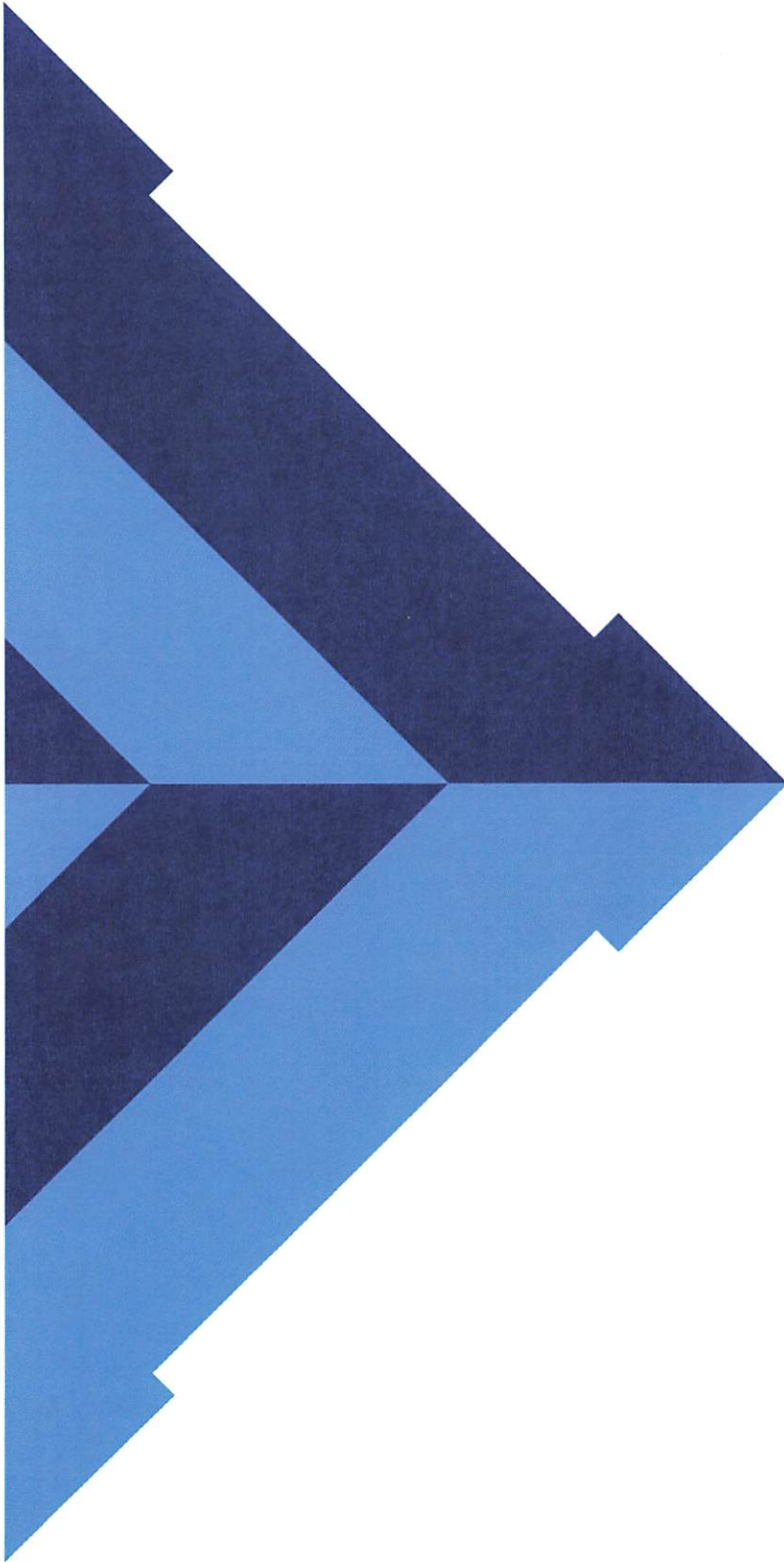


APPENDIX E

GUNN & ASSOCIATES, P.C.





May 12, 2020

PH&J Architects, Inc.
804 South McDonough Street
Montgomery, AL 36104

Attention: Mr. Hal Gandy

RE: Alexander City - City Hall Assessment
G&A Project No. 20-090

Hal:

I visited the Alex City - City Hall for the purpose of evaluating the existing electrical systems. Below is a summary of our investigation along with recommendations for repairs and a cost estimate for the repairs.

City Hall:

Power:

The existing facility is fed by a pad-mounted transformer. The pad-mounted transformer serves a 1200-amp GE 6-main switchboard. This switchboard is the primary source of power for the building and appears to be manufactured in 1972. The main switchboard is past end of life. New parts will be hard to be obtained for this switchboard. A limited supply of re-furbished aftermarket overcurrent protective devices might be available (not guaranteed) to service this switchboard in the event of a failure of one or more of its components. Caution should be exercised when operating these circuit breakers as they could break or permanently disengage due to their age and render themselves permanently inoperable. There is also not much clearance in front of the switchboard

There are numerous panelboards throughout the facility that are the same age. These panelboards are also past their end-of-life and parts for these panels may be unavailable. A few newer panelboards was installed along-side the original panelboards in various areas. The newer panels are in good shape.

The facility appears to have a decent coverage of receptacles.

It appears there is a standby generator that backs up the whole facility.

The original conductors in the building are old. The insulation has become brittle in some locations and working with these conductors could pose a hazard to maintenance personnel.

Lighting:

The existing lighting system is made up of incandescent and fluorescent fixtures with either T8 or T12 lamps making it difficult or almost impossible to comply with current energy code requirements. There is no lighting control installed in any areas of the building. Some method of lighting control is required by current energy codes. Emergency wall packs and exit signs are placed through out the facility and the ones we checked function correctly.

Exterior lighting is square incandescent lights with screw in fluorescent lamps. These fixtures are on a photocell-timeclock arrangement. No energy code compliant lighting control system has been installed. No exterior emergency lighting.

Communications:

The existing communications system is made up of a system of racks, patch facilities, CAT 5 and CAT 6 communications cabling and fiber optic cabling and appears to be in good condition. This communications system serves the current occupants needs adequately.

Fire Alarm:

The existing fire alarm system is an old hardwired system and manufactured by Notifier and is in need of replacement. The system appeared to be functioning but we were not able to test. The fire alarm coverage would not meet today's NFPA codes. We would recommend upgrading the system to an addressable system to meet current NFPA guidelines.

Paging System:

A central paging system is installed throughout the building and was told that it functions.

Security Camera System:

The building currently has a security camera system. The system is operable and appears to be in good condition.

Recommendations:

Power:

The building's electrical infrastructure should be replaced. The electrical infrastructure is well past its life expectancy. Electrical equipment that is old typically will not operate properly (mechanically) when called upon. Depending on the insulation type conductors can have a life span of anywhere from 20 to 50 years. We would recommend that the service lateral into the building from the pad-mounted transformer should be carefully inspected and replaced if required. All panel feeders and major equipment feeders should be inspected and replaced if required.

The existing branch circuit panelboards should be replaced and branch circuitry should be evaluated for replacement .

Lighting:

The entire buildings lighting system (interior and exterior) will need to be replaced to comply with the new energy code. Replacement of these fixtures will be required as a part of any renovation project that takes place in the buildings. We would recommend center basket volumetric type (architectural) LED fixtures be installed in all offices, corridors restrooms and other finished areas. In utilitarian areas either flat panel LED fixtures will need to be installed or strip type LED fixtures. Installing LED fixtures along with occupancy sensors will bring the building into compliance with the latest state energy codes and standards.

Exterior fixtures will be replaced with energy-efficient LED area lighting fixtures and controlled by a separate lighting control system panel independent of the interior lighting control system. Pedestrian lighting may be accomplished in the same manner as the existing fixtures with the exception that all pedestrian lighting will be LED type.

Communications System:

AS mentioned earlier the communication system is adequate and serves the needs of the existing tenant. However, depending on the tenant's programming needs the existing communications system may be inadequate.

Fire Alarm:

Provide new addressable fire alarm system to meet current NFPA guidelines.

COST:

| | |
|--|---------------------|
| Upgrade Electrical Infrastructure: | \$165,000.00 |
| Interior Lighting Replacement: | \$99,000.00 |
| Exterior Lighting Replacement: | 30,000.00 |
| New Fire Alarm System: | \$57,750.00 |
| Total Electrical Cost of Renovation | \$351,750.00 |

If you have any questions about this letter please call me.

Sincerely,



Kenny Gunn, P.E.



May 12, 2020

PH&J Architects, Inc.
804 South McDonough Street
Montgomery, AL 36104

Attention: Mr. Hal Gandy

RE: Alexander City - Police Station Assessment
G&A Project No. 20-090

Hal:

I visited the Alex City - Police Station for the purpose of evaluating the existing electrical systems. Below is a summary of our investigation along with recommendations for repairs and a cost estimate for the repairs.

Police Station:

Power:

The existing facility is fed by a pad-mounted transformer. The pad-mounted transformer serves a 6-main panel. This panelboard is the primary source of power for the building and is very old. The main panelboard is past end of life. New parts will be very hard to be obtained for this panelboard. A limited supply of re-furbished aftermarket overcurrent protective devices might be available (not guaranteed) to service this panelboard in the event of a failure of one or more of its components. Caution should be exercised when operating these circuit breakers as they could break or permanently disengage due to their age and render themselves permanently inoperable. The main electrical room has spliced cables hanging out a gutter above panels that is a dangerous situation. These cables need to be placed back in the gutter and enclosed. I could not verify if there was multiple service to this facility or not, but it appeared to have multiple electrical services.

There are various age panelboards throughout the facility. These panelboards are also past their end-of-life and parts for these panels may be unavailable. A network of newer panelboards was installed alongside the original panelboards in various areas. The newer panels are in good shape.

The facility does not have adequate coverage of receptacles.

There are a lot of plug strips in facility that would be considered a fire hazard.

It appears there is a standby generator that backs up the whole facility.

The original conductors in the building are old. The insulation has become brittle in some locations and working with these conductors could pose a hazard to maintenance personnel.

Lighting:

The existing lighting system is made up of incandescent and fluorescent fixtures with either T8 or T12 lamps making it difficult or almost impossible to comply with current energy code requirements. There is no lighting control installed in any areas of the building. Some method of lighting control is required by current energy codes. Emergency wall packs and exit signs are placed throughout the facility and the ones we checked function correctly.

Exterior lighting is flood HID lights with retrofit LED bulbs. There are also incandescent exterior lights. No energy code compliant lighting control system has been installed. No exterior emergency lighting.

Communications:

The existing communications system is made up of a system of racks, patch facilities, CAT 5 and CAT 6 communications cabling and fiber optic cabling and appears to be in good condition. This communications system serves the current occupants needs adequately.

Fire Alarm:

There is no fire alarm system.

Security Camera System:

The building currently has a security camera system. The system is operable and appears to be in good condition.

Recommendations:

Power:

The building's electrical infrastructure should be totally replaced. The electrical infrastructure is well past its life expectancy.

Lighting:

The entire buildings lighting system (interior and exterior) will need to be replaced to comply with the new energy code. Replacement of these fixtures will be required as a part of any renovation project that takes place in the buildings. We would recommend center basket volumetric type (architectural) LED fixtures be installed in all offices, corridors restrooms and other finished areas. In utilitarian areas either flat panel LED fixtures will need to be installed or strip type LED fixtures. Installing LED fixtures along with occupancy sensors will bring the building into compliance with the latest state energy codes and standards.

Exterior fixtures will be replaced with energy-efficient LED area lighting fixtures and controlled by a separate lighting control system panel independent of the interior lighting control system. Pedestrian lighting may be accomplished in the same manner as the existing fixtures with the exception that all pedestrian lighting will be LED type.

Communications System:

As mentioned earlier the communication system is adequate and serves the needs of the existing tenant.

Fire Alarm:

Provide new addressable fire alarm system to meet current NFPA guidelines.

COST:

| | |
|--|---------------------|
| Upgrade Electrical Infrastructure: | \$195,000.00 |
| Interior Lighting Replacement: | \$115,200.00 |
| Exterior Lighting Replacement: | \$30,000.00 |
| New Fire Alarm System: | \$68,250.00 |
| Total Electrical Cost of Renovation | \$408,450.00 |

If you have any questions about this letter please call me.

Sincerely,



Kenny Gunn, P.E.