

Report of
Facility Condition Assessment

For
Lakeside Apartments
Abraham Baldwin Agricultural College
Tifton, GA 31793



September 12, 2013 (revised March 27, 2014)

Provided By:
Faithful+Gould, Inc.

Provided For:
Abraham Baldwin Agricultural College
2802 Moore Highway
Tifton, GA 31793

March 27, 2014

University System of Georgia
Board of Regents
270 Washington Street SW
Atlanta, GA 30334

Attention: Mr. Wayne Tyler
Program Manager
Real Estate Ventures Management & Operations
Office of Real Estate and Facilities

Reference: Revised Report of Facilities Condition Assessment of the Lakeside Apartments at
Abraham Baldwin Agricultural College

Dear Mr. Tyler:

Faithful+Gould, Inc. has completed a report of our Facilities Condition Assessment of the
Lakeside Apartments at Abraham Baldwin Agricultural College ("the property").

Project Information

The property consists of a three story approximately 134,858 SF student housing building. This report provides a summary of the project information known to us at the time of the study, the scope of work performed, an evaluation of the visually apparent condition of the Property, and a forecast of anticipated capital expenditures required over the next fifteen years.

This report was completed in general accordance with the ASTM E2018-08 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process and our proposal dated May 28, 2013 and accepted July 16, 2013. We have included the changes requested in our meeting of January 28, 2014.

Very Truly Yours,

A handwritten signature in black ink, appearing to read "Jack Wexler".

Jack Wexler, P.E.
Chief Facility Assessor

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EXECUTIVE SUMMARY

The Lakeside Apartments located at Abraham Baldwin Agricultural College in Tifton, Georgia was built *circa* 2007 and consists of a three story student housing complex containing 195 units (489 beds) ("the property"). The Property is located at the north west corner of the campus on the shore of Lake Baldwin. Plan EX-1 provides a summary of the Property.

Plan EX-1 – Aerial View of Property



The Property contains a reported floor area of 134,858 gross square feet and a footprint of 466' (east-west) x 152' (north-south) with two courtyard areas of 123' (east-west) x 80' (north-south). North is considered the front (Hillside) elevation for the purposes of this report). The building is served by one elevator.

Assessment

On July 25 and 26, 2013 Mr. Jack Wexler, P.E. of Faithful+Gould visited the Property to observe and document the condition of the building and site components. Our assessment was completed in general accordance with the ASTM E2018 - 08 Standard Guide for Property Condition Assessments: Baseline

Property Condition Assessment Process. During our site visits, Faithful+Gould was accompanied and assisted by Duane Weeks and Eric Lawson of the maintenance staff. Mr. Michael McLean, head of facilities was interviewed.

Capital Requirements

Over the 10 year study period a variety of expenditures should be anticipated. **Capital expenditures over the study period total \$1,225,250 in 2013 dollars and \$1,451,755 when inflated at 3% per year.** The majority of these expenditures relate to replacement or capital repair of systems due to current or anticipated life-cycle failure / obsolescence. We included the cost of periodic interior refurbishment. Table EX-2 provides a summary of expenditures per year.

Table EX-1 Capital Expenditure Requirements

Year	Expenditures
Immediate	\$0
2014	\$79,650
2015	\$2,000
2016	\$202,000
2017	\$62,000
2018	\$67,000
2019	\$114,450
2020	\$298,000
2021	\$2,000
2022	\$7,000
2023	\$391,150
TOTAL	\$1,225,250

System & Condition Summary

Site systems consist of the brick paver sidewalks on all sides of the Property, site furniture within the building courtyards, enclosures for trash dumpsters, a gazebo, landscaping consisting of various trees, shrubs and ground cover, and stormwater management features. The parking area contains 497 spaces. Site systems were in good condition. There were doors missing on one dumpster enclosure. The parking lot needs crack filling, sealcoat and re-striping.

The building structure consists of a wood framed structure and brick veneer exterior walls. The superstructure is supported on a foundation of concrete spread footings and slab on grade. The building structural systems appeared to be in good condition with no observed evidence of settlement (with one exception noted below), deterioration, or distress noted. There are some minor areas of cracked gypsum concrete in corridors

The roof system generally consists of asphalt shingles on oriented strand board decking on a 6:12 slope with ridges parallel to the centerline of the main corridor and three cross corridors. There is a low slope roof on the canopy over the main entrance.

The roof systems were generally in good condition having been installed in circa 2007 and being subject to a manufacturer warranty assumed to be expiring in 2027. A roof leak was being repaired on the date of the inspection. We do not anticipate a requirement for complete replacement of the roof system during the study period.

The building footprint is in a letter E shape with the exterior elements including the waterproofing systems over the below grade perimeter footings, brick veneer exterior walls, punched windows, and storefront entrances. The exterior closure appears to be in good condition except for extensive staining caused by HVAC unit condensate leakage. We recommend budgeting for a replacement of all building sealants a few years beyond the end of the study period when the initial sealant material will be over 15 years old, statistically the end of its useful life.

Heating and cooling of living units is provided by individual self-contained through-wall heat pump units each serving one or two living units. Distribution within units is by fiberglass or flexible ducts to ceiling diffusers. Fresh air enters through the heat pump enclosures. Digital thermostats control dampers to provide localized temperature control of each unit served.

Corridors and other common areas are conditioned by split system upright fan coil units with heat pumps located in groupings on the ground level adjacent to the building. Digital thermostats provide localized temperature control of each area served. The HVAC system as a whole appeared to be adequately designed and in fair condition although a widespread problem with condensate dripping down the face of the brick façade has caused extensive and unsightly staining throughout. This is the result of poor installation or a product defect preventing condensate from properly draining into the provided internal drainage piping risers and backing up to drain outside the building. Corrective repairs were underway the dates of the inspection.

Electrical power is supplied by two Georgia Power service transformers located on the east and west ends of the site at 277/480 volts to two main switchboards. The services from the main switchgear components feed various 277/480-volt distribution panels located throughout the building and step down transformers that serve the 120/208-volt power risers in each building. HVAC systems, elevators, and exterior lighting fixtures are served by 277/480-volt system panelboards. General purpose receptacles, fluorescent lighting fixtures, small motors, and miscellaneous power branch system panels are served by 120/208-volt circuits. There is no emergency generator. Interior lighting throughout the building was found to consist of high efficiency fixtures.

The electrical equipment appears to be in generally good condition and adequately sized to support the presently imposed electrical loads. Significant replacement of the electrical installations is not anticipated. Scheduled infra-red thermography and associated routine maintenance are also advised on a five year cycle.

The telecommunications infrastructure includes hard-wired telephone and cable television service to each floor and each residential sleeping room plus WI-FI transmitters serving all areas. Fixed position security cameras are located in stairways, exits and other locations. These are not monitored but images are recorded. The data, television, telephone infrastructure, card reader system and closed circuit television appeared to be in good condition and of an adequate capacity to serve the building. Management has indicated the desire for more camera locations.

Plumbing systems include the PVC sanitary and storm sewer piping, PVC domestic hot and cold water risers, PVC branch piping, and residential domestic electric hot water heaters located in each pair of living units. There is a communal kitchen on the ground floor that is served by a commercial electric hot water heater. There is a triplex water booster pump system that appears superfluous. Plumbing systems appear to be in generally good condition.

Fire and life safety related installations include a wet-pipe fire suppression sprinkler system, suite and common area heat and smoke detectors, the fire alarm control panel, common area strobes and speakers, and fire rated enclosures. The fire and life safety installations appeared to be in good condition.

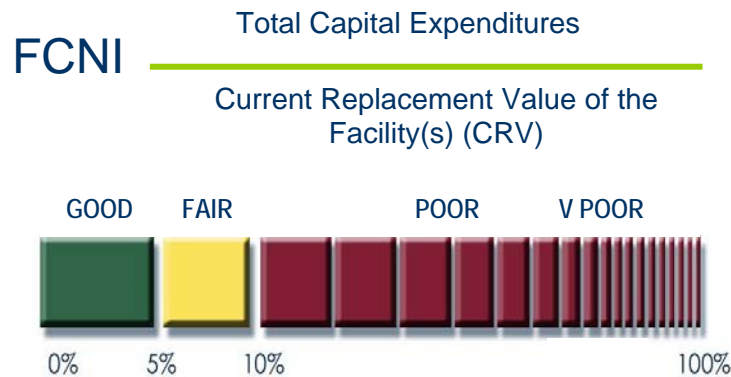
Vertical transportation is provided by a single 2,500 pound capacity hydraulic elevator serving all floors. The elevator is in good condition and no expenditures are anticipated.

Interior areas include the entrance lobby, the living floors at each level, the common hallways and lobby area restrooms, and support and service areas. Living units are typically one to two bedrooms with one to two bathrooms and separate vanities for each pair of private bedrooms. Units contain a living area, dining space, kitchen with a refrigerator/freezer and a microwave oven. Cabinetry is particle board with melamine plastic laminate surface. Countertops are particle board with a plastic laminate surface. Bathrooms contain fiberglass tubs and china commodes. Interior finishes are generally in good condition. We include the cost of periodic interior refurbishment which was in progress during the inspection.

FACILITY CONDITION NEEDS INDEX

In this report we have calculated the **Facility Condition Needs Index (FCNI)** for the facility; illustrating the likely condition of the systems and equipment should the required funding not be expended over the cost study period. The FCNI is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCNI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCNI is the ratio of accumulated total of all projects that are not routine maintenance to the Current Replacement Value (CRV) for a constructed asset. The range is from zero for a newly constructed asset, to one. Acceptable ranges vary by 'Asset Type', but as a general guideline the FCNI scoring system is as follows:



The FCNI is a relative indicator of condition, and should be tracked over time to maximize its benefit. It is advantageous to define condition ratings based on ranges of the FCNI. There are a set of ratings: good (under 0.05 (under 5%)), fair (0.5 to 0.10 (5% to 10%)), and poor (over 0.10 (over 10%)) based on evaluating data from various clients at the time of the publication. Table EX-2 will help interpret the results:

Table EX-1 FCNI Scoring System

Condition	Definition	Score	Percentage Value
GOOD	In a new or well maintained condition, with no visual evidence of wear, soiling or other deficiencies	0.00 to 0.05	0% to 5%
FAIR	Subject to wear, and soiling but is still in a serviceable and functioning condition	0.05 to 0.10	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 0.10	Greater than 10%
V POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary	Greater than 0.60	Greater than 60%

If the FCNI rating is 60% or greater then replacement of the asset/building should be considered instead of renewal.

Table EX-3 provides a calculation of the FCNI illustrating both the current condition of the buildings and the likely condition of the facilities should the required funding not be expended over the cost study period. The results of the study indicate that currently the building contains a poor facility condition needs index rating, therefore suggesting that the building is currently not well maintained.

Table EX-2 Facility Condition Needs Index

Building Name	Gross Square Foot (GSF)	CRV per GSF	Current Replacement Value (CRV)	10 Year Capital Expenditures	FCNI Score	Condition
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Lakeside Apartments	131,763	\$100	\$13,176,300	\$1,225,250	0.093	Fair
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Terminology & Limitations

This report and the attached expenditure forecast generally identify the Expected Useful Life (EUL) and the Remaining Useful Life (RUL) of observed systems and components. EUL is projected based upon industry-standard guidelines and our experience with similar systems. RUL is projected based upon our assessment of age, condition and maintenance / repair history.

The timing of the projected expenditures and their associated costs represent our opinion considering the aforementioned factors. Alternative methods of managing the existing equipment or systems may be feasible over the 15-Year study period. However, these alternative methods will depend upon actual management practices, financing requirements, and the ability of the engineering staff to perform some of the repairs in-house. Alternative scenarios that have not been presented to Faithful+Gould have not been considered within this report.

This report has been presented based upon our on-site observations, information provided to us, discussion with building management and maintenance staff, our review of available documentation (see scope of services and document review section) and our experience with similar systems. If any information becomes available that is not consistent with the observations or conclusions expressed within this report, we request that this information be immediately forwarded to us.

The evaluation of existing structures requires that certain assumptions be made regarding existing conditions. This evaluation was based upon our visual non-destructive evaluation of accessible conditions of the Property. Furthermore, this evaluation was limited in time on-site, fee, and scope and was not based upon a comprehensive engineering evaluation. As such, our report is not intended to represent a complete review of all systems or system components or a check or validation of design professionals' computations. Therefore, Faithful+Gould's evaluation and this report do not represent warranty or guarantee any system or system component or the future performance of any site improvement.

SCOPE OF SERVICES & DOCUMENT REVIEW

The primary purpose of the Facilities Condition Assessment was to identify visually apparent deficiencies in the building and site. The evaluation included site visits to observe the building and site systems, interviewing building management and maintenance personnel, and reviewing available maintenance systems, design and construction documents and plans, and public records.

This Facilities Condition Assessment was completed and has been conducted in general accordance with industry standards and the American Society for Testing and Materials (ASTM) Standard E 2186-08 Standard Guide for Property Condition Assessment: Baseline Property Condition Assessment Process.

We performed a visual non-destructive assessment of the interior, exterior and site components of the Property, including the following major components and systems:

- **Site Systems.** We visually observed the site systems for the removal of storm water and evidence of poor drainage and / or erosion potential. We also reviewed (where applicable) the condition of pavements, site concrete, retaining walls, fencing, landscaping, site grading, and storm water drainage features.
- **Structural System.** We observed the structures for visible signs of distress and have reported our findings. We also reviewed available structural drawings for information regarding the design load criteria of the existing structures and the building codes to which the structures were designed. We did not complete a seismic evaluation (PML) of the Property.
- **Roof System.** We visually evaluated the condition of accessible roof systems, accessories, and details. In addition, where applicable we discussed existing roof warranties.
- **Building Exterior Elements.** We visually observed the exterior wall system, window and door systems for visible evidence of deficiencies, continuity of seals, and other types of distress and have reported our findings. We reviewed available flashing and connection details for drainage design and observed the condition and placement of expansion joints. Our visual observations were based on those conditions that can be observed from ground level, lower roof levels and through the use of binoculars.
- **Mechanical / HVAC, Electrical, Plumbing (MEP) Systems.** We observed the age and condition of the MEP and related building systems and have commented on their condition and visible deficiencies.
- **Fire and Life Safety.** We observed the age and condition of the fire and life safety elements and have commented on their condition and any visible deficiencies. The elements surveyed included structural fire protection, means of egress, fire suppression systems, and fire detection and alarm systems.
- **Conveyance Systems.** We completed a visual evaluation of the conveyance systems including a review of maintenance and service records.
- **Interior Finishes.** We visually observed the interior areas of the Property and have reported their general condition. We did not include for replacement of tenant finishes.

- **Accessibility.** We reviewed the Property for conformance with applicable accessibility requirements and have reported our findings.

The scope of services under which the Facilities Condition Assessment was completed was visual in nature and not intended to be destructive to the Property to gain access to hidden conditions. We did not perform any destructive testing or uncover or expose any system members. We have documented the type and extent of visually apparent defects in the systems in order to perform the condition assessment.

The scope of services under which the Facilities Condition Assessment was completed includes only those items specifically indicated. The evaluation does not include any environmental services such as (without limitation) sampling, testing, or evaluation of asbestos, lead-based paint, lead-in-water, indoor air quality, PCB's, radon, mold, or any other potentially hazard materials, air-borne toxins or issues not outlined in the previous scope of services. In addition, the assessment does not include identification of underground soils, identification, or quantification of underground contaminants.

Document Review

In addition to the completion of our visual evaluation, Faithful+Gould interviewed representatives from Abraham Baldwin Agricultural College, (reference Executive Summary) and reviewed the following documentation:

Drawings

- Structural drawings prepared by the Structural Consulting Group and dated August 31, 2007
- Architectural drawings prepared by Niles Bolton Associates, Inc and dated August 31, 2007.
- Civil and Landscaping drawings prepared by Ganas Landscape Group and dated August 31, 2007.
- Mechanical, electrical and plumbing drawings prepared by Safaie Landry Group and dated August 31, 2007

Other Documentation

Documents Requested for Review

Faithful+Gould requested various documents be provided to assist our review of the Property. The list of documents requested by Faithful+Gould includes the following (X = received).

- X Original / As-built Drawings (including Civil, Architectural, Structural, Mechanical, Electrical, Plumbing and Fire Protection)

- ☐ Warranty / guaranty Information (Roofs, Caulking, HVAC, Elevators etc.)
- ☐ Past ADA Audits / Studies
- ☐ Service Contracts (including HVAC, Electrical PM, Elevators, Fire & Life Safety Systems etc.)
- ☐ Past Condition Assessment Reports (including Roofs, Pavements, Exterior Curtain Walls and Caulking, HVAC, Electrical, Elevators, Fire & Life Safety systems etc.)
- ☐ Preventative Maintenance Logbooks (including HVAC, Electrical, Elevators etc.)
- ☐ Past Repair / Replacement Project Information (including Roof, Pavements, Caulking, Interior Renovations, HVAC, Elevators, Fire & Life Safety Systems etc.)
- ☐ ALTA Survey (including Legal Description of Property)
- ☐ Project Specifications / Project Manual

Easements

The site plan in the architectural drawings supplied to us as prepared by Niles Bolton and Associates dated August 31, 2007 stated the following easements:

North

- State of Georgia water line easement

East

- None

South

- None

West

- None

SITE FEATURES

1.0 SITE SYSTEMS

Site systems consist of brick paver sidewalks around the building, landscaping consisting of various trees, shrubs flower beds and ground cover, cast-in-place concrete steps and associated steel railing assemblies, steel site furniture, light poles and wall light fixtures and storm water management features. There is a surface parking lot (reference Photographs 6 through 15 in Appendix B).

1.1 Description

The sidewalks are red brick pavers laid in a herringbone pattern with a border of gray brick pavers in a soldier course pattern. There are concrete steps leading down to exit stairway landings at both courtyards. Brick retaining walls form both sides of the steps.

Landscaping consists of localized grass lawn areas, shrubs and mulched areas, flower beds and various semi mature trees. The landscaped areas are provided with an in-ground irrigation system. There are two brick enclosures for trash dumpsters.

Site furniture consists of permanently mounted painted steel benches and bicycle racks. Site lighting is provided by aluminum light poles, ground and wall mounted light fixtures. There are wall mounted battery back-up emergency light fixtures in the two courtyards.

Storm water is collected in a number of surface-recessed catch basins and roof gutter downspouts and conveyed to the campus storm water management system.

The parking lot contains 497 marked parking spaces. The pavement is asphalt with concrete curbs and gutters. There are landscaped islands separating parking aisles. Parking spaces typically measured 8'-5" x 17'.

Vehicular traffic enters the parking lot from the north side via a double lane road from the campus perimeter road. There are turf fire lanes with rollover curbs at the east and west ends of the building.

There are two trash dumpster enclosures with pairs of swinging doors. Two volleyball courts are shown in the west courtyard on the construction drawings but were not built.

1.2 Condition

Brick paver sidewalks and curb sections are in generally good condition. The brick retaining walls at the exit stairways in the courtyards have open mortar joints and exhibit efflorescence from moisture within the walls. We suggest tuck pointing the deficient joints and applying a clear sealer to the brick.

Landscaping and irrigation equipment appeared in good condition. Site furniture was in good condition. We anticipate that as-needed replacement or repainting of the site furniture can be completed as an operational expense.

Pole mounted site lighting was in good condition. A number of the ground level flood lights were damaged and are slated to be removed and not replaced. The wall mounted battery back-up emergency light fixtures in the two courtyards are interior-type fixtures and are protected by plexi-glass enclosures which effectively hamper periodic testing and maintenance. We suggest these be replaced with exterior-rated fixtures.

Storm water inlets appeared clean and operational.

The parking area was in fair condition with the asphalt aggregate polished and the pavement and markings faded. We noted significant cracking parallel to parking islands. We recommend a current program of crack filling, new seal coat and re-stripping the parking spaces.

The trash dumpster enclosures appeared in fair condition. The east enclosure had its doors removed because the hinges failed. The doors on the north enclosure were damaged. We suggest that the swing doors be replaced with smaller sliding doors that are less subject to abuse.

The area outside the first floor kitchen has been used as a disposal area for used cooking oil and grease. As such the gravel area is stained. We recommend placement of a portable grease disposal container outside the door and engagement of a disposal service.

1.3 Projected Capital Expenditures

Required:

1. Periodic crack fill, seal coat and restripe the parking area. 17,500 SY @ \$1.10/SY = \$19,250 in 2014, 2019 and 2024.

BUILDING ELEMENTS

2.0 STRUCTURAL SYSTEMS

The description of the respective structural systems is based upon our review of available drawings (see document review section), and our observation of exposed portions of the building structure at locations where the drywall ceiling was open (reference Photographs 16 through 19 in Appendix B).

2.1 Description

The building is a three story wood framed structure with a gable and hipped roof. Structural elements are primarily engineered and manufactured wood trusses and joists with galvanized steel fasteners at members consisting mainly of 2 x 4 lumber. Floor elements reportedly are engineered wood joists with 2 x 2 lumber flanges and particle board webs. No ceilings were open to observe and confirm this.

Foundation

The foundation is mainly a 4" thick concrete slab-on-grade reinforced with 6 x 6-w1.4 x w1.4 welded wire mesh. At locations of exterior walls and interior load bearing walls the slab is thickened to 1' and 2' wide, reinforced with 2 #4 bars. In the center wing at the lounge room there are spread footings supporting 5" square steel tube columns. Footings are 3' square and 12" deep reinforced with 4 #5 bars each way. Foundation concrete is specified as 3,000 psi.

Superstructure

Typical elevated floors consist of 18" or 22" deep engineered wood joists with 2 x 2 lumber flanges and particle board webs, spaced typically 24" on center. The joists are fireproofed on the underside with one layer of 5/8" gypsum board to afford a one hour rating and four 5/8" layers where a two hour rating is specified. The floor system has a 3/4" plywood sub-floor and 3/4" of gypsum underlayment.

Columns are typically nested groups of 2x lumber. Bearing walls are 2 x 4 wood studs at various spacing with gypsum board applied with a specified fastening pattern to act as shear walls. Beams over doors are double 2 x 8. Beams over windows are double 2 x 10. Beams across corridors are double 2 x 12. It is assumed the beams are "glu-lam" laminated lumber sections but this could not be observed. At the Lakeside lobby there are two story high 5" square steel tube sections supporting structural steel framing supporting the third floor in this area.

The roof structure consists of factory fabricated wood trusses typically spaced 24" on center made of mainly of 2 x 4 lumber with galvanized steel pressure fasteners at joints. Sheathing is 3/4" oriented strand board. The attic space is divided by fire rated barrier walls of drywall construction with rated self-closing doors between areas, per the drawings.

Loadings and Lateral Design

The structural drawings provided indicate the buildings" designed superimposed live loads detailed in pounds per square foot (psf):

- Typical residential floor - 40 psf

- | | | |
|-------------------------|---|---------|
| • 1 st floor | - | 100 psf |
| • Stairs | - | 100 psf |
| • Roof | - | 20 psf |

Concrete Strength

Structural drawings reviewed indicate that the concrete elements are designed for the following 28-day pounds per square inch (psi) strength:

- | | | |
|-------------------------------|---|-----------|
| • Foundations | - | 3,000 psi |
| • Sidewalks and slab-on-grade | - | 3,000 psi |

2.2 Condition

Faithful+Gould observed exposed portions of the building structure at an open ceiling area on the third floor. All other ceiling areas were concealed. The building structure appeared to be in good condition with no significant instances of settlement or other deterioration noted with the exception of the issue noted below.

Areas of the corridors were noted with excessive deflection feeling “spongy”. Lifting some carpet tiles revealed cracked gypsum underlayment. Reportedly this was caused by heavily loaded dollies of gypsum board being wheeled along corridors when the drywall material was being stocked during construction. Reportedly no floor protection was employed. Visibly damaged underlayment areas were reportedly patched during construction. Fractured and weakened areas probably were not noticed or replaced, resulting in the current condition. We recommend an effort to map the damaged areas and repair same to maintain the required fire rating of the floor assembly.

An area of the third floor reportedly was water damaged by an extensive flood caused by a damaged sprinkler head. The damaged gypsum underlayment was reportedly removed and replaced with plywood. This may have resulted in a diminishment of the required fire rating of the floors since the gypsum is a component of the rating. We recommend this be investigated further with the architect of record and corrected if necessary. We have not included any cost for correction in the capital expenditure forecast.

2.3 Projected Capital Expenditures

Required:

1. Inspect all corridor floors for areas of excessive deflection and repair such areas with the proper materials. We recommend budgeting an allowance of \$15,000 (3 men 20 days @ \$200/day plus materials) for repairing the gypsum underlayment with a suitable patching compound in 2014.

3.0 ROOFING COMPONENTS

3.1 Description

The roof system consists of a 6:12 pitched asphalt three tab shingle roof in a gable and hip configuration with the ridges parallel to the long dimension of each section (reference

Photographs 20 through 24 in Appendix B). The roof system is installed over asphalt impregnated felt. The attic space contains 6" to 8" thick blown cellulose insulation with fiberglass batt insulation where previous repairs took place. Plan 3-1 provides a graphical overview of the roof area.

Plan 3-1 Roof Plan



The roof extends over the exterior walls approximately 18" terminating in a wood fascia that supports the gutters. The overhang is closed with a perforated metal soffit acting as an eave vent providing air intake to the attic space. There are 102 metal roof louvers spaced uniformly alongside the ridges providing an exhaust means to ventilate the attic space. There are also five dormer sections on the south side acting as "eyebrow" vents with louvered gable ends. Ridges are asphalt shingle material and valleys are butted shingles assumedly with an aluminum flashing beneath. The roof sections drain into aluminum gutters and downspouts connected to underground storm sewer piping. There is a small built-up roof area on the canopy at the front entrance. Table 3-1 summarizes the construction of the main roof area.

Table 3-1 Summary of Roof Construction

Roof Component	Main Roof and Penthouses
Installation Date	2007
Roof Area (total / approx.)	53,346 Square Feet
Application/ Membrane	Asphalt Shingles
Manufacturer / Model	Unknown
Surface	Granular
Deck Type	¾" Oriented Strand Board
Insulation	6"-8" Blown Cellulose in Attic
Cover Board	None
Drainage	Aluminum Gutters and Downspouts
Overflow Scuppers	n/a
Valley Flashings	Aluminum (assumed)
Cap Flashings	None
Perimeter Enclosure	Overhanging Eaves with Perforated Soffits
Warranty (Contractor)	Not Provided
Warranty (Manufacturer)	Not Provided

3.2 Condition

The roof appeared in good condition and the underside of the structural decks and drywall ceilings showed no evidence of water infiltration where they could be observed. A roof repair was in progress the date of the inspection including replacement of a small area of decking, fascia and gutter. The surface of the soffit material was heavily stained and should be cleaned. There were abandoned insect nests that should be removed.

The roof system, having been installed circa 2007, is probably subject to a manufacturer warranty expiring in 2027. This warranty has not been provided.

3.3 Projected Capital Expenditures

Required:

1. Replace the shingle roof at a cost of \$216,000 (54,000 sf @ \$4.00/sf) in 2028.

4.0 BUILDING EXTERIORS

The exterior of the building is tan and red colored brick veneer with punched windows on all the residential levels (reference Photographs 1 through 5 and 25 through 26 in Appendix B).

4.1 Description

Below Grade Wall Systems

The brick veneer rests 9" below grade on a shelf formed in the perimeter continuous footing. The wall cavity is filled with grout below grade to the underside of through wall flashing terminating at grade. There are plastic weep tubes at 24" spacing above the flashing and a mortar net within the cavity.

Above Grade Wall Systems

The brick veneer is supported by steel shelf angles at each upper floor fastened with lag bolts to wood beams at the perimeter of each floor assembly. The angles have through-wall flashing of a self-adhering rubber sheet material. Weep holes consisting of plastic tubes are provided 24" on center along shelf angles and at steel angle lintels over windows and doors.

The back-up walls are typically 2 x 4 wood studs, 16" or 24" on center with ½" oriented strand board sheathing covered with a building wrap material. Masonry ties are screwed to the sheathing probably 24" on center horizontally and vertically, providing a 2" cavity between the sheathing and the brick.

Through-wall heat pump louvers occur at each pair of living units. Toilet exhaust duct caps protrude through the brick walls at each living unit as well as 12 dryer exhaust duct caps at the ground floor of the center wing.

Windows are white painted aluminum single hung units with clear insulated glass. Windows are typically 3' wide and 6' high.

Storefront & Door Systems

The entrance lobby on the north side and the ground floor lounge of the center wing on the south side have dark anodized aluminum storefront with clear 1" thick insulated glazing units. The storefront typically extends to the finished floor. At the lounge, typical bays are 12'-4" wide by 16'-10" high with 12 lites and an arched head. In the lobby typical bays are 8'-2" wide by 7'-8" high with six lites. There are various interior storefront areas at offices on the ground floor. There are pairs of swing doors at the lobby and lounge and single doors at the stairway exits and the ground floor function room.

Other Exterior Elements

There is an aluminum canopy over the main entrance.

4.2 Condition

Below Grade Wall Systems

Not applicable.

Above Grade Wall Systems

We viewed the exteriors of the buildings from the ground using binoculars. There is extensive staining from leaking condensate at practically every through-wall heat pump location extending vertically from the bottom of the louver at all levels. This is the result of possibly incorrect heat pump installation or a product defect. Corrective measures are in progress to cure the problem. This is fully discussed in section 5.0. After correction, a program of cleaning the walls is required. Pressure washing and possibly chemical cleaning might be necessary.

Sealants appeared flexible and in good condition. By the end of the study period in 2018 the sealant material will be 11 years old, well within its useful life. We anticipate no necessity of replacing the window and other sealants within the capital expenditure 5 year study period.

Storefront & Door Systems

The storefront appeared to be in good condition with no evidence of water infiltration noted. The doors appeared to be fully operational and in good condition.

Other Exterior Elements

The canopy appeared to be in good condition. The canopy face requires cleaning at the scupper.

4.3 Projected Capital Expenditures

Required:

Below Grade Wall Systems

No required expenditures are anticipated at this time.

Above Grade Wall Systems

1. We recommend a program of cleaning the stained brick areas and heat pump sleeves. We recommend a budgeted amount of \$31,200 (96 locations @ \$325 EA) (4 man hours @\$50 + \$100 lift + \$25 materials) in 2014.

Window & Door Systems

No required expenditures are anticipated at this time.

Other Exterior Elements

No required expenditures are anticipated at this time.

Building Systems

5.0 MECHANICAL SYSTEMS

The following information was obtained through our visual observations of the building systems, review of the drawings and discussion with building management personnel (reference Photographs 1 through 6 in Appendix C).

5.1 Heating & Cooling Systems

Description

Through wall heat pumps

Each pair of living units is cooled and heated by individual self-contained through wall heat pumps manufactured by First Company. These units are nominal two ton units (22,000 BTU) with 8 KW emergency heating coils. The units are located in closets between living units. They are controlled by digital programmable thermostats, one in each living unit with electrically operated dampers to direct and cycle heated or cooled air flow to either living unit as demand requires. This is controlled by a Honeywell Mini-Zone Controller adjacent to each heat pump.

Condensate is piped from a drip pan in the heat pump enclosure to risers within the closets which discharge to the storm sewer system. A secondary drip pan conducts condensate to the outside of the wall sleeve in the event of a primary drip pan overflow condition. There is no overflow cut-off switch on the drip pan. Fresh air is introduced by a 3" flexible duct open to the exterior louver.

Common Areas

Heating and cooling in the lobby, corridors, offices and the large lounge is accomplished with split system fan coil units located in closets and service rooms along the corridors. Fan coil units are piped to outside heat pumps located on the ground in groupings around the building. Fan coil units and heat pumps are manufactured by Goodman and range in capacity from 1.5 to 5 tons. Fresh air is introduced by a fresh air duct riser in corridor locations with a roof louver. Stairways and the pump room are heated with wall mounted electric cabinet heaters.

Condition

The through wall heat pumps are in poor condition, with rusted and leaking evaporator coils and non-functional condensate pans and drains. Reportedly the condensate issues have been caused by an inadequate drain design which caused the drains to back up due to negative internal pressure within the unit cabinets and/or by clogged, improperly cleaned or chemically treated drain pans causing the overflow to the secondary drain pan and the outside wall. Product installation instructions are not clear and the sleeve should have been installed protruding from the brick plane with flashing and a drip edge provided beneath the sleeve to direct the condensate water out and away from the brick face. The leaking coil problem might be caused by formic acid from formaldehyde off gassing in the building materials, possibly the melamine finish on the cabinetry or pre-finished doors.

A program of testing and replacement of leaking coils and replacement of condensate drain tubing with pvc piping and traps was underway the day of the inspection. This is intended to extend the life of the units plus cure the overflow condition causing staining on the building exterior. We have not included the cost of this work since it is currently in progress.

We suggest vigilance in chemically treating the drip pans and drain lines along with frequent inspection and cleaning. We also suggest installation of overflow cut-off switches to the drip pan and Through-wall air conditioning systems generally have an expected useful life of fifteen years. Having been in service for six years, scheduled replacement in 2023 is anticipated.

Corridor fan-coil units and outside heat pumps were found to be in fair condition. A small percentage of motors and coils will likely fail every year as the fan-coil units age. A component replacement allowance should be considered part of any long range budget models. With proper maintenance, and isolated component replacements, the fan coil units should remain serviceable beyond the five year time period.

The insulation on the outside refrigerant lines leading to heat pumps is failing and exposing the tubing lines. We recommend re-insulating all outside refrigerant lines.

Projected Capital Expenditures

Required:

1. We recommend budgeting \$7,200 (96 units @ \$75) for installation of overflow cut-off switches to the through wall unit drip pans in 2014.
2. We recommend budgeting for fan-coil unit repairs to coils and fans. Our opinion of cost for this work is \$2,000 per year for every year of the study period.
3. We recommend budgeting for outside heat pump unit replacement in 2023. Our opinion of cost for this work is \$192,000.
4. We recommend budgeting for unit fan-coil unit replacement in 2023. Our opinion of cost for this work is \$96,000.

5.2 Air Distribution Systems

Description

In the living units conditioned air is distributed to the rooms via fiberglass ducts and flexible ducts connected to ceiling supply diffusers. Return air is conducted back to the heat pumps via undercuts of the bedroom doors then through louvers in the HVAC closet doors.

Conditioned air is distributed to the corridors, study rooms and other common rooms via fiberglass ducts and flexible ducts connected to ceiling supply diffusers. Return air is conducted back to the fan coil units through louvers in the HVAC closet door or side wall registers. Exhaust from the living units is provided by ceiling mounted exhaust fans in the suite bathrooms and ducted to the outside through the walls. A residential type range exhaust hood is provided in the first floor common kitchen exhausting above the exterior kitchen door.

Condition

The unit exhaust fans were found to be operational and in good condition. Ceiling mounted exhaust fans are considered to be "run-to-fail" items that should be replaced as part of routine maintenance efforts. The exhaust hood in the first floor kitchen was functioning but not drawing sufficiently. It is possible there is a clog or an open joint in the ductwork and this should be investigated.

The study rooms located in the corridors were uncomfortably cold. The supply from the corridor fan coil should be balanced.

Projected Capital Expenditures

Required:

No capital expenditures are currently anticipated.

5.3 HVAC Controls

Description

Building automation is limited to the individual mechanical systems. Student suites are equipped with digital programmable thermostats manufactured by White-Rogers or Honeywell and Honeywell Mini-Zone Controller panels.

System Capacity

The controls are functional and were observed to be operating without significant problems.

Condition

It is not clear whether high and low limits have been set within the thermostats, although they have that capability according to their operating manuals. Operating personnel advised that students frequently lower the thermostat settings in an attempt to cool their rooms more or more quickly. The above-noted replacement of leaking coils and cleaning of the remaining coils should alleviate the need to set the thermostats so low.

Projected Capital Expenditures

Required:

No capital expenditures are currently anticipated.

6.0 ELECTRICAL SYSTEMS

The following information was obtained through our visual observations of the building systems, review of the drawings and limited discussions with building management personnel. The electrical systems include the incoming electrical service, service switchgear and electrical distribution equipment, communications systems, and security systems (reference Photographs 7 through 9 in Appendix C).

6.1 Electrical Service Equipment

Description

Electrical Service Equipment

Electrical power is supplied by two Georgia Power service transformers located on the east and west sides of the site at 277/480 volts to two main housed switchboards.

Main Switch Gear

The complex has two dedicated 3,000 ampere electrical services. The services from the main switchgear components feed various 277/480-volt distribution panels located throughout the building and step down transformers that serve the 120/208-volt power risers in each building.

Power Distribution

Voltages

Corridor and common area HVAC systems, elevators, and exterior lighting fixtures are served by 277/480-volt system panelboards. General purpose receptacles, fluorescent lighting fixtures, small motors, and miscellaneous power branch system panels are served by 120/208-volt circuits.

Wire and Conduit

Typical power distribution for feeders and branch circuits is accomplished using wire in flexible metal conduit. Within living units reportedly wiring consists of copper conductors with thermoplastic insulation (Romex).

Panel boards

Three types of panel boards are used in the building. High amperage distribution panels feed small capacity load centers within living units and larger panels for common area lighting and power. The distribution panels incorporate fusible switch type feeder devices. The lighting and appliance panels utilize circuit breakers for over current and short circuit protection of circuits.

Equipment Manufacturers

The manufacturer of the main switchboards, motor control centers and panel boards are primarily Cutler-Hammer. Most of the electrical distribution equipment dates to the original construction of the building (circa 2007).

Condition

The electrical equipment appears to be in generally good condition and adequately sized to support the presently imposed electrical loads. Significant replacement of the electrical installations is not anticipated. When buildings contain more than a single electric service safety signage must be provided to advise workers or fire department personnel. We recommend this.

The arrangement of electrical panels and load centers within living units does not appear to be in accordance with the design drawings furnished to us. Heat pumps and hot water heaters within living units were supposed to be fed separately from a number of distribution panels separate from the living unit load centers. In actuality the heat pumps and hot water heaters are fed from separate breakers (50 and 100 amps respectively) in the load centers. The heat pumps have disconnect switches built into their cabinets. The hot water heaters did not have disconnect switches although there is a distance rule from the panel that might have allowed this.

Within the load centers there are ground fault interrupter (GFI) type breakers labeled as feeding lights and receptacles within bedrooms. This seems unusual and is not a code requirement for bedrooms. Management reported unusual problems with these breakers tripping when connections to the Ethernet cable was made. They have replaced a number of the GFI breakers with conventional type. Wet area receptacles in bathrooms and kitchens have required GFI receptacles.

Thermographic analysis of all primary electrical service components to include feeder connections, switchgear, transformers and breaker panels is recommended near term and on a five year cycle.

Projected Capital Expenditures

Required:

1. We recommend budgeting for thermographic analysis of the primary electrical system, step-down transformers and breaker panels. Our opinion of cost for this work is \$5,000 in 2014, 2018, 2022 and 2026 for a total cost of \$20,000.

6.2 Emergency Power Generation and Distribution Equipment

Description

There is no emergency generator.

6.3 Lighting Systems

Description

Interior lighting in the residential suites consists of surface mounted T-8 and high efficiency compact fluorescent fixtures and ceiling fans with lighting in bedrooms. Lighting in the suites is served by 120-volt circuits. Corridor, stair and common areas are illuminated with recessed and wall surface mounted compact fluorescent fixtures on 277-volt circuits. Surface mounted wall packs and pole-mounted, HID fixtures on 277-volt illuminate the parking area and site. Battery operated dual head wall packs provide emergency lighting in corridors, stairways and common areas.

Condition

Fixtures generally appeared to be in good condition. Assuming the completion of as-needed re-lamping as part of routine maintenance we do not anticipate significant expenditures relative to the lighting systems. Ceiling fans typically last 15 years and will need replacement in 2023. There are interior-type emergency wall packs mounted on exterior walls in the two courtyards. Because they are not weather-proof they are enclosed in clear plastic enclosures. These should be replaced with proper fixtures. Other exterior lighting should be replaced in 2028 at the end of their expected 20 year useful life.

Projected Capital Expenditures

Required:

2. Replace ceiling fans in 2023 at a cost of \$73,650 (491 @ \$150 each).
3. Replace exterior lighting in 2028 at a cost of \$6,000 (30 @ \$200 each).

6.4 Communication, Television, Data and Security Systems

Description

The telecommunications infrastructure includes hard-wired telephone, data and television service to each floor and each residential sleeping room and WI-FI transmitters throughout. Security systems include electronic key card access to exterior doors, fixed position closed circuit television cameras and a digital video recorder.

Condition

The data, television, telephone infrastructure, card reader system and closed circuit television system appeared to be in good condition. Building management indicated they would like more camera locations to fully serve the building

Projected Capital Expenditures

Required:

No required expenditures are anticipated at this time.

7.0 PLUMBING SYSTEMS AND APPLIANCES

Plumbing systems surveyed include the water service entrance, domestic hot water system, domestic water system and the sanitary piping system (reference Photographs 10 through 14 and 22 in Appendix C). Appliances include unit refrigerators and microwave ovens, and central clothes washers and dryers.

7.1 Domestic Water Systems

Description

Domestic Cold Water

Domestic cold water is supplied to the building by the State or City of Tifton through a 6" main running in an easement on the north side. A water meter and backflow preventer are located in an underground vault outside the pump room. Domestic water riser piping mainly consists of chlorinated polyvinyl chloride (cpvc) piping with solvent cement fittings. Domestic water pressure to the upper floors is maintained by a Tigerflow packaged pumping station which consists of a control panel and three pumps. This system supplies and distributes cold water to the risers in each building.

Domestic Hot Water

Domestic hot water for the common kitchen and public restrooms is produced by an A.O. Smith 119 gallon electric hot water heater in the ground floor pump room. Hot water for living units is supplied by individual 50 gallon A.O. Smith low boy electric hot water heaters located in the HVAC closet of each pair of units.

Domestic Water Piping

Water distribution within the residential suites is cpvc.

Plumbing Fixtures

Plumbing fixtures within the common area restrooms include wall mounted vitreous china urinals and water closets. Lavatories are primarily counter mounted vitreous china sink basins with chrome faucets.

Plumbing fixtures within the living units include 1.6 gallon per flush, floor mounted, tank-type vitreous china water closets. Lavatories are counter mounted vitreous china sink basins with chrome plated manual operated faucets. Tubs are vitreous china with shower heads and tile surround. There are high-low drinking fountains in the corridor of the central wing.

System Evaluation

The capacity and configuration of the water service to and through the building appears to be appropriate for the current occupancy.

Condition

Domestic Cold Water

The package booster pump station appeared to be in good condition and operating without any issues. It appears unusual to have such a system in a three story building since water pressure gauges indicated above 50 PSI available. The duty cycle of booster pumps in collegiate housing facilities is such that they generally become problematic after ten years of service however this system appears over designed and should last much longer.

Domestic Hot Water

The domestic water distribution piping system overall appeared to be in good condition. We do not anticipate the need to replace the domestic water distribution piping during the five-year study period. The unit hot water heaters have an expected useful life of 12 years therefore we recommend budgeting for their replacement in 2020.

The plumbing fixtures appeared to be in good condition and of adequate quality for collegiate housing. There was no evidence of significant leaks or other areas of deterioration noted or reported to us. Based on the anticipated life cycle of 25-years, replacement should not be required within the fifteen-year study period.

Projected Capital Expenditures

Required:

1. Replace unit hot water heaters in 2020 at a cost of \$96,000 (96 @ \$1,000).

7.2 Sanitary Waste and Storm Drainage System

Description

Sanitary waste piping consists of a gravity system with connections to all plumbing fixtures, and vertical pipe drops down through the building consolidated to a sewer main that discharges to the municipal sewer line. Floor drains and plumbing fixtures are served by gravity drain lines and discharged into the main sewer line. All sanitary piping is of pvc construction.

Storm Water Systems

Storm drainage from the sloped roof areas is via aluminum gutters and downspouts and is drained to Lake Baldwin via gravity.

System Evaluation

The capacity and configuration of the sanitary and storm water collection systems for the buildings appear to be appropriate for the current occupancy.

Condition

Sanitary waste and storm drainage systems appear to be in good operational condition.

Projected Capital Expenditures

Required:

No required expenditures are anticipated at this time.

7.3 Natural Gas Service

Description

There is no natural gas service to the building.

7.4 Appliances

Description

Residential units are equipped with two-door over and under refrigerator/freezers and wall mounted microwave ovens. There is a central laundry room with access card operated electric washers and dryers.

Condition

Unit appliances appear in good condition after five years of use and management maintains about a 5% inventory of replacement equipment. Microwave ovens have a nine year expected life and refrigerators have a 14 year expected useful life. The washers and dryers have a 10 year expected useful life.

Projected Capital Expenditures

Required:

No required expenditures are anticipated at this time.

8.0 FIRE AND LIFE SAFETY SYSTEMS

The following information was obtained through our visual observations of the building systems, and discussion with building management personnel. Fire and life safety elements observed included fire detection and alarm systems, fire suppression systems, and means of egress

8.1 Structural Fire Protection

Description

Common area corridors and the separation between living units are constructed with a one hour fire rating. Enclosures at each egress stairwell, elevator shaft and duct shafts were designed to be rated with a two hour fire rating. Structural systems were wood joist and drywall ceiling assemblies with plywood underlayment and gypsum fill rated at one hour. Doors are generally 20 minute fire rating in one hour walls. There are smoke partitions separating the central wing from the east and west wings with self closing metal doors in the corridors.

Condition

We noted the condition and adequacy of the structural fire protection systems at the support rooms and at egress stairwells. The fire protection appeared to be in good condition and generally installed in accordance with industry accepted practice.

Projected Capital Expenditures

Required:

No required expenditures are anticipated at this time.

8.2 Means of Egress

Description

Residential Floors

Each residential floor has an exit stair at the south end of each wing along with one stair at the north end of the center wing (total 4) running from the third floor and exiting on the ground floor to the courtyard or north lobby for emergency egress. Exit stairs are steel stringers and risers with precast concrete treads and poured-in-place concrete landings.

The path of egress at each area was constructed of wood joist or stud and drywall assemblies with plywood floor underlayment and gypsum fill rated at one hour. Doors are generally 20 minute fire rating in one hour walls. Doors contained panic hardware and are minimum clear opening width of 32". Exit signs and emergency lights were powered by back-up batteries. Exit signs were

provided at each exit, each stair enclosure door on every level, and at appropriate locations along the path of egress. Handrails at exit stairs were wall mounted and had a height of 31".

Condition

The paths of egress appeared to be generally compliant with the fire code in effect at the time of construction. We do not anticipate the need for capital expenditures for means of egress during the term of study.

Projected Capital Expenditures

Required:

No required expenditures are anticipated at this time.

8.3 Fire Suppression Systems

Description

The building is protected throughout by a fully automatic wet-pipe fire suppression sprinkler system. The sprinkler system provides 100% building coverage and utilizes non-recalled heads. A 6" fire main with backflow prevention serves the fire suppression system utilizing street pressure.

4" steel pipe risers are located in the south stairwells of each wing (reference Photographs 16 and 17 in Appendix C). There are no fire department hose connections located on the floors. Horizontal piping is cpvc with solvent cement couplings. There are portable fire extinguishers in cabinets in the corridors.

Condition

The fire suppression systems appeared to be in good condition and did not utilize recalled heads. The sprinkler system is tested annually by the Fire Marshal. The last inspection was March 18, 2013. We do not anticipate the need for capital expenditures for fire suppression system during the term of study. Recently a project of adding hangers at a number of heads was completed. portable fire extinguishers were also last inspected March 18, 2013.

Projected Capital Expenditures

Required:

No capital expenditures are currently anticipated.

8.4 Fire Detection and Alarm Systems

Description

The building is protected by an automatic fire detection and evacuation alarm system. The Notifier® main Fire Alarm Control Panel (FACP) is located in the electric room in the corridor of the middle wing on the ground floor. There is not an annunciator panel at the lobby front desk which is less than 50 feet from the panel. The fire alarm system monitors manual pull stations, duct smoke detectors, sprinkler alarm switches and elevator lobby and machine room smoke detectors. There are hard wired local smoke detectors in each bedroom and within the suite common areas. These are not monitored by the FACP. The FACP drives audiovisual and visual signal devices located in the corridors, toilet rooms, and suites.

Condition

The fire alarm system appears to be in good condition. Fire alarm control panels generally become increasingly maintenance intensive and unreliable after fifteen years of service. The FACP has been in service for nearly seven years and we recommend budgeting for replacement in 2023

Projected Capital Expenditures

Required:

1. Replace fire alarm control panel in 2023 at a cost of \$15,000.

9.0 CONVEYANCE SYSTEM

9.1 Description

Vertical transportation is provided by a single 2,500# capacity hydraulic elevator located at the north lobby and serving all floors. It operates at a speed of 150 feet per minute. The equipment is manufactured by Albany Elevator Co. (reference Photographs 18 through 21 in Appendix C).

The hydraulic elevator machine consists of a skid mounted pump, motor, and reservoir tank with integral control cabinet. The elevator machine is located in a dedicated machine room in the corridor of the central wing.

Pits & Hoistway

Each hoistway contained the following major pieces of equipment.

• Limit Switches	• Door Operating Equipment
• Hoistway Wiring and Conduit	• Door Operators
• Panels and Frames	• Car Operating Station
• Fascias and Dust Covers	• Leveling Equipment
• Buffers	

Cabs

The elevator cab consists of a steel enclosure with basic durable finishes. A car-operating panel is provided within the cab. Raised numbers and Braille tags are provided at the operating panel. A hands-free communication system is provided within the cab. The cab is provided with a side opening single-speed door with infrared sensors.

Lobbies

Hall buttons are provided at the passenger elevator along with arrival lanterns and Braille floor designations.

Condition

The elevator overall appeared to be in good condition. Currently under service contract with Albany Elevator, the elevator provides adequate and reliable service. The controller appeared to be in good condition and of newer technology. Finishes within the elevator cab are in good condition, having been installed as part of the original construction.

Assuming the continuation of on-going maintenance in accordance with industry standard practice and manufacturer recommendations, replacement or significant capital repair should not be required within the fifteen-year study period. We recommend budgeting for refurbishment of the cab in 2023

Projected Capital Expenditures

Required:

1. Refurbish elevator cab finishes in 2023 at a cost of \$12,500.

BUILDING INTERIORS & FINISHES

10.0 INTERIOR FINISHES

10.1 Description

Interior areas include the entrance lobby, the living floors at each level, the common hallways and community rooms, maintenance areas, office areas, storage areas, service areas (reference Photographs 27 through 42 in Appendix B).

Lobby Level

Finishes at the main building entrance lobby consist of simulated wood strip flooring made of a composite material, ceramic tiles, a combination of painted gypsum board walls and exposed brick, ceiling system consisting of painted gypsum board and ceiling-recessed lighting. A security desk is located at the main entrance lobby.

The lobby level contains two public restrooms designed as one male and one female. Each restroom contains multiple stalls, vitreous china lavatories, plastic laminate toilet partitions, ceramic tile floors, a combination of painted and ceramic tile covered walls, vitreous china urinals at the male restroom and ceilings consisting of painted drywall.

Other areas on the lobby level include the mail room, meeting rooms, laundry rooms and housing department offices. There is a small convenience store in the lobby.

Finishes within the lobby level and upper level living units consist of rubber tile floors, painted gypsum wallboard walls, painted gypsum board ceilings throughout and ceiling surface mounted lights. There are 1" louver blinds placed over the interior face of the painted aluminum window systems. There are particle board base and wall kitchen cabinets and vanities with plastic laminate surfaces and plastic laminate counter tops and back splashes. Kitchen and vanity areas have vinyl tile floors. Bathrooms have ceramic tile floors and fiberglass tub surrounds. Kitchen appliances include double door top freezer refrigerators and microwave ovens. Doors are paneled wood with Onity key card locks, optical interviewers and spring hinges.

10.2 Condition

Faithful+Gould walked the common areas and 24 living units (12.5% of the total) to observe the general condition, areas of damage and to determine future capital projects. Finishes were generally consistent throughout the interior spaces. In order to concisely describe conditions, we have detailed below the condition of the lobby, hallways, offices, restrooms and the support areas.

Lobby

The main entrance lobby inclusive of the ground floor elevator lobby was in good condition.

Hallways

Finishes at the elevator lobbies and hallways were in good condition. Carpet was slightly worn in high traffic areas. Painting was underway during our visit. A number of service area doors had overhead closers that were broken or disabled and should be repaired. Carpet should be replaced in 2018.

Offices

Finishes within the office areas were in mostly good condition.

Restrooms

Public Restrooms were in good condition. Living unit restrooms had no noted signs of leakage beneath tubs or commodes on ceilings below.

Support Areas

Finishes at the support areas are in generally good condition and in-keeping with their support / secondary use. We have anticipated that as-needed repainting of walls or replacement of floor tiles can be completed on an as-needed basis as an operational expense.

Living Units

24 units representing 12.5% of the total number of units were inspected. The sample was distributed by floor, exposure (courtyard or exterior), unit size and type.

The following units were entered:

142,159,156,145,132,121,124,110,227,201,208,228,253,269,271,267,238,336,308,309,301,327,
368,371.

Living units were generally in good condition considering the age and use of the facility. Carpets were generally in fair condition with some staining and should be replaced in 2018-2020 (1/3 per year). Bathtubs and surrounds should require refinishing in 2018-2020 (1/3 per year).

A general re-painting should be contemplated on a four year cycle beginning in 2016.

10.3 Projected Capital Expenditures

Required:

1. Replace corridor carpet in 2018-2020 (1/3 per year) at a cost of \$38,000 (1,900 square yards @ \$20/sy).
2. Refinish bathtubs and surrounds in 2018-2020 (1/3 per year) at a cost of \$144,000 (192 @ \$750 each).
3. Repainting allowance in 2016 and 2020 at a cost of \$400,000 (200,000 sf @ \$1/sf)

ACCESSIBILITY

11.0 Accessibility

11.1 The Guidelines

As a publically accessible office, service and residential facility, the building should seek compliance with the 1991 Americans with Disability Act (ADA) Accessibility Guideline. This report section compares the requirements of the ADA with as-built conditions, and where applicable, recommends upgrades required to achieve compliance. Specifically, two areas of the ADA have significant effect on the physical aspects of the Property.

Since this is also an elevator equipped residential building the building and the living units must also comply with the Fair Housing Amendment Act of 1988 (FHAA). There are 195 total units of which 13 (29 beds) are designed as handicapped accessible units. There are also 4 units (8 beds) designated as hearing impaired units.

1991 Americans with Disability Act (ADA)

Title I deals with employment discrimination, and requires that employers not discriminate against a disabled person in hiring or employment. This can impact the configuration and features of buildings and those employers are expected to make “reasonable accommodation”, including making facilities readily accessible to disabled employees.

Title III requires that public accommodation provide goods and services to disabled patrons on an equal basis with the non-disabled patrons. This title is the part of the ADA with perhaps the greatest impact on buildings, which provide public accommodations, including office buildings.

The ADA has provided a benchmark for measuring accessibility, primarily orientated towards new construction. It also provides guidance for modification of existing facilities to eliminate barriers to access. This benchmark is the ADA Accessibility Guidelines (ADAAG). The ADAAG was written by the Architectural and Transportation Barriers Compliance Board, and first issued in final form in July 1991. The stated purpose of the guidelines is to ensure that newly constructed facilities and altered portions of existing facilities covered by the ADA are readily accessible to disabled persons.

This report has been based upon the ADAAG issued in July 1991. Discussion has been made by the Architectural and Transportation Barriers Compliance Board for modification to the presently enforceable ADAAG. The details and enforcement date of these modifications have yet to be released. In light of this information, we recommend that prior to conducting any improvement, advice is sought from legal counsel and current guidelines be adhered to.

Regulatory implementation of the ADA includes the following prioritizes for barrier removal in existing facilities:

- **Accessible Entrances.** Providing access from public sidewalks, parking or public transportation that enables disabled individuals to enter the facility.
- **Access to Goods and Services.** Providing access to areas where goods and services are made available to the public.
- **Usability of Restrooms.** Providing access to restroom facilities.
- **Removal of Remaining Barriers.** Providing access to the goods, services, facilities, privileges, advantages, or accommodations.

11.2 Applicability

The ADA in its purist form relates only to facilities occupied or significantly altered after March 13, 1991. For facilities with Certificates of Occupancy issued prior to March 13, 1991 and not significantly altered after this date, the ADA is seen as a “good practice guide” with a requirement to complete accessibility upgrades typically made by civil suit and employee / user request. The building was first occupied in 2007. For the purposes of this report, we have identified non compliant conditions and recommended that these conditions be brought into compliance with the ADA.

11.3 Accessible Entrances

The first consideration relates to measures that will enable individuals with disabilities to physically approach and enter a place of public accommodation. The priority of “getting through the door” recognizes that providing actual physical access to a facility from public sidewalks, public transportation, or parking, is generally preferable to any alternative arrangement in terms of both business efficiency and the dignity of individuals with disabilities.

The public sidewalks at the north side of the site are provided with curb ramps where required and are generally accessible.

All parties entering the building via parking transport or from the ADA designated parking stalls will enter via the lobby doors. Access via the at-grade entrances is provided through a pair of swing doors.

Door width and hardware were compliant with the applicable sections of the ADAAG. The door opening force was compliant with the 22.2 Newton requirement of Section 4.13.11 (Door Opening Force) of the ADA.

11.4 Accessible Drop-Off and Pick-Up Areas

If passenger drop-off areas are provided, they must be accessible and an accessible route must connect each accessible drop-off area with the accessible entrance(s). Curb ramps must be

provided if the drop-off area is next to a curb and raised sidewalk. There is a passenger drop-off area.

11.5 Route of Travel

Disabled persons wishing to access the Property are able to gain suitable means of entry via the street entrance at the north side. The route of travel, from the public street frontage to the entrance, is generally unrestricted and accessible in compliance with the ADAAG.. Once at the lobby access is unrestricted.

11.6 Horizontal and Vertical Circulation

The elevator serves each living level of the building. The elevator is compliant with the requirements of Section 4.10 (Elevators) of the ADAAG. The elevator car came to a stop at the required vertical distance from the floor. The door remained open for a minimum of three seconds and opened and closed automatically. Audio and visual signals designated the arrival of the cars, with an audible signal once for up and twice for down. Hallway call buttons were centered at the appropriate height from the floor. The entranceway floor numbers were placed at a compliant height and were of an adequate letter size.

The elevator has a communications device installed. The elevator control panel numbers were raised 1/32 of an inch, located to the left of the buttons, and were 40 to 45-inches off the floor, and contrasted with their background.

Section 4.10.9 (Floor Plan of Elevator Cars) of the ADA requires that an elevator car with a side opening door have an interior dimension of 54-inch deep x 80-inches wide. The building appears to meet the requirements of Section 4.10.9.

Stairs were exempt from complying with Section 4.9, due to the elevators connecting the same levels as the stairs.

Once within the Property, a disabled individual is provided with level and generally unrestricted access to all the floors.

11.7 Door Widths and Signage

Section 4.13 (Doors) of the ADAAG states that doorways and gates, including security entrance gates shall have a minimum clear opening of 32-inches. The doorways met this requirement with a typical clear opening width of 33 to 34-inches.

This section of the ADAAG also states that the threshold at doorways shall not exceed ½-inches in height, and that door hardware (handles, pulls, latches, locks etc.) on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. The doorways and doors at the Property were compliant with these requirements.

The ADAAG states that signs that identify permanent rooms and spaces such as those identifying rest rooms and exits or providing room numbers must have Braille and raised letters or numbers to allow them be read visually or tactilely. The ADAAG also states that signs must also meet specific requirements for mounting location, color contrast, and non-glare surface. Signs that provide direction to, or information about, functional spaces must only comply with requirements for character proportion, character height, and finish and with contrast between the characters and background.

Letters and numbers on signs shall have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10. The letters and numbers on signs shall be raised 1/32-inches minimum and shall be sans serif. The characters or symbols on signs shall be at least 5/8-inches high, but no higher than 2-inches. Symbols or pictographs on signs shall be raised 1/32-inches minimum. The ADAAG also requires that doors to hazardous areas be equipped with tactile warnings.

Signs used to identify offices and other permanent rooms and spaces within the Property met these requirements. Signs providing directions, information about offices and other functional spaces complied with these requirements. Signs at each restroom met the physical requirements of the ADA. Refer to following restroom discussion for more details.

11.8 Space Allowance and Reach Ranges

Section 4.2 (Space Allowance and Reach Ranges) of the ADAAG requires that a minimum clear width for single wheelchair passage shall be 32-inches, the minimum width for two wheelchairs to pass is 60-inches, the space required for a wheelchair to make a 180-degree turn is a clear space of 60-inches, and the minimum clear floor or ground space required to accommodate a single, stationary wheelchair occupant is 30-inches by 48-inches. The Property complied with these requirements.

11.9 Protruding Objects

Section 4.4 (Protruding Objects) of the ADAAG requires that objects projecting from walls (e.g. drinking fountains) with their leading edges between 27-inches and 80-inches above the finished floor shall protrude no more than 4-inches into walks, halls, corridors, passageways, or aisles. Objects mounted with their leading edges at or below 27-inches above the finished floor may protrude any amount. Free-standing objects mounted on posts or pylons may overhang 12-inches maximum from 27-inches to 80-inches above the ground or finished floor. Protruding objects shall not reduce the clear width of an accessible route or maneuvering space.

The section also states that walks, halls, corridors, passageways, aisles, or other circulation spaces shall have a minimum clear head room of 80-inches. If a vertical clearance of an area adjoining an accessible route is reduced to less than 80-inches (nominal dimension), a barrier to warn blind or visually-impaired persons shall be provided. No significant protruding objects were noted within the Property.

11.10 Ground and Floor Surfaces

Section 4.5 (Ground and Floor Surfaces) of the ADAAG requires that ground and floor surfaces along accessible routes and in accessible rooms and spaces, including floors, walks, ramps, stairs, and curb ramps, be stable, firm, and slip-resistant. Flooring within the Property generally complied with this requirement.

This section also requires that changes in level between ¼-inches to ½-inches be beveled with a slope no greater than 1:2, and that changes in level greater than ½-inches be accomplished by means of a ramp. The section also states that carpet or carpet tile used on a ground or floor surface be securely attached; have a firm cushion, pad, or backing or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Where gratings are located on walking surfaces, then they shall have spaces no greater than ½-inches wide in one direction. Ground and floor surfaces for the Property were compliant.

11.11 Ramps

Section 4.8 (Ramps) of the ADAAG requires that any part of an accessible route with a slope greater than 1:20 shall be considered a ramp. The Property has no ramps leading to the main entrance.

11.12 Accessible Amenities

ADAAG requires that the controls and operating mechanisms of vending machines in restaurants and cafeterias comply with all of 4.27 (Controls and Operating Mechanisms) of the ADAAG. Vending machines complied with these requirements.

11.13 Usability of Rest Rooms

Sections 4.16 through 4.21 of the ADA detail those measures that will provide individuals with disabilities with access to rest room facilities. Public restrooms appeared compliant with the ADA.

11.14 Unisex Restroom

There is no unisex restroom.

11.15 Showers

There are no showers.

11.16 Drinking Fountains

Wall-mounted "hi-lo" drinking fountains are provided at the lobby level. The use of "hi-lo" drinking fountains provides one drinking fountain to those who use wheel chairs and one drinking

fountain at a standard height convenient for those who have difficulty bending. Drinking fountains typically had a spout height of 34-inches from the spout outlet to the floor, a clear knee space height of 27-inches and a fountain depth of 18-inches. Drinking fountains complied with section 4.15 (Drinking Fountains and Water Coolers) of the ADAAG.

11.17 Parking

Per plans the parking area contains 497 parking spaces. Of the total spaces, 9 spaces are designated as accessible and four of those are van accessible.

Section 4.1.2 Accessible Sites and Exterior Facilities (5) (a) of the ADA states that 9 accessible including two designated as van accessible should be provided when a building contains 497 parking spaces. The Property thus contains an adequate number of accessible parking spaces and van accessible spaces.

Federal Fair Housing Act

The Federal FHA was passed in 1968 as Title VIII of the Civil Rights Act and prohibited discrimination based on race, color, religion or national origin in the sale, rental or financing of housing. In 1974, a provision prohibiting housing discrimination based on gender/sex was added and in 1988, provisions prohibiting housing discrimination based on mental and/or physical disabilities were added.

Under the law, landlords and sellers cannot discriminate against a person based on the cited characteristics and must make reasonable accommodations for a person's disability. The law does not apply in some cases where the landlord or seller is acting with regard to his or her private house or small apartment building. The law also allows the rejection of any tenant or buyer who would directly threaten the health or safety of other individuals or would cause substantial physical damage to the property of others.

The Fair Housing Act requires seven basic requirements that must be met to comply with the Act. These requirements are:

Requirement 1. An accessible building entrance on an accessible route.

Requirement 2. Accessible common and public use areas.

Requirement 3. Usable doors (usable by a person in a wheelchair).

Requirement 4. Accessible route into and through the dwelling unit.

Requirement 5. Light switches, electrical outlets, thermostats and other environmental controls in accessible locations.

Requirement 6. Reinforced walls in bathrooms for later installation of grab bars.

Requirement 7. Usable kitchens and bathrooms.

For each of its seven requirements, the FHA does not require fully accessible units, but instead, apply to a broad number of dwelling units. The Act's design and construction requirements are modest and result in units that do not look different from traditional units, but can be easily adapted by people with disabilities who require features of accessibility not required by the Act.

The architectural drawings specify the design requirement to comply with the FHA and a general observation has confirmed compliance.

Projected Capital Expenditures

Required:

No required expenditures are anticipated at this time.

Appendix A

Ten-Year
Capital Expenditure Forecast



TEN YEAR CAPITAL EXPENDITURE FORECAST
LAKESIDE APARTMENTS
ABRAHAM BALDWIN AGRICULTURAL COLLEGE



Component No.	Component	Estimated Useful Life or Replacement Cycle (Yrs)	Remaining Useful Life (Yrs)	Quantity	Unit of Measurement	Unit Cost	Immediate	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Required
						Year	0	1	2	3	4	5	6	7	8	9	10	
Site Systems & Recreational Features																		
Required																		
1	Crack Fill, Sealcoat and Stripe Parking Area (5 year cycle)	5	1	17,500	SY	\$1.10		\$19,250					\$19,250					\$38,500
Structural Systems																		
Required																		
1	Repair Corridor Floors at Damaged Gypsum Underlayment (allowance)	N/A	1	1	LS	\$15,000.00		\$15,000										\$15,000
Roofing Systems																		
Required																		
Exterior Elements																		
Required																		
1	Clean Stained Brick at Heat Pump Louvers (5 year cycle)	5	1	96	EA	\$325.00		\$31,200					\$31,200					\$62,400
Mechanical																		
Required																		
1	Install Overflow Switches at Through Wall Heat Pumps	10	1	96	EA	\$75.00		\$7,200										\$7,200
2	Periodic Fan Coil Repairs	1	1	1	LS	\$2,000.00		\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$20,000
3	Replace Heat Pump Outside Units	15	10	96	EA	\$2,000.00											\$192,000	\$192,000
4	Replace Unit Fan Coil Units	15	10	96	EA	\$1,000.00											\$96,000	\$96,000
Electrical																		
Required																		
1	Thermographic Analysis of Electrical Equipment (4 year cycle)	4	1	1	LS	\$5,000.00		\$5,000				\$5,000				\$5,000		\$15,000
2	Replace Ceiling Fans	15	10	491	EA	\$150.00											\$73,650	\$73,650
Plumbing																		
Required																		
1	Replace Hot Water Heaters	12	7	96	EA	\$1,000.00								\$96,000				\$96,000
Fire and Life Safety																		
Required																		
1	Replace Fire Alarm Control Panel	15	10	1	EA	\$15,000.00											\$15,000	\$15,000
Conveyances																		
Required																		
1	Refurbish Elevator Cab	15	10	1	EA	\$12,500.00											\$12,500	\$12,500
Interiors																		
Required																		
1	Replace Corridor Carpet	10	5	1,900	SY	\$20.00					\$12,000	\$12,000	\$14,000					\$38,000
2	Refinish Bathtubs and Surrounds	10	5	192	EA	\$750.00					\$48,000	\$48,000	\$48,000					\$144,000
4	Cyclical Paint Finish Allowance	4	1	200,000	SF	\$1.00				\$200,000				\$200,000				\$400,000
Accessibility																		
Required																		
						Required Cost (Present Worth)	\$0	\$79,650	\$2,000	\$202,000	\$62,000	\$67,000	\$114,450	\$298,000	\$2,000	\$7,000	\$391,150	\$1,225,250
						Cost (Inflated @ 3% Per Yr.)		\$82,040	\$2,060	\$214,302	\$67,749	\$75,409	\$132,679	\$355,828	\$2,460	\$8,867	\$510,362	\$1,451,755

Appendix B

Architectural and Site Photographs



Photograph No. 1

North elevation west end



Photograph No. 2

West wing east elevation



Photograph No. 3

West courtyard looking north



Photograph No. 4

West courtyard looking north east



Photograph No. 5

South elevation of center wing



Photograph No. 6

Planters at the east courtyard



Photograph No. 7

Faded handicapped parking



Photograph No. 8

North sidewalk



Photograph No. 9

Cracked pavement



Photograph No. 10

Cracked pavement



Photograph No. 11

Low area not draining properly



Photograph No. 12

Exit steps at the west courtyard. Note efflorescence



Photograph No. 13

Exit steps at the west courtyard. Note efflorescence



Photograph No. 14

Unintended cooking grease disposal area in the east courtyard at the kitchen door.



Photograph No. 15

Dumpster enclosure at the east end



Photograph No. 16

Roof trusses



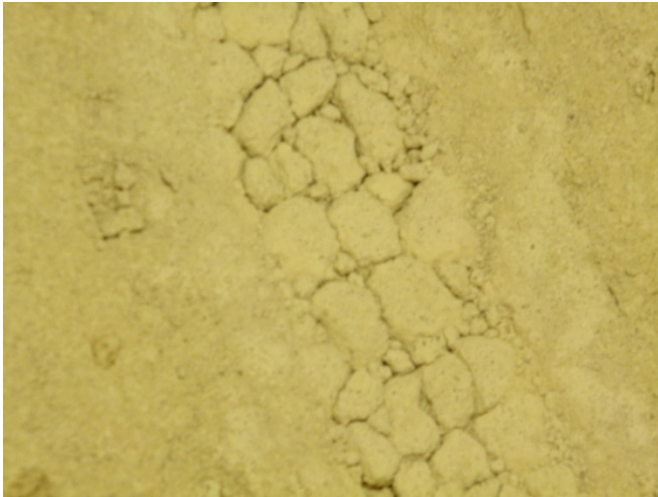
Photograph No. 17

Roof trusses



Photograph No. 18

Damaged gypsum floor underlayment



Photograph No. 19

Damaged gypsum floor underlayment



Photograph No. 20

Low slope roof at the north entrance canopy



Photograph No. 21

Shingle roof



Photograph No. 22

Eave overhang and aluminum gutter and downspout



Photograph No. 23

Soffit material is very dirty



Photograph No. 24

Dirty soffit



Photograph No. 25

Staining from heat pump condensate



Photograph 26

Staining from heat pump condensate



Photograph No. 27

North lobby lounge area



Photograph No. 28

North lobby computer area



Photograph No. 29

North lobby reception desk and corridor



Photograph No. 30

South lounge



Photograph No. 31

Office areas



Photograph No. 32

Upper level typical corridor



Photograph No. 33

Living unit kitchen area



Photograph No. 34

Living unit bed room



Photograph No. 35

Living unit bathroom



Photograph No. 36

Public restroom on the first floor



Photograph No. 37

Public restroom on the first floor



Photograph No. 38

Public restroom on the first floor



Photograph No. 39

Public restroom on the first floor



Photograph No. 40
Typical living unit doors



Photograph No. 41
Laundry room at first floor



Photograph No. 42
Communal kitchen first floor

Appendix C

Mechanical, Electrical, Plumbing and Conveyances Photographs



Photograph No. 1

Heat pump and hot water heater in a typical living unit HVAC closet



Photograph No. 2

Heat pump interior with new pvc drain piping



Photograph No. 3

Testing a heat pump evaporator coil for leaks



Photograph No. 4

Typical corridor fan coil unit



Photograph No. 5

Heat pump cluster in east courtyard



Photograph No. 6

Deteriorated refrigerant line insulation



Photograph No. 7

One of two main switchboards. No warning signage posted advising there is a second electric service.



Photograph No. 8

Distribution boards feeding living unit load centers



Photograph No. 9

Living unit load center. Note GFI breakers labeled for bedroom lights and receptacles.



Photograph No. 10

Domestic water main and meter in an underground vault



Photograph No. 11

Living unit hot water heater



Photograph No. 12

Domestic water booster pump



Photograph No. 13

Hot water heater for the communal kitchen and the public restrooms



Photograph No. 14

Connections to a typical living unit hot water heater. This is directly wired with no electrical disconnect.



Photograph No. 15

Fire alarm control panel in first floor electrical room



Photograph No. 16

Sprinkler control valves at the first floor pump room



Photograph No. 17

Sprinkler valves in a south stairwell



Photograph No. 18

Elevator entrance



Photograph No. 19

Elevator cab and controls



Photograph No. 20

Elevator controller



Photograph No. 21

Elevator pump and reservoir



Photograph No. 22

High/low water coolers in first floor corridor

Appendix D

Resumes of Assessment Team

Jack Wexler, PE Chief Facility Assessor

With more than 30 years of experience, Jack Wexler has a sound construction background. From performing over 200 condition assessments to managing the design and construction of large projects, Jack is well adept at providing strategic solutions to his clients. Jack has worked in a variety of sectors including commercial and retail, hospitality, residential, industrial and historical. Jack's condition assessment expertise spans a variety of functions including performing site visits and providing monthly reports on the quality of the facility, contract compliance, schedule and budgets.

Prior to joining Faithful+Gould, Jack owned and operated his own construction consulting firm in which he performed property condition assessments, construction management, forensic investigations, claims consulting and provided technical advisory services.

SELECTED PROJECT EXPERIENCE

- **Georgia Institute of Technology Portfolio; Atlanta; GA** - providing comprehensive FCA services to the Georgia Institute of Technology on 112 buildings on its campus comprising approximately 6.5 million square feet. The scope consists of facility condition assessments, collection of energy data and prioritization of all noted capital expenditure requirements. All information will then be input to our iPlan software.
- **Country Inn and Suites; Douglasville, GA** - Provided an ASTM-compliant property condition assessment of a five-story, 91-room limited service hotel for the purchaser. Inspected all trades including civil, mechanical and electrical. The scope included estimates of capital expenditures to correct deferred maintenance.
- **The Knickerbocker; New York City, NY** - Conducted the architectural and structural assessment of a 16-story, 330,000-square-foot historic office building for the purchaser who intended to convert it to a hotel property.
- **Five Forks Trickum Retail Center; Lilburn, GA** - Provided an ASTM-compliant property condition assessment of an 80,000-square-foot-retail property for the purchaser. Inspected all trades including civil, mechanical and electrical.

Education

Bachelor of Civil Engineering,
Rensselaer Polytechnic Institute, 1965

Master of Business Administration,
Rutgers University, 1971

Certifications/Affiliations

Professional Engineer: GA, FL, DC and NY, 1972

Graduate Certificate in Real Estate,
Georgia State University 1993

Board of Directors, Real Estate
Investment Advisory Council, 1993 - Present

Board of Directors, Georgia State
University Real Estate Alumni Group,
2010 - Present

Member, American Society of Civil
Engineers, Geotechnical Section, 2009
– Present

Member, CoreNet Global

Member, Atlanta Hospitality Alliance

Member, Society of College and
University Planners

Member, Georgia Association of
Physical Plant Administrators

Member Construction Management
Association of America-CCM candidate

LEED EB/OM Accredited Professional
candidate

Adjunct Instructor, School of Building
Construction, College of Architecture
Georgia Institute of Technology, 2001 - Present

Adjunct Instructor, Real Estate
Department; Robinson College of
Business, Georgia State University,
2005 – Present

Lorman Educational Services Speaker,
2007 Construction Management
Program

Institute of Continuing Legal Education
Speaker, 2010 Foreclosure Program

Years of Experience

30+ years

The scope included estimates of capital expenditures to correct deferred maintenance.

- **International Monetary Fund; Washington, DC-** Conducted the architectural and structural assessment of a 12-story, 511,000-square-foot office building with a three story, 288,000 square foot underground parking garage.
- **Portfolio acquisition; San Juan, Puerto Rico-** Conducted property condition assessments of five commercial, retail and residential buildings.

Some of Jack's other notable experience includes:

- Glenn Hotel Owner Representation and Business Interruption Insurance Claim; Atlanta, GA
- Emory University Marcus Hillel Center Technical Advisor; Atlanta, GA
- Atlantis Resort Claims Review and Cost Consulting; Bahamas
- Owners Representative-Centennial Park West Condominiums; Atlanta, GA
- Owners Representative- Aquarium Hilton Garden Inn; Atlanta, GA
- The Palm and Radisson Northlake Hotels Due Diligence and Redevelopment; Atlanta, GA
- Project Manager-2500 Peachtree Street Luxury Condominium; Atlanta, GA
- Owners Representative-1330 and 1350 Spring Street Modernization; Atlanta, GA
- Project Manager-Artmore Hotel Renovation; Atlanta, GA
- Owners Representative-1001 Pennsylvania Ave; Washington, DC
- Owners Representative-One Franklin Square; Washington, DC
- Project Manager-Federal Center Plaza; Washington, DC
- Assistant Project Manager-100 William Street; New York, NY
- Assistant Project Manager-Park Lane Hotel; New York, NY
- Assistant Superintendent-Memorial Sloan Kettering Cancer Center; New York, NY