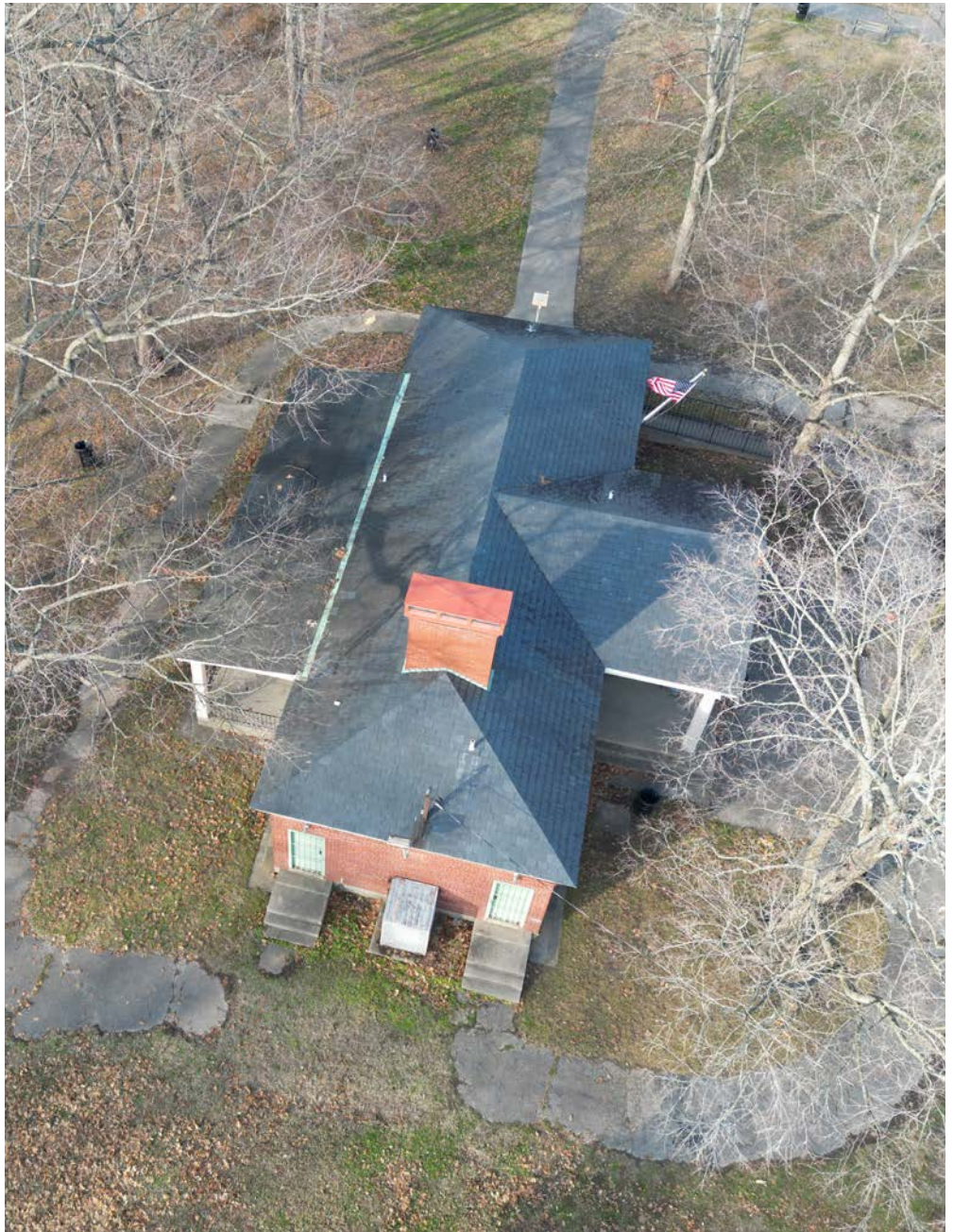




FEASIBILITY STUDY

AUGUST 15, 2023

OLMSTED PARKS CONSERVANCY
LODGE BUILDING ANALYSIS
CHICKASAW PARK

EXISTING CONDITIONS ANALYSIS



OLMSTED
PARKS
CONSERVANCY



LOUISVILLE
PARKS
AND RECREATION

FEASIBILITY STUDY FOR THE REVITALIZATION OF CHICKASAW'S LODGE

Project Address:

1200 Southwestern Parkway, Louisville KY, 40211

Prepared For:

Olmsted Parks Conservancy

Prepared By:

JRA Architects

Lexington / Louisville Kentucky

and

Element Design

Louisville / Lexington / Murray Kentucky

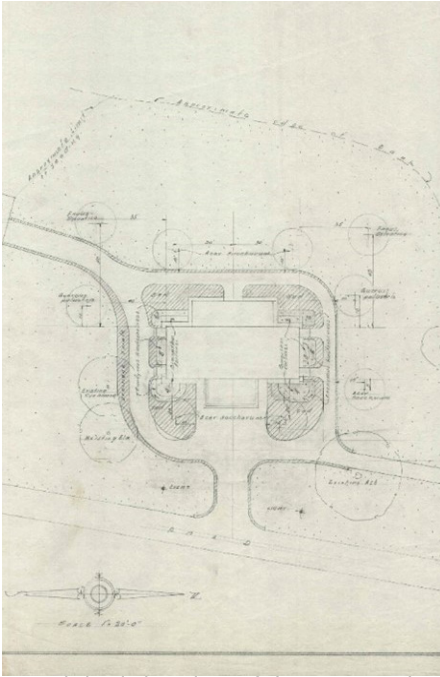
Consultants:

KGEI Engineers

Louisville, KY

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Original Site Plan of the 1952 Lodge

EXISTING CONDITIONS ANALYSIS

Chickasaw Lodge

Executive Summary

Element Design, JRA Architects, and Kerr-Greulich Engineers are very excited to be involved with Olmsted Parks Conservancy, to investigate the existing conditions of the Historic Lodge at Chickasaw Park. Olmsted Parks Conservancy excels in providing ecological restoration and enhancing Louisville's community spaces in addition to outreach and education. This existing conditions survey is not only to examine the revitalization of the Lodge at Chickasaw Park, but to further continue the efforts of Olmsted Parks Conservancy in creating a better community.

Located in the Chickasaw Neighborhood of Louisville's West End, the Lodge is located near the center of the Park, at 1200 Southwestern Parkway, Louisville KY, 40211. It is adjacent to the existing tennis courts, play area, and fitness area.

The purpose of the existing conditions assessment is to review the current conditions of the building site, building elements and building systems. Our team has conducted an initial building code review for life safety and potential code compliance issues, reviewed the existing site conditions, existing building architectural elements both interior and exterior, building systems (structural, mechanical, electrical, plumbing, and Information technology) to develop this report with recommendations for repairs and restoration needs.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Existing Building: General History

In 1923, plans for a new park in Louisville were underway. Designed by the Olmsted Firm, the former farm was created to be the largest park for Black Louisville residents. It is believed to be the only park the firm designed specifically for Black residents at a time when racial inequalities were sweeping the nation.

The park opened with two tennis courts, two baseball diamonds, and a football field. Over the following years, Louisville would begin to invest in the park by continuing to add amenities. In 1929, the first lodge was established by converting a home on the property into a new gathering space.

The former home turned lodge capitalized on the incredible views of the river and created a new place for congregation. As the years progressed, Chickasaw Park grew to become a staple in the West End neighborhood and became a destination to visit.

On December 1st, 1950, a fire destroyed the original Lodge; the building was a complete loss. Seven months later Louisville's Parks Department hired the Landscape-Architecture Firm Berg & Dahl to create a new Lodge. The existing building was constructed in 1952.

It wasn't until 1988 that the Lodge received its first renovation. At that time, the bathrooms received new updates, a kitchen update, and reconstructed porch on the rear of the property.

Since then, the Lodge has not had any major updates other than regular maintenance and upkeep. By the efforts of Olmsted Parks Conservancy, Louisville Metro Parks, and community leaders, the Lodge and park has stayed central to the neighborhood. Gradual improvements are continued to be made, and as Chickasaw celebrates 100 years, the community stays rooted in its history while looking to the future.



*1952, One Week Before
Grand Opening*



1953 Interior



Overhead Aerial Photo



River View from Rear of Site



Rear View of Existing Lodge

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Existing Lodge Building (1952): Statistics

Olmsted Park Conservancy – Chickasaw Lodge Building

Architect: Berg and Dahl Landscape Architects

General - Floor Plan Area:

Total Gross Square Feet = 1,635 GSF

The original 1952 Building is a single story, stem wall construction.

Typical floor to ceiling heights are 11' - 11 5/8".

The current 1952 Building is not equipped with a fire protection system.

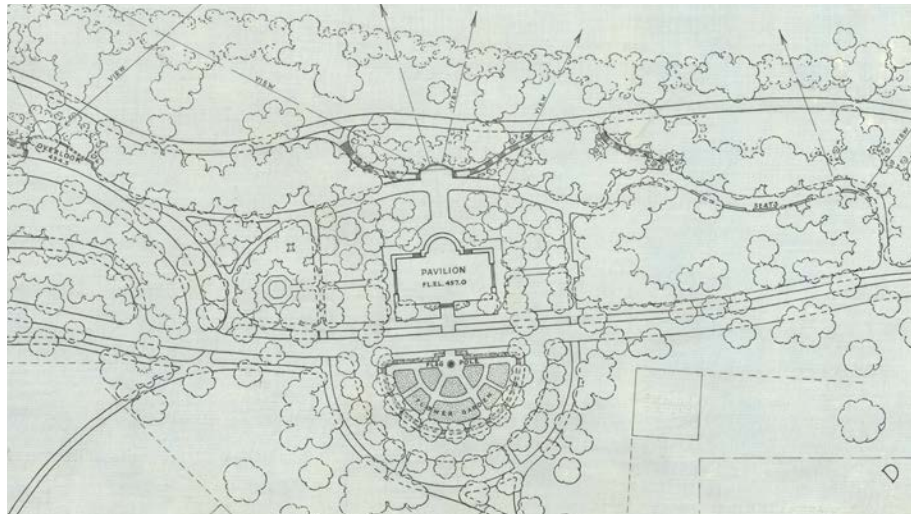
EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

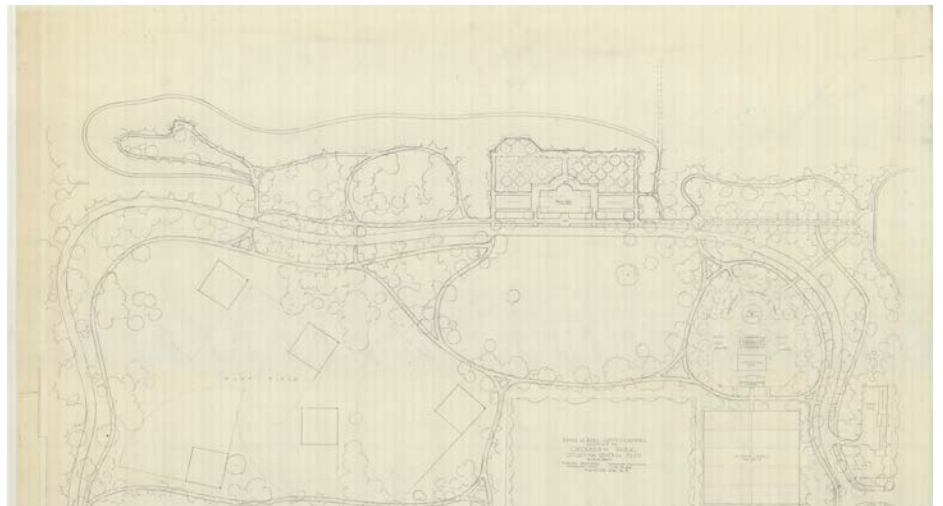
1952 Lodge Building: Existing Civil Site Context

Located within the historic Chickasaw Park, the Lodge Building site has undergone a series of transformations from the initial concept, through the original Lodge Building that burned down, and then the replacement in 1952. A series of Olmsted Brothers plans from the 1920s show a very formal design proposal, including detailed planting beds at the front of the building. In the rear, a series of paths including an overlook of the Ohio River, were proposed. A later planting plan from 1930 shows gardens but no building.

Portion of the Olmsted Brothers' 1923 'Preliminary Plan for Chickasaw Park'



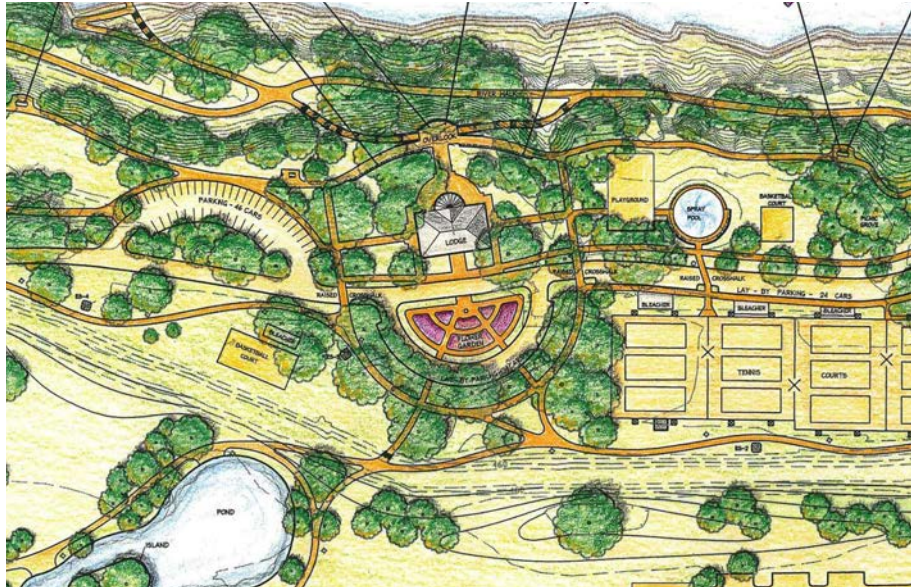
Portion of the Olmsted Brothers' 1923 'Preliminary Plan for Chickasaw Park'



Plans from subsequent improvement projects show a simplified implementation of the original design. Plans for the 1952 building replacement show the paths and site features as they are found today.

1952 Lodge Building: Existing Civil Site Context

Portion of Environs Inc's 2001
'Chickasaw Park Master Plan'



More recent planning work during the 2001 Master Plan, recommended a return, at least in part, to the original design proposal. The 2001 plan proposed a more formal layout of paths connecting to a larger trail system throughout the park. An overlook at the Ohio River bank provides visual access to the river while sets of stairs connect to proposed trails further down the steep bank. Formal landscape development of the semi-circular driveway in front of the building is proposed, while the mature trees and lawn are preserved surrounding the Lodge.

Improvements around the Lodge since the 2000 Master Plan include new tennis courts, playground improvements, and new outdoor gym equipment to the north. At the time of this report, a new trail and overlook are under construction to the south.



PHOTO A-8
Storm Drainage



PHOTO B-8
Ponding Water in Lawn



PHOTO C-8
Pavement Edges

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Existing Site Conditions:

Site conditions surrounding the Lodge have deteriorated over the years, displaying drainage problems, cracked and crumbling pavement, and accessibility challenges. The following summarizes the existing conditions.

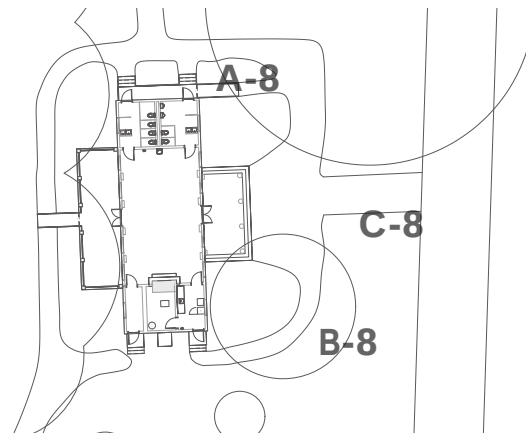
Stormwater:

In general, the site immediately surrounding the Lodge is very flat until it reaches the Ohio River bank, and then drops off steeply to the river. A couple existing inlets in the area collect water that is directed to the bank behind the Lodge, where the storm system daylights directly to the river.

1. Storm Drainage Problems: The flat nature of the Lodge site and settlement of soil and pavement over time has led to significant drainage issues during and after rainfall events. Large areas of ponding are present at the front of the building, between a very large Ash tree and the ramp leading to the exterior restroom doors. The extensive root system of the large tree presents a challenge in resolving the drainage.

2. Ponding Water in Lawn: At various places throughout the lawn, small pools of water can be found. The photo at left shows ponding around a utility pole. Historical photos from 1952 show ponding as well, indicating a long term problem (see Grand Opening photo page 4).

3. Edges of Pavement: Rainwater is caught in edges between pavement and lawn with no outlet, creating muddy edges when wet and bare patches of soil when dry.



EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Pathways: Pavements:

A combination of asphalt and concrete paths are present on site. All are in varying states of deterioration due to general aging, storm drainage issues, maintenance challenges, and tree root systems.

1. Front entrance: The front walkway to the Lodge building is asphalt. There are numerous cracks, areas of ponding, and encroachment of grass into the asphalt.

2. Back Walkway: The back walkways is a combination of asphalt and concrete. The concrete section is possibly a patch over a utility line, but that is unknown at this time. The pavement is uneven, cracking, and generally in need of repair.

3. Missing Sections: In some areas along the back and side of the building, entire sections of pavement are missing or covered with soil and vegetation.

4. Steps: Cracked pavement is creating uneven and dangerous conditions at landings for steps.



PHOTO A-9
Front Entrance



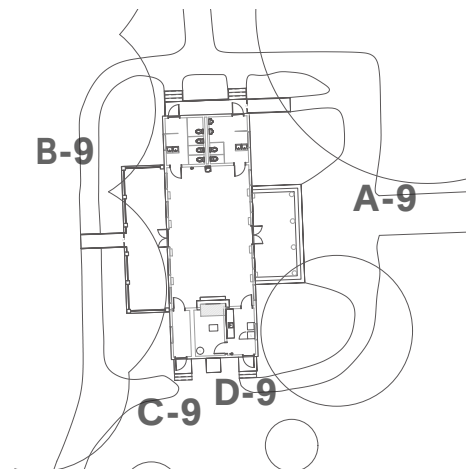
PHOTO B-9
Back Walkway



PHOTO C-9
Missing Sections



PHOTO D-9
Steps



EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Pathways: Front Entrance

An asphalt path leads to the front entrance of the Lodge, where low rise (4" approx.) concrete steps lead to the front door. The steps do not meet ADA standards although ramps are provided at other entrances.

1. Left side of steps have a narrow concrete band at the bottom. Asphalt is cracked and uneven. The condition of steps is fair with some unevenness on the edges.

2. The right side of the steps have a similar condition to the left. Concrete is in fair condition with some gouges in the edges. Asphalt leading to the steps is cracked and uneven.

3. The center portion of the steps also shows signs of age and wear, with cracking and uneven chunks of concrete missing. Asphalt leading to the steps is cracking and uneven.



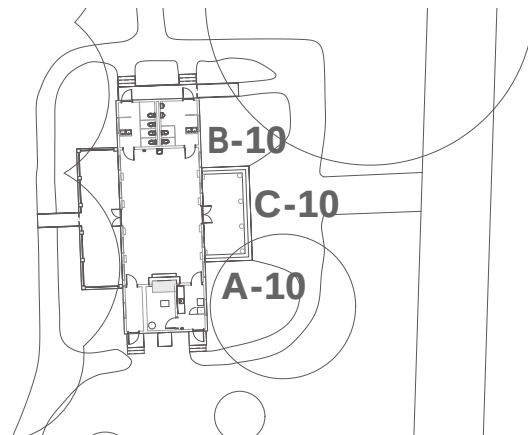
PHOTO A-10
Front Steps, left side



PHOTO B-10
Front Steps, right side



PHOTO C-10
Front Steps, center



EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Pathways: Exterior Restroom Entrances

The two exterior restroom entrances are accessed by steps or a ramp that was added onto the Lodge at a later date. The existing site features do not meet current ADA standards. The ramp is too narrow and the railing does not meet current code.

1. The concrete ramp leading to the restrooms does not show signs of cracking or spalling on the surface. The ramp is too narrow; it does not provide the minimum clearance between rails and the railing does not meet current code for design. The railing is in poor condition with a number of bent pieces.

2. The sides of the ramp and steps are showing age and deterioration. The ramp appears to be in fair condition but one set of steps has a large piece of concrete broken off.

3. The steps are original to the 1952 building and are generally showing age with mis-coloration, stains, and cracking.



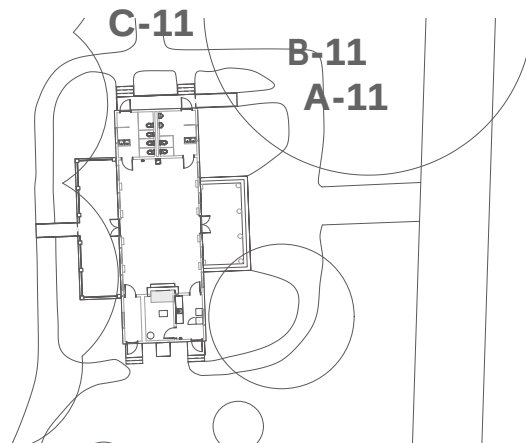
PHOTO A-11
Restroom Ramp



PHOTO B-11
Back Walkway



PHOTO C-11
Missing Sections



EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Pathways: Back Porch Entrance

The back porch and entrance provide access to the yard that overlooks the Ohio River. The existing site features do not meet current ADA or building code standards.

The back porch entrances are accessed by a ramp that was added onto the Lodge at a later date. The 1952 asphalt walkway is still visible below the ramp. The ramp and railing do not meet current ADA standards. The ramp is too narrow and the railing does not meet current code.

1. The concrete ramp leading to the back porch is in reasonably good condition but does show signs of age with discoloration and staining. The ramp is also too narrow; it does not provide the minimum clearance between rails and the railing does not meet current code for design.

2. The guardrail on the porch is too short and does not meet current code.

3. The transition from one material and structure to another is inconsistent and unorganized. The ramp was built directly on top of the old asphalt walkway, which was left in place. The uneven edges are visible next to the ramp and concrete strip that surrounds the building.



PHOTO A-12
Back porch ramp



PHOTO B-12
Front Steps, right side



PHOTO C-12
Front Steps, center

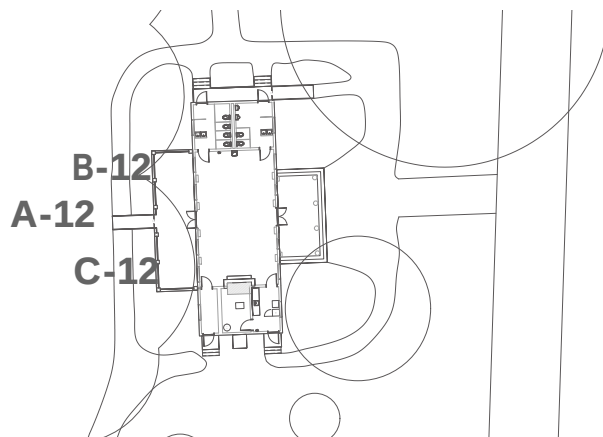




PHOTO A-13
Storage room door



PHOTO B-13
Restroom ramp



PHOTO C-13
Back Walkway

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Pathways: Kitchen & Storage Entrances

The paths leading to the Kitchen and Storage room are in particularly poor condition. Large cracks are present throughout the visible asphalt. The concrete steps do not have handrails.

1. Access to both the storage room and kitchen is provided by an asphalt path and concrete steps. The concrete steps have some chips and rough edges, and have settled somewhat. The asphalt leading to the steps has large cracks and vegetation growing throughout.
2. Large sections of pavement are either missing or completely covered by soil and vegetation. This section of the path connects the front of the building to the maintenance areas as well as the parking lot.
3. An equipment pad is located outside the Kitchen door and is completely enclosed. The enclosure is rusting and likely needs replacement.

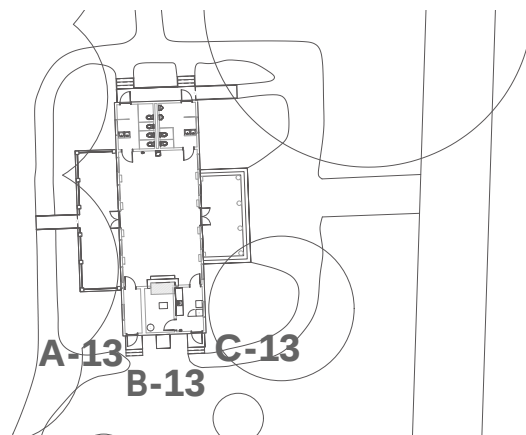




PHOTO A-14
Storm outfall to Ohio River



Front Steps, center

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

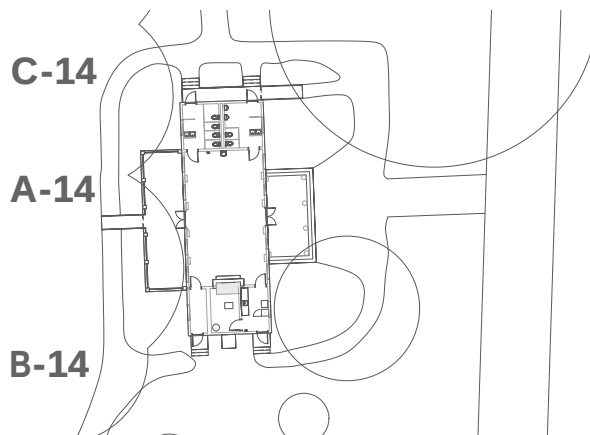
Site Features:

The surrounding site is characterized by turfgrass and mature trees. The Lodge Building is located adjacent to the banks of the Ohio River, with the old Concession Building on one side and the playground and fitness area on the other. The park road runs past the front of the building.

1. The stormwater system in the area is collected in pipes and daylights at an outfall on the Ohio River bank.
2. A path connects the back yard of the Lodge Building to the old Concession Building, which now functions as a shade shelter.
3. The backyard of the Lodge Building overlooks the Ohio River. Some clearing of vegetation has been completed, creating some limited views to the river. An old stone fire place is located on the edge.



PHOTO C-14



EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Existing Civil

Landscape:

The existing landscape is largely turfgrass and shade trees. Some newer trees have been planted recently in areas around the building. Mature trees with extensive root systems may be causing some disruption to the paths around the building and will need to be considered during improvements.

1. The large ash tree appears as far back in the plans as the 1950s. The tree appears to be receiving treatment for EAB and is in good health. Other tree species present include, but are not limited to, Maples, Tulip Poplars, and Oaks.

2. A standard utility pole with a cobra head light attached is located in rear of the building.



PHOTO A-15
Large Ash Tree



PHOTO B-15
Utility pole (back of property)

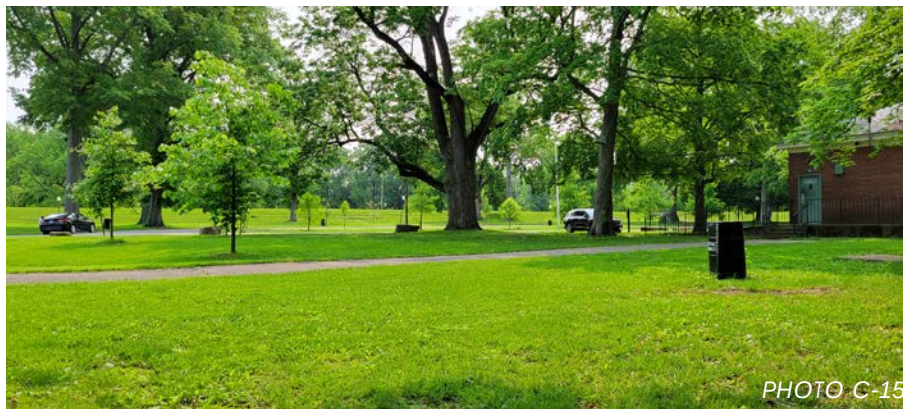
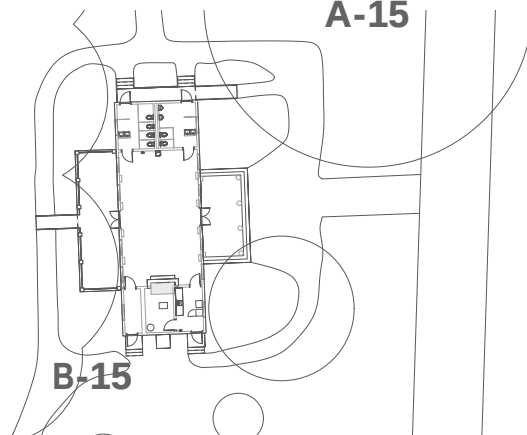


PHOTO C-15
Utility pole (back of property)

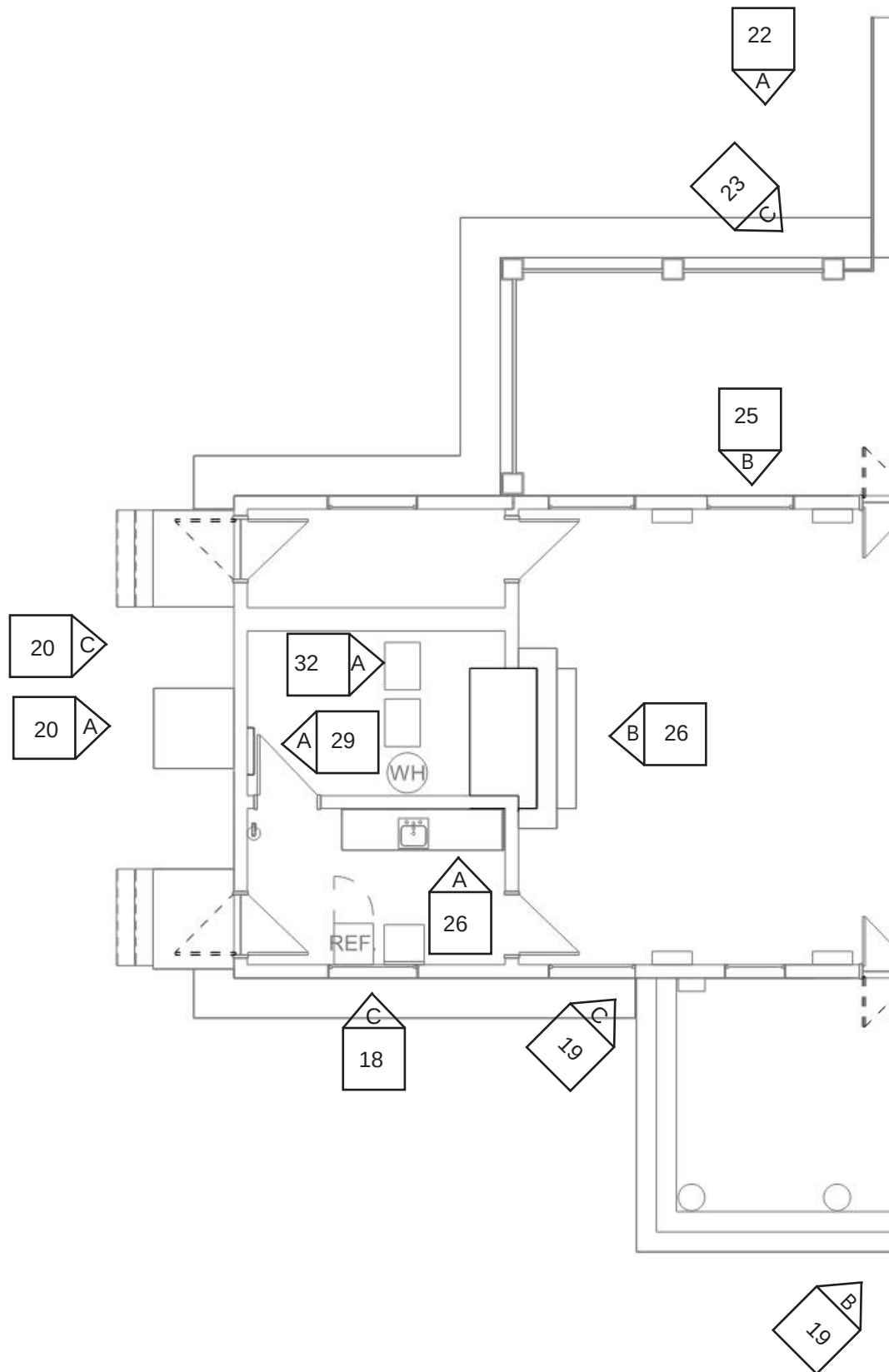
C-15

A-15



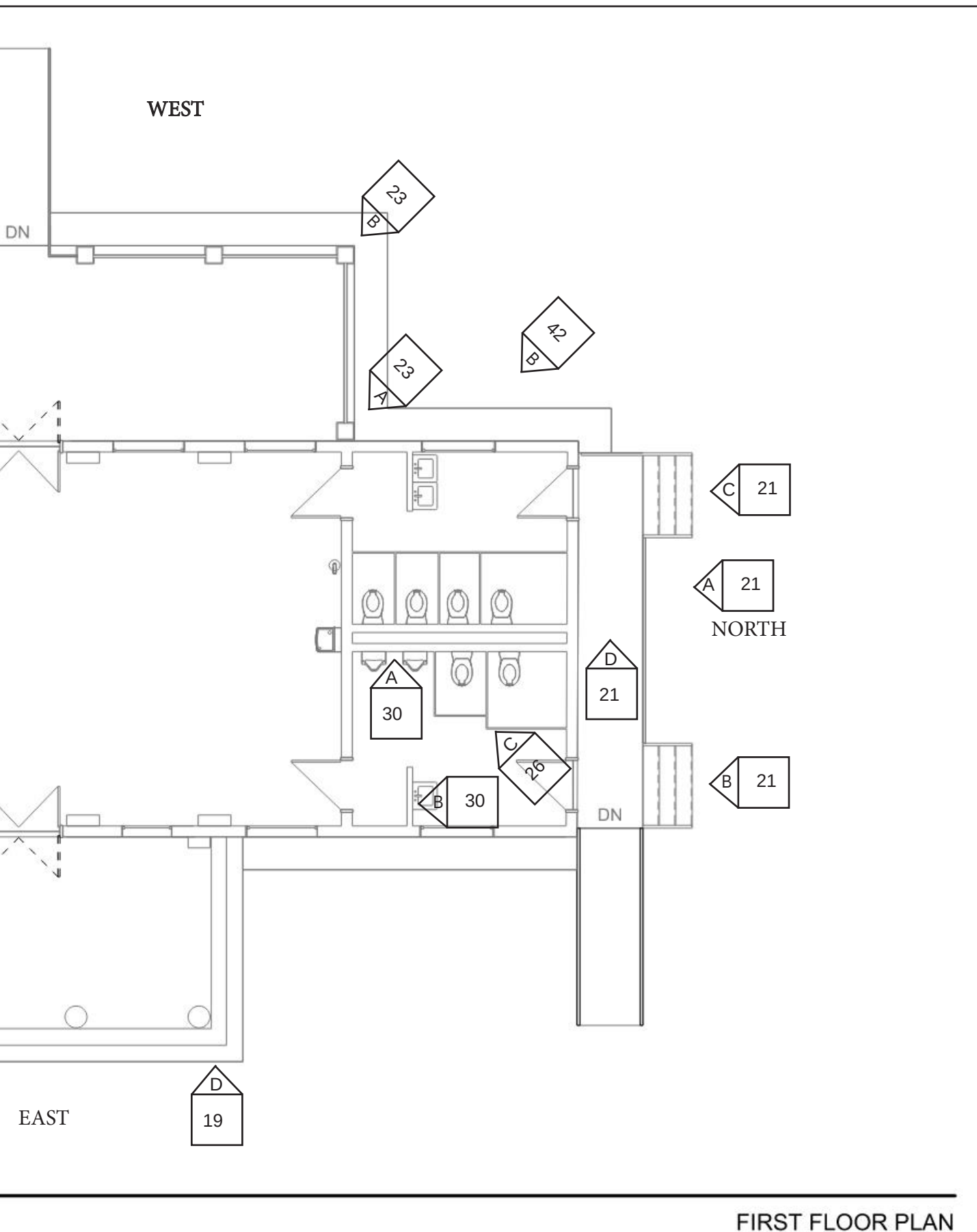
B-15

SOUTH



OVERALL FIRST FLOOR PLAN

1/8" = 1'-0"



EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural Exterior Observations:

Exterior Construction:

The exterior walls are brick veneer construction with interior load bearing wood framing and are generally 8" thick. The interior is finished with a traditional plaster veneer assembly. The brick veneer is set in a modified Flemish bond pattern where every 6th course is a rowlock course. The brick and mortar is in fairly good condition and shows few visible signs of deterioration. It appears that in some areas, that the exterior mortar joints have been tuck-pointed. This is not at all locations but at various locations around the building. At the time of this report, testing of the original mortar and new mortar has not been performed. At the porch, there are four concrete Doric columns that support the roof. The columns are in good condition and the original 1952 drawings indicated they were once turned wood columns. At some point, they were replaced with the current concrete columns.

Exterior Doors:

The exterior doors are not original to the building and had been replaced during the 1988 renovation. The original front door was replaced with a modern hollow metal door and frame and a security gate. The replacement of all the original doors was to provide an upgraded level of protection from break-ins and vandalism. The front entry door swings into the building, which is not to code. The original north and south doors were indicated to be hollow metal doors and frames. The doors installed currently are newer painted hollow metal doors.

Windows:

The original windows were a painted steel sash with single pane glass. At the restrooms, obscure glass was indicated to be installed based on the original design drawings. The original mullion pattern for the primary windows was a 3 over 5 pattern. The left and right window sections were operable casements. The new replacement windows were installed in the 1988 renovation. They are a steel frame with 6 over 3 panel pattern. This windows currently have a plexi-glass panel that replaced the intended glass panes. The replacement of the glass and the new mullion pattern was selected to prevent/minimize break-ins. The smaller opening limits the ability of someone getting through the openings.

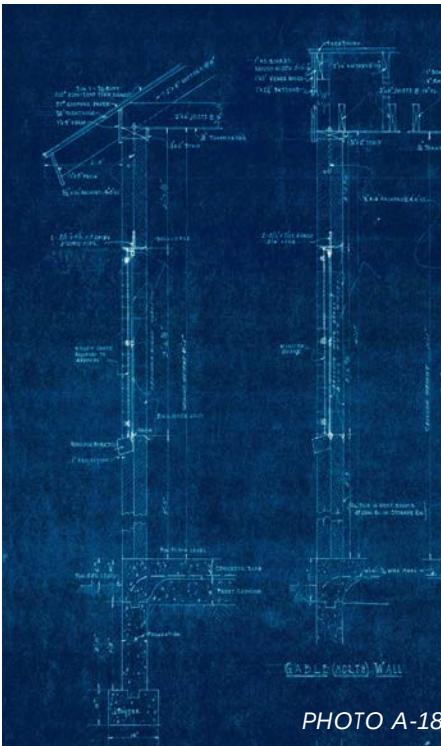


PHOTO A-18

Typical Wall Section
(Original Drawings)

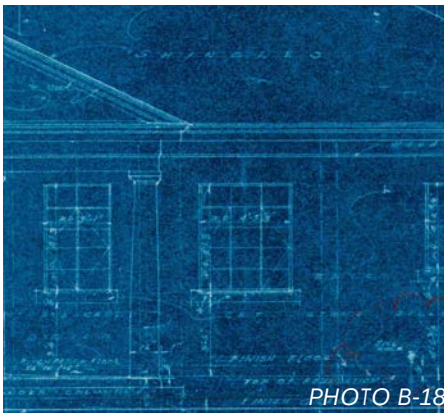


PHOTO B-18

Original Window Design
(Original Drawings)



PHOTO C-18

Typical Window with bars and Shutters



East Building Facade



*Concrete Columns
Note missing frieze board*



*Typical Gutter/Frieze Board Detail.
This Photo showing typical paint
deterioration.*

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural (cont)

Exterior Observations (cont):

East Facade - The East facade is the front face of the building where the main entrance is located. The front entrance is accessed by a raised concrete porch which has three integrated steps. These steps wrap around the three sides of the front porch. In the current configuration, there is no direct access to the main entrance doors for physically challenged visitors. The Gable covered porch roof identifies the main entrance to visitors. The gable is trimmed with painted wood with a variety of molding profiles. For our review, it appears that all of the molding profiles are original. Over the years there have been sections that have been replaced as part of limited building maintenance. Most of the deterioration that is evident at the gutter assembly is showing up at the roof valleys. This is the location of the most concentration of rainwater. It should be pointed out that the roof/gutter design of the building does not include a formal water collection gutter. All of the water from the roof is designed to cascade over the face of the gutter. With this condition, rainwater ponds around the perimeter of the building.

In reviewing the original design drawings, the original wood Doric style wood columns have been replaced with concrete/plaster columns. Based upon our review, these columns appear to be in good condition. The abacus (top of the capitol) has been painted at some point. Several of these abacus' are showing signs of the paint failing.



*Column Capitol Detail Photo.
This Photo showing typical paint
deterioration.*

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural

Exterior Observations (cont):



PHOTO A-20
South Facade



PHOTO B-20
Security Light Fixture
hanging off of the wall.



PHOTO C-20
Detail photo of grade around
the air conditioning unit.

South Facade - The South facade has two entrances, one to the current kitchen and the other to the storage room. Both doors have security doors, similar to the others in the building, and have additional security gates that are typically padlocked. Both interior spaces are accessed via a raised exterior concrete stoop. These entrances are not accessible from the exterior of the building to people with disabilities. The existing AC unit is centered between both doors and is protected by a cage. There is a security light above the roof line that is centered on the building face. The brick veneer appears to be in good condition with the exception of random locations where the mortar has been tuck-pointed. There is no evidence of building settlement on this facade which is a positive for this building. There are sections of the roof cornice that are showing signs of wood rot and deteriorating paint.

It should be noted that on this side of the building, the grade slopes toward the building between the two access doors where the air conditioning unit is. This grading should be reworked to slope away from the building and provide positive drainage in this areas. Also refer to the civil section of this review.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural (cont)

Exterior Observations (cont):

North Facade - The North facade has the exterior access for the Men and Women's bathrooms for the park. These restrooms are accessed via a raised concrete stoop. We estimate that the raised stoop is roughly 36" above the finish grade. On the North side each door has a series of concrete stairs with painted metal guard rails. On the East side of the stoop is a concrete ramp. Based upon our field dimensions, the slope of the ramp exceeds the maximum allowed slope of an ADA ramp (1" -12"). The painted metal railings were added as part of the 1988 building renovations. At that time, stair/ramp guard rails were allowed to function as both handrail and guardrail. Current building codes require separate handrail and guardrail elements. Current building codes require that ramp structures that exceed 30" in vertical rise include a 5'-0" long landing at some point along the ramp length. The restroom exhaust fans are mounted to the exterior wall and covered with a painted closure metal box. The two hollow metal doors do not have an additional security gate and the paint is showing signs of extreme wear. The brick veneer appears to be in good condition with the exception of random locations where the mortar has been tuck-pointed. There is no evidence of building settlement on this facade which is a positive for this building. There are sections of the roof cornice that are showing signs of wood rot and deteriorating paint. There is a security light centered on the building face that was added in the 1988 renovation. There are two large visible cracks on the platform and at the ramp, indicating signs of settlement.



Photo of Men's Restroom Door, Steps and Railing.



Photo of Women's Restroom Door, Steps and Railing.



Photo of crack in concrete stoop.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural

Exterior Observations (cont):



PHOTO A-22

West Facade

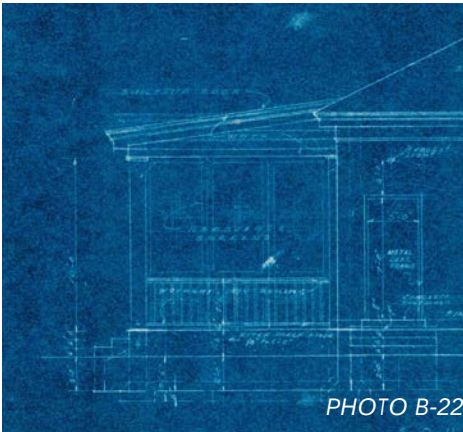


PHOTO B-22

Enlarged South Elevation
of Porch

West Facade - The West face of the building is the facade that faces the Ohio River. Centered on this facade is a covered porch structure that is roughly 41' long x 12' deep. Supporting the porch roof is a series of equally spaced wooden columns. The porch floor which was set roughly 12" below the finish floor of the lodge. During the 1988 building renovation, a new concrete overlay floor was added so that the new porch floor would match the original main building floor elevation. In reviewing the 1988 renovation plans, it is unclear if the new concrete floor was physically tied or pinned to the original concrete floor.

The original porch design was constructed with wrought iron railings on three side of the porch with the exception of the center west bay. The spaces between the wood columns were infilled with a mesh insect screen. At some point in the building's life the original wrought iron railings and insect screens were removed. The railings that are installed currently are painted metal modern railings. These railings are showing various stages of rust and deterioration.

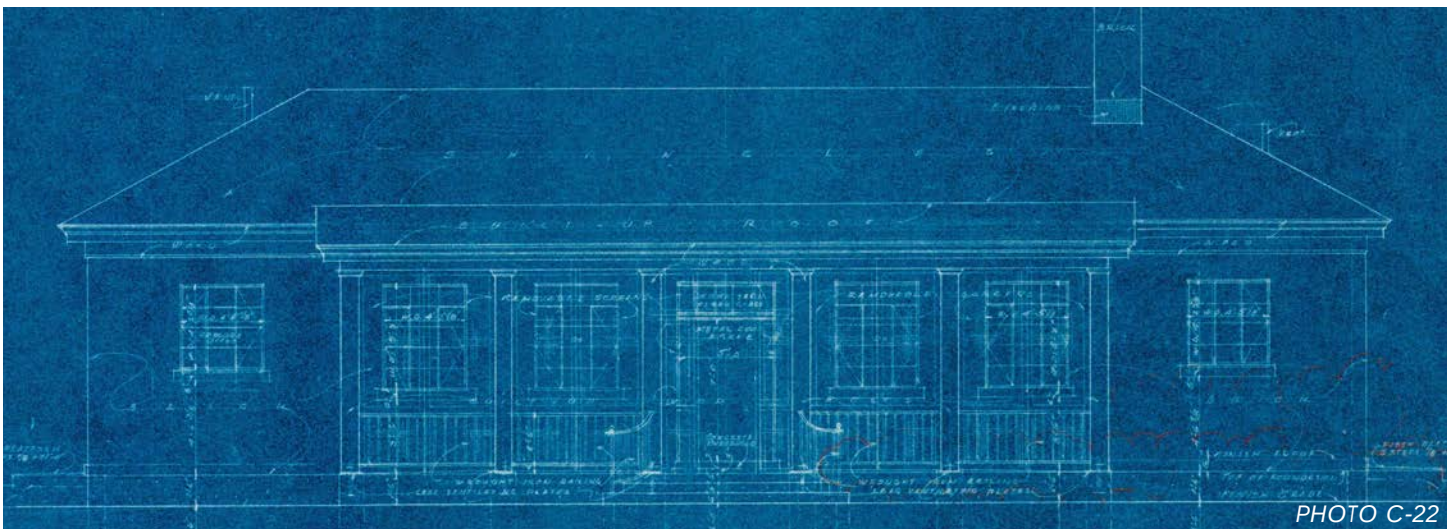


PHOTO C-22

Detail drawing of West Elevation from
original drawings.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural (cont)

Exterior Observations (cont):

West Facade Continued:

At the time of the 1988 renovation, the original wood roof supporting columns were removed and new hollow wood columns were constructed. In reviewing the new wood columns, most or all of these columns are showing various degrees of wood rot. This also includes the wood columns that are engaged with the exterior wall. Upon closer inspection of the construction of the wood columns, we discovered several details that were overlooked when the columns were built. When designing/constructing exterior wood columns, it is necessary to provide a vent space at the top and bottom of the columns. This vent allows for moist air that develops within the column to escape and ventilate. The columns were not constructed with these vents thus contributing to the degradation of the columns. Additionally, since these columns were originally constructed as hollow load bearing columns, the wood joints of the column shafts were built using lock-mitered corners. The columns that are in place currently in place were not constructed using the same method.

The painted metal railings currently installed have limited connections to the wood columns and a single point of connection to the concrete floor. We suspect that if tested, these railings would not pass the horizontal safety loads required for today's building code.



PHOTO A-23
West Porch Column
and railing



PHOTO B-23
Photo of current wood columns and
railings.



PHOTO C-23
Detail photo of column base.



PHOTO D-23
Damaged Frieze Board
and Sheathing

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

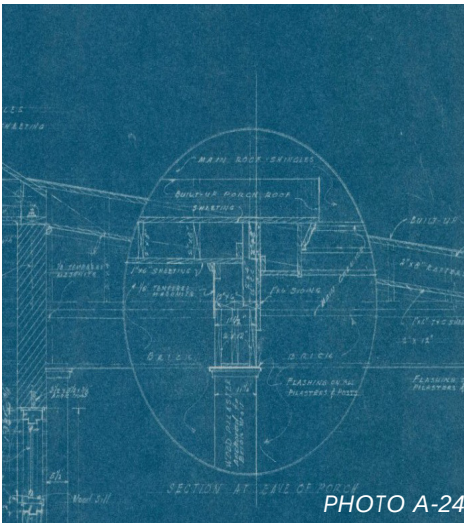
1952 Lodge Building: Architectural

Exterior Observations (cont):

Roof Construction:

Reviewing the original construction documents, the roof was framed using 2" x 8" wood rafters with 2" x 8" ceiling joists at 2'-0" centers. The roof sheathing was a 1" x 6" Tongue & Grooved assembly. The original drawings indicate a shingle roof being installed. The detail notes do not indicate the type of shingle to be used. Currently there is a slate shingle assembly installed. The flashing currently installed is a lead coated copper flashing which is appropriate for this era of construction.

The South porch roof is constructed using low pitched 2" x 8" rafters spaced at 16" centers. The original sheathing was the same 1" x 6" Tongue & Grooved wood assembly as the main roof. At some point in the building's life, the 1' x 6" T & G decking was replaced with 1/2" or 9/16" plywood. At the time of our review, we could not determine if the plywood installed is exterior grade material. The roofing material indicated on the original drawings was a built-up roofing material. This is what is currently installed as well. The flashing currently installed is a lead coated copper flashing.



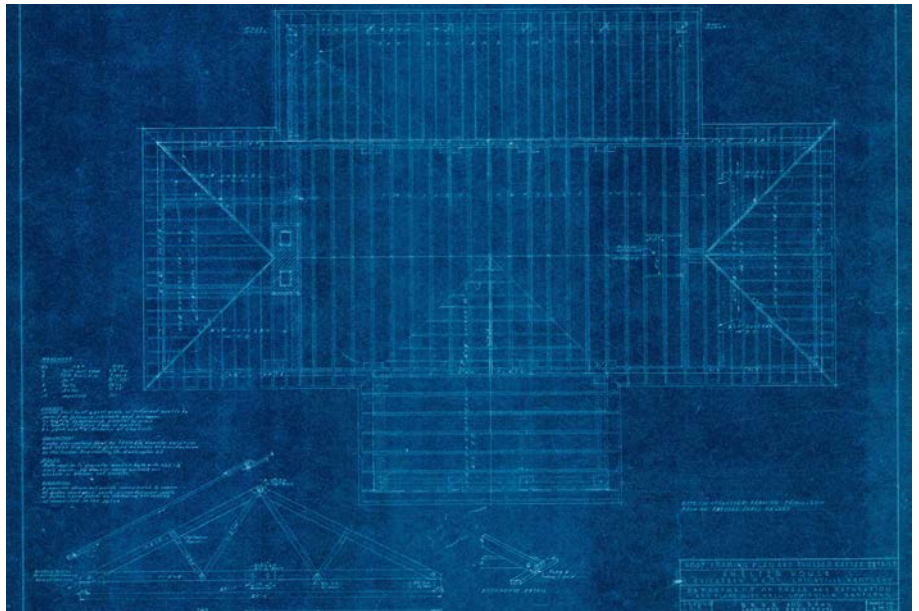
*Porch Assembly Drawing
(Original Drawings)*



*Detail photo of current
Slate Roof*



*Detail photo of built up
roof at South porch*



Original Building Roof Framing Plan (Original Drawings)

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural (cont)

Exterior Observations (cont):

Roof Construction:

In reviewing the condition of the slate roof that is currently installed we noticed that on all sides of the roof there are multiple broken slate shingles. These locations range from ridge cap locations field locations, transition shingles and edge shingles. Based on the amount of broken or damaged shingles, our recommendation is going to be a complete replacement of the shingles and underlayment system. It should be noted that we were not able to determine the material used for the underlayment of the slate. Typically, this would be a rosin paper slip sheet.

For the condition of the roof flashing, we noticed that in multiple locations, there was an attempt to make isolated repairs over the years. In some locations these repairs were successful but in many cases the repairs were not installed correctly. The most notable location is the transition between the pitched roof and the low sloped south porch roof. The current flashing installation is allowing water to get into the building as well as damaging the roof sheathing of both the pitched roof and the porch roof. In several locations along the porch roof transition line, the roof sheathing and the porch roof rafters have developed significant wood rot. This is almost to the point of isolated failure.



PHOTO A-25
Porch Roof Flashing Failure Detail



PHOTO B-25
Porch Sheathing and Framing Water Damage



PHOTO C-25
Porch Sheathing and Framing Water Damage



PHOTO D-25
Porch roof/Pitched Roof Cornice deterioration Photo

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural (cont)

Interior Observations:

The interior of the Lodge is broken down into 7 distinct areas: The Community Room, Storage Room, Kitchen, Mechanical Room, Men's restroom, Women's restroom and the attic. There is no insulation indicated on the original design drawings in the exterior walls, but there is modern fiberglass insulation above the ceiling in the building.

Community Room: The Community Room is centered in the building where all other rooms can be accessed. The interior walls are load bearing brick walls. Based on historical photos, the community room has always been painted brick and has a gyp ceiling that was installed during the 1988 renovation along with new lighting. The concrete floor was also repainted at this time as well. The original stone fireplace is still intact but there is damage to fire box and damper. It is recommended that the fireplace not to be used in its current state. On the opposite wall of the fireplace, the original commemorative plaque is still mounted. At the ceiling, there are two fans, centered in the room.

Kitchen: The kitchen walls use the same multi wythe wall system but with a glazed brick at the interior of the structure. Some of these glazed bricks are showing signs of wear and discoloration. The current appliances in the kitchen are a stove and refrigerator with a sink and countertop on the opposite wall. The ceiling has a missing light fixture and an additional light from 1988. The door that exits to the exterior swings in the wrong direction and has an additional security gate.

Mechanical Room: In the Mechanical room, the ceiling has partially collapsed in several places exposing the original construction. The HVAC unit, electrical panel, water heater and security control are located in this room. The brick is exposed and unpainted in this room.

Storage Room: The storage room is very simple in its layout. There is a wooden 2x8 hung on the wall opposite the window that is being used as a rack. The ceiling has an original light fixture as well as a light from the 1988 renovation. The space is currently being used for chair storage and yard tool storage. The brick is exposed and is unpainted. The door that exits to the exterior swings in the wrong direction and has an additional security gate.



PHOTO A-26
Damaged Glazed Brick in Kitchen



PHOTO B-26
Original Stone Fireplace



PHOTO C-26
Men's Restroom



View into Attic



Ventilation Pipe in Attic

EXISTING CONDITIONS ANALYSIS

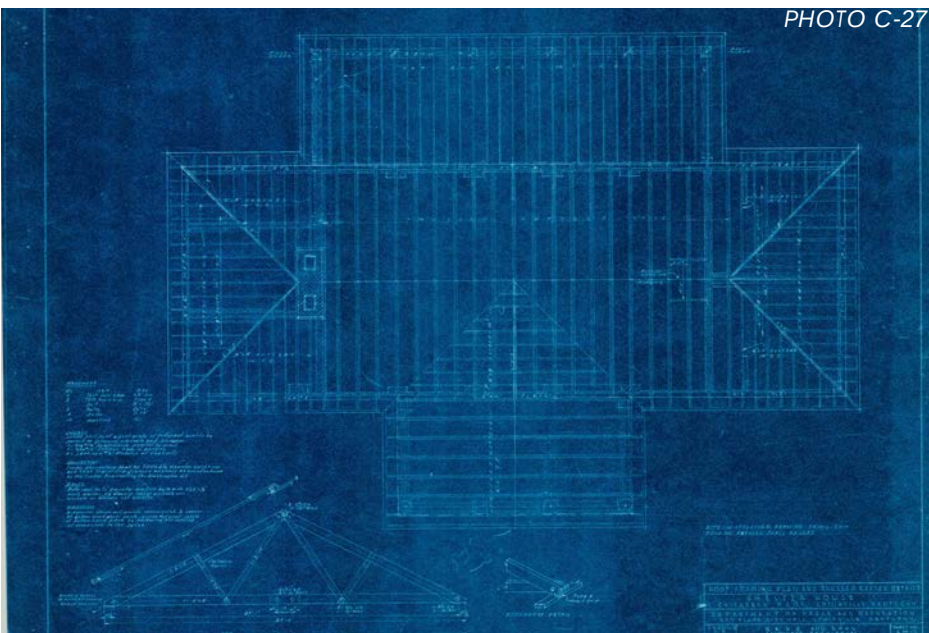
CHICKASAW LODGE BUILDING

1952 Lodge Building: Architectural (cont)

Men's Bathroom: The men's restrooms has floor to ceiling tile on the walls with a gyp ceiling. There is a ceiling hatch with access to the plumbing above. The current finishes in the bathroom are dated and past their lifespan. The ceiling in the bathroom is failing in multiple locations and the exposed metal vents/hatches are rusting, indicating moisture retention. The bathroom both serves the lodge and the park. According to the original drawings, similar to the kitchen, the interior walls are also glazed brick behind the current tile.

Women's Restroom: The women's restrooms has floor to ceiling tile on the walls with a gyp ceiling. The current finishes in the bathroom are dated and past their lifespan. The ceiling in the bathroom is failing in multiple locations. The bathroom serves both the Lodge and the park. There is direct access off the community room and exterior doors which allows the restrooms to still be used even when the Lodge is closed. Behind the existing tile, the original drawings indicate that the walls are constructed from a similar glazed brick, as in the kitchen.

Attic: The attic is only accessible by a ladder through a hatch in the Community Room. All of the primary ducting runs through this area and feeds through the ceiling. There is more modern fiberglass insulation that appears to have moisture damage and is missing in various places. There are four ventilation pipes the extend from the attic to the exterior of the building.



Original Roof Plan



PHOTO A-28

Attic Space

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Structural

According to the original drawings the base foundation is a typical stem wall construction with a slab on grade floor that is 6" thick. The stem wall is 1' - 0" thick and extends 2' - 6" below grade.

Based on photos and original drawings, the construction of the exterior walls is a dual wythe brick construction. The kitchen walls use the same construction but with a glazed brick at the interior of the structure. The interior wall structure are also dual wythe brick walls.

Above, the roof system is constructed with a 2x8 truss system that is 2'-0" on center. The joists that are spread across the span of the building are also 2x8 lumber 2'-0" on center. Comparing site photos and original drawings, the structure seems to have its original 7/8ths tongue and groove sheathing at the roof. Attaching the roof structure to the multi-wythe wall construction is a top plate anchored into the wall. The typical wall width, as indicated in the drawings, is 8" thick.

At the exterior there is evidence of settling in various places at the foundation, but there is no evidence of any major structural issues.

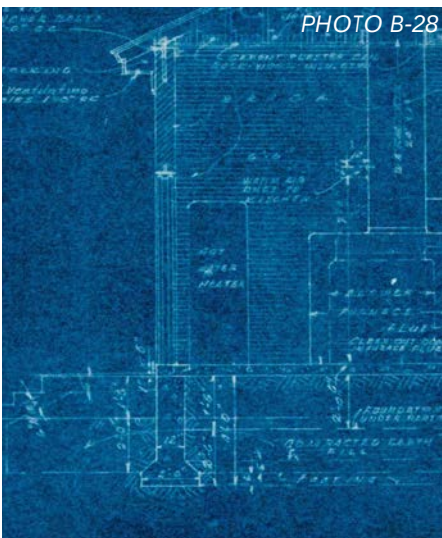


PHOTO B-28

Stem Wall and Slab Construction



Control Panels



Typical Fire Alarm



Kitchen

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Assessment of Existing Mechanical, Electrical, and Plumbing Systems

The assessment performed is a visual assessment of the MEP and fire/life safety systems, performance testing was not conducted. Recommendations are based on visual observations and estimated system age.

The Chickasaw Park Lodge Building is a single-story structure, approximately 1,200 SF. The building was constructed in the early 1950's and had a partial renovation around 1987. The walls of the structure are concrete block with a brick veneer exterior surface. Fenestrations are single pane with operable sections. Both front and rear entries have covered porches. There is an ADA accessible ramp on the restroom end of the building. There is a wood burning fireplace in the main community room. It is not clear if the fireplace is functional. There is a kitchen space with a refrigerator, range/oven, countertop with stainless steel sink. There is no exhaust hood over the range/oven.

FIRE ALARM

- There is no fire alarm panel or fire sprinkler system in the building.
- There are several smoke detectors located in various rooms. These appear to be connected to a Honeywell security panel.

Key Issues:

- The security system/smoke detectors appear aged and should be tested to ensure operation and replaced if necessary.
- Assuming A-3 occupancy, a full fire alarm system is not required by code.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Plumbing

The state of the existing plumbing has been evaluated on the current limited visible observations and review of the most recent 1988 renovations. Further investigation requiring demolition work will be required to determine the extent of plumbing work that will be needed beyond replacing and updating the bathroom fixtures.

- The waste and vent system is concealed and couldn't be verified.
- There is an external sump pump with a control panel mounted on the exterior wall.
- There is a 19-gallon electric water heater with an expansion tank in the mechanical room, this seems to serve only the sink in the kitchen.
- There is a kitchen with a two-compartment sink.
- There are two public restrooms with wall mounted urinals, toilets, stainless steel wall mounted sinks, and electric hand dryers.
- The restroom fixtures appear to have abandoned automatic flush valve sensors and currently utilize manual flush valves.
- The restroom lavatories only have cold water, no hot water.
- The domestic water entrance couldn't be located. We observed water piping at an attic access hatch and in the utility room. Piping, where visible, was copper. Water piping in the attic had closed cell insulation, although there was some insulation that was removed/missing. It also appeared that there was heat trace under the water piping insulation, but this couldn't be verified.
- There is one wall-mounted, keyed hydrant on the front exterior wall of the building.

Key Issues:

- The water heater may need replacement, based on the serial number, it may be older than 10 years old and has reached its expected service life.
- There is no hot water in the restrooms, KY plumbing code requires lavatories to have hot water.
- The fixtures in the restrooms need to be cleaned and repaired/replaced as needed.
- The sump pump should be tested for proper operation.



PHOTO A-30
Bathroom Conditions



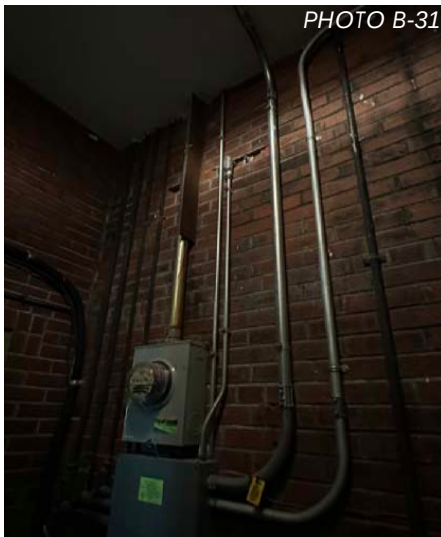
PHOTO B-30
Bathroom Conditions



View into Plumbing Hatch In Men's
Room



Existing Electrical



Existing Electrical to Ceiling

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

1952 Lodge Building: Electrical

ELECTRICAL:

- The building is served by a single overhead electrical service fed from a pole mounted transformer outside of the building. The service size is 200A/120/240V/1-Phase/3W, which appears to have been updated with a new distribution panel in 2001.
- There is a single distribution panel located in the mechanical room off the kitchen. The panel has space for additional breakers/circuits, but an evaluation has not been completed to quantify the amount of additional capacity available.
- Wiring was routed in a mixture of conduit, MC cable, and romex.
- Lighting is a mixture of aged fixtures in various states of repair. There was no apparent battery back-up emergency lighting.

Key Issues:

- The electrical panel was not labeled. The existing electrical circuits have been modified over the years and it appears several circuits are not being utilized. Several breakers were turned off.
- In general, the interior and exterior lighting is in disrepair and needs to be replaced. New light fixtures need to be selected and installed that would provide adequate light levels to all areas of the building. Specifically, externally under the patio areas, at the restroom entrances, and around the full exterior of the building.
- Adding battery powered emergency lighting should be considered.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING



Existing HVAC System

1952 Lodge Building: HVAC / Mechanical HEATING VENTILATION AIR CONDITIONING (HVAC)

- The building is served by a single Trane 5 Ton Split System Heat Pump.
- The existing heat pump system is approximately 14 years old and appears to be in fair condition, space temperatures were controlled while we visited the site.
- A Honeywell programmable thermostat is used to control the heat pump system.
- The outdoor heat pump is enclosed in a metal cage.
- HVAC system utilizes supply and return air duct work installed in the original 1951 construction.
- There are balancing dampers present at each supply duct takeoff.
- There are two 18" x 32" return grates, one on either side of the fireplace.
- There are side-wall bathroom exhaust fans for each restroom.

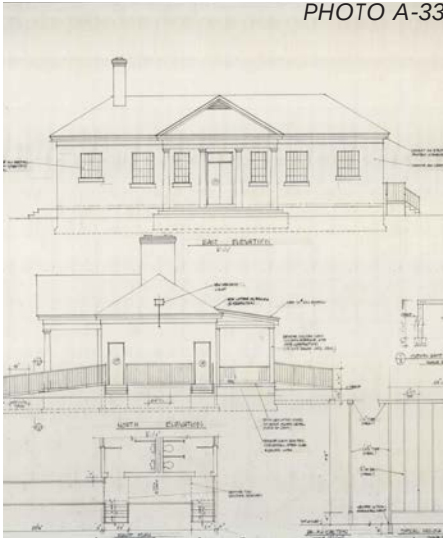
Key Issues:

- The heat pump system is approaching the end of its useful life.
- Duct insulation is in disrepair, several sections of the duct have bare, exposed sheet metal.
- The supply grilles/diffusers in the meeting space as well as the restrooms are corroded and in disrepair.
- The restroom exhaust fans did not turn on, function could not be verified.
- The range did not have a hood.
- There is no OA being delivered into the building. Natural ventilation satisfies the OA requirement, but with the doors and windows closed and the exhaust fans in the restrooms running the building will operate in a negative pressure condition.

EXISTING CONDITIONS ANALYSIS

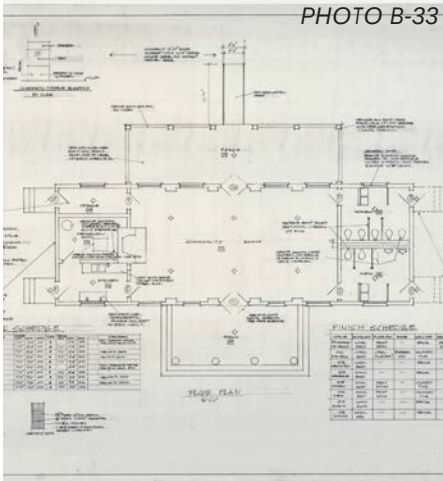
CHICKASAW LODGE BUILDING

PHOTO A-33



Elevation from 1988 Renovation

PHOTO B-33



Floor Plan from 1988 Renovation

Preliminary General Building Code Review

JRA conducted a preliminary Architectural Building Code review for the 1952 Lodge to identify building types and potential non-conforming architectural components as it relates to the scope of the proposed renovation project.

The Building Codes used for this study:

2018 Kentucky Building Code

2015 International Building Code

2015 International Existing Building Code

The Building Code and International Existing Building Code outlines mandatory upgrades to meet current Building Codes based on given thresholds for renovations, additions and change of occupancy.

The proposed renovation project does not include Additions to the Building and the proposed program does not constitute a change of occupancy.

Upgrades to meet current Building Codes have been included in the opinion of probable cost as noted in subsequent sections.

Note that all new work for the final design will need to conform to the current Building Code.

A comprehensive Building Code review will need to be conducted with the final design for the Lodge.



PHOTO A-34
Overview of Lodge



PHOTO B-34
Existing Building Entrance

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Architectural Building Code Information

Original 1952 Lodge Building

Probable Construction Type: Type IIIB, Non-Sprinkled

Occupancy Type: A-3

Required Fire-Resistance Rating Requirements

Primary Structural Frame - 1 hour

Bearing Walls - 1 hour

Non-load bearing Walls and partitions - 1 hours

Floor construction - 1 hour

Roof construction - 1 hour

Approximate Floor Area: 1,635 sf

Maximum Height: 25' - 4" feet

Allowable Maximum Height: 55 feet

Maximum Allowable Sqft Allowed: 6,000 sqft

Number of stories: 1

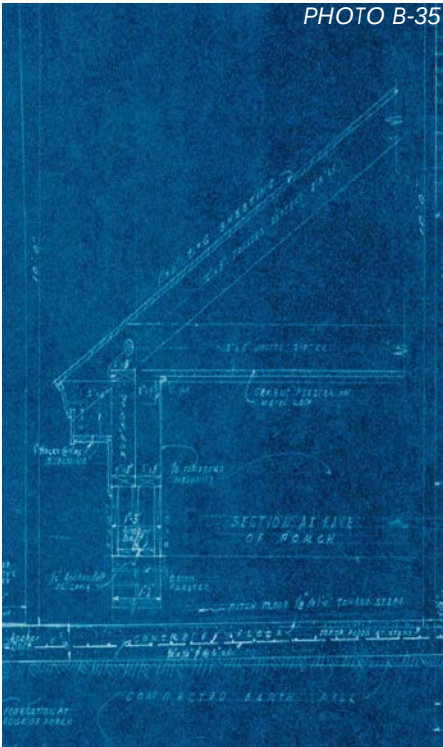
Allowable number of stories above grade: 2

Plumbing Code Requirements (815 KAR 20:191):

Men: 2 Water Closets, 2 Urinals, 2 Lavatories

Women: 4 Water Closets, 2 Lavatories

Drinking Fountain(s): 1



Porch Eave, Original Drawing

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Building Code Information: Structural

Original 1952 Lodge Building

IEBC Code Study

This section is intended to establish requirements of the 2018 Kentucky Building Code (KBC) and the adopted 2015 International Building Code (IBC) and 2015 International Existing Building Code (IEBC), specific to the first floor renovation. The relevant parts of the code are organized and explained below.

Our intent for structural alterations, if required, is to meet new construction requirements, so we plan to follow the Work Area Compliance Method.

Work Area Compliance Method (IEBC Chapters 5 through 13)

Generally, the IEBC addresses four main topics of existing structures: repair, alterations, additions and change of occupancy. From our understanding of the proposed scope, only alterations need to be considered in IEBC. We do not anticipate structural repairs, change of occupancy or building additions for the structure.

Structural Alterations (IEBC Chapters 7, 8 and 9)

IEBC describes alterations through a tiered system, namely Levels 1, 2 or 3. The reprogramming for the lodge falls within Level 1 alterations since it does not involve the reconfiguration of space, but rather the replacement of existing materials, elements, equipment, and fixtures.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Architectural Program: General

Chickasaw Park is going through a major renaissance at the moment with the addition of the new play forest, pond renovation, and security upgrades. The program developed for the Lodge revitalization feasibility study was created based on discussions with the user group, the conceptual program prepared by others, research of similar facilities, our project experience, and our initial code research.



PHOTO A-36
JRA Precedent



PHOTO B-36
JRA Precedent

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Architectural Program: General

General Note: As the building was constructed in 1952, the structure and any components being worked on are to be tested for lead-based paint. Where applicable, it will be appropriate to encapsulate any lead based paint if remediation is not required.

The historical significance being an Olmsted Park, it is recommended the species of wood is tested for any replacement that is necessary throughout the project.

The probable architectural scope of work will include the following:

The Lodge can be broken down into 9 distinct zones: The Community Room, Storage Room, Kitchen, Mechanical Room, Men's restroom, Women's restroom, Attic, Exterior of building, and the Site.



PHOTO A-37
JRA Precedent



PHOTO B-37
View of existing Community Room

Probable Scope of Work: Site

The following will provide basic recommendations for the rehabilitation of the site. All improvements should adhere to the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

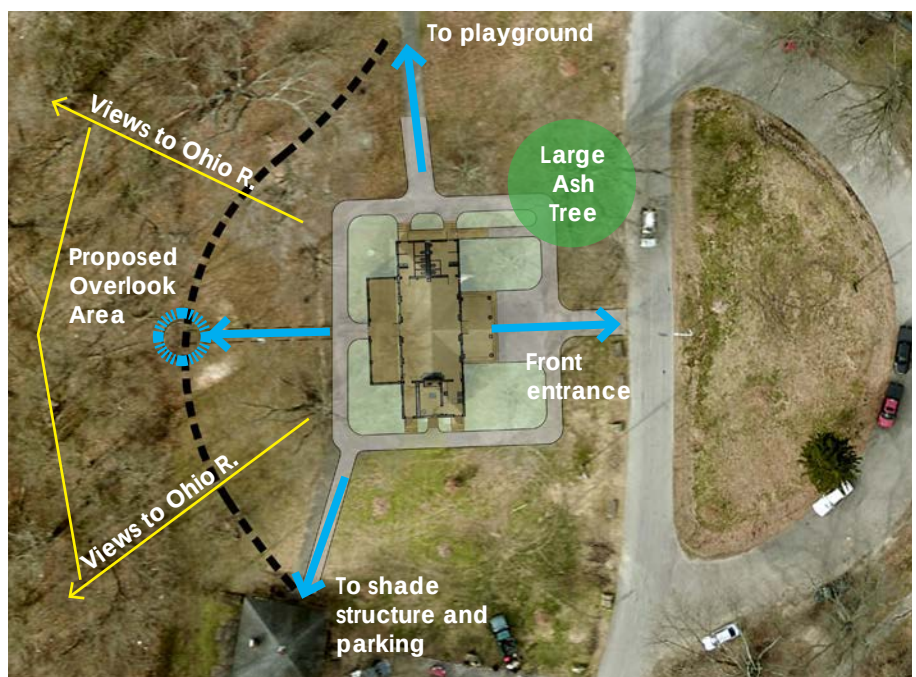
For the purposes of this report, all pavements are assumed to be replaced in place. A full-phase site design process is recommended and will allow for a more thorough review of the site. The design process should address existing issues, current and future uses, while also respecting the historic site. Consideration should be given to the 2001 Master Plan recommendations for the Lodge site, exploring design solutions that interpret the original Olmsted Brothers site designs in a way that supports current pedestrian circulation throughout the park, special event use of the Lodge, and provides access to views of the Ohio River.

General site recommendations are as follows:

Hardscape:

All pavements should be fully removed and replaced. Although most of the paving is asphalt, historic mix concrete can be considered for use. Asphalt is appropriate for mixed use paths, but concrete may provide options for key areas such as the entrance plaza.

Site diagram showing existing pavement locations and possible additions of secondary pathways and Ohio River overlook.



Probable Scope of Work: Site

ACCESSIBILITY

All site pathways and building entrances should be designed to meet current ADA standards. The surrounding site lends itself to accessibility because it is flat, but needs even and consistent surfaces that drain well. All building entrances have steps and will require additional study to develop solutions that meet ADA standards.

A design option could be explored to raise the grade in the rear of the building. New fill may allow for an accessible entrance that does not require a ramp while also solving some drainage issues. Any new ramps need to meet minimum clear distance between handrails and provide appropriate landing distances.

STORMWATER MANAGEMENT

Improvements to stormwater management are needed to eliminate all ponding issues. Raising the grade around the building where possible and some re-grading may help direct water away from the Lodge and surrounding pavement. If needed, other potential solutions may include permeable pavers, additional yard inlets, or french drains to collect water before releasing it through the storm system into the Ohio River.

LANDSCAPE

The site is characterized by Olmsted's Pastoral style of mature shade trees and lawn, with areas of naturalized vegetation along the river bank. The Lodge area landscape also serves as additional gathering space for events. Some more recent tree plantings will provide future shade trees for when the mature ones reach the end of their life cycles. Landscape improvements should continue to support the use of the lawn as an extension of the interior event space. Any additions of trees, shrubs, and perennials should be planned with the larger park in mind, to support the Pastoral style, and be low maintenance and native.

Probable Scope of Work: Site

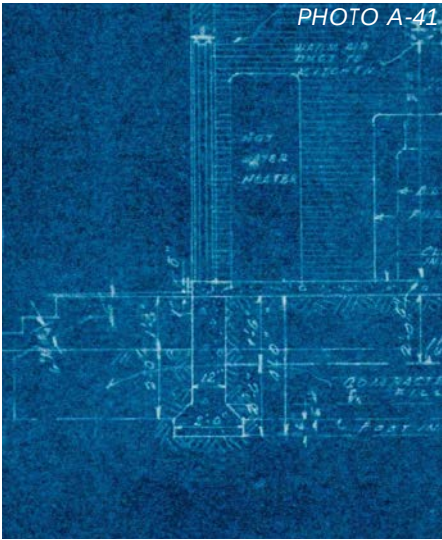
Note on Mature Trees

The mature landscape found in areas of Chickasaw Park is of high value. Preservation of these landscape resources should be prioritized throughout all work. Caution is advised in areas with mature trees that often have extensive root systems long distances outside the canopy. The large Ash near the Lodge Building is a noteworthy tree whose protection should be a priority during any work in the Lodge Building area. A brief summary of tree protection measures follows below.

Tree Root Protection Zones should be established before any site work begins. The zones should extend, where possible, a distance of 1.25 feet per inch of trunk diameter. The Protection Zone should surround the tree(s) with chain link fencing with no entry point to prevent contractors from storing materials or equipment. Mulch protection zones to a minimum depth of 6" to protect roots.

Any work in areas with mature trees should be done in consultation with an ISA certified Arborist. Precautions may include excavation by hand and with an air knife. If equipment must pass over the root zone, a road bed of no less than 6" of mulch or gravel must be created and maintained to protect the soil. When and if root damage does occur, impacted trees should be root pruned using approved equipment and under supervision of the Arborist. Other measures may be appropriate, such as the use of Plant Growth Regulators, but, again should be done in consultation with the Arborist.

Any future work around the Lodge Building should plan for strict tree protection measures and develop design solutions that support the long term health of these mature trees.



Stem Wall and Slab Construction



Concrete Apron around Structure



Damage to Ceiling in HVAC Room

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Probable Scope of Work: Architectural

Community Room: The Community Room will welcome people to the space and offer an area to gather and collaborate during events. All walls and floors are to be cleaned and loose paint removed. After, they are to be painted a similar color to the original. The ceiling is to be patched where damaged and also receive new paint. The dedication plaque should be removed to be restored and put back into place after the project is complete. All windows should be replaced and should be built to look like the original 1952 construction. New lighting should be installed to better update the space and provide extra light. Both door pairs will need to be updated to have a proper swing direction to the exterior to meet code. An updated water fountain should be installed with a bottle filler in place of the existing unit.

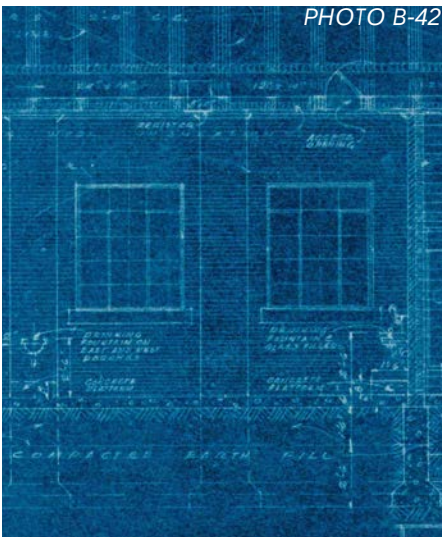
Kitchen: It is recommended that a new kitchen sink and counter is installed. The window should be replaced built to look like the original 1952 construction. A new door will need to be installed in the proper swing direction to address egress concerns. To meet current code, a stove will not be permissible to be reinstalled. Any damaged parts of the ceiling are to be patched, repaired, and repainted. Uniform lighting should be installed in all interior locations. The interior glazed brick should be cleaned, and the damaged brick should be restored to its original color. The floor should be cleaned and sealed to protect the original unpainted concrete floor.

Mechanical Room: Because of the extensive damage in the room, the mechanical space should receive a new ceiling and new HVAC unit as further outlined in the mechanical section. The owner expressed interest in relocating the exterior HVAC unit to the roof, a further structural investigation will need to be done to determine the feasibility of this.

Storage: Minimal work is required in this room. The walls, floor, and ceiling should be cleaned. Any damage to the ceiling should be repaired and repainted. Additional storage can be added along the wall opposite the window but should not interfere with the means of egress. The window should be replaced and built to look like the original 1952 construction. To meet code, the current exterior door will need to be replaced and the door swing changed to meet code for proper egress. The lighting should be updated and match the other new fixtures being installed.



Similar Park Shelter at Tyler Park



Typical 1952 Window Elevations



PHOTO B-42
Men's Room Ceiling Damage

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Probable Scope of Work: Architectural (cont)

Men's Restroom: The bathroom is to receive new tile and plumbing fixtures. The new fixtures will remain in the place and an ADA stall will need to be created. With this, new toilet partitions should be installed. The gyp ceiling is to be removed and reconstructed and a new ceiling hatch should be installed for access to plumbing. The window should be replaced and built to look like the original 1952 construction with privacy glass. It is required that the bathrooms are further updated to meet ADA guidelines, this will include new doors with proper swing directions and accessible sink locations. Matching ceiling lights in both bathrooms should be installed. The fan should be removed and replaced with a modern replacement. The floors should be scrapped and prepped for new paint.

Women's Restroom: The bathroom is to receive new tile and plumbing fixtures. The new fixture locations will remain in the place and an ADA stall will need to be created. With this, new toilet partitions should be installed. The gyp ceiling is to be removed and reconstructed. The window should be replaced and built to look like the original 1952 construction with privacy glass. It is required that the bathrooms are further updated to meet ADA guidelines, this will include new doors with proper swing directions and accessible sink locations. Matching ceiling lights in both bathrooms should be installed. The fan should be removed and replaced with a modern replacement. The floors should be scrapped and prepped for new paint.

Exterior: All damaged, rotted, or missing fascia boards are to be replaced. All exterior painted surfaces are to be sanded and repainted. A new gutter and drainage system should be put in to help mitigate the water issues around the building. Additional grading away from the Lodge will assist in this problem. A new ADA ramp should be added with proper railings and handrails. New lighting should be added to the site for better security and after-hours use. It is recommended that the rear porch columns be removed to be reconstructed respective to the original drawings. It is recommended that the concrete apron around the exterior perimeter of the building is removed.

Attic: All existing insulation should be removed for new insulation to be installed. While needing to be updated and since the insulation is not evenly spread throughout the attic space, this will also allow for easier access to repairs to the electricity, and ducting. Any damaged or broken cross bracing should be properly supported while being repaired or replaced.

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Probable Scope of Work: Structural

A new HVAC unit is to be located in the same location in the Mechanical room. The current unit's size and weight are currently unknown. The existing floor system is comprised of a 6" slab on grade and it is assumed to be bearing on soil. Depending on the size and operating weight of the future Unit, the worst-case scenario is the existing slab will have to be locally removed and replaced with a thicker slab that is suitable to support the Unit.

Additional items that are currently not in the Structural Scope, but could have structural cost implications if brought into scope, are as follows:

- Slab trenching – If the existing slab is not adequate for the HVAC unit, it will need to be trenched for proper reinforcement.
- Additional roof restructuring - If the client decides to move the HVAC unit to the roof, a structural study will need to be completed to determine the additional weight the ceiling joists/roof structure will need to carry.
- Rear porch - As recommended to rebuild the back porch structure, it will be important to review the structural integrity of the existing roof construction. When rebuilding the porch, it will be important to provide temporary support during reconstruction.

7-24-2023

Chickasaw Park Meeting House
Louisville, KY

HVAC & Plumbing Equipment

Item	Manufacturer	Model #	Serial #	Location	size	Age/Yrs	Good	Fair	Poor	comments
AHU / HP #1	American Standard	4A6B3060A10000BA/4TEC3F60B1000AA	9345RT2F/93456NG2V	Mechanical Room	5 ton	14 yrs		X		Has exceeded 75% of its serviceable life
Water Heater	Bradford White	M120U6S5-1NAL	FJ12364844	Mechanical Room	19 gal	11 yrs			X	Exceeded serviceable life

Probable Scope of Work: HVAC/Mechanical

Current Codes Enforced:

2018 Kentucky Building Code (2015 International Building Code)

2015 International Mechanical Code

2012 International Energy Code

2020 Kentucky Plumbing Code

2017 NFPA 70 - National Electric Code

A complete HVAC system replacement is recommended to correct the issues noted above. The range should be removed from the property to minimize HVAC replacement costs and maintenance requirements. The current system uses a split system heat pump for conditioning, this is an appropriate system for the application, but only provides one cooling zone. Based on the small floor plan and singular use, we would recommend keeping this system type. The restroom exhaust fans should be replaced. Ceiling mounted fans for each restroom, switched with the lights, are recommended.

Opinion of Cost:

The scope of the installation of a completely new HVAC system:

- New high efficiency split system heat pump with electric heat. The specific size of the equipment would be dependent on any architectural improvements to the attic insulation or windows.
- New externally insulated supply, return, and outside air duct routed in the attic space.
- New air distribution devices including registers, diffusers, balancing dampers.
- New thermostat/control system.
- New restroom exhaust fans.
- New security cage or platform for the outdoor heat pump condensing unit.

Probable Scope of Work: Plumbing

Full replacement of all bathroom fixtures is recommended, including a new hot water heater. Hot water service should be extended to include the kitchen.

Probable Scope of Work: Electrical

Because of replacing some doors and updating their swing and adding new windows, the security system will need to be updated and reinstalled on the new doors and windows.

Summary

In general, the proposed revitalization can provide an updated communal space for the visitors to Chickasaw Park and the greater neighborhood. The close proximity to the river and adjacent improvements going on at the park makes this a desirable project to further invest in.

It is expected that there will be unforeseen costs in any lead paint removal and any possible structural changes if the HVAC unit is to be moved to the roof.

Closure

In closing, we appreciate this opportunity to be of assistance on this Project. We look forward to helping take the project forward into the next phase. As this report is reviewed, we appreciate any comments or questions which may arise. Thank you.

Respectfully submitted,

JRA Architects

Louisville, Kentucky

Element Design

Louisville, Kentucky

Kerr-Greulich Engineers

Louisville, Kentucky

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Opinion of Probable Cost

JRA Architects, Element Design, and Kerr-Greulich Engineers, have prepared the following opinion of probable construction cost for the renovation work associated with the Chickasaw Park Lodge. These costs are based on our understanding of the proposed scope as outlined in this report and the findings of this feasibility study. The opinion of probable cost is based solely on our historical cost data from past similar projects and do not necessarily reflect the current bidding market pricing at the time of construction. Should this work be deferred for longer than 1 year from the date of this report, we recommend an adjustment for inflation be considered depending on the bidding market and materials pricing.

Architectural Improvements Opinion of Cost:

Slate roof replacement -

- 29 squares (2,900 s.f.) x \$6,000.00 per square = **\$174,000.00**

Exterior window replacement -

- Large windows \$6,000.00 each x 6 = \$36,000.00
(includes windows, glazing, removal and installation)
 - Medium windows \$5,550.00 each x 4 = \$22,000.00
 - Small windows \$5,000.00 each x 2 = \$10,000.00
- \$68,000.00**

Porch renovation

- Demo = \$5,000.00
 - Replacement columns, Full \$2,000.00 each x 4 = \$8,000.00
 - Replacement columns, Half \$1,000.00 each x 4 = \$4,000.00
 - New roof structure = \$75,000.00
- \$92,000.00**

Misc exterior renovation/restoration costs -

- Masonry tuck pointing = \$4,000.00
- Masonry waterproofing = \$4,000.00
- Masonry cleaning = \$3,000.00
- Exterior painting = \$10,000.00
- Wood cornice repair = \$10,000.00
- Replacement handrails = \$7,500.00

(note, only new handrails/guardrails would be included at the H/C ramps. No other locations)

\$38,500.00

EXISTING CONDITIONS ANALYSIS

CHICKASAW LODGE BUILDING

Opinion of Probable Cost

Interior renovation costs -

• Repair damaged ceiling =	\$5,000.00
• Paint entire building interior =	\$20,000.00
• Replacement of toilet partitions =	\$10,000.00
• New poured flooring =	\$25,000.00
• New warming kitchen casework =	\$10,000.00
	<u>\$70,000.00</u>

TOTAL ARCHITECTURAL IMPROVEMENTS	\$442,500.00
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Site Improvements Opinion of Cost:

General Conditions, EPSC, Demo	\$50,000.00
Earthwork, Storm Drainage	\$40,000.00
Paving: Asphalt Trails	\$45,000.00
<u>Lawn Remediation, Finish Grading</u>	<u>\$15,000.00</u>

TOTAL SITE RENOVATION	\$150,000.00
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MEP Improvements Opinion of Cost:

New HVAC System Budget:

Design Fees	\$10,000.00
Demo	\$ 5,000.00
HVAC Equipment	\$ 7,500.00
Duct work, registers, diffusers, balancing dampers	\$14,500.00
Exhaust Fans	\$ 2,500.00
Controls	\$ 1,500.00
Security Cage	\$ 5,000.00
Electrical	\$ 7,500.00
Plumbing fixtures	\$ 6,400.00
Hot water pump / service	\$ 7,500.00
<u>Labor</u>	<u>\$20,000.00</u>

TOTAL MEP IMPROVEMENTS	\$87,400.00
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This does not include architectural repairs for walls or ceilings to accommodate the HVAC replacement.

TOTAL PROJECTED PROJECT COST:	\$679,900.00
<u>20% DESIGN CONTINGENCY</u>	<u>\$135,980.00</u>
TOTAL W/ DESIGN CONTINGENCY	\$815,880.00

Limitations of Report

This report is based on review of drawing information provided by the Owner, review meetings with selective stakeholders, information shared by facilities staff, and through field observations performed by the design team (JRA Architects, Element Design, Kerr-Greulich Engineers). The design team's field observations were made by visual inspection only; No material testing was performed, and no destructive methods were used to reveal concealed properties/conditions.

Furthermore, while this report involved preliminary investigation and data collection as well as initial programming and high-level feasibility studies, design work was not performed as part of this report's scope-of-work. Design Services are intended to be performed under separate future project(s).

The providing of these professional services involved exercising professional judgments with the usual thoroughness and competence of architectural professionals currently practicing in these areas under similar time and budgetary constraints. No other warranty or representation, expressed or implied is intended in this report.

Cost estimates prepared by the design team as part of this report are to be considered opinions of probable cost. Actual costs may vary significantly from estimates due to any, or a combination of the following factors:

- Contractor workload
- Site conditions
- The general economy
- Construction limitations on site
- Interest rates
- Unusual changes in material prices

Cost estimates prepared by the design team are not guarantees. All construction projects, and the construction process, involve unknowns and extras. A reserve or contingency fund on this project is required and presumed by the design team to exist.

