



September 16, 2020

Ms. Hydie Friend
Everglades Society for Historic Preservation
P.O. Box 46
Everglades City, Florida 34139

RE: Bank of Everglades Historical Report

Dear Hydie,

As requested, Kyle Binninger from Atlantic Engineering and I reviewed the Everglades Bank Building located at 201 Broadway Avenue W. in Everglades City, Florida on August 13-14, 2020 to conduct a structural and architectural assessment of the building. The building was unoccupied and suffered from water damage. There is one missing window, utilities were turned off, and there was some damage from demolition.

We then proceeded with a review of the project. Our assessment is as follows:

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BANK OF EVERGLADES DRAFT REPORT

This report was commissioned by the Everglades Society for Historic Preservation for the Historic Bank of Everglades Building. That building was reviewed by this firm, Bender & Associates Architects, in late 2017 and early 2018, to analyze its current condition. Access to the interior was not available at that time, so the report dealt with exterior damage only.

Collier County was incorporated in 1923 and was named for Barron Collier, who founded the county. Everglades City was named as the county seat. The Everglades Bank Building was started in 1923 by Barron Collier and was the only bank in Collier County until 1949. Temporary offices were located in a small building across Broadway until this building was completed in 1926. It was designed by architect William O. Sparklin. The building is in the center of town and faces the river, to attract clients arriving by boat.

This Everglades Bank Building was the only bank in Collier County for 26 years. It was in continuous operation, including through the Great Depression, until 1962 when the county seat and most of the Collier corporation's activities moved to Naples. The bank charter was sold to the Bank of Immokalee.

Offices on the top floor were used by Humble Oil from the 1940s for more than 20 years while they explored oil in Sunniland, 30 miles north on State Highway 29. The Collier County school board moved in after Humble Oil moved out.

In the 1970s, the building was owned by novelist Buck Dawson who used it as a boarding house. Joe and Rusty Rupis published the "Everglades Echo", founded in 1979 as a weekly newspaper. The building was sold in 1988 to the Tuff family. Currently, the building is empty.

There are two proposals for roofing this building from Naples Roofers, King Roofing, and Target Roofing, to repair the roof that currently leaks.

SUMMARY:

The Bank of the Everglades is located at 201 Broadway Avenue W, Everglades City. The two-story building was built in 1926, with a rectangular footprint, a continuous footing at exterior walls and 1 ½ inches of stucco over 2 x 6 wood walls. The roof is flat, sloping from the center to the north and south walls. Windows are aluminum, replacements for the original wood windows. The building is in the Classic Revival style with pediments above the main entrance and side walls. A two-story addition was added to the building in 1950 on the northeast end. This addition was masonry covered with stucco in a style that replicates the original building. The stair on the southeast side is the original stair and was likely open to the exterior when built. It is currently enclosed.

PHYSICAL DESCRIPTION

ITEM: Site Components

The Bank of the Everglades is located in a small fishing village on the north end of the Everglades. The lot is a small grassy lot south of the Everglades Rod & Gun Club. The City Hall is east of this lot at the main circle. Everglades City is a narrow north-south aligned town on the east side of the Baron River. It opens on the south to the Chokoloskee Bay and Everglades National Park. There are grass and plants on the south, north, and west end of the building. Parking consists of 12 spaces on the east end of the building. Large shrubs border this lot on the south and north sides to screen it.

This building and the City Hall are designed in the classical revival style. The Rod & Gun Club, dating from ca. 1880, is also a significant historic structure. All of them are easy to locate and define the center of the historic district.



View showing surrounding site components. Courtesy of Google Maps.



The Bank from the west side showing site elements. Courtesy of Google Maps.

ITEM: Exterior Components

The building is rectangular in plan, 36 feet wide x 74 feet long, designed in Classical Revival style, and is two-stories in height. The roof is flat behind exterior parapets. Current windows are aluminum that replaced original wood units. The building is distinctive in its presentation. The base projects out of the upper envelope by 5 inches. The building is distinctive in detailing. The base is darker than the upper portion and defines the building as substantial. Each of the north, south, and west sides have white pilasters attached. The pilasters divide the north and south sides into four bays, while the west end divides the elevation into three parts. Access on the west is up four curved risers to a landing. There are doors at the south side at the stair, coming up a ramp, and one at the north end of the east end to a 1950s room. That room has a stair inside that accesses the second floor. A fourth door exists on the second floor of the north side, but no stair reaches it.

There are 30 aluminum windows on this building that replaced original wood units, 21 in the historic building and 9 on the 1950s addition. It is assumed that all were installed in 1950 when the addition was built. All will need restoration to the original wood or aluminum windows at a future date.



West elevation



South side

The building is formal in its current format. All elevations, north, west, and south are symmetrical. The north and south walls of the historic building match. Each is divided into four parts separated by a two-foot-wide plinth.

The building is supported by a base projecting out 5 inches from the main wall. This base, with its two vents at each bay, establishes a formal presence.



North side



East side with parking

ITEM: Exterior Walls

Exterior walls of the historic building are constructed of nominal 2 x 6 wood studs, 3/4" inch wood siding, 1.5 inches of concrete stucco outside, and a plaster interior finish for a 9 inch finish wall system. The vault is constructed with 8-inch thick concrete walls and roof. The 1950 addition is constructed of masonry with a stucco exterior finish. There are some cracks in the walls, but overall, they are in good condition.



Attic area

ITEM: Roof Systems

All roofs are framed in wood with the upper wall structures exposed. The materials are in good condition with no evidence of distress identified except where the roof leaks. The exterior siding was set at a 45-degree angle for structural stability. There was no evidence of damage to wall studs, sheathing, or roof joists in the attic. There were some roof leaks that needed repairs.



Attic area showing roof drain and plastic

ITEM: Windows and Air Conditioning Systems

There are 30 aluminum windows on the building, 21 on the original building and 9 on the rear 1950 addition. All windows will require restoration, which will include replacing them with wood double hung sashes. The new windows should replicate the original wood double hung windows. Work will be required at sashes and framing. Some windows have been removed or altered to allow through window A/C units.

New air conditioning systems should be installed in this building to replace the through window units. Two systems will allow more control. The first-floor unit can be in the rear closet area. This system can be altered to A/C the first-floor as needed. The second-floor unit will address the second-floor rooms. The design should be adjustable to allow second floor offices or housing units to be comfortable. The final design will be based on what the final use is. This might require using separate units for each apartment or allowing units to adjust their temperature.



Exterior window



Interior trim

ITEM: Interiors

The interiors have been altered over time, with some demolition in progress at this time.

The interior floors are wooden boards. The exterior walls and original walls are plaster. The base wall exterior on the first floor had a wood wall from the window sills to the floor below. Walls above the sills were plaster. There are three columns running the length of the building. These are centered on the building. All of them are 11.5 inches square surrounding a 6 x 6 wood post. A beam sits on them that supports the second-floor joists. It is assumed that the beam is the same height as the second-floor system since no beam is visible above these columns.



This photo shows the first floor with partitions partially demolished.

In 1962, the current Bank of Everglades was sold to the Bank of Immokalee. Changes then occurred to this building which converted it to a rooming house. The second floor continued to serve as office space until the 1970s when they became part of the rooming house. Other changes included adding a second stair from the second-floor. That exit went out of the second-floor to a landing with a stair to grade. The landing is still in place but the stair is now gone. That stair was replaced with a new stair that goes into the northeast room and exits to the parking lot. Each of these rooms have their own bathrooms. All floors are wood. Historic walls are still plaster. New wood frame walls are drywall on wood studs. Ceilings are plaster or acoustic tiles in a metal grid. The original wooden stair is still in place at the southeast corner. The second floor has five bedrooms plus a general room with a half bath. There is a laundry and kitchen on the first floor that serves all guests.



These photos show second floor areas. Top left is the stair. Top right is the upper landing. Lower left is the hall. Lower right is the bedroom.



These are second floor bedrooms and bathrooms.



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September 15, 2020

Mr. Bert L. Bender, RA, LEED AP
Bender & Associates Architects, P.A.
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Key West, Florida 33040-7401

Re: Bank of Everglades - Structural Evaluation
Everglades City, Florida

AES Project: #320-030

Dear Bert:

Atlantic Engineering Services of Jacksonville (AES) has completed its evaluation of the structure located at 201 Broadway Avenue West in Everglades City, Florida, also known as the Bank of Everglades Building. Our assessment consisted of a visual review of the structure on August 13th and 14th, 2020. Present at the site were Mr. Bert L. Bender, RA, LEED AP with Bender & Associates Architects, P.A. and Mr. Kyle W. Binninger, P.E. with AES.

BACKGROUND

The structure located at 201 Broadway Avenue West was constructed circa 1926 and is a two-story, wood framed building bearing on masonry stem walls on concrete foundations. The original exterior walls are constructed of 2-inch x 6-inch wood studs and concrete stucco exterior. Approximately in 1950, a two-story addition was placed at the northeast corner and was constructed of 8-inch concrete masonry units (CMU) with concrete stucco exterior that bear on concrete foundations. The building is in the Classical Revival Style with pediments above the main entrance and at the roof line of the second-story (see Photograph 1). Pilasters with capitals are on all elevations except the west side (see Photograph 2).

The roof of the original 1926 construction is a gabled roof with roughly a half inch per foot slope to the north and south bearing walls. The 1-inch x 8-inch roof sheathing is supported by 2-inch x 8-inch roof joists spaced at 24-inches on center, which bear on the perimeter north and south walls and the 2-inch x 4-inch center knee wall. In each corner of the roof, roughly an 8-inch diameter roof drain penetrates the roof sheathing and drops into the attic space to then protrude through either the north or south bearing walls. The perimeter of the structure has roughly a 2-foot tall parapet constructed of 2-inch x 4-inch spliced studs with a 2x knee brace from the roof joists (see Photograph 3). The overall attic space is approximately 6-feet tall at the highest point. The attic framing consists of 2-inch x 4-inch ceiling joists spanning to the perimeter and interior load bearing walls.

The addition constructed in 1950, compared to the original construction, has a lower mono sloped roof, which slopes eastwardly. The roof is comprised of 1-inch x 8-inch roof sheathing and 2-inch x 8-inch roof joists at 16-inches on center. The roof joists bear on the perimeter CMU walls and interior 2-inch x 4-inch center wall. The joists are pocketed into the CMU structure at the north and south bearing walls, and bear and lap on the center wood stud wall. There are 1X ceiling sleepers attached to the underside of the roof joists which support the plaster ceiling.



The second-floor framing of the original 1926 construction consists of 3/4-inch x 3-inch tongue and groove wood decking supported by 2-inch x 12-inch wood floor joists at 16-inches on center, supported by the perimeter load bearing 2-inch x 6-inch wood stud walls, and a centered multi-ply 2-inch x 12-inch wood beam supported by three (3) 6-inch x 6-inch wood columns at quarters and pocketed in the original exterior walls. The addition constructed in 1950 has a second-floor of similar construction with the exception of the wood floor joists pocketing into the perimeter CMU walls and bearing on interior 2-inch x 6-inch wood stud walls, which are framed tight to the concrete vault. The concrete vault is constructed with a 4-inch thick reinforced concrete roof supported by 12-inch thick reinforced concrete walls, which are supported by concrete foundations.

Access from the first floor to the second is by an interior staircase located at the southeast corner of the structure and consists of 2-inch x 12-inch stair stringers at 16-inches on center and 1X decking. Located at the northeast corner of the structure is an abandoned staircase that once linked the first and second floors near the 1950 addition. The first-floor framing of the original 1926 construction consists of 3/4-inch x 3-inch tongue and groove wood decking supported by 2-inch x 12-inch wood floor joists at 16-inches on center; supported wood beam consisting of three (3) 2x12's located at the perimeter of the building and the interior centerline. The multi-ply beam spans to concrete piers at third-points of the structure and the corners. It is assumed the concrete piers bear on concrete shallow foundations.

Access to the building is provided through the west and south facades. The west entry is the main entry where a set of double doors provides access into the structure by means of cast-in-place concrete steps with a topping slab. The south entry has a wood ramp constructed of 2X stringers with composite lumber decking, which spans from the east parking lot and connects to the original concrete landing located at the stoop of the south facade. The original stoop remains and is constructed of a 4-inch concrete slab spanning to 8-inch CMU walls with the original concrete steps located under the wooden ramp. A door is located at the first floor of the east façade and is accessible by a set of wooden stairs and a wooden landing. Additionally, a second-floor door is located at the north façade and is inaccessible with no stairs leading to the door from the perimeter, and no interior walkways leading to the door from the interior of the structure.

OBSERVATIONS

Our structural condition evaluation consisted of a visual review of the structure. The survey plans approximately locate the deteriorated areas pinpointed during our survey (see Appendix A). The overall structure is in FAIR condition (see Appendix C, Existing Structural Conditions Evaluation Criteria).

All roofs are in POOR condition due to the failing waterproofing membrane, and the roof drains which appear to have been leaking for several years. The original roof framing consisting of the decking and joists is severely deteriorated at the roof drains (see Photograph 4). Throughout, signs of active termites and termite damaged framing is evident. A plastic membrane was placed above the ceiling joists within the attic and is acting as a secondary roofing membrane. The plastic tarp is holding water within the attic space (see Photograph 5). The roof of the 1950s addition has a hole and allows rainwater and elements into the building to further deteriorate the existing roof, second, and first floor framing (see Photograph 6).

The second floor is in FAIR condition overall with the following exceptions noted; several areas of floor decking and floor joists are deteriorated due to water intrusion through windows and the roof with additional water damage due to leaking pipes (see Photographs 7, 8, & 9). Several floor joists have been coped for the existing plumbing, compromising the integrity of the floor joists (see Photograph 10). Additionally, the stairs linking the first floor to the second floor at the northeast corner are severely deteriorated and are structurally unstable, and the wood handrail has failed (see Photograph 11). These stairs replaced a previous stair, which provided access to the second-floor exterior door. There is no longer interior access to the second-floor exterior door.



The concrete vault appeared to be in GOOD condition with no exceptions noted. A hole was cut into the east wall to allow access through the vault into the east rear corridor. The main vault door appears to be inoperable due to severely deteriorated internal components. The foundations of the vault were not reviewed.

The first floor appears to be in FAIR condition with minor deteriorated tongue and groove floor decking (see Photograph 12). The first-floor framing and foundations were not observed from within the crawl space due to standing water, excessive mosquitoes, and debris found. However, a conduit access hole allowed viewing of the northeast section of the original 1926 structure. Upon review, it was noted that the northeast pier is severely cracked and damaged (see Photograph 13).

The stairs and landing at the entry of the east façade building are severely deteriorated, unstable, and in POOR condition. It appears the framing is non-pressure treated lumber with several loose deck boards (see Photograph 14). The wooden handrail has failed and the structure bears directly on grade or on split CMU (see Photograph 15). Located at the west façade, the cast-in-place steps and perimeter walls appear to be in FAIR condition with minor topping cracks and spalls (see Photograph 16). The south façade entry is in FAIR condition; however, the wooden ramp is not ADA compliant. The southwest handrail post base at the ramp landing has deteriorated and caused the concrete topping to spall, exposing the metal base, and causing additional deterioration (see Photograph 17). At the north façade of the second-floor entry, the rear access steps have been removed and the wooden landing is severely deteriorated and beyond repair (see Photograph 18). The perimeter walls of the original 1926 structure have roughly 1-1/2-inch thick concrete cladding with a skim coat of smooth stucco. It appears the cladding has cracked at the base of the first floor to the foundation wall junction in several areas (see Photographs 19 and 20).

EVALUATION AND RECOMMENDATIONS

The structure located at 201 Broadway Avenue West in Everglades City, Florida, also known as the Bank of Everglades Building, is in FAIR condition overall, and requires repair and significant maintenance. The deteriorated roof joists require reinforcing with new 2X wood framing members and the deteriorated connections require repair. Roof sheathing, associated with the roof leaks, requires replacement. Once the necessary roof framing repairs have been completed, it is critical that a new roof be installed at both the high and low roofs to mitigate future water deterioration. The reviewed termite damaged framing did not appear to be severe, but the areas should be monitored. A termite expert should be consulted to determine the best solution for mitigating the insects and minimize the potential of any further termite damage to the framing.

Located within the attic, the standing water trapped in the plastic tarp needs to be removed along with the tarp. Moisture within the attic space will cause excessive humidity and increase the rate of wood decay. The tarp will be unnecessary once the re-roofing has been completed. Deteriorated second floor wood joists need to be repaired by sistering a new 2X framing member to the existing, and the associated decking needs to be replaced. Prior to completing the second-floor repairs, it is recommended the ceiling be opened by removing the plaster and exposing the coped, compromised 2-inch x 12-inch floor framing. It is recommended to sister an additional 2X to the compromised joists. A review of the plumbing is highly recommended to determine if there are still active leaks in the pipes. The plumbing review will help minimize the likeliness of future leaks and water damage to the framing. Access stairs linking the first floor to second floor at the northeast corner require demolition and reconstruction, preserving any salvageable historic framing.



It is recommended, the access stairs located at the east façade be demolished and reconstructed with pressure treated lumber on solid foundations. The wooden ramp at the south façade did not appear to have any deficiencies, however, the ramp should be deconstructed and reconstructed if the building is to be ADA accessible. Located at the southwest corner of the south façade entry stoop, the deteriorated handrail base should be removed and replaced with a Simpson post base connector and the concrete topping should be repaired. It is recommended the west façade entry steps have the concrete topping patched and re-leveled. The north façade second-floor stair landing requires deconstruction and the associated second-floor exterior entry door should be removed and patched with either an architecturally approved window or a new wall section to match the existing wall.

Although the structure has survived numerous high wind events in its history; the ground floor structure should be tied down to the foundation piers. It is recommended that any spalled or cracked foundation piers be repaired.

CONCLUSIONS

In general, the structure located at 201 Broadway Avenue West is in FAIR condition overall, and requires significant repairs in the form of joist, beam, sheathing, decking, handrails, steps, and stucco siding repair. Several maintenance items are required to extend the life of the structure such as a new roof and painting the exterior of the structure with exterior grade paint. The foundations were not reviewed at the time of the evaluation due to standing water, excessive mosquitoes, and debris. However, the perimeter of the structure does not show signs of settlement. The ground floor structure should be tied down to the foundation piers with hurricane strapping.

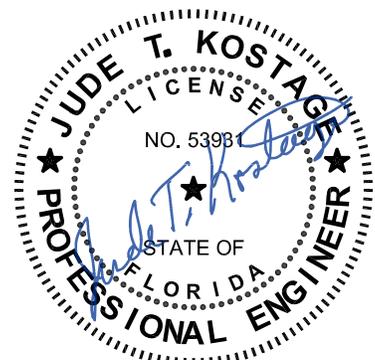
Please contact our office if there are any questions regarding this correspondence, or if you need any additional information.

Very truly yours,
ATLANTIC ENGINEERING SERVICES OF JACKSONVILLE
FLORIDA CERTIFICATE OF AUTHORIZATION #791

Kyle W. Binninger, P.E.
Project Engineer

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Senior Project Engineer

KWB/JTK/drg



09/15/20

PHOTOGRAPHS



Photograph 1
West Facade



Photograph 2
South Facade



Photograph 3
Parapet Knee Brace



Photograph 4
Deteriorated Roof Framing at Drain



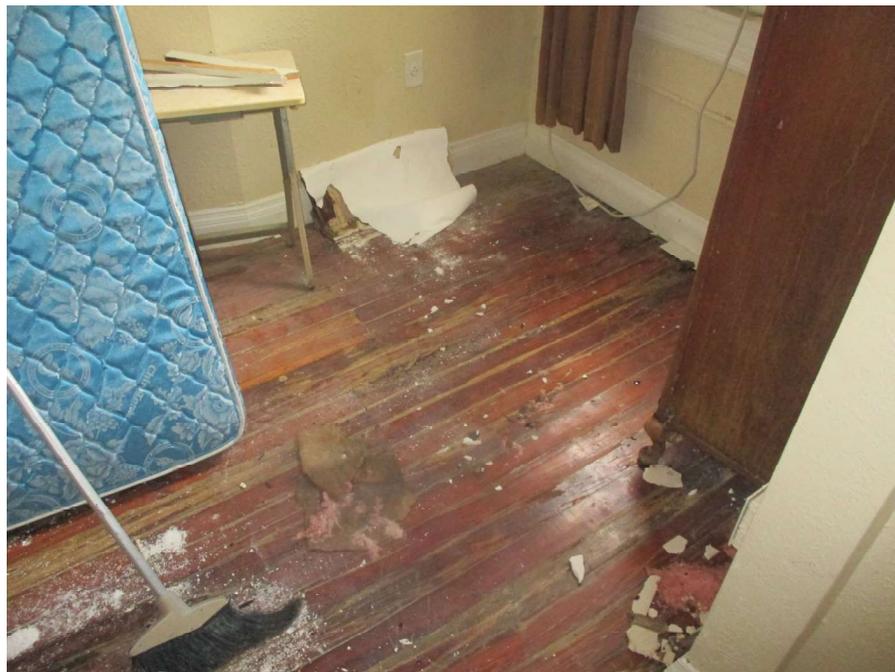
Photograph 5
Plastic Membrane in Attic Over Ceiling



Photograph 6
Rear Addition Low Roof Opening



Photograph 7
Water Damage Due to Plumbing Leak



Photograph 8
Water Damage Due to Roof Leak



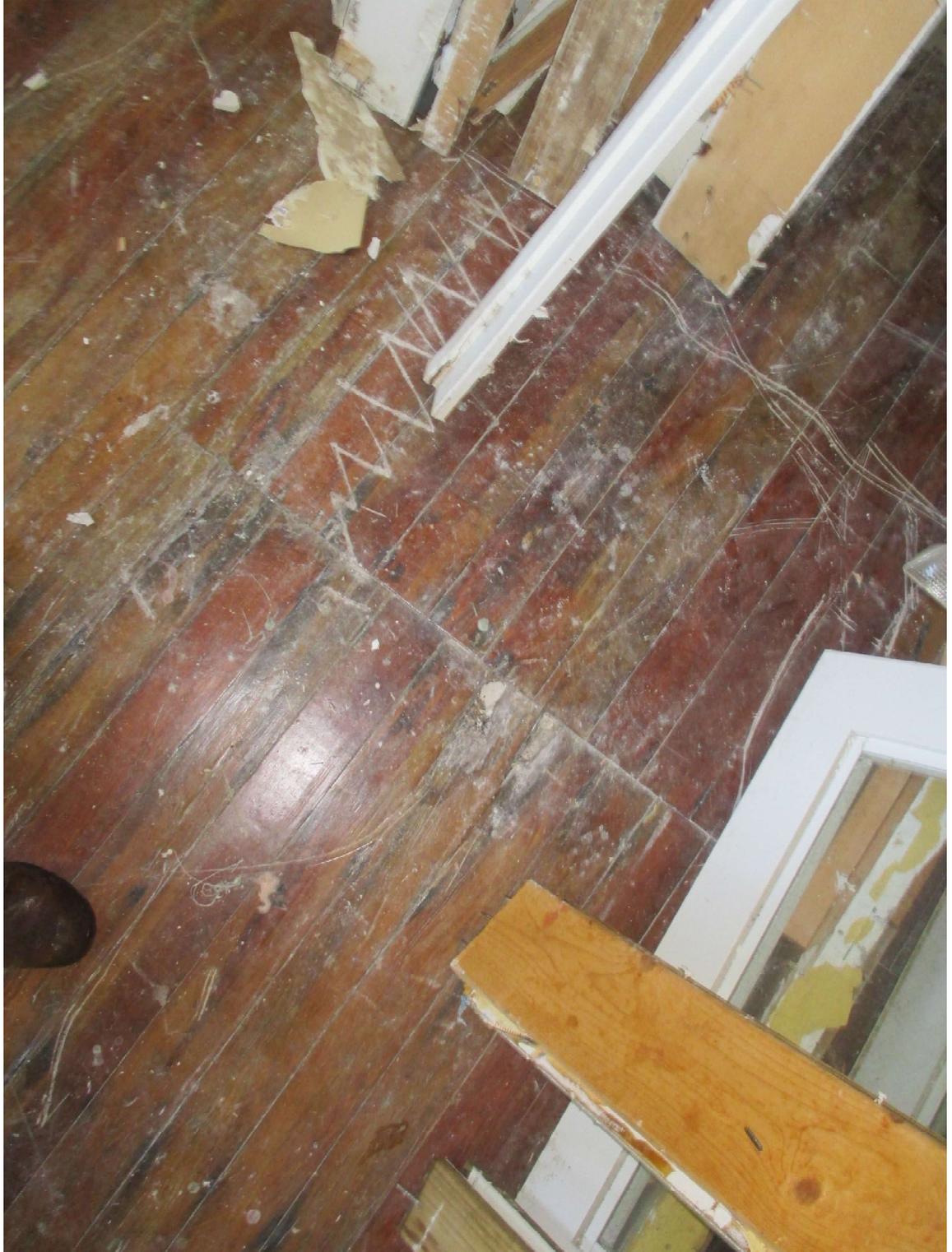
Photograph 9
Water Damaged Framing at Exhaust Fan



Photograph 10
Compromised Joist Due to Coping and Leaking Drainpipe



Photograph 11
Failed Stairs and Handrail at Northeast Corner



Photograph 12
Deteriorated First-Floor Decking



Photograph 13
Northeast Foundation Pier Cracked



Photograph 14
East Facade Deteriorated Wood Stair Requiring Replacement on New Footings



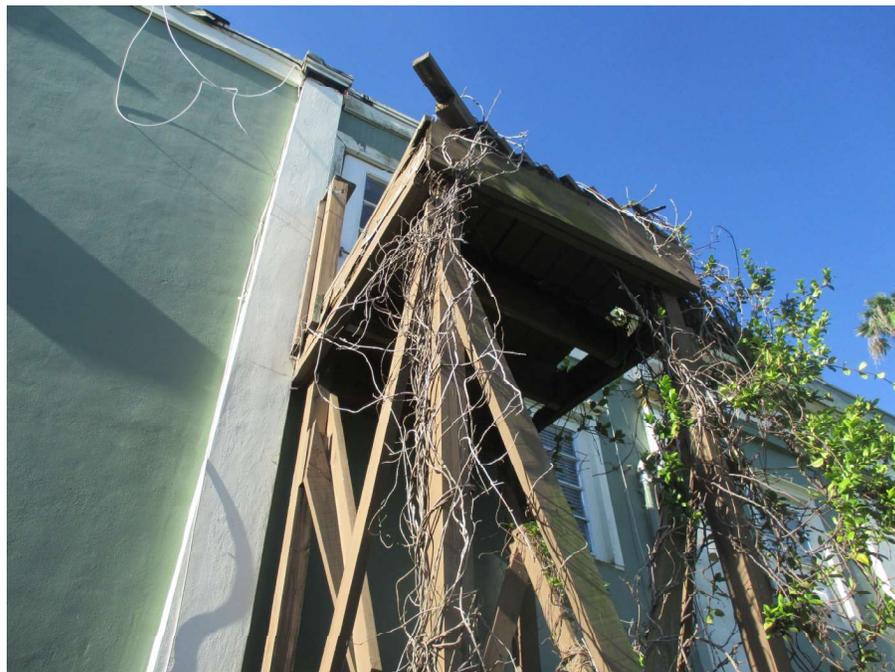
Photograph 15
Failed Handrail and Bearing On Grade



Photograph 16
West Façade Entry Steps - Topping Deterioration



Photograph 17
South Façade Entry Handrail - Base Deterioration



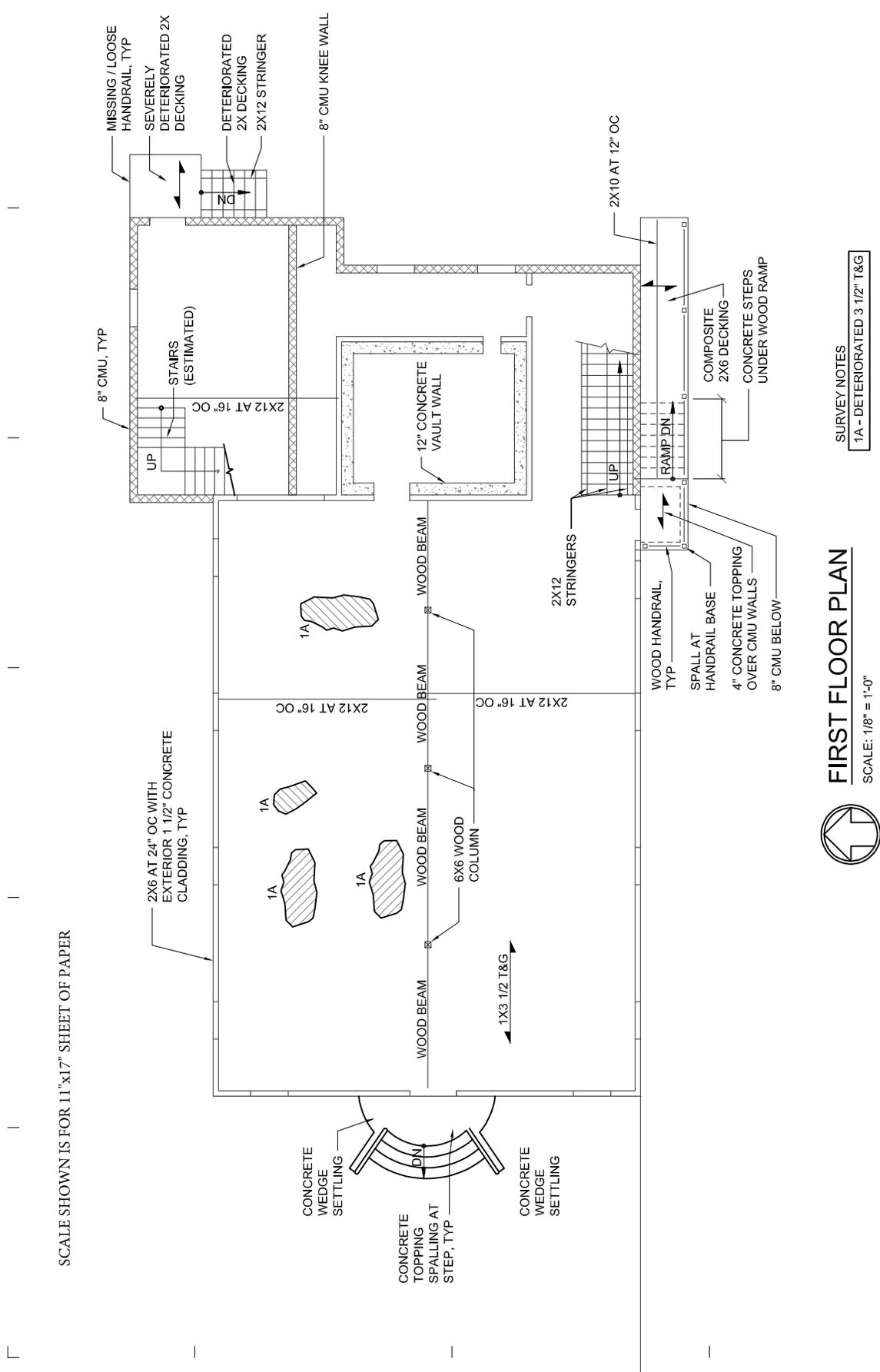
Photograph 18
North Façade Entry Deterioration



Photograph 19
Northwest Corner Cladding Spall



Photograph 20
Cladding Crack at First Floor Joint

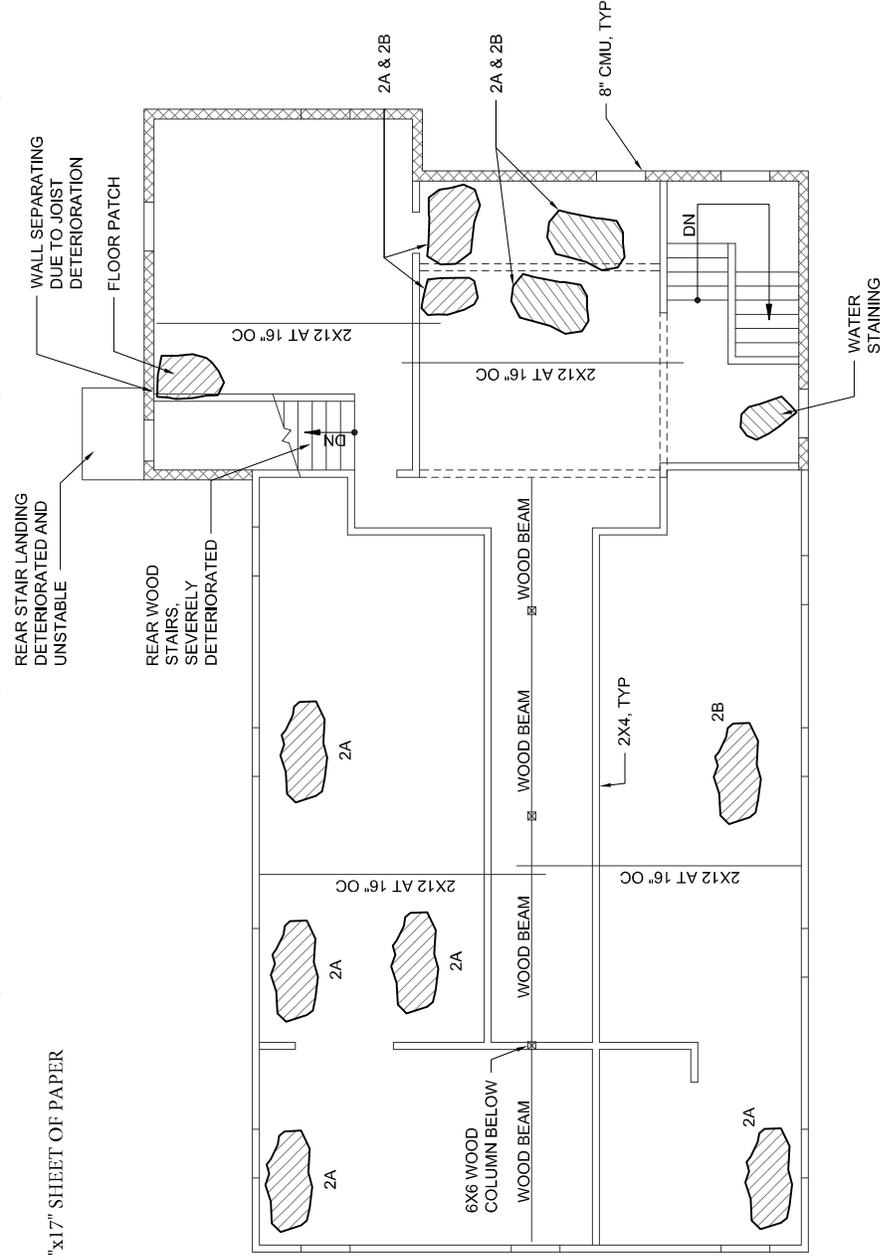


SCALE SHOWN IS FOR 11"x17" SHEET OF PAPER

FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

SURVEY NOTES
 1A - DETERIORATED 3 1/2" T&G

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SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

SURVEY NOTES

- 2A - DETERIORATED DECKING
- 2B - DETERIORATED JOIST

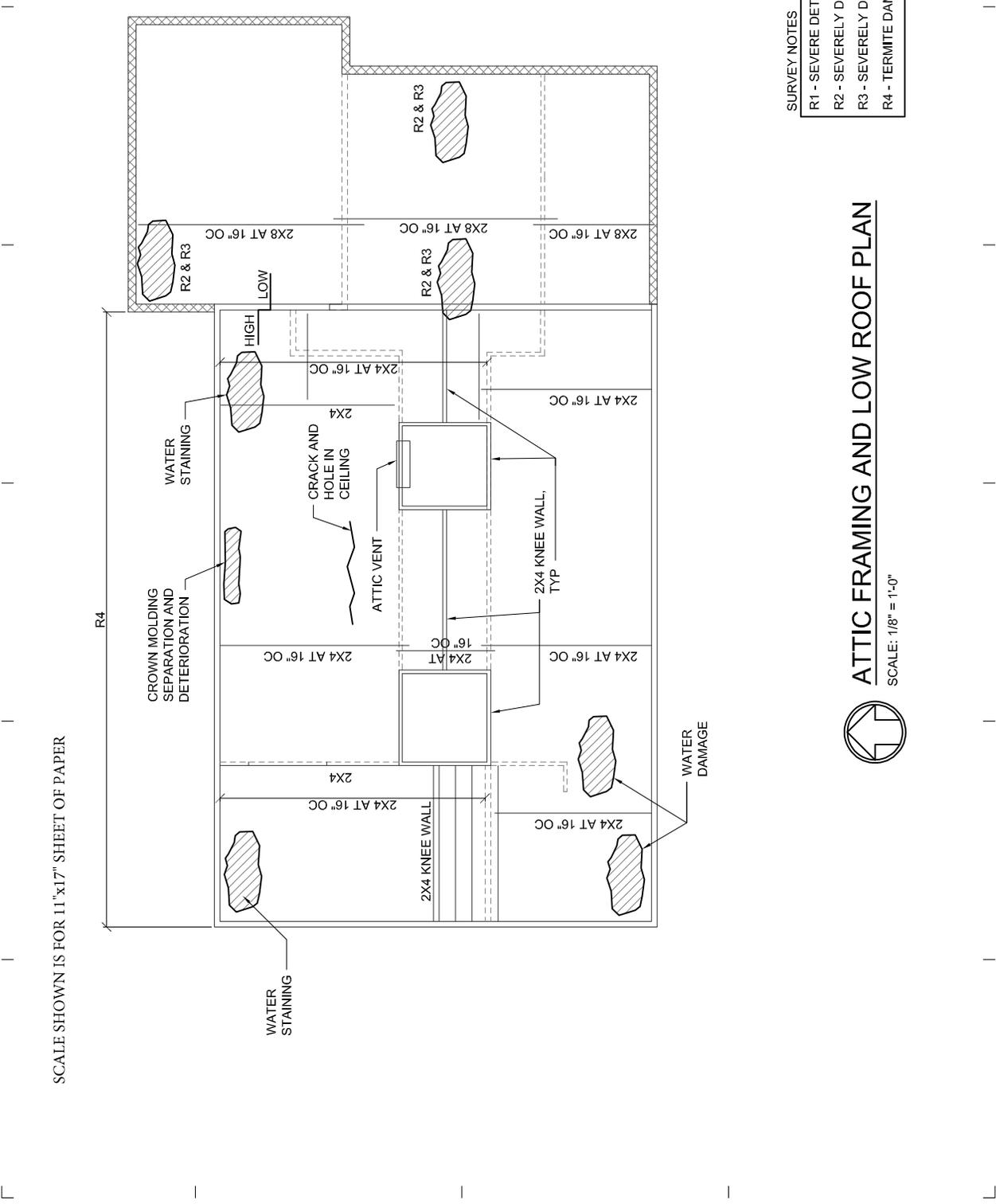
EXISTING CONDITION DOCUMENTS
 BANK OF EVERGLADES
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 Date: 08/25/2008

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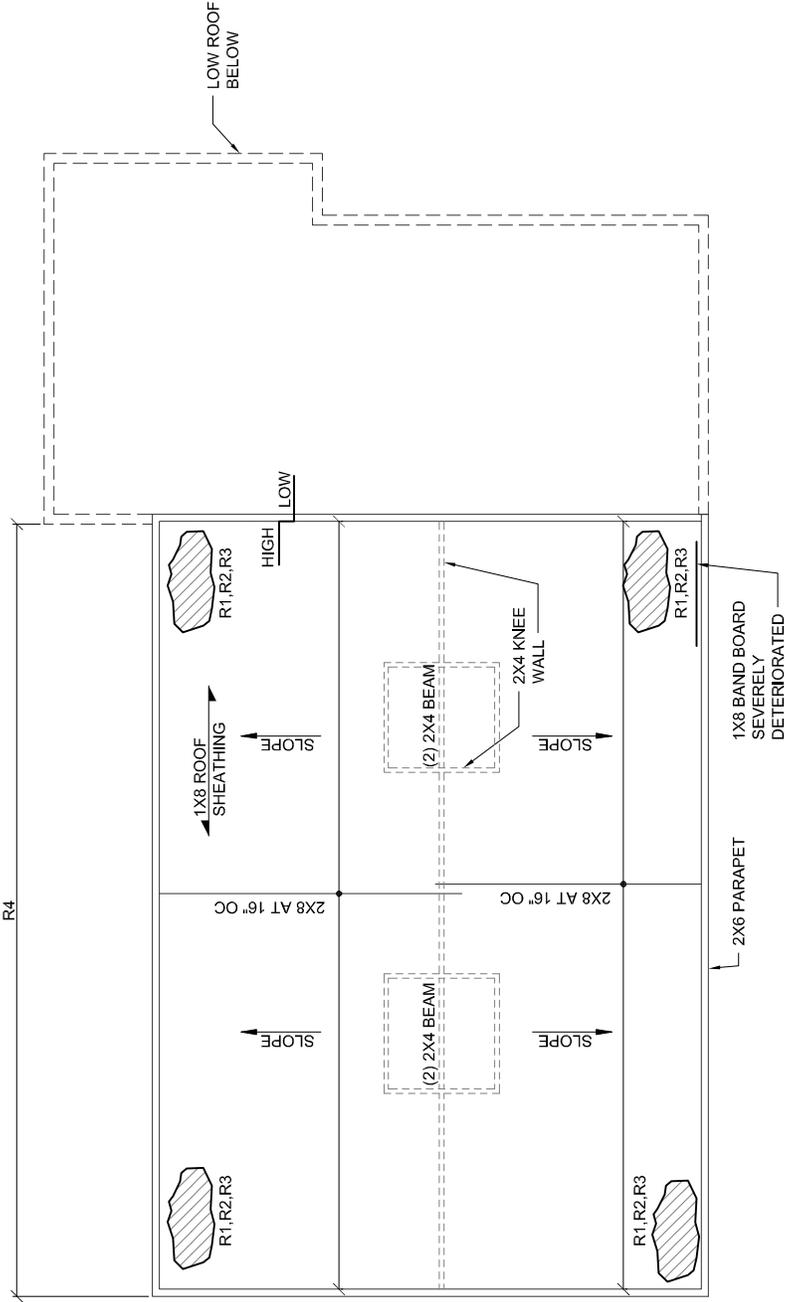
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SURVEY NOTES
 R1 - SEVERE DETERIORATION AT ROOF DRAIN
 R2 - SEVERELY DETERIORATED DECKING
 R3 - SEVERELY DETERIORATED JOIST
 R4 - TERMITE DAMAGE THROUGHOUT

ATTIC FRAMING AND LOW ROOF PLAN
 SCALE: 1/8" = 1'-0"



SCALE SHOWN IS FOR 11" x 17" SHEET OF PAPER



HIGH ROOF PLAN

SCALE: 1/8" = 1'-0"

SURVEY NOTES

- R1 - SEVERELY DETERIORATED ROOF DRAIN
- R2 - SEVERELY DETERIORATED DECKING
- R3 - SEVERELY DETERIORATED JOIST
- R4 - TERMITE DAMAGE THROUGHOUT

EXISTING CONDITION DOCUMENTS
BANK OF EVERGLADES
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Project #
Title: HIGH ROOF PLAN
Date: 08/27/2020

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of





DEFINITION OF TERMS ASSOCIATED WITH THE DURABILITY OF CONCRETE

(From ACI 201.1R-08)

1 CRACKING

Crack- A complete or incomplete separation, of either concrete or masonry, into two or more parts produced by breaking or fracturing.

- 1.1 *Checking*- Development of shallow cracks at closely spaced but irregular intervals on the surface of plaster, cement paste, mortar, or concrete (See also *cracks* and *crazing*).
- 1.2 *Craze cracks*- Fine random cracks or fissures in a surface of plaster, cement paste, mortar or concrete. *Crazing*- The development of craze cracks; the pattern of craze cracks existing in a surface (See also *checking* and *cracks*).
- 1.3 *D-cracks*- A series of cracks in concrete near and roughly parallel to joints and edges.
- 1.4 *Diagonal crack*- In a flexural member, an inclined crack, caused by shear stress, usually at approximately 45 degrees to the axis; or a crack in a slab, not parallel to either the lateral or longitudinal directions.
- 1.5 *Hairline cracks*- Cracks in an exposed-to-view concrete surface having widths so small as to be barely perceptible.
- 1.6 *Longitudinal cracks*- A crack that develops parallel to the length of the member.
- 1.7 *Map cracking*- 1) Intersecting cracks that extend below the surface of hardened concrete; caused by shrinkage of the drying surface concrete that is restrained by concrete at greater depths where either little or no shrinkage occurs; vary in width from fine and barely visible to open and well defined; or 2) the chief symptom of a chemical reaction between alkalis in cement and mineral constituents in aggregate within hardened concrete; due to differential rate of volume change in different members of the concrete; cracking is usually random and on a fairly large scale and, in severe instances, the cracks may reach a width of 12.7 mm (0.50 in.) (See also *checking* and *crazing*; also known as *pattern cracking*).
- 1.8 *Pattern cracking*- Cracking on concrete surfaces in the form of a repeated sequence; resulting from a decrease in volume of the material near the surface, or an increase in volume of the material below the surface, or both (see *map cracking*).
- 1.9 *Plastic shrinkage cracking*- Cracking that occurs in the surface of fresh concrete soon after it is placed and while it is still plastic.
- 1.10 *Random cracks*- Uncontrolled cracks that develop at various directions away from the control joints.
- 1.11 *Shrinkage cracking*- Cracking of a structure or member due to failure in tension caused by external or internal restraints as reduction in moisture content develops, carbonation occurs, or both.
- 1.12 *Temperature cracking*- Cracking due to tensile failure, caused by temperature drop in members subjected to external restraints or by a temperature differential in members subjected to internal restraints.
- 1.13 *Transverse cracks*- Cracks that occur across the longer dimension of the member.



2 DISTRESS

Deterioration- 1) Physical manifestation of failure of a material (for example, cracking, delamination, flaking, pitting, scaling, spalling, and staining) caused by environmental or internal autogenous influences on rock and hardened concrete as well as other materials; or 2) Decomposition of material during either testing or exposure to service (See also *disintegration*).

- 2.1 *Chalking*- Formation of a loose powder resulting from the disintegration of the surface of concrete or an applied coating, such as cementitious coating.
- 2.2 *Curling*- The distortion of concrete member from its original shape such as the warping of a slab due to differences in temperature or moisture content in the zones adjacent to its opposite faces (See also *warping*).
- 2.3 *Deflection*- Movement of a point on a structure or structural element, usually measured as a linear displacement or as succession displacements transverse to a reference line or axis.
- 2.4 *Deformation*- A change in dimension or shape.
- 2.5 *Delamination*- A separation along a plane parallel to a surface, as in the case of a concrete slab, a horizontal splitting, cracking, or separation within a slab in a plane roughly parallel to, and generally near, the upper surface; found most frequently in bridge decks and caused by the corrosion of reinforcing steel or freezing or thawing; similar to spalling, scaling, or peeling except that delamination affects large areas and can often only be detected by non-destructive tests, such as tapping or chain dragging.
- 2.6 *Disintegration*- Reduction into small fragments and subsequently into particles (See also *deterioration*).
- 2.7 *Distortion*- See *Deformation*.
- 2.8 *Drummy area*- area where there is a hollow sound beneath a layer of concrete due to a delamination, poor consolidation, or void (See also *delamination*).
- 2.9 *Dusting*- The development of a powdered material at the surface of hardened concrete (See also *chalking*).
- 2.10 *Efflorescence*- A deposit of salts, usually white, formed on a surface, the substance having emerged in solution from within either concrete or masonry and subsequently been precipitated by a reaction, such as carbonation or evaporation.
- 2.11 *Exfoliation*- Disintegration occurring by peeling off in successive layers; swelling up, and opening into leaves or plates like a partly opened book.
- 2.12 *Exudation*- A liquid or viscous gel-like material discharged through a pore, crack, or opening in the surface of concrete.
- 2.13 *Joint deficiencies*- Expansion, contraction, and construction joints not functioning in intended service conditions.
 - 2.13.1 *Joint spall*- A spall adjacent to a joint.
 - 2.13.2 *Joint sealant failure*- Joints opened due to a cracked and/or debonded sealant.
 - 2.13.3 *Joint leakage*- Liquid migrating through the joint.
 - 2.13.4 *Joint fault*- Differential displacement of a portion of a structure along a joint.
- 2.14 *Leakage*- Contained material is migrating through the concrete member.
 - 2.14.1 *Leakage, liquid*- Liquid is migrating through the concrete.
 - 2.14.2 *Leakage, gas*- Gas is migrating through the concrete.



- 2.15** *Mortar flaking*- A form of scaling over coarse aggregate.
- 2.16** *Peeling*- A process in which thin flakes of mortar are broken away from a concrete surface, such as by deterioration or by adherence of surface mortar to forms as forms are removed.
- 2.17** *Pitting*- Development of relatively small cavities in a surface; in concrete, localized disintegration, such as a popout; localized corrosion evident as minute cavities on the surface.
- 2.18** *Popout*- The breaking away of small portions of a concrete surface due to localized internal pressure that leaves a shallow, typical conical, depression with a broken coarse aggregate at the bottom.
 - 2.18.1** *Popouts, small*- Popouts leaving depressions up to 10 mm (0.4 in.) in diameter, or the equivalent.
 - 2.18.2** *Popouts, medium*- Popouts leaving depressions between 10 and 50 mm (0.4 and 2 in.) in diameter.
 - 2.18.3** *Popouts, large*- Popouts leaving depressions greater than 50 mm (2 in.) in diameter.
- 2.19** *Scaling*- Local flaking or peeling away of the near-surface portion of hardened concrete or mortar (See also *peeling* and *spalls*).
 - 2.19.1** *Scaling, light*- Loss of surface mortar without exposure of coarse aggregate.
 - 2.19.2** *Scaling, medium*- Loss of surface mortar 5 to 10 mm (0.2 to 0.4 in.) in depth and exposure of coarse aggregate.
 - 2.19.3** *Scaling, severe*- Loss of surface mortar 5 to 10 mm (0.2 to 0.4 in.) in depth with some loss of mortar surrounding aggregate particles 10 to 20 mm (0.4 to 0.8 in.) in depth.
 - 2.19.4** *Scaling, very severe*- Loss of coarse aggregate particles as well as surface mortar, generally to a depth greater than 20 mm (0.8 in.).
- 2.20** *Spall*- A fragment, usually in the shape of a flake, detached from a concrete member by a blow, by the action of weather, by pressure, by fire, or by expansion within the larger mass.
 - 2.20.1** *Small spall*- A roughly circular depression not greater than 20 mm (0.8 in.) in depth and 150 mm (6 in.) in any dimension.
 - 2.20.2** *Large spall*- May be roughly circular or oval or, in some cases, elongated, and is more than 20 mm (0.8 in.) in depth and 150 mm (6 in.) in greatest dimension.
- 2.21** *Warping*- Out-of-plane deformation of the corners, edges, and surface of a pavement, slab, or wall panel from its original shape (See also *curling*).



3 TEXTURAL FEATURES AND PHENOMENA RELATIVE TO THEIR DEVELOPMENT.

- 3.1 *Air void*- A space in cement paste, mortar, or concrete filled with air; an entrapped air void is characteristically 1 mm (0.04 in.) or greater in size and irregular in shape; entrained air void is typically between 10 μ m and 1 mm (0.04 mil and 0.04 in.) in diameter and spherical or nearly so.
- 3.2 *Blistering*- the irregular raising of a thin layer at the surface of placed mortar or concrete during or soon after the completion of the finishing operation; also, bulging of the finish plaster coat as it separates and draws away from the base coat.
- 3.3 *Bugholes*- Small regular or irregular cavities, usually not exceeding 15 mm (0.6 in.) in diameter, resulting from entrapment of air bubbles at the surface of formed concrete during placement and consolidation (Also known as surface air voids).
- 3.4 *Cold joint*- A joint or discontinuity resulting from a delay in placement of sufficient duration to preclude intermingling and bonding of the material in two successive lifts of concrete, mortar, or the like.
- 3.5 *Cold-joint lines*- Visible lines on the surfaces of formed concrete indicating the presence of a cold joint where one layer of concrete had hardened before subsequent concrete was placed.
- 3.6 *Discoloration*- Departure of color from that which is normal or desired (See also *staining*).
- 3.7 *Honeycomb*- Voids left in concrete due to failure of the mortar to effectively fill the spaces among coarse aggregate particles.
- 3.8 *Incrustation*- A crust or coating, generally hard, formed on the surface of concrete or masonry construction or on aggregate particles.
- 3.9 *Laitance*- A layer of weak material known as residue derived from cementitious material and aggregate fines either: 1) carried by bleeding to the surface or to the internal cavities of freshly placed concrete; or 2) separated from the concrete and deposited on the concrete surface or internal cavities during placement of concrete underwater.
- 3.10 *Sand pocket*- A zone in concrete or mortar containing fine aggregate with little or no cement material.
- 3.11 *Sand streak*- A streak of exposed fine aggregate in the surface of formed concrete, caused by bleeding.
- 3.12 *Segregation*- The differential concentration of the components of mixed concrete, aggregate, or the like, resulting in nonuniform proportions in the mass.
- 3.13 *Staining*- Discoloration by foreign matter.
- 3.14 *Stalactite*- A downward-pointing deposit formed as an accretion of mineral matter produced by evaporation of dripping liquid from the surface of concrete, commonly shaped like an icicle (See also *stalagmite*).
- 3.15 *Stalagmite*- An upward-pointing deposit formed as an accretion of mineral matter produced by evaporation of dripping liquid, projecting from the surface of rock or of concrete, commonly roughly conical in shape (See also *stalactite*).
- 3.16 *Stratification*- The separation of overwet or overvibrated concrete into horizontal layers with increasingly lighter material toward the top; water, laitance, mortar, and coarse aggregate tend to occupy successively lower positions in that order; a layered structure in concrete resulting from placing of successive batches that differ in appearance; occurrence in aggregate stockpiles of layers of differing grading or composition; a layered structure in a rock foundation.



**EXISTING STRUCTURAL CONDITIONS
EVALUATION CRITERIA**

EXCELLENT	Meets or exceeds current structural code requirements. Capable of safely carrying proposed occupancies. No significant vibrations, cracking or deflections. No structural reinforcement or repairs required. Very minor, if any, maintenance required.
GOOD	Meets current structural code requirements. Capable of safely carrying proposed occupancies. Deflections, cracking, vibrations may be observable. No structural reinforcement required. Minor structural repairs required. Some significant maintenance repairs required.
FAIR	Majority of structure meets structural code requirements. Portions of structure are not capable of carrying proposed occupancies. Deflections, cracking, vibrations, structural distress is observable. Structural reinforcement required in limited portions of the structure. Structural repairs required generally. Many significant maintenance repairs required.
POOR	Majority of structure does not meet structural code requirements. Much of the building is not capable of carrying proposed occupancies. Deflections, cracking, vibrations, structural distress commonly observable throughout the structure. Major reinforcement or reconstruction of the structure is required. Major maintenance repairs are required.
EXTREMELY POOR	Collapse of structure is imminent. Structure exhibits significant deflections, cracking, vibrations, structural distress. Structure requires extensive reinforcement or reconstruction of impractical scope.

NOTE: Some parts of each definition may not apply.

RECOMMENDATIONS FOR REPAIRS:

The most serious element is the roof. There are two proposals for repairing this roof. The first is from Target Roofing and Sheet Metal in Naples. Their proposal is dated February 25, 2020 and provides a GAF Everguard 60 mil plate bonded roof cover as follows:

Base Price:.....	\$29,214
Option 1: GAF Diamond Pledge 20 YRW	\$1,200
Option 2: Furnish and install coping cap.....	\$5,034
<u>Option 3: Furnish and install collector box & downspouts.</u>	<u>\$4,712</u>
TOTAL.....	\$40,160

A second price comes from King Roofing in Naples. Their proposal is dated January 29, 2020 and provides a Certainteed Flintlastic System and will provide drains but makes no mention of downspouts. It provides a 5-year warranty and has a cost of **\$54,300**.

Based on these two proposals, we recommend using the Target Roofing system including the alternates for \$40,160.

Windows require repairs. Based on their condition, we recommend replacing the 21 historic windows with wooden windows that replicate the original wood windows. Protection could be with plywood or board shutters. The aluminum windows in the addition date to its construction in 1950. These windows need restoration. We recommend that those windows be restored to match their original condition.

The upper door is no longer needed due to removal of the stair. We recommend that this door be converted to an aluminum window that matches the windows in the addition. Alternately, this door could be removed and the opening sealed to match the existing condition of the wall. Either one of these solutions will work for restoration.

Exterior doors require restoration. We recommend that all exterior doors are restored. Exterior walls are damaged. We recommend that those repairs are completed.

Interiors will require work for its new use. That work will be determined at that time.

Structural repairs include roof sheathing, particularly at roof leaks, and other areas of deterioration. Much of this work will be included in repair of the roofs noted above. Some termite damage will need repairs. Standing water in the attic should be removed, as well as the tarp after roofing has been completed.

Second floor framing members require 2 x 12 joists sistered to them. A review of plumbing should be conducted by a qualified consultant and necessary repairs should take place. The stairs at the northeast corner are damaged and require replacement.

Exterior stairs require restoration, replacement, or other work, such as the ramp on the south side. The concrete stairs on the west side should be restored to match their historic configuration. The wooden stair on the south side should be demolished and rebuilt for code compliant ADA access.

The underside of the structure has not been inspected, but deficiencies, such as cracked piers, will need restoration or replacement. We recommend that the underside be inspected by a structural engineer after clearing has occurred. Current conditions include hypodermic syringes, mosquitos, water, and rubbish. All of these should be addressed.

GRANT SOURCES LIST

The following source list is presented to aid in procuring grants that may be available for this historic rehabilitation/restoration project. There are many sources of funding available for historic preservation projects. Our clients with similar projects have received grant funds from various sources, including capital campaign funds, the local Tourist Development Council, Private Foundations, local government funding, but by far the most significant amount of funding has come from the State of Florida.

Florida Department of State

Laurel Lee, Secretary of State
Division of Historical Resources
500 South Bronough Street
Tallahassee, FL 32399
(850)245-6500
Historic Preservation Grants Program
DHRgrants@dos.myflorida.com

Historic Preservation Grants in Aid Program:

Historic Preservation Small Matching Grants
Historic Museums Small Matching Grants
Historic Preservation & Historical Museums Special Category Grants

Further information is available at the Internet address:

<http://dos.myflorida.com/historical/grants/>

Also State of Florida

Department of Cultural Affairs:

CULTURAL FACILITIES PROGRAM
Teri Abstein
329 North Meridian Street
Tallahassee, FL 32301
(850)245-6299
teri.abstein@dos.myflorida.com
<http://dos.myflorida.com/cultural/grants/grant-programs/cultural-facilities/>

United States Government, US Department of the Interior, National Parks Service

<https://www.nps.gov/orgs/1623/hpf-in-action.htm>

National Trust for Historic Preservation

The National Trust has a State funding Program for Historic Preservation that is funded through corporation trust fund, (approximately \$2,000,000 available)
2600 Virginia Avenue NW
Suite 1100
Washington, DC 20037
info@savingplaces.org
Web site: <https://savingplaces.org/grants>

The National Park Service in partnership with the Institute of Museum and Library Services, the National Endowment for the Arts, and the National Endowment for the Humanities

Save America's Treasures grants

These grants and the matching funds support the preservation of nationally significant historic properties and collections across America.

1849 C Street NW

Washington, D.C. 20240

202-208-6843

Web Site: <http://www.nps.gov/>

American Society of Landscape Architects (ASLA)

This organization provides historic preservation fund grants to preserve nationally significant intellectual and cultural artifacts, historic structures and sites

636 Eye Street NW

Washington, D.C. 20001

1-888-999-2752

info@asla.org

Web Site: www.asla.org

Private Sector

Funding is also available from the private sector, specifically foundations and grants established by individuals and corporations

SUMMARY OF FINDINGS:

The Bank Building requires repair on a number of items, with the roof being the number one component. Water coming in from the roof is causing continuous damage which should be stopped in the near future.

A second issue includes replacement of missing windows, specifically on the west side first floor. This window allows moisture to enter the building. That window was on the outside of the building and should be installed.

Other items requiring attention are inside and outside of the building. We recommend that those items be listed by priority, with stairs being the highest component.

Please call to discuss this report as needed.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bert Bender', with a long horizontal flourish extending to the right.

Bert Bender, Architect