



Medgar and Myrlie Evers Home National Monument Historic Structure Report - Appendices

Final Submission

October 2024





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Cover: View of the Medgar and Myrlie Evers Home from the street looking northeast. Photograph by BBB.

Appendix A:
2021 Condition Assessment



CONDITION ASSESSMENT

MEDGAR AND MYRLIE EVERS HOME NATIONAL MONUMENT

SEPTEMBER 2021



MEDGAR AND MYRLIE EVERS HOME NATIONAL MONUMENT

CONDITION ASSESSMENT

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National Park Service
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September 2021

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ADMINISTRATIVE DATA

Request Number. 140P5120Q0067

TIC Document No. N/A

PMIS No. N/A

Medgar and Myrlie Evers Home

Developer: Winston J. Thompson & Leroy Burnett

Present Owner: US Department of the Interior, National Park Service

Historic Use: Private Home

Present Use: Interpretive Site

Location Data

Address: 2332 Margaret Walker Alexander Drive

Jackson, Mississippi 39213

Coordinates: 32.34100666054236, -90.21266596756766

National Register No.: 00001459

Period of Significance: 1956-1963

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EXECUTIVE SUMMARY

Background

In June of 2020, the home of Medgar and Myrlie Evers was acquired by the National Park Service via conveyance from Tougaloo College. This assessment report and associated work have been commissioned as due diligence in establishing the Medgar and Myrlie Evers Home National Monument. The purpose of this report is to document current conditions of the house and site, and to provide recommendations and a cost estimate for repairing deficiencies. Noted conditions will be primarily related to stability of historic materials and function of the structure as a publicly accessed, historic site. Additional recommendations may be proposed to address conditions which deviate from historical accuracy of the period of significance. All recommendations within this report will comply with the Preservation Guidelines defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Methodology

Before architectural and engineering fieldwork took place, the structure and site were digitally scanned in November 2020 using a FARO 3D laser scanner. This scan was then used to produce base AutoCAD drawings to be utilized in the assessment and for future projects.

Early in 2020, as part of the pre-acquisition due diligence of the property, a preliminary environmental assessment was completed to evaluate hazards. The previous report was evaluated and testing was expanded to confirm previously tested materials and identify others that had not been tested, where allowed. This additional sampling took place on March 3, 2021, with a follow up report submitted by the end of March, see Appendix B.

After the team reviewed the environmental assessments, the design and engineering team arrived to assess the property on June 29, 2021 and meet with National Park Service staff.

With assistance from the Mississippi Department of Archives and History as well as WFT Architects, additional documentation of changes to the structure and site was also collected at this time and has been used to evaluate conditions. The Historic Structure Report prepared by WFT Architects in 1995 provides a thorough documentation of the history and importance of this site, structure, and life of Medgar Evers and his family's life in the home.

Summary of Conditions

Generally, the condition of the house is sound; the following outlines overall observations and a few key deficiencies.

Management of water around the site seems to have been improved within the last decade but remains not fully resolved. The large hackberry tree in the northeast corner of the yard is of concern to the property and neighbors, due to its size, age and condition. It is, however, of significance to the historic landscape of the property along with an evergreen which has been moved to the lot nearby. Most other existing plants on site do not appear significant. The exposed driveway where not covered by the carport roof, is significantly cracked and has been repetitively patched. An irrigation system is present and functional, a few sprinkler heads are damaged.

There is evidence of a possible previous roof leak in the current interpretive room, room 107, and termite damage in the crawl space, neither appear recently active. Ballast on the roof has shifted to reveal bare spots of the built up roofing material in areas near edges. With an insufficient gravel stop at the roof's edge in many places, ballast has fallen onto and within the exterior mechanical unit.

Even with site improvements, signs of significant water and moisture are still present within the crawl space. It is likely that the main source of mold noted in the environmental assessment report begins in the crawl space. The floor system has been replaced but may need additional supports for the greater load than a residential structure would experience, given the house's new use as an interpretive space.

The mechanical system is young and oversized; there are areas of ductwork in the crawl space that are not sealed. The existing fire suppression system is suspected to have been installed in 1996 and is believed to be a wet system and is not operational. Two water heaters were located but both were disconnected. A humidifier is located within a closet but is not in use.

The electrical system has been updated to generally, if not completely, meet requirements for the building's function as a museum rather than a residence. There are two security systems throughout the house, one active and one inactive. The fire alarm is tied into a single panel with the security system; however, it is unclear who monitors the systems and is alerted.

At this time, the exterior envelope and interior finishes need primarily cosmetic repairs and joint sealant.

Accessibility will be a significant hurdle at this site. Only one exterior door to the primary structure, the main door that provides entry from the carport to the house, meets the code requirements. There are steps to access the carport door which would require a ramp; due to the historic significance of the carport and door, alterations are challenging.

Once inside, no interior doors are code compliant and the shoe mould in the interior hallway restricts the clear dimension to 25 1/2 inches. All interior doors are 30 inches or less; minimum width of an accessible door is generally 34 inches.

Other hurdles for public access to the site will include restroom facilities and parking. The small size of the site and structure do not provide enough space for either, without a significant negative impact to the historic fabric. These will need to be resolved nearby or elsewhere.

Summary of Costs

The following are estimated costs of repairs, based on this report's recommendations and quantified materials. Numbers below include trade costs and are not based on specific materials or design. They

do not include full construction costs which would include mark-ups such as general conditions, overhead, profit and contingencies.

Foundations	\$7,080
Superstructure	\$11,885
Exterior Envelope	\$26,356
Roofing	\$10,930
Interior Finishes	\$21,254
Plumbing	\$1,250
Mechanical	\$4,400
Fire Protection*	
Wet Pipe	\$4,176
Dry Pipe	\$5,023
Dry Pipe Nitrogen	\$6,400
Pre-action	\$6,664
Electrical	\$4,643
Remediation (Allowance)	\$14,000
Site Improvements	\$33,121
Driveway Option A	\$5,947
Driveway Option B	\$47,352
Driveway Option C	\$43,809

*There are various combinations of design options for fire protection systems and these cost estimates are not based on a designed system for this structure. They are based on industry standards and average costs. See square footage costs in Appendix G under Basis of Estimate, Other Comments.

The greatest total project cost estimated, is approximately \$448,737 which includes the pre-action fire protection system and Option B for driveway repair. This is an estimate of full construction cost, including such mark-ups as general conditions, overhead, profit and contingencies.

Of deficiencies and recommendations noted within this report, conditions related to site drainage are of highest priority. While there are no imminent threats to the stability and function of the site or structure, prolonged exposure to moisture will continue to negatively impact materials and only increase repair costs.

Fire suppression and security are also high priority, to ensure the structure and site are protected.

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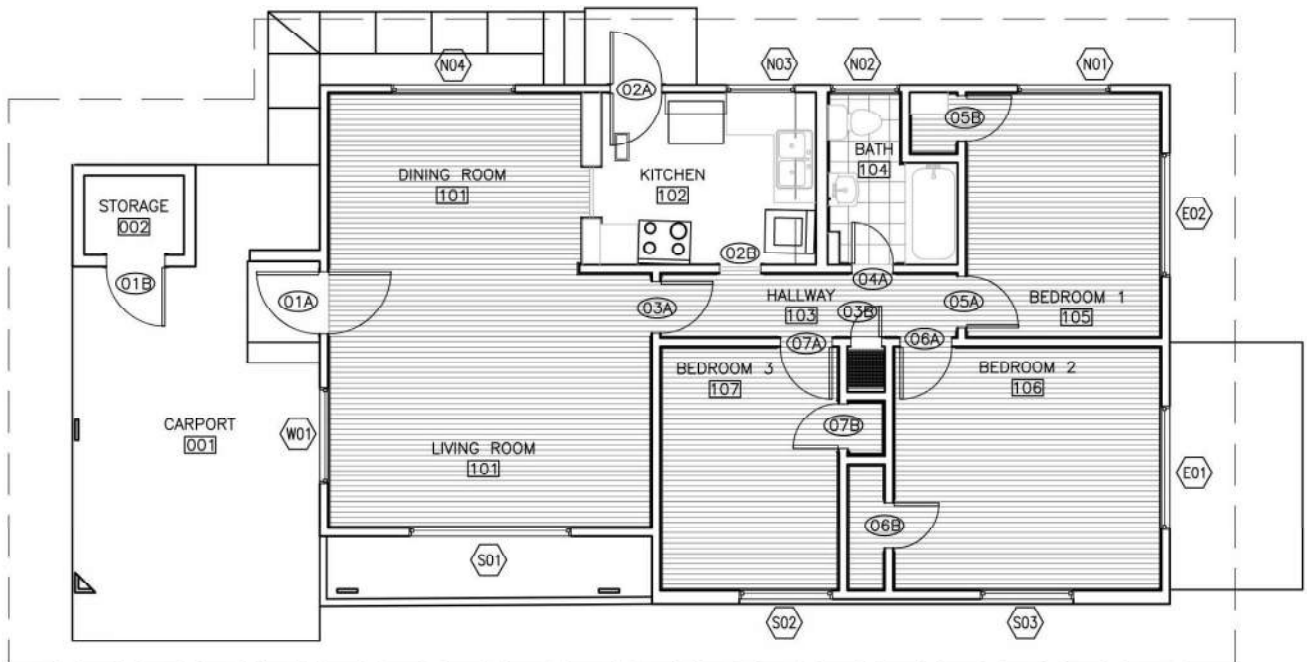


Figure 1. Medgar and Myrlie Evers Home Floor Plan



INTRODUCTION

Character Defining Features

Character defining features are distinct details which give a building an identify of its own. These elements may be as large in scale as the position of the building within its context, the plan of the structure itself and as small as moulding profiles. Even when a building's significance is tied to historic events or persons, the physical and architectural components distinguish a structure and should be preserved. The following are the character defining features of the Medgar and Myrlie Evers Home National Monument.

Per the National Register of Historic Places, the period of significance for this structure is 1956 through 1963, the time frame in which the family, including Medgar, occupied the house. The following character defining features correlate with that period of significance. Certain characteristics are of particular significance as they were designed with the family's safety in mind; these features are distinctly identified below.

Exterior

- Driveway and carport area
- Grassed front and rear yards
- Exterior cladding: roman bricks, board and batten siding, asbestos paneled siding
- Steel windows
- Overhang with exposed rafters
- Decorative iron supports

Interior

- Efficient plan layout
- Textured wall and ceiling finish
- Kitchen/Dining divider
- Kitchen/Bathroom wall finishes

Safety

- Site location
- Entry door location within the carport
- Low slope roof with gravel ballast
- Location of refrigerator



Figure 2. Front overhang and veneer materials.



Figure 3. Living and Dining Room with Kitchen divider.



Figure 4. Main entry door within Carport.

Code Requirements

Applicable building codes as required by the National Park Service are as follows:

- International Building Code 2021, with Appendices
National Fire Protection Association 101 – Life Safety Code, to be used when IBC is silent
- International Existing Building Code 2021, with Appendices

Accessibility Requirements

Applicable accessibility codes as required by the National Park Service are as follows:

- Architectural Barriers Act Accessibility Standards (ABAAS)
Accessibility to sites, facilities, buildings, and elements for new construction and alterations to Federal properties and leased portions of existing buildings or facilities.

Accessibility to non-Federal facilities, built or altered with Federal grants or loans.

The design of this structure, which is well outlined in the 1995 HSR by WFT Architects, was efficient and compact. With the exception of the carport door into the house and the door into the carport storage, all other doors are 30 inches or less. Accessible routes are required to be 36 inches, with thresholds allowed to be 32 inches, clear. The minimum width of doors that provide 32 inches clear when open is approximately 34 inches due to the thickness of the door.

The rear kitchen door would be the more historically sensitive, albeit still negatively impactful, location to install a permanent ramp for an accessible entrance, but is only 30 inches. To provide greater width at the interior of the kitchen at this location would likely require the removal or relocation of the refrigerator, which is historically significant in its proximity to the rear door. The refrigerator was located where it could be used to barricade the rear door from intruders.

The carport door has the required clearance for an accessible entrance, however due to the significance of the space, being where Medgar Evers was found after being shot, it is not recommended that a permanent ramp or attachments are made in this space. A movable ramp may be considered, but should be thoroughly reviewed with interpretive and preservation efforts in the carport.

Three configurations of ramps are provided in Figures 5-7 for scale and consideration when reviewing accessibility for the home. These ramps meet the guideline for ABAAS; however, design of accessible routes beyond have not been shown.

Installation of any permanent ramp would have some negative impact on experiencing the site. Also noted previously in the HSR, any changes to the entrances or openings within the house would have significant negative impact on the character and historic conditions of the home. See architectural floor plan in Appendix E for a list of all door widths.

Below is an excerpt from the NPS Management Policies 2006: The Guide to Managing the National Park System, which may be a pertinent reference for consideration at this site. Alternate and creative means of providing disabled persons access, may be required.

5.3.2 Physical Access for Persons with Disabilities

The National Park Service will provide persons with disabilities the highest feasible level of physical access to historic properties that is reasonable, consistent with the preservation of each property's significant historical features. Access modifications for persons with disabilities will be designed and installed to least affect the features of a property that contribute to its significance. Modifications to some features may be acceptable in providing access once a review of options for the highest level of access has been completed. However, if it is determined that modification of particular features would impair a property's integrity and character in terms of the Advisory Council's regulations at 36 CFR 800.9, such modifications will not be made. To the extent

possible, modifications for access will benefit the greatest number of visitors, staff, and the public, and be integrated with or close to the primary path of travel for entrances and from parking areas. In situations where access modifications cannot be made, alternative methods of achieving program access will be adopted.

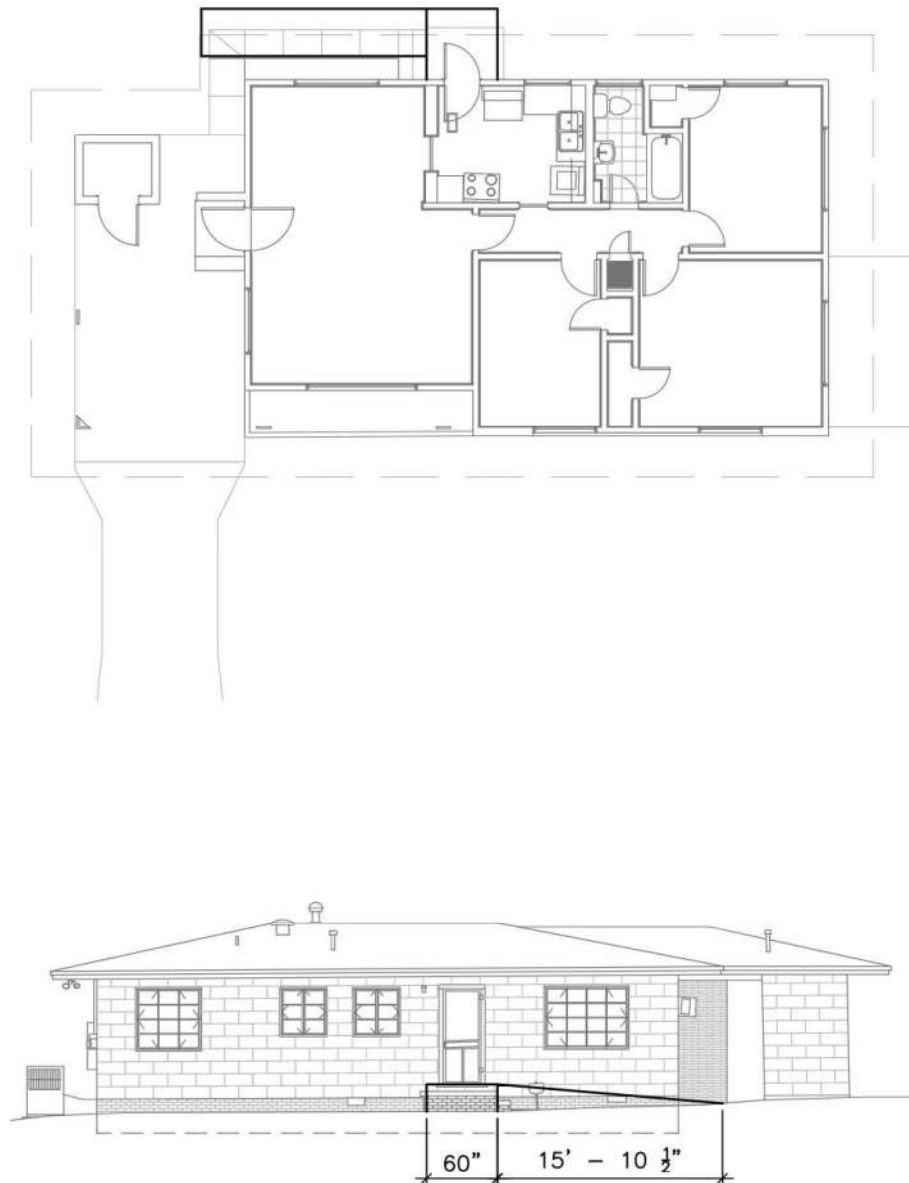


Figure 5. Rear ramp and landing option.



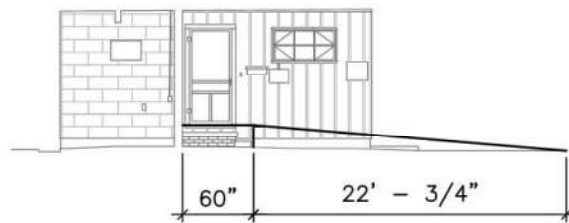
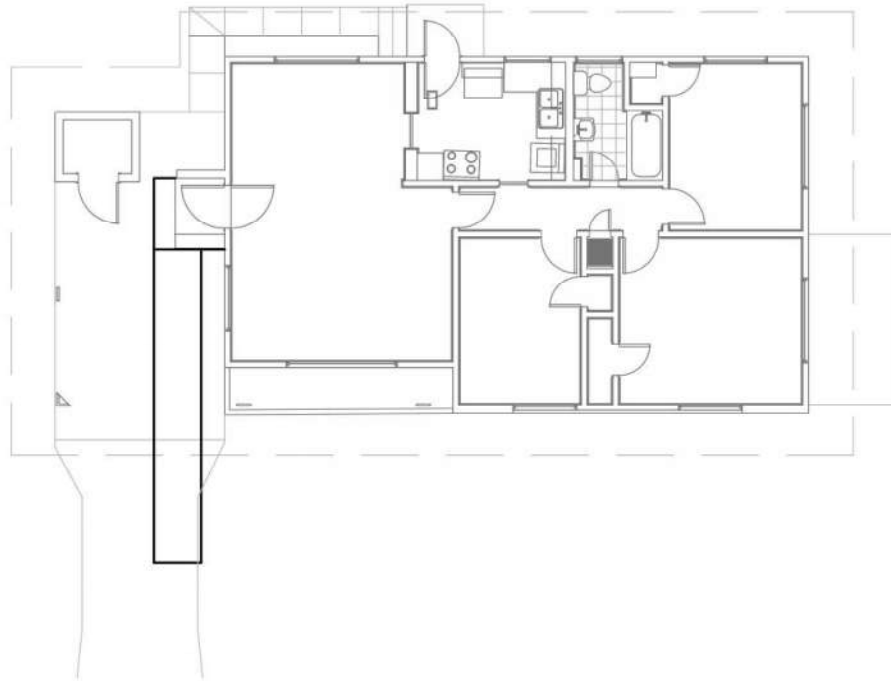


Figure 6. Carport ramp and landing, north-south option.



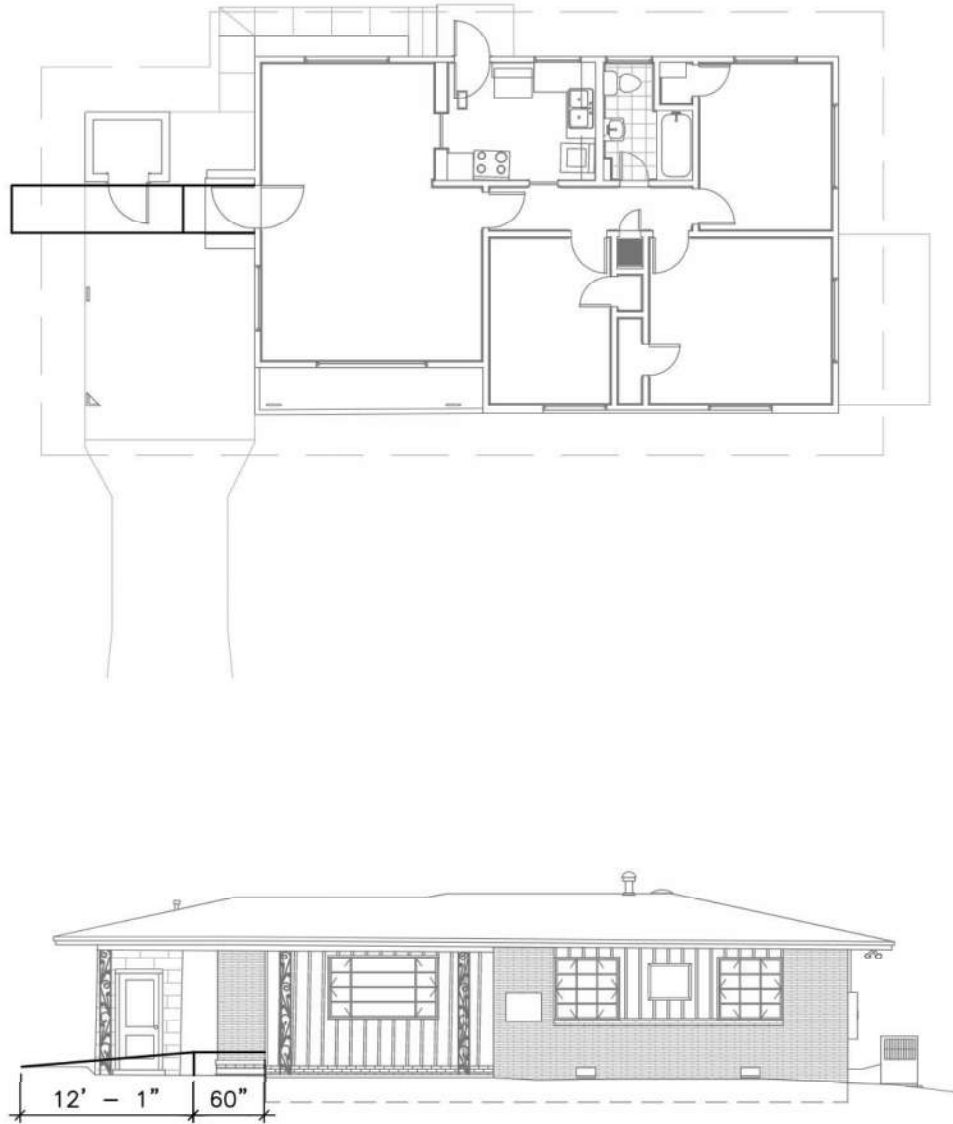


Figure 7. Carport ramp and landing, east-west option.



CONDITION ASSESSMENT AND TREATMENT RECOMMENDATIONS

Site

Description

Located in northwest, Jackson, MS, the Medgar and Myrlie Evers Home and the associated historic district are bounded by Missouri St. to the west, Ridgeway St. to the north, Munsey Avenue to the south, and Miami St. to the east. (See figure below)



Figure 8. Historic District and Site Context

The single-family residential lot is located in an area that was historically known as the Elaine Subdivision. The area was listed on the National Register of Historic Places as a Historic District in 2013. Now known as the Medgar Evers Historic District, it is historically significant statewide as the first modern subdivision designed for middle-class blacks after World War II in Mississippi. Additional information about the development of this neighborhood is included in the 1995 HSR by WFT Architects.

The Medgar and Myrlie Evers home lot is approximately 75 feet wide and 91 feet deep, which equates to approximately 0.1454 acres. The longest facade of the house faces the street and spans a significant portion of the site. The most defining historic features of the property are the house itself (see the architectural assessment section for details), and the driveway and carport area where Mr. Medgar Evers was shot. Historic photos show blood trails on the driveway and

carport from Mr. Evers injuries. The remainder of the site now and historically has consisted of a typical lawn, one significant tree in the rear yard, a mix of plants along the property lines acting as screening/hedge material, a raised planting bed at the front of the house, and minimal other trees that are no longer in place.



Figure 9. Medgar Evers Historic District

Observations/Conditions

During the condition assessment, a thorough inventory and evaluation of the existing site was completed. In general, the landscape is well maintained, however there are a few items which should be addressed to ensure the longevity and preserve the historic features of the property.

Plantings

Lawn: The existing lawn appears to be healthy. Although weeds are present, the condition is typical of, if not better than, the rest of the neighborhood. See Figure 10.

Trees: There is only one existing tree on the property and that is a hackberry (*Celtis occidentalis*) located in the northeast corner of the rear yard. See image below. The tree is approximately 36 inches in diameter at breast height (dbh) and is in reasonably stable condition but showing visible signs of decline. The tree canopy extends over multiple properties and is well within reach of several structures, should the tree fall. The age of the tree is unknown, but it is



Figure 10. Lawn Condition.

believed that the tree was present during the period of significance for the property, indicating it may be minimally 65 years in age.



Figure 11. Significant Hackberry tree at rear of property.

Along the rear property line there are several other trees that are on an adjacent property, and a portion of their canopy extends onto the Medgar and Myrlie Evers property. The species appear to be crape myrtle (*Lagerstroemia indica*) and Tree of Heaven (*Ailanthus altissima*). The trees do not pose any significant risk to the property; however Tree of Heaven can be extremely invasive.



Figure 12. Neighboring trees.

Raised Planting Bed: At the front of the house there is a narrow, raised planting bed which contains some foundation plantings. (see image below) The bed is constructed using one wythe of bricks, two courses high. It is understood that during the period of historic significance, there was a raised bed in this location, however the current bed is not original. It was reconstructed as part of the improvements in 2013. The current plants, Japanese pittosporum, are also not original.



Figure 13. Front planting bed.

Miscellaneous Plantings: Along the east, west and north property lines there are various groupings of plants acting as screening and hedge material. Most are in fair health but are not of historic significance and many are invasive. They consist of:

- Yucca
- Photinia
- Abelia
- Cherry Laurel
- Magnolia



Figure 14. Magnolia

It also appears that several tree stumps that have been trimmed and allowed to sucker and grow water shoots have grown to form the shape of a shrubs.

- Oak tree
- Elm tree
- Sweetgum



Figure 15. Oak

At the southwest property line there is what appears to be a partial hedge made up of Helleri Holly (*Ilex crenata* 'Helleri'). These shrubs may very well be original to the property. Through conversations with family members it is believed that hedges were once planted around the periphery of the site, and holly was mentioned as one of the plant types. (See image below.)



Figure 16. Possible historic hedge.

Fencing

Fencing is currently installed on three sides of the property, the west, north and east property lines. There is also a section of fence on both sides of the house connecting to the property line fence, which encloses the back yard. A section of fence and a gate are currently installed under the carport, that allow access to the rear yard. The segment of fence with a gate contains a dog decoration has been identified as a gift from Medgar to Myrlie. A chain link fence was installed at some point during the period of significance, when the family owned a dog. The current fence type is typical chain link, and the height varies from 3'-6" to 5'-6" tall. The screening plantings along the property line make it difficult to evaluate the full section of fencing, but what is visible shows rust and bent framing. The fence sections that abut the structure also have large gaps at the corners. The fence is not considered a security fence. (See images below.)



Figure 17. Overgrown existing fence.



Figure 18. Existing fence.



Figure 19. Historic gate with dog decoration and fence segment.

Irrigation

There is an existing irrigation system consisting of mainly pop-up rotary style heads. These are located throughout the front and rear yards, as well as in the front landscape bed. The control panel is located on the east side of the house near the HVAC condenser unit and other utilities. Multiple valves are located within the lawn/landscape next to the house in the backyard. There are a couple of broken sprinkler heads located in the front yard near the driveway. Other than the few damaged sprinkler heads, the system appears to be in working order. (see image below)



Figure 20. Damaged sprinkler head.

Hardscape

Sidewalks: There is an existing concrete sidewalk that connects the concrete pad underneath the carport, to the rear entrance of the house. This is understood to be the original configuration of the sidewalk. The sidewalk ranges from 30" wide to 24" wide. The concrete shows signs of typical wear but is in relatively sound condition. However, it does appear that the sidewalk is sloped to drain toward the house, which could be adding to water issues in the crawl space. Any water that makes its way between the sidewalk and foundation is trapped.



Figure 21. Existing rear sidewalk.

Stairs: The stairs at the rear entrance are concrete, sitting on red brick foundation and are discolored and worn. There are significant chips in the concrete and a major crack underneath the concrete landing/stoop. Dirt and biological growth can be seen on the concrete, bricks and mortar. The stairs in the carport are a similar concrete and brick configuration; the concrete shows an expected level of wear but is well intact. Some staining from a cleaner or mortar can be seen on the brick.



Figure 22. Existing rear stoop.



Figure 23. Spalling and crack at rear stair.



Figure 24. Carport stairs

MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT
CONDITION ASSESSMENT

Driveway: The condition of the driveway is greatly deteriorated. Significant cracks have been present for some time, anecdotal evidence suggests a nearby oak that has since been removed, caused the cracking. It has been described that a film crew in the mid to late 1990's removed the oak, lifted and reset the concrete driveway. It appears that old and recent patch work has been completed to try to seal the cracks. The material used to seal the cracks is of a contrasting color to the concrete which only highlights the cracks and makes them more visible. This fill material is also starting to fail as the cracks get wider and the driveway continues to degrade. The 3 main panels of the driveway are in the worst condition and will continue to deteriorate. The concrete driveway apron and curb cut, and carport concrete are in sound condition.

Site Drainage



Figure 25. Driveway

Water Concerns: From interviews with neighbors and family members, it is evident the site has always suffered from poor drainage. These issues were also noted in the 1995 HSR. The two properties to the north of the site drain south, which means any type of conveyance system must account for not only the given property but also

adjacent runoff. The overall property is extremely flat, which makes natural drainage very difficult. An improved drainage swale was part of the 2013 improvements. This collects water from roughly the center of the back yard and conveys it around the east side of the house. A curb cut was installed at the street to allow for discharge of water from the swale.

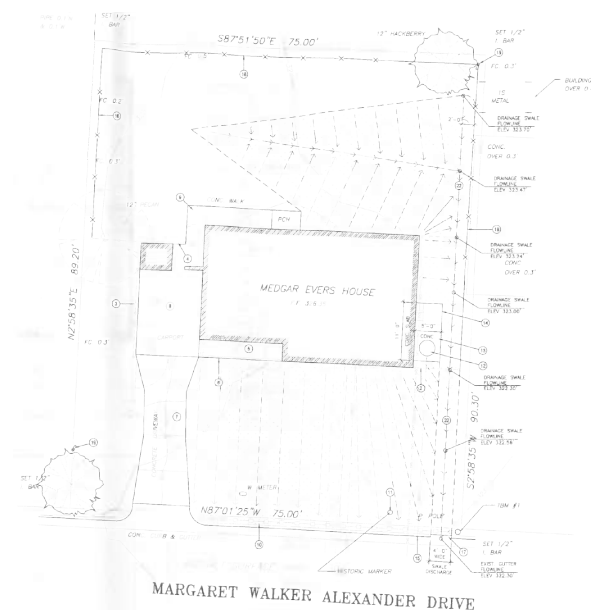


Figure 26. Drawing from WFT Architects, 2013 Rehabilitation

This swale appears to be working as designed, although a few of the plants (Yucca) along the property line have fallen over and are blocking part of the swale.

Despite the improved swale, water is still making its way into the crawlspace of the house. This would indicate that the swale may be too shallow, or it may also be that there is not enough positive drainage from the foundation to keep water from making its way to the house. There is also evidence of erosion below the roof drip edge. This is creating low spots for water to sit and make its way into the crawlspace.

The concrete slab in the crawl space and the trench drain conveying water to the sump pump, should allow water to exit the crawl space quickly. This water is being pumped, via pipe out to the curb near the swale outflow.

Sink Holes: There are two significant low spots/



Figure 27. Swale drainage with yucca in bottom right of image.



Figure 28. Drip edge erosion from roof.

sink holes on the property. See the site plan in Appendix A for locations. One is located beside the carport building, underneath the chain-link fence. This sinkhole was caused by the decay of an old tree and the accompanying roots. The ground has now settled and created a significant depression. The area expands significantly on both sides of the fence and varies in depth from a few inches to over a foot. It is hidden by grass and is a safety concern.



Figure 29. Sink hole where tree has been removed.

The other depression area is located in the northwest corner of the property. This is also most likely leftover from an old tree and the roots have decayed and allowed the ground to settle. Grass is covering the area making it difficult to see.

Utilities

Site utilities that were visible have been indicated on the site plan. A gas line was marked on the east side of the house and can be seen in figure below. (Also see site plan in Appendix A)

There are currently no accessible entries into the residence. There are stairs at both doors. The rear sidewalk is also too narrow (varies from 30" to 24") to be considered an accessible walk.

Miscellaneous Site Features

Clothesline poles: Two clothesline poles are located in the rear yard. These are believed to be in their historic location. The concrete footing for one of the poles is heaving out of the ground and could become a hazard.



Figure 30. Clothesline Poles

Camera Poles: There are two cameras installed on poles on the property. One in the front yard at the southwest corner, and one in the rear yard at the northeast corner. These were installed as part of the 2013 improvements.



Figure 31. Security camera in front yard.

Recommendations

The following recommendations have been classified into levels based on two criteria; intensity (significance and effort) of the improvement, and the timeliness (urgency) of the repair/work to be completed.

Timeliness

- 1- work should be done immediately.
- 2 – work is recommended, but if not completed the current conditions should not worsen.
- 3 – general maintenance, or work is not required but would enhance and improve the site function.

Intensity

- I – Intense improvements, will be a significant undertaking.
- M – Moderate improvements
- S – Small improvement, can be done relatively easily.

Plantings

Lawn: general maintenance only. Should drainage and grading improvements be completed, then the yard areas would need repair. (Level 3-S)

Trees: Due to the decline of the existing hackberry and the liability concerns of it falling onto the house or adjacent property, it is recommended to be removed. As this tree was present during the period of significance, it is also recommended that a creative reuse of the tree be explored. This might include, an art display, carved bench seats, signage posts, etc. The tree should be cut below ground as far as possible. The excavated area should be compacted with fill material to an elevation roughly 2-3 inches below adjacent grade. Fill remainder of the depth with topsoil. Over time as the stump and roots decay, more fill material will be required. Planting of a replacement tree, possibly of a smaller variety, may be considered for interpretive purposes as well. (Level 1-M)

Raised Planting Bed: The brick planter walls appear to be stable and can remain. The plant material should be removed, and historically appropriate species installed. (Level 2-S)

Miscellaneous Plantings: The plantings along the property line can remain. However, if fencing improvements are made the plantings currently acting as a hedge will most likely need to be removed. It is understood that historically there were hedges, believed to be a Holly or Boxwood variety along the property lines. It is recommended to re-install a similar species. (Level 2-M)

Maintenance: Regular trimming and maintenance of plantings will be needed to keep the site visibly as it was during the period of significance, once it has been reestablished.

Fencing

The existing chain-link fence and the associated overgrown, invasive plant material should be removed. The fence is in poor condition. The gaps between fence corners and buildings, and breaks in the fence, prevent it from acting as a security fence. The section of fence and gate that contain the dog decoration that was presented to Myrlie by Mr. Evers, should remain given its historic significance. It is understood that historically, along the property line were evergreen hedges.

If the interpretive strategy in the yard is to return the hedges, replanting of the hedges is recommended using an appropriate species (Ilex, Taxus, Buxus). However, it will take many years for the plants to reach a size where they would provide a visual barrier or any type of security for the property. Therefore, it is also recommended that an approved security fence be installed in a temporary manner, within the property lines, that will not be obtrusive and fit the aesthetic of the site. The fence should be installed in such a manner that at the time the hedges have grown to the required size, the fence could be removed.

Alternatively, the presence of a chain link fence is also historically accurate during the period of significance, and the existing fence could be replaced, in-kind. All fencing is recommended to be installed within the property lines, to ensure it cannot be removed by others. (Level 2-I)

Irrigation

The current irrigation system is in working order. There are a couple of sprinkler heads at the front of the house that have been damaged. These should be repaired. It is recommended that a full system check and service be performed on the system. (Level 3-S)

Hardscape

Sidewalks: The existing sidewalk at the rear of the house is stable. It appears the sidewalk may slope toward the house which may be allowing water to drain into the crawl space, but overall is likely adding little to the issue. Given the historic significance of the sidewalk the recommendation would be to leave it unchanged. However, if accessibility improvements are made to the house the rear entrance would be the logical point of entry. If that were the case, this sidewalk would need to be replaced with a sidewalk of appropriate width (36" minimum.).

- One method which could be used to provide both an accessible route and preserve the historic sidewalk, would be to carefully remove the existing sidewalk in whole sections and salvage. Install a concrete slab at the required width, with a recessed section of the slab where the historic sidewalk could be reinstalled and inset flush into the new sidewalk. (2-M)
- If ABAAS accessibility is considered, this area of sidewalk and stairs would need to be configured with a ramp. (2-I)

See Figures 5 - 7 for possible ramp configurations.

Stairs: The concrete landing, and the concrete stairs at the rear of the house should be repaired. The concrete and brick should be cleaned using a gentle, biological cleaner, and the mortar repointed. A dutchman type repair may be used at the spalled section of the middle step. The horizontal crack may be sealed with an appropriate concrete repair material. (1-M)

Driveway: There are several, large cracks in the three main slabs of the exposed aggregate concrete driveway. It is evident that repairs have been attempted in the past, but the joint filler will

not keep the cracks from worsening. Given the historic significance of the driveway, replacement is not preferred unless all other solutions are not viable. Even then, efforts to retain the material for preservation at an alternative location may be explored. Options for extending the lifespan of the driveway in its current location are as follows:

- Option A: Remove the existing crack and joint sealant. Replace with an appropriate crack filler, either a quick setting cement or patching compound, that can be color matched to the existing concrete. (1-S)
- Option B: Carefully remove and salvage all panels of the existing concrete drive. Install an appropriate subbase of aggregate (4-6 inches in depth) below the concrete. Reinstall making all joints fit tight. Install a steel edge restraint along the perimeter of the concrete driveway to prevent continued expansion and failure of the driveway. Use a color matched, patching compound and expansion joint filler for all joints and cracks. (1-I)
- Option C: Remove the existing concrete and salvage the most historically significant pieces. Pour a new concrete driveway and strategically inlay the historic pieces of the old concrete. The pieces chosen to inlay, and locations should be carefully studied and confirmed with NPS and the family. (1-I)

The concrete under the carport and at the driveway apron/curb are stable and does not need any repair work. Given the historic significance of Medgar Evers assassination and being found in the carport, a greater evaluation of the preservation and interpretive strategy is needed for the area.

Site Drainage

Water Concerns: Efforts to prevent water from entering the house were made as part of the 2013 improvements. The trench drain in the crawl space concrete slab should be enough to convey any water that gets under the house out. This drain and the associated sump pump should be checked to ensure they are clear and the pump is working. A battery backup for the sump pump may also be explored for times when the power may be out and/or an alert system to signal if it fails. (1-S)

To further alleviate water from entering the crawl space and lessen the amount of water standing in the back yard, the existing swale could be improved. The addition of a French drain in generally the same location as the existing swale should help with drainage concerns. This drain should extend from the start of the existing swale along the east side of the house and could discharge either into the existing swale or extend to the street. This improvement also needs to create stronger positive drainage from the house. The yucca which has fallen over and is blocking a portion the swale in the front yard should be removed. (1-I)

The addition of a swale and/or french drain extending from the back yard along the west side of the house and driveway may also help with standing water issues. This swale should extend to the street, with a cut in the curb to allow for discharge. (2-I)

Given the flat nature of the site topography, and the fact that many of the adjacent properties drain onto the site, it is understood why standing water is an issue. In addition to the drainage swale and french drain improvements, the addition of hedges and plant material along the edge of the property could help absorb much of the water running onto the property. (2-M)

Sink Holes: The two sink hole areas on the property should be filled and compacted. The top 2-3 inches of fill should be topsoil or an approved material appropriate as growing medium. Sod or seed should be installed to blend with the rest of the yard.

Miscellaneous Site Features

Clothesline poles: The clothesline poles are significant to the history of the house and should remain. Their concrete footings are heaving out of the ground and may eventually cause the poles to fall over. They may also become a trip hazard. It is recommended to remove and reinstall the clothesline poles in new concrete footings. Location of the poles to match existing. (Level 2-M)

Camera Poles: The existing security cameras and camera poles do not present any type of real issue on the site. However, a holistic evaluation of the site security should be conducted. If the cameras are deemed necessary, a less obtrusive method of attachment should be used. Should the security system be evaluated, and the poles are not needed, they should be removed. (Level 3-S)

Structural System

The structural system of the house is wood roof, wall and floor framing sitting atop brick piers with a crawlspace. A more detailed description, conditions and recommendations are included in the structural report, see Appendix D.

Exterior Envelope



Figure 32. Front (south) elevation.

Description

The Medgar and Myrlie Evers home is a mid-century single story, asymmetrical ranch house with a low slope, hipped roof. Exposed roof rafters extend on all sides beyond the structure and are capped with fascia board and a drip edge, no gutters. Rough attic vent openings have been cut periodically between rafters and have mesh screening.

The southeast surface of the front façade is clad in sandy colored roman style brick in a ‘U’ shape; the area within the brick having board and batten siding with a central framed panel. Painted board and batten siding steps in behind the brick and

continues to the west and wraps to the west wall of the house or east wall of the carport. The board and batten siding terminates at a roman brick wing wall. Siding transitions to a lapped panel asbestos siding for the remainder of the west, north and east elevations.



Figure 33. Rear (north) elevation.

Steel windows of varying sizes and alignment are present on all four sides. The two entry doors on the main structure also have wood framed, screen doors.

Decorative metal supports frame the west two thirds of the southern elevation and continue around to the west side of the carport. A small storage room at the northwest corner of the carport is clad in lapped panel siding. The door to the small storage room is the only wood, two panel style and rail door.

The house structure, without carport and storage room, sits on red brick piers with infilled brick sections, except where the roman brick extends to grade. Crawlspace vents are present on the north and east elevations, and in the roman brick area of the south elevation.

Observations/Conditions

The exterior of the house is generally in sound condition.

Ballast on the roof has shifted over time and has exposed roofing material below; there appears to be no gravel stop, or the height of the gravel stop is

not adequate to prohibit materials from washing off in many areas.



Figure 34. Shifted ballast in valley and edge of roof.

Conditions of joints between dissimilar materials around the structure are a common point of weakness, where joint compound has deteriorated, or materials have separated.



Figure 35. Joint conditions between multiple materials.

At the south elevation near the rafters, diagonal sheathing is visible behind the top portion of roman brick. It appears that the upper portion of the brick veneer may be slowly leaning outward. A piece of curved flashing creates a bridge between the sheathing and brick to span the void. There is evidence of bird's nests in this trough and the flashing may no longer be continuous.



Figure 36. Exposed sheathing behind roman brick on south elevation.

The field of roman brick on the front elevation appears in largely good condition. There are a handful of small penetrations, with a few sporadic hairline cracks in brick and mortar. Paint and caulk have bled onto the roman brick where it intersects with siding and windows. Where a plaque has been attached to the brick, it is unclear if the penetrations are through brick, mortar, or both. There are artifacts which have been slipped behind the sign such as coins and paper.

Paint on wood and other siding elements is beginning to show signs of thinning in small areas. The area of most deterioration is at the front, within the planter where humidity is trapped behind the plants and the paint can be seen peeling on the board and batten siding. On the rear elevation, lower lap siding panels and bricks are discolored with dirt.



Figure 37. Paint peeling at planter.



Figure 38. Dirt and discoloration on siding.

There does not appear to be continuous flashing at the transition from siding to the brick foundation wall. Some panels do not extend over the brick, which appears to have been cut. Paint from the siding and smeared mortar are also present on the face of the brick foundation.



Figure 39. Transition from siding to brick.



Figure 40. Broken panels and bent corner trim.

A handful of siding panels appear cracked or chipped at corners; similarly, the corner trim in a few locations has been damaged.

All steel windows show signs of rust and seem to be painted shut.

Recommendations

At this time, no conditions at the exterior envelope are severe, requiring immediate action. However, action should be taken as soon as it is feasible, to avoid rapid deterioration of any materials. It is suggested, for all paint related recommendations, that paint analysis of the layers be done to confirm historic colors on each material type.

- Replace broken and damaged exterior siding panels with visually matching material. If desired, remediation of all asbestos siding may be most economical and acceptable. Approximate square footage of asbestos shingle lap siding is 680 square feet.
- Clean, repoint and ensure no large gaps exist in brick foundation walls.
- Remove applied signage from the structure, repair materials at attachment points.
- Install gravel stop at roof edge.
- Install flashing at transition from siding to brick foundation.
- Clean and repair steel windows to operable condition. Apply rust prohibitive finish of historically appropriate color.
- Repaint wood and siding elements.
- Install flashing at top of roman brick at south elevation.
- Evaluate and potentially brace or further anchor top of roman brick at south elevation. Investigate presence and condition of brick ties and weeps. This should take place concurrently with evaluation from the interior of room 107. See interior recommendations.
- Consider options for accessible entry. No single recommendation can be made at this time; exceptions for access to this site in part or whole will need to be made to avoid significant negative impact to historic materials.

Other recommendations for routine maintenance are as follows:

- Assess ballast distribution on roof and adjust as needed, particularly after storms.
- Periodically clean windows and siding.
- Inspect flashing elements.

Interior Elements

Description

The simple, compact floor plan consists of a combined living and dining space, kitchen, hallway, bathroom and three bedrooms with closets. All spaces, with the exception of the bathroom and closets, have textured ceilings painted white. Similarly, all walls, with the exception of the bathroom and kitchen, are also textured and painted green. Spanning almost the full width of the hallway ceiling is a large, metal louver to the attic space. The kitchen walls are white, with a green tile back splash and vine on brick wallpaper behind the stove. Green and white tile wainscot encircles the bathroom and extends upward around the bathtub. The bathtub, toilet, sink and in-wall space heater all have a pink finish.



Figure 41. White and green tile and pink fixtures in bathroom.

Anecdotal evidence has indicated that the location of the toilet in the bathroom has been altered. Based on observations from the crawl space, it seems that the toilet may have been backed against the exterior wall originally, and rotated to its current position at a later date.

No crown moulding is present in the home; wood door casing is a simple decorative moulding and the wood base is a 1x4, with shoe mould. All base moulding and door moulding is painted green to match the walls.

Doors are hollow core, flush, veneered doors with an exposed wood grain, dark finish. The mechanical closet door in the hallway has a louver embedded. Window casings have a simple, flat metal profile frame, also painted green. Cabinets in the kitchen area and all doors have a clear finished natural wood grain. Hardwood floors are present in all rooms except the kitchen and bathroom which are non-original vinyl tile.



Figure 42. Example of typical interior door, moulding, wall and ceiling finishes.

All rooms, with the exception of Bedroom 3, room 107, have been furnished with period furniture

and appliances but are understood to not be close matches to the family's furniture or in accurate locations. In Bedroom 3, room 107, a display of historical documents and information focused on Medgar Evers' life and legacy is mounted to the west, north and east walls.

Observations

With the exception of the interpretive room, only small, discrete areas of damage to interior finishes have been identified. In order to determine presence of hazardous materials, samples of wall finishes were taken in discrete areas behind doors and in closets, which has left small chips in material. Other wall areas appear minorly damaged by door hardware and furniture scraping finish surfaces. In Bedroom 2, room 106, a shoe moulding has detached behind the entry door. Also in this room, a possibly patched corner bead is torn and curling, or detaching from adjacent wall finish.

The south, exterior wall and ceiling of Bedroom 3, room 107 show signs of water intrusion in the form of peeling texture and paint. Materials were dry at the time of the condition assessment, and it has been reported that there has not been an active leak. Also on the south wall, there are visible attachment points telescoping through the finishes as well as an obvious horizontal joint or edge of material.



Figure 43. Torn and detaching corner bead in room 106.

Noted in the environmental report, included in Appendix B, there is a notable presence of mold in the house. The structural report, included in Appendix D, identifies significant water entering the crawl space and is likely the primary source of moisture feeding the mold. Mold was not visibly identified on interior materials; it is possible there is mold within the walls from previous leaks that is not visible at this time.



Figure 44. Visible moisture damage at exterior wall of room 107.

It is important to acknowledge the hole in the wall between the living room and kitchen, which is a bullet hole from the evening Medgar Evers was assassinated. Images taken during the investigation are posted around the area. This condition should be considered in any work or interpretation in this area.

Recommendations

The most pressing interior condition is to address the issue of mold and moisture within the crawl space. It is recommended that when the finishes in Bedroom 3, room 107 are repaired, investigations into the interior condition of the walls be made

to determine the cause of the observed water intrusion, to the extent feasible without extensive damage to the structure or finishes. It is suggested, for all paint related recommendations, that paint analysis of the layers be done to confirm historic colors on each material type. Other recommendations include the following:

- Repair sample locations and other small damaged areas of wall finish.
- Reattach shoe moulding.
- To the extent possible, replace furniture, appliances and fixtures with closer matches to the family's.
- Evaluate the use of crime scene imagery within the space once interpretive direction is determined. Similarly, review the bullet hole condition for possible additional preservation needs.

Electrical Systems

Description

The house is served from an overhead power line located at the southeast corner of the property. The incoming service is a 120/240V, single-phase service typical for residential homes. The service entrance panel is rated for 200 amps, with a main circuit breaker of the same rating, located outside on the east wall near the HVAC equipment. The panel is a 30-pole panelboard with 6-Spaces mounted in a NEMA 3R enclosure. The age of the panel was noted as 1995.



Figure 45. Active electrical panel.

The original panelboard has been disconnected and remains as an artifact, located in the hallway.



Figure 46. Original, inactive electrical panel.

The building's main loads include the HVAC system, lighting, and receptacles.

Observations

The panelboard and breakers are 25 years old which is at the manufacturer's recommended lifespan for replacement.

All non-metallic sheathed wiring has been replaced in a previous renovation with metallic sheathed cable (MC cable) bringing the electrical installation up to code due to the change in classification from home to museum space. The MC cable is in good condition.

A junction box in the attic was noted to be open, exposing wires.



Figure 47. MC Cable and open junction box in attic.

In Bedroom 3, room 107 there were two ceiling mounted junction boxes with exposed wiring.

For the exterior Rain Bird irrigation controller, the cord is plugged into a weatherproof receptacle not rated for while-in-use.



Figure 49. Weatherproof receptacle, when closed.

There appears to be (2) security systems however one was noted as not operable and abandoned. The functioning system utilizes (2) intrusion motion detection sensors and horn.

Recommendations

- Replace panelboard and all circuit breakers and provide updated panel schedule.
- Provide cover on open junction boxes in attic and Bedroom 3.
- Provide While-In-Use cover for irrigation controller.
- Remove nonfunctioning security system including devices and wiring.
- Evaluate remaining security system and adjust as needed if lacking.

Fire Alarm/Fire Protection Systems

Description

A wet sprinkler system is installed with concealed heads in every room as well as two heads in the carport. The system is brought in through the crawl space and a shut off valve and tamper switch is installed. The system valve is in the off position, indicating that the system is not active. The drain for the system is in the storeroom in the carport.

The fire alarm system is an addressable system utilizing smoke detectors and alarms throughout the house.

Observations

The sprinkler system was noted as not in use due to the inline pressure gauge reading of 0 psi.



Figure 48. Pressure gauge indicating 0 psi.

Sprinkler piping in the attic was noted as being protected by heat tape wrapped around piping with insulation.

Fire alarm device located in kitchen was noted as damaged.

Fire alarm control panel is located in Closet 1 and appears to be connected in conjunction with the security system panel.

Recommendations

Both the age of the sprinkler and fire alarm systems was noted as 25 years and is recommended to be replaced with a NFPA 13 system.

Options for system types are as follows:

- Option A: Replace in-kind with wet system, which is the simplest and most cost effective.
- Option B: Dry-pipe system, which would require an air compressor and would alleviate the need for insulating the piping and providing heat trace to prevent freezing. To avoid corrosion, it is preferred to use nitrogen with a nitrogen

generator to pressurize the system.

- Option C: Pre-action dry-pipe system, which provides more protection from accidental leaking; for this system multiple conditions must be met before water will release, protecting the resources from water damage unnecessarily.

The size of the required air compressor for the dry or pre-action system may be too large to fit into a closet and would not typically be kept outside. The storage closet in the carport may provide the only existing interior space large enough for a small compressor or generator.

Mechanical Systems

Description

The HVAC system is served by a 3 ton air conditioning unit with gas heat located on grade on the east side of the house. Ductwork is routed into the crawl space then routed to aluminum floor grilles in each room. A steam generator located in the northeast bedroom closet pipes steam to the supply duct for humidification control in the winter. An electric duct heater is also installed in the main supply duct in the crawl space to provide reheat for dehumidification in the summer. A toilet exhaust fan is mounted in the ceiling of the bathroom discharging into the attic.

A Whirlpool through wall air conditioning unit installed in 1963 in the dining room is not operable and kept for historical reasons.



Figure 51. Historic Whirlpool wall unit, not in use.

Observations

The 3-ton air conditioning unit is 6 years old manufactured in 2013 by Carrier and appears to be working properly. The outdoor ductwork is weatherproofed and connects to insulated ductwork in the crawl space. The connection to the indoor ductwork and other branch connections were observed to be leaking a significant amount of cold air into the crawlspace. The crawlspace is reported to be uncomfortably cool. Much of the insulated ductwork is wet and dripping on to the concrete floor of the crawlspace. This is contributing to the water in the space as well as causing other metallic items to sweat. See images in Structural Report, Appendix D.



Figure 50. Carrier air unit.

Recommendations

All of the insulation in the crawl space should be removed and the leaks in the ductwork repaired. The ducts should be dry when reinsulated.

The batt insulation between joists should be replaced with faced batts at a minimum.

Plumbing Systems

Description

The plumbing system is original to the house and is still functioning. The bathroom and kitchen are not used. An electric water heater is installed in the cabinets below the kitchen sink. A gas

fired water heater in a storeroom in the carport is disconnected.

Observations

The water heater in the kitchen is not functioning and is showing signs of rust.



Figure 52. Water heater below kitchen sink.

Recommendations

Remove gas fire water heat in Storage Room 109.

Provide instantaneous water in kitchen for cleaning purposes, only.

Environmental Hazards

For all recommendations, the hazardous materials report included in Appendix B should be reviewed prior to commencing activities. Preliminary specifications for remediation of asbestos, lead paint and mold are included in Appendix C.

References

National Register of Historic Places,

2000. "Evers, Medgar, House." #00001459.

WFT Architects, P.A.

1995. "A Historic Structure Report." Medgar Evers Home Renovation.

APPENDICES

APPENDIX A: SITE PLAN - CONDITIONS

APPENDIX B: ENVIRONMENTAL REPORT

APPENDIX C: REMEDIATION SPECIFICATIONS

APPENDIX D: STRUCTURAL REPORT

APPENDIX E: ARCHITECTURAL DRAWINGS

APPENDIX F: ENGINEERING DRAWINGS

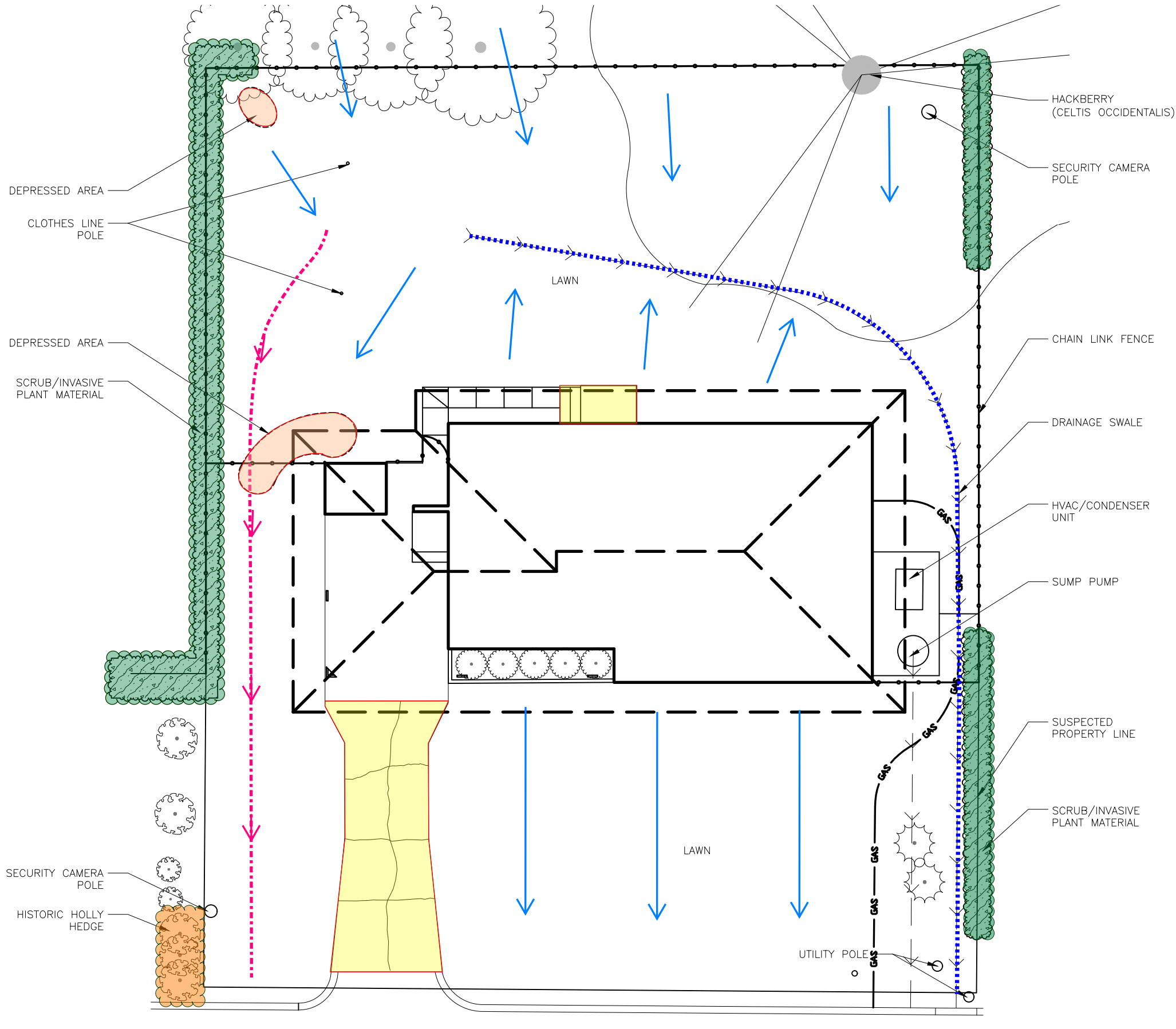
APPENDIX G: COST ESTIMATE

APPENDIX

APPENDIX A: SITE PLAN - CONDITIONS

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LEGEND

GENERAL NOTES

- DEPRESSED AREA/SINK HOLE
- FENCELINE SHRUB MATERIAL
- HISTORIC HOLLY
- OBSERVED SITE DRAINAGE PATTERN
- EXISTING SWALE- ENHANCE WITH NEW FRENCH DRAIN
- PROPOSED NEW SWALE/FRENCH DRAIN
- DETERIORATING HARDSCAPE

SHEET SPECIFIC NOTES

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SCALE OF FEET



DESIGNED:
XXX
LAS
TECH. REVIEW:
XXX
DATE:
XXX XXXX

SUB SHEET NO.
L1.0

TITLE OF SHEET
SITE PLAN
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
—
—
PMIS/PKG NO.

SHEET
OF

APPENDIX

APPENDIX B: ENVIRONMENTAL REPORT



March 23, 2021

Professional Service Industries, Inc.
95 Chastain Road, Suite 301
Kennesaw, Georgia 30144
Phone: 770.424.6200
Fax: 770.424.0199

LORD AECK SARGENT
A KATERRA COMPANY
1175 Peachtree Street
Suite 2400
Atlanta, Georgia 30361

Attention: Susan Turner, AIA
Principal, LEED AP

SUBJECT: Regulated Materials Survey
Medgar and Myrlie Evers Home National Monument
2332 Margaret Walker Alexander Drive
Jackson, Mississippi

Dear Ms. Turner:

In accordance with our agreement of September 9, 2020, Professional Service Industries, Inc. (PSI), an Intertek company, is providing you with one (1) copy of the final report for the above referenced project.

PSI thanks you for choosing us as your consultant for this project. Please contact us at 770-422-6200 if you have any questions or we may be of further service.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

A blue ink signature of Robert Graham, appearing as a stylized, horizontal line.

Robert Graham
Inspector

A blue ink signature of Christopher Hundley, written in a cursive style.

Christopher Hundley
Principal Consultant





REGULATED MATERIALS SURVEY

Medgar and Myrlie Evers Home National Monument
2332 Margret Walker Alexander Drive
Jackson, Mississippi

PREPARED FOR

LORD AECK SARGENT
A KATERRA COMPANY
1175 Peachtree Street
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Christopher Hundley
Principal Consultant

March 23, 2021

PSI Project Number: 05171032

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1 EXECUTIVE SUMMARY

Professional Service Industries, Inc. (PSI), an Intertek company, was retained by Lord Aeck Sargent, A Kattera Company (LAS), to conduct a survey for a regulated materials survey that included asbestos-containing materials (ACM), lead-based paint (LBP), and mold in the Medgar and Myrlie Evers Home, located at 2332 Margaret Alexander Drive in Jackson, Mississippi. Robert Graham of PSI conducted the survey on March 9, 2021.

The subject building is an approximately 900 square foot, one-story, wood frame structure with brick and cementitious siding. The subject structure was un-occupied during the inspection. The primary use of the building is currently as an interpreted historic structure. The U.S. National Parks Service (NPS) has plans to display the house as a historic museum.

The purpose of the investigation and sampling was to provide information regarding the presence, condition, and estimated quantity of accessible ACMs, LBPs, mold and other hazardous materials located at the facility prior to its planned renovation. Roof Systems were not included in the scope of this survey.

This summary does not contain all the information presented in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

ACM Survey Summary

A total of twelve (12) samples were collected from four (4) suspect asbestos-containing homogeneous materials during the survey. The samples were analyzed by polarized light microscopy (PLM). The U.S. Environmental Protection Agency (EPA), the U.S. Occupational Safety and Health Administration (OSHA) and State of Mississippi define an ACM as any material containing greater than one percent (>1%) asbestos. **No ACMs (>1%) were identified through PLM analysis during this investigation.**

In addition, materials that could not be sampled due to inaccessibility, safety concerns, or in order to avoid compromising their integrity, would be identified as assumed ACM. **The following assumed ACM's were identified during this survey:**

- Roof Core

Previous survey information from Barksdale and Associates, Inc. (July 2018) did identify ACM. **The following materials were found to be ACM and confirmed to remain at the site during this survey:**

- Exterior Cementitious Siding (10% Chrysotile Asbestos)
- Drywall System Texture (4% Chrysotile Asbestos)

The 2018 survey information also found materials that contained asbestos below the regulatory standard, however, must be considered ACM unless verified by additional point count analysis per the EPA. Due to restrictions on where PSI was allowed to sample, PSI could not confirm if this material was non-ACM. **Therefore, the following material is considered ACM based on the 2018 results:**

- Joint Compound on the Drywall System (<1% Chrysotile Asbestos)



LBP Survey Summary

In 1978, the Consumer Product Safety Commission banned the sale of lead-based paint to consumers, and its application to areas where consumers have direct access to painted surfaces. As a result of this ban, buildings painted prior to 1978 are suspected of containing leaded paint. The EPA and the U.S. Department of Housing and Urban Development (HUD) define a LBP as any coating having 1.0 mg/cm² or greater lead when tested by an X-Ray Fluorescence (XRF) device or 0.5% lead by weight with laboratory analysis.

Based on the historic nature of the structure and the NPS guidelines to only sample for lead paint prior to renovations that would impact painted surfaces, PSI was instructed not collect paint samples for analysis. **However, The Barksdale and Associates, Inc. 2018 survey identified the following paint as LBP and confirmed to remain on site:**

- Green Exterior Wood Door Trim (0.73% lead by weight)

The Barksdale and Associates, Inc. 2018 survey also found detectable levels of lead in paints that are regulated by OSHA in terms of exposure. **The following paints were found to have detectable levels of lead and confirmed to remain on site:**

- Green Exterior Wood Window Frame (0.48% lead by weight)
- Green Exterior Metal Carport Post (0.10% lead by weight)
- Green Exterior Wood Siding (0.019% lead by weight)
- White Interior Metal Window Sill (0.21% lead by weight)
- Green Interior Metal Window Frame (0.24% lead by weight)
- Green Interior Wood Door Trim (0.13% lead by weight)

Limited Mold Survey Summary

Visible fungal growth was not observed in the space. The visual investigation did find obvious water intrusion in the Interpretive Room.

Results of the airborne spore trap samples collected did indicate significant elevated indoor airborne concentrations of fungal spores as compared to the outside ambient sample. **The following significantly elevated indoor airborne concentrations of fungal spores as compared to the outside ambient sample were identified by laboratory analysis:**

- ***Penicillium/Aspergillus Group***

Visual HM Survey Summary

The purpose of this limited visual HM survey was to provide general information for this facility regarding the presence of suspect hazardous materials. A visual survey was conducted to provide general information for this facility regarding the presence of suspect hazardous materials. **No suspect materials were observed.**

This summary does not contain all the information presented in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.



2 INTRODUCTION

2.1 SCOPE OF SERVICES

The scope of services for this project consisted of conducting an ACM, limited LBP, and limited mold survey, including inspection, sampling and analysis of accessible and exposed interior areas at the subject facility, excluding the roof.

The subject area(s) of the facility for this investigation included the interior of the building.

Asbestos Survey

This survey was intended to identify all asbestos containing materials (ACM) as required by the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP), the US Occupational Safety and Health Administration (OSHA) and the State of Mississippi. Additional information relative to friability, quantity and condition is also provided to assist the owner or his representative in the appropriate decisions involved with renovation and demolition. Regulations pertaining to asbestos renovation and demolition surveys include EPA NESHAP (40 CFR Part 61), OSHA Asbestos in Construction (29 CFR 1926.1101).

Lead Paint Survey

This survey was intended to identify LBP in general accordance with the EPA, OSHA and the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.

Mold Survey

This survey was intended to evaluate indoor air quality and surface mold concentrations in the facility to determine if they are present. Visual observations were made to identify possible water intrusion and causes.

Hazardous Materials Investigation

The purpose of the proposed scope of services was to visually inspect the extent and identify hazardous materials. PSI visually inspected for and quantify chemicals found at the location, including but not limited to: cleaning chemicals, maintenance chemicals, paints, hydraulic equipment, above ground storage tanks, underground storage tanks, batteries, acids and photographic development; PCB and mercury containing items (ballasts, fluorescent light bulbs, thermostats, smoke detectors, exit signs); blood borne pathogens containers and the identification and quantification of containers/storage vessels associated with the spaces. No sampling was conducted for this assessment.

2.2 PURPOSE

The purpose of this survey was to provide general information for the subject building(s) regarding the presence, condition, and quantity of accessible and/or exposed friable and non-friable, building materials that contain asbestos, components coated with lead containing paint, potentially mold impacted building materials and other hazardous materials.



2.3 AUTHORIZATION

Authorization to perform this work was given on September 12, 2020 by Susan Turner with LAS. The project was conducted in accordance with the scope, terms and conditions of PSI Proposal No. 0517-321096 (Revision 1), dated August 10, 2020.

2.4 LIMITATIONS

The asbestos survey was intended to meet the requirements of the EPA NESHAP for Asbestos demolition or renovation. The lead paint survey was intended to meet the requirements of the EPA, OSHA or HUD requirements for demolition or renovation. The limited mold investigation was conducted within industry standards. The ACM/LBP/Mold/Hazardous Materials survey included a thorough inspection of all areas of planned renovation.

Roof Systems were not included in the scope of this survey.

Destructive sampling, such as behind finished surfaces (plaster/drywall walls, above hard ceilings, etc.) inside mechanical chases, behind mirrored walls, under carpet or tiled floors, etc., was not generally conducted to assess inaccessible or concealed materials.

Inaccessible is defined as areas of the building that were locked, or where admittance was not permitted. It also includes areas/materials that could not be tested (sampled) without destruction of the structure or a portion of the structure, and areas/materials that could not be safely reached by the inspector or inspection team. In the event that access to a portion of the building was not obtained (which otherwise would have been tested), such limitations specifically are identified in the Findings Section of this report.

PSI did not sample any system which presented a hazard to the inspection team such as energized electrical systems or within confined spaces.

PSI did not collect samples from building elements where the intended use would be compromised by testing, such as fire rated doors, vapor barriers, mirror mastics, etc.

2.5 WARRANTY

The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of accessible and/or exposed suspect ACM/LBP/Mold/Hazardous Materials for the building structure. PSI warrants that the findings contained herein have been prepared in general accordance with accepted professional practices at the time of its preparation as applied by professionals in the community. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey and analytical methods have been used to provide the client with information regarding the presence of accessible and/or exposed suspect ACM/LBP/Mold/Hazardous Materials existing at the time of the inspection. Test results are valid only for the material(s) tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of the study or which were not apparent during the site visit. This inspection covered only those areas that were exposed and/or physically accessible to the Inspector. The study is also limited to the information available from the client at the time it was conducted.



No other warranties are implied or expressed.

Use By Third Parties

This report was prepared pursuant to the contract PSI has with LAS. That contractual relationship included an exchange of information about the subject site that was unique and between PSI and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between PSI and its client, reliance or any use of this report by anyone other than LAS, for whom it was prepared, is prohibited and therefore not foreseeable to PSI.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third-party beneficiary to PSI's contract with LAS. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

Unidentifiable Conditions

This report is necessarily limited to the conditions observed and to the information available at the time of the work. Due to the nature of the work, there is a possibility that there may exist conditions which could not be identified within the scope of work or which were not apparent at the time of our site work. This report is also limited to information available from the client at the time it was conducted. The report may not represent all conditions at the subject site as it only reflects the information gathered from specific locations.



3 GENERAL BUILDING AND SURVEY INFORMATION

3.1 BUILDING INFORMATION

<u>Subject Property:</u>	Medgar and Myrlie Evers Home 2332 Margaret Walker Alexander Drive Jackson, Mississippi
<u>Facility Construction Date:</u>	1956
<u>Previous Renovation Dates:</u>	Unknown
<u>Number of Floors:</u>	One (1) on crawlspace
<u>Estimated Square Footage</u>	900 sf
<u>Construction Type:</u>	Wood frame with brick and cementitious siding
<u>Building Occupant(s)</u>	U.S. National Park Service
<u>Additional Information</u>	N/A

3.2 INSPECTION INFORMATION

<u>Name of PSI Inspector(s):</u>	Robert Graham
<u>Date(s) of Inspection:</u>	March 9, 2021
<u>Escort:</u>	Garry Lee



4 METHODOLOGY

Inspection and sampling procedures were performed in general accordance with the guidelines published by the EPA, OSHA and HUD. The inspection and survey described below was performed by an EPA accredited and State of Mississippi licensed inspector.

4.1 RECORD DOCUMENT REVIEW

Prior to conducting the visual inspection, PSI reviewed documents provided by the client, including drawings, floor plans, historical data, maintenance records, previous survey reports, laboratory reports, etc. for information regarding construction history and building materials. The following report was provided to PSI by the client for review:

- Phase I Pre-Acquisition Environmental Site Assessment Survey (dated January 3, 2020) by Barksdale & Associates, Inc. (Pensacola, Florida). Included in this report was asbestos and lead paint sampling and analysis performed by Barksdale & Associates, Inc. during a 2018 survey.

4.2 VISUAL INSPECTION PROCEDURES

ACM Survey

An initial individual building structure walkthrough was conducted to determine the presence of suspect ACM's that were accessible and/or exposed. Exterior areas, excluding, the roof systems were not included in the scope of this investigation.

The inspection and sampling was limited to those areas and materials that were accessible and did not involve destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

Materials which were similar in color, texture, general appearance and which appear to have been installed at the same time were grouped in Homogeneous Sampling Areas. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were also noted.

The inspector evaluated the overall condition of the material and determined whether the materials were friable or non-friable by touching the material, where practical. A friable material is defined as any material able to be crushed, crumbled, pulverized or reduced to a powder by hand pressure when dry.

Each material was further assessed for overall condition. Conditions were rated as good, damaged or significantly damaged. PSI's inspector also identified the EPA NESHAP classification of the material: Regulated ACM (RACM), Category I non-friable ACM, and Category II non-friable ACM, based on the materials current condition. PSI's inspector provided estimated quantities of the materials identified as ACM, based only on materials that were accessible and exposed.

Limited LBP Survey

An initial visual inspection was conducted of exterior accessible building surfaces for the presence of paints and varnishes suspected of containing lead and compared to the 2018 survey by Barksdale & Associates, Inc.



Limited Mold Survey

Observations were performed focusing on identification of potential indoor air quality concerns and possible pathways of exposure was conducted. The building was visually evaluated for evidence of biological growth or other correlated factors, which may cause contaminants or odors to be entrained into the building.

Other Hazardous Materials Visual Survey

PSI performed a visual evaluation focusing on identification of other hazardous materials. Photographic images were collected to document visual observations of the subject site at the time of the evaluation. Photographs for site evaluations typically included images of observations such as the suspect equipment including labels/tags.

4.3 SAMPLING PROCEDURES

ACM Survey

Following the walkthrough, the Inspector collected samples of suspect materials.

EPA guidelines were used to determine the sampling protocol. Sampling locations were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from areas already damaged or areas which were the least visible to minimize disturbance of the material.

Each sample location was sprayed with amended water and was kept wet during the entire sampling process. Samples were collected by coring through the material from the surface down to the base substrate. All layers of the material were extracted and placed into a sample container for transport to the laboratory. Sample containers were sealed and labeled with a unique sample identification number. Where appropriate, sampled materials were sealed with an encapsulant or covered with tape after sampling. PSI is not responsible for restoring the sampled areas to their pre-sampled condition.

In accordance with the agreement between PSI and the client, roofing materials were not sampled as part of this survey.

Limited LBP Survey

At the client's request, testing for LBP was not included in this survey.

Limited Mold Survey

Potential airborne fungal spores were sampled utilizing a high-volume pump with a Multi-Mold™ spore trap for initial identification of non-viable bioaerosols (i.e. not cultured). The high-volume pump was calibrated to a known volume of air with sample time over a 10-minute period for the collection of 50 liters of air per sample. In addition to the indoor samples collected, two outside ambient samples were collected for comparison.

4.4 ANALYSIS PROCEDURES

ACM Survey

All samples were analyzed at PSI's Asbestos Laboratory located at 850 Poplar Street, Pittsburgh, Pennsylvania 15220. The PSI Pittsburgh Asbestos Laboratory is a National Voluntary Laboratory Accreditation Program (NVLAP) Accredited (#101350-0) and an American Industrial Hygiene Association (AIHA) Accredited (#8222) Laboratory. A copy of the Laboratory's Accreditation Certificate is included in the Appendix.



The samples were analyzed for asbestos by PLM and in accordance with the “EPA Method for the Determination of Asbestos in Bulk Building Materials” (EPA/600/R-93/116 July 1993). Analysis was performed by visually observing the bulk samples with a stereoscope followed by slide preparation(s) for microscopic examination and identification.

Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample. Next, the samples were mounted on slides and analyzed by PLM for asbestos (chrysotile, amosite, crocidolite, anthophyllite, actinolite/tremolite), and fibrous non-asbestos constituents (mineral wool, fiberglass, cellulose, etc.). Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The EPA method allows samples which are visually determined to have less than 10% asbestos to be quantified using a Point Count procedure. An ocular reticule (cross hair or point array) is used to visually superimpose a point or points on the microscope field of view. A total of 400 points superimposed on either asbestos fibers or non-asbestos matrix material must be counted over at least eight different preparations of representative subsamples. If an asbestos fiber and matrix particle overlap so that a point is superimposed on their visual intersection, a point is scored for both categories. Point counting provides a quantification of the area percent asbestos. Point counted results supersede the results of the visual estimation. No samples were point counted for this survey.

It should be noted that some ACM might not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard PLM method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials.

Limited Mold Survey

The airborne and surface mold samples were forwarded under chain-of-custody to PSI’s American Industrial Hygiene Association (AIHA), Environmental Microbiology Laboratory Accreditation Program (EMLAP) Microbiological Laboratory in Pittsburgh, Pennsylvania, for analysis and identification of the mold samples.

4.4.1 Laboratory Quality Control Program

The PSI Asbestos, Lead Paint and Mold Laboratory maintains an in-house quality control program. This program involves blind reanalysis of ten (10) percent of all samples, precision and accuracy controls, and use of standard bulk reference materials. In addition, the PSI Asbestos Laboratory is accredited by NVLAP, which also has quality control procedures inherent in its program.

4.5 QUANTIFICATION

Quantification of suspect ACMs/Mold was conducted using visual estimation by the accredited inspector. This visual estimation was performed in accordance with generally accepted practices in the asbestos and lead paint industry based on materials that were accessible and exposed. These values are sufficiently accurate for the purpose of documenting the presence of ACMs/LBPs/Mold/Other Hazardous Materials within its space for the purpose of identifying abatement control conditions or for general policy considerations. Actual quantities may differ between visually estimated values and physical measurements. If a licensed abatement contractor



is engaged to remove ACM/LBP, the abatement contractor is responsible for verifying reported quantities of ACMs/LBPs/Mold/Other Hazardous Materials to be removed.



5 FINDINGS

5.1 RESULTS

The “Report of Bulk Sample Analysis for Asbestos”, the Sample Chain of Custody(s), and Photographs are included in the Appendices.

Asbestos Survey

A total of twelve (12) samples were collected from four (4) suspect homogenous materials during this asbestos survey.

The Tables attached to this report list the suspect ACMs observed throughout the building. Table 1 lists the materials that were sampled during this survey, along with the results of the inspection and laboratory analysis. Table 2 lists the materials that were sampled in 2018, along with the results of the inspection and laboratory analysis.

Tables 1 and 2 gives a description of the materials, their general locations, condition, friability, EPA NESHAP Category, and estimated quantity of identified ACM.



Table 1 - Summary of Asbestos Sampling Results for Medgar and Myrlie Evers Home

HSM (Sample Numbers)	Material Description	Material Location	Asbestos Type & Percent	Friable (Yes/No)	Condition of Material	Approximate Quantity	NESHAP Category
01 (001-003)	Drywall System	Throughout Interior	NAD	Yes	Good	N/A	N/A
02 (004-006)	Wall Texture	Throughout Interior	NAD	Yes	Good	N/A	N/A
03 (007-009)	Ceiling Texture	Throughout Interior	NAD	Yes	Good	N/A	N/A
04 (010-012)	Blown-in Insulation	Attic Space	NAD	Yes	Good	N/A	N/A
05	Built-up Roof Material	Roof	Assumed ACM	No	Good	1,000 sf	Cat I NF

NOTES:

HSM = Homogenous Sampling Material,

Asbestos Type NAD = No Asbestos Detected

NESHAP Category - Regulated ACM (RACM), Cat I NF=Category I Non-Friable ACM, Cat II NF= Category II Non-Friable ACM

Table 2 - Summary of Previous Asbestos Sampling Results for Medgar and Myrlie Evers Home (2018)

HSM (Sample Numbers)	Material Description	Material Location	Asbestos Type & Percent	Friable (Yes/No)	Condition of Material	Approximate Quantity	NESHAP Category
1 (ME-AS-01 & 02)	Black Tar	Gravel Roof	NAD	No	Good	N/A	N/A
2 (ME-AS-03 & 04)	Cementitious Board	Building Exterior Siding	CH 10%	No	Good	1,000 sf	Cat II NF
3 (ME-AS-05 & 06)	Felt Under Cementitious Board	Building Exterior Siding	NAD	No	Good	N/A	N/A
4 (ME-AS-07 & 08)	Window Pane Glazing	Exterior Window Frames	NAD	No	Good	N/A	N/A
5 (ME-AS-09 & 10)	Drywall System	Throughout Interior	CH <1%	Yes	Good	2,000 sf	RACM
6 (ME-AS-11 & 12)	9" X 9" Brown Floor Tile and Mastic	Kitchen	NAD	No	Good	N/A	N/A



Table 2 - Summary of Previous Asbestos Sampling Results for Medgar and Myrlie Evers Home (2018)

HSM (Sample Numbers)	Material Description	Material Location	Asbestos Type & Percent	Friable (Yes/No)	Condition of Material	Approximate Quantity	NESHAP Category
7 (ME-AS- 13 & 14)	9" X 9" White Floor Tile and Mastic	Bathroom	NAD	No	Good	N/A	N/A
8 (ME-AS- 15 to 19)	Drywall Ceiling and Wall Texture	Throughout Interior and Carport	CH 4%	Yes	Good	2,000 sf	RACM

NOTES:

HSM = Homogenous Sampling Material,

Asbestos Type NAD = No Asbestos Detected, CH = Chrysotile Asbestos

NESHAP Category - Regulated ACM (RACM), Cat I NF=Category I Non-Friable ACM, Cat II NF= Category II Non-Friable ACM



Limited LBP Survey

The current Regulatory Standards for the definition of a LBP is the “Federal Action Level” from the EPA and HUD’s “Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing”, 2012 Edition. The “Federal Action Level” for a paint chip is 0.5% lead by weight.

Building components were not identified to be surfaced with paint containing lead in excess of the standard, 0.5% lead by weight as established by the EPA and the HUD guidelines.

Due to NPS guidelines, PSI did not collect samples for lead analysis during this survey. Table 3 lists the paints that were sampled in 2018, along with the results of the inspection and laboratory analysis.

Table 3 - Summary of Previous Lead Paint Results for Medgar and Myrlie Evers Home (2018)						
Sample Number	Paint Color	Component Description	Component Location	Substrate	Lead Content (% by weight)	Paint Condition
ME-PB-01	Green	Door Trim	Exterior Doors	Wood	0.73%	Intact
ME-PB-02	Green	Window Frame	Exterior Windows	Metal	0.48%	Intact
ME-PB-03	Green	Support Post	Carport	Metal	0.10%	Intact
ME-PB-04	Green	Siding	Exterior of Building	Wood	0.019%	Intact
ME-PB-05	White	Window Sill	Interior Windows	Metal	0.21%	Intact
ME-PB-06	Green	Wall	Interior Walls	Drywall	<0.0080%	Intact
ME-PB-07	Green	Window Frame	Interior Windows	Metal	0.24%	Intact
ME-PB-08	Green	Door Trim	Interior Doors	Wood	0.13%	Intact

Mold Assessment

Observations during the walk-through did not identify apparent mold growth, however, there were obvious indications of moisture intrusion in the Interpretive Room.

Airborne Mold Spore Sampling

It is important to note that mold is ubiquitous in the environment and fungal bioaerosols (i.e., airborne mold) will be present in all interior settings. It is also important to note that there are a variety of factors that impact indoor airborne mold levels. Factors such as the use of restroom fans, opening of windows, and occupant activities all potentially affect the indoor levels of airborne mold. Additionally, the presence of visible mold amplification indoors will likely augment, or contribute to, interior airborne mold levels.

The diversity in mold species (taxa) identified at the selected indoor and outdoor sample locations is reviewed by PSI to identify airborne mold species, which are commonly associated with moisture impacted materials (i.e., *Stachybotrys* sp. and *Penicillium/Aspergillus* type spores). The presence of such fungi significantly above outdoor concentrations is viewed by PSI as a possible indicator of an interior amplified mold source.

“Significantly elevated” conditions are present when the indoor sample concentration is observed to be at least one order of magnitude (10 times) above the average outdoor measured concentration. In evaluating airborne mold data, PSI also reviewed the total airborne mold spore concentrations, measured from indoor sample



locations, to determine if they were “significantly elevated” when compared to total airborne spore concentrations measured from outdoor locations.

The indoor airborne mold total spore concentration ranged from 190,000 spores per cubic meter of air (spores/m³) to 800,000 spores/m³ while the outdoor total levels ranged from 15,000 spores/m³ to 35,000 spores/m³. The types of mold identified indoors were generally similar to the outdoor types, but at significantly elevated concentrations. Table 3 shows only the same types of spores found inside as compared to outside or only found inside. The detailed laboratory report for the spore trap samples is provided in Appendix B.

Fungi Identification	ST 001 Kitchen	ST 002 Interpretation room	ST 003 Bathroom	ST 004 Boys Bedroom	ST 005 Outside Ambient Air	ST 006 Outside Ambient Air
<i>Cladosporium</i>	220	380	80	60	800	840
<i>Ascospores</i>	---	---	21	21	21	40
<i>Basidiospores</i>	60	---	21	100	21	21
<i>Smuts/Myxomycetes</i>	21	100	21	21	100	140
<i>Penicillium/Asp</i>	680,000	190,000	800,000	640,000	26,000	80
<i>Alternaria sp.</i>	21	---	---	---	120	21
<i>Drechslera/Bipolaris</i>	21	---	---	---	---	---
<i>Curvularia sp.</i>	40	21	---	21	60	21
<i>Stachybotrys sp.</i>	21	---	---	21	---	---
<i>Unknown/Brown</i>	21	21	21	21	40	21
<i>Chaetomium sp.</i>	140	40	180	40	---	---
<i>Epicoccum sp.</i>	---	21	---	---	7,600	14,000
<i>Ganoderma sp.</i>	---	---	21	---	---	-40
Total Spores	680,000	190,000	800,000	640,000	35,000	15,000

Notes: Result in Spores/m³ = fungal spores per cubic meter, --- Indicates no fungal spores were detected

Visual Other Hazardous Materials Survey

A visual survey for hazardous materials was performed to determine the presence and locations of suspect hazardous materials in or around the existing renovation space. The visual survey did not identify any potential other hazardous materials.

5.1.1 INACCESSIBLE AREAS

PSI was able to access all areas within the building.

5.1.2 NON-SUSPECT MATERIALS

The following materials were observed but are considered ‘non-suspect’ ACM due to their composition (fiberglass, rubber, etc.) and were not sampled.

- Fiberglass HVAC Duct Insulation
- Foam Pipe Insulation



5.1.3 REGULATORY GUIDELINES:

Asbestos

ACM Definition –

The EPA and OSHA consider a material to be ACM if at least one sample from the homogeneous area shows asbestos in an amount greater than 1%.

Point Count Quantification –

If a material is found to contain less than 10% asbestos via visual estimation, it can be treated as non-ACM per EPA Regulations, if verified to contain 1% or less asbestos by the Point Count Quantification Procedure. If not point counted, a sample in which asbestos was visually detected and estimated (including trace to $\leq 1\%$) must be assumed to be greater than 1% and treated as ACM. Please refer to the laboratory analyses for a more detailed description of the microscopic analysis of individual samples. No samples were quantified by the Point Count Procedure in this Asbestos Survey.

EPA NESHAP Category –

EPA NESHAP classifies ACM into the following categories:

- **RACM** is any (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.
- **Category I Non-friable ACM** includes packings, gaskets, resilient floor covering, and asphalt roofing products which contain more than one percent asbestos.
- **Category II Non-friable ACM** includes any material, except for a Category I non-friable ACM, which contains more than one-percent asbestos and cannot be reduced to a powder by hand pressure when dry.

OSHA –

OSHA requires all suspect materials to be analyzed by layer, even materials such as drywall/joint compound, which may sometimes be composited per the EPA. If any layer contains asbestos in a concentration $>1\%$, the material is considered an ACM.

OSHA has a classification system (I thru IV) for ACM depending on the type of material and the disturbance as follows:

- **Class I** work is defined as activities involving the removal of ACM or presumed ACM (PACM) that is thermal system insulation (TSI) and surfacing materials.
- **Class II** activities involve removal of ACM/PACM other than TSI or surfacing material.
- **Class III** work includes repair and maintenance operations which are likely to disturb ACM/PACM.
- **Class IV'** work includes maintenance and custodial activities during which employees contact but do not disturb ACM/PACM.



Materials where asbestos is detected, but where point counting is conducted and determined that the concentration is $\leq 1\%$ asbestos, are not considered to be ACM by EPA or OSHA. However, these materials are considered unclassified asbestos work per OSHA. Some OSHA work control practices and prohibitions will still apply, with the extent depending on whether the worker's exposure to airborne asbestos exceeds the OSHA permissible exposure limit (PEL).

Additional details of the OSHA asbestos regulations related to the construction industry can be found in 29 CFR part 1926.1101.

Lead Paint

LBP Definition –

The EPA and HUD defines "lead-based paint" as any "paint, surface coating that contains lead equal to or exceeding one milligram per square centimeter (1.0 mg/cm^2) or 0.5% lead by weight."

EPA – Renovation, Repair and Painting Program

EPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified by EPA (or an EPA authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices.

OSHA –

The current OSHA standard (29 CFR 1926.62) for lead exposure in construction has a permissible exposure limit (PEL) of 50 micrograms per cubic meter of air ($50 \text{ } \mu\text{g/m}^3$), measured as an 8-hour time-weighted average (TWA). As with all OSHA health standards, when the PEL is exceeded, the hierarchy of controls requires employers to institute feasible engineering and work practice controls as the primary means to reduce and maintain employee exposures to levels at or below the PEL. When all feasible engineering and work practice controls have been implemented but have proven inadequate to meet the PEL, employers must nonetheless implement these controls and must supplement them with appropriate respiratory protection. The employer also must ensure that employees wear the respiratory protection provided when it is required.

HUD –

The *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Edition)* enforce HUD's vision to reduce hazards in housing in a cost-effective manner while protecting the health of children. These guidelines are used by those who are required to identify and control lead paint hazards, as well as property owners, landlords, and child-care center operators. Helpful advice on renovations in older housing, lead-based paint inspections and risk assessments, and where to go for help can be found in the guidelines. The guidelines also outline what users have to do to meet requirements and recommendations; identify training – and if applicable, certification – required for people who conduct the work; and describe how the work should be done.

The guidelines complement regulations that have been issued by HUD, the EPA, and OSHA.

Mold

The interpretation of bioaerosol sample results is a challenge for the health and safety professional as there are at present no strict numerical guidelines which are appropriate for assessing whether the contamination in



an area is acceptable or not. There are currently no regulatory standards for evaluating airborne fungi concentrations for this or any other facility. The standard of care in the industry involves the comparison of airborne fungal species from the indoor air environment to outdoor varieties and concentrations. The best scenario in this evaluation is to observe similar species indoors and outdoors, with the concentrations indoors being less than, or not significantly more than, the outdoor concentrations.

The ACGIH has recommended rank order assessment, as shown below, as a means of interpreting data. Because of the problems noted above, numerical guidelines cannot be used as the primary determinant of whether there is a problem.

1. Significant numbers of certain pathogenic fungi should not be present in indoor air. These include *Aspergillus fumigatus*, *Histoplasma*, and *Cryptococcus*. Bird or bat droppings in air intakes, ducts or rooms should be assumed to contain these pathogens. Corrective action should be taken accordingly in the event of positive findings. The air sampling techniques used in this survey cannot measure some of these species.
2. The persistent presence of significant numbers of toxigenic fungi, *Stachybotrys*, toxigenic *Aspergillus*, *Penicillium*, and *Fusarium* species indicates that further investigation and remedial action should be taken accordingly.
3. The confirmed presence of one or more fungal species occurring as a significant percentage of a sample in indoor air samples and not similarly present in concurrent outdoor samples is evidence of a fungal amplifier.
4. The indoor airborne species of mold (mycoflora) and bacteria is qualitatively similar and quantitatively lower than that of outdoor air.

It is important to note in evaluating air sampling data that airborne concentrations may vary significantly based on variability in fungal growth, time of day, temperature, humidity and air movement.

Other Hazardous Materials

Hazard Materials Definition –

By definition, EPA determined that some specific wastes are hazardous. These wastes are incorporated into lists published by the EPA. These lists are organized into three categories:

1. The F-list (non-specific source wastes). This list identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Because the processes producing these wastes can occur in different sectors of industry, the F-listed wastes are known as wastes from non-specific sources. Wastes included on the F-list can be found in the regulations at 40 CFR §261.31.
2. The K-list (source-specific wastes). This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. Wastes included on the K-list can be found in the regulations at 40 CFR §261.32.



3. The P-list and the U-list (discarded commercial chemical products). These lists include specific commercial chemical products in an unused form. Some pesticides and some pharmaceutical products become hazardous waste when discarded. Wastes included on the P- and U-lists can be found in the regulations at 40 CFR §261.33.

Waste that have not been specifically listed may still be considered a hazardous waste if exhibits one of the four characteristics defined in 40 CFR Part 261 Subpart C - ignitability (D001), corrosivity (D002), reactivity (D003), and toxicity (D004 - D043).

1. Ignitability - Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 °C (140 °F). Examples include waste oils and used solvents.
2. Corrosivity - Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels.
3. Reactivity - Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water.

Toxicity - Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead, etc.). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute ground water. Toxicity is defined through a laboratory procedure called the Toxicity Characteristic Leaching Procedure (TCLP) (Method 1311). The TCLP helps identify wastes likely to leach concentrations of contaminants that may be harmful to human health or the environment.



6 CONCLUSIONS & RECOMMENDATIONS

6.1 CONCLUSIONS

ACM Survey

ACMs from the 2018 survey were found in the Medgar and Myrlie Evers Home.

Assumed ACMs were found in The Medgar and Myrlie Evers Home.

Materials with low concentrations of asbestos (trace to 1%) from the 2018 survey were identified in the Medgar and Myrlie Evers Home.

LBP Survey

Lead was detected in the 2018 survey above the regulatory level for a LBP in paint tested, including detectable levels of lead in the Medgar and Myrlie Evers Home.

Mold Survey

Indications of apparent water intrusion was found in the Medgar and Myrlie Evers Home.

Significantly elevated airborne mold spore concentrations were found in the Medgar and Myrlie Evers Home.

Visual Other Hazardous Materials Survey

Other Hazardous Materials were not visually observed in the Medgar and Myrlie Evers Home.

6.2 RECOMMENDATIONS

ACM

ACMs should be maintained in a good non-damaged condition through use of an Operations and Maintenance (O&M) program. Regulated ACM (RACM) must be properly removed by a licensed asbestos abatement contractor prior to renovations or demolition that would disturb the material. Federal, State and Local regulations and guidelines should be strictly adhered to when removing the ACM.

The assumed ACM built-up roof material (HSM 05) is considered to be Category I non-friable ACM as per EPA NESHAP 40 CFR, Part 61, Subpart M, which does not pose a significant exposure problem unless sawn, drilled, sanded, or structurally altered in a way which could make them become friable and therefore RACM. PSI recommends coring of the roof to obtain all layers of the roofing system and submitting the samples for laboratory analysis to determine asbestos content, if any. Should sampling not be conducted or if found to be ACM, prior to any renovations/demolition, which may impact these materials, a roofing contractor with certified asbestos personnel utilizing proper removal techniques should remove and dispose of them.

The identified ACM cementitious boards (HSM 2) from the 2018 survey are considered to be Category II non-friable ACM as per EPA NESHAP 40 CFR, Part 61, Subpart M, which does not pose a significant exposure problem unless sawn, drilled, sanded, or structurally altered in a way which could make them become friable and therefore RACM. Prior to any renovations/demolition, which may impact these materials, a certified asbestos abatement contractor utilizing proper removal techniques should remove and dispose of them. PSI recommends using wet removal methods with documentary air monitoring to verify compliance with the NESHAP Regulations.



The identified ACM drywall joint compound and texture (HSM 5 and 8) from the 2018 survey are considered to be friable ACM. "Friability" refers to the propensity of a material to crumble under hand pressure when dry. Friable ACM are more likely to release asbestos fibers into the environment than non-friable ACM and are therefore considered more hazardous. As the 2018 survey found these materials to have low asbestos content based on a couple of samples, PSI recommends additional sampling and analysis to determine if they are actually ACM and if so, their extent. Should additional sampling not be conducted or if found to be ACM, prior to any renovations/demolition, which may impact these materials, a certified asbestos abatement contractor utilizing proper removal techniques should remove and dispose of them. PSI recommends a full containment with wet removal methods and documentary air monitoring to verify compliance with the NESHAP regulation.

LBP

Surfaces coated with LBP/lead coatings can be painted over and encapsulated, where practical. However, for components containing deteriorated paint, the surfaces may need to be prepared prior to repainting. For surfaces that will be scraped by mechanical means to remove loose or flaking paint, control measures should be established to capture loose paint. If chemical stripping techniques are to be utilized, precautions should be taken to properly collect the paint/stripper waste. Some components may be removed intact with the lead paint. Painted surfaces are considered to be in fair to poor condition.

Waste resulting from LBP coated component removal or removal of LBP by chemical stripping/mechanical removal is likely to result in the requirement for disposal in a hazardous waste facility. All lead paint and debris, whether from chemical or mechanical removal from its substrate, or whole component removal, must be tested to determine proper disposal. Waste characterization testing should be performed on all materials prior to making a disposal decision. Materials that are to be disposed of should be tested by the Toxicity Characteristic Leachate Procedure (TCLP) per EPA requirements to determine disposal requirements.

Note: OSHA regulates workers exposure to lead paint concentrations in any detectable amount. Therefore, in order to satisfy OSHA requirements, worker protection and monitoring may be required for work activities that disturb paints that contain lead in any amount. In accordance with the OSHA Construction Standard for Lead (29 CFR 1926.62), it is the contractors' responsibility to protect their workers when an employee may be occupationally exposed to lead.

Mold

Visual evidence of apparent water intrusion was noted in the Interpretive Room during the site visit. PSI recommends the cause of this water intrusion be identified and corrected. If, during the investigation into the water intrusion issue, mold impacted materials are uncovered, PSI recommends remediation by an experienced mold remediation contractor.

Results of the airborne spore trap samples collected did indicate significant elevated indoor airborne concentrations of *Penicillium/Aspergillus Group* fungal spores as compared to the outside ambient samples.

Based on the airborne spore trap results, PSI recommends all surfaces be cleaned and treated with an EPA approved biocide. This work should be done by an experienced mold remediation contractor after the removal of the existing HVAC system and ductwork.

Other Hazardous Materials

No further investigations appear warranted at this time.



APPENDIX A – REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS AND SAMPLE CHAIN OF CUSTODY



REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS

TESTED FOR: PSI, Inc.
95 Chastain Road Ste. 301
Kennesaw, GA 30144
Attn: Robert Graham

Project ID: 05171032
Lord, Aeck and Sargent
2332 Margaret Walker Alexander Dr
Jackson, MS; Medgar and Myrlie Evers
Home National Monument

Date Received: 3/11/2021

Date Completed: 3/16/2021

Date Reported: 3/17/2021

Analyst: Dan Anderson

Work Order: 2103392

Page: 1 of 1

Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) <i>Analyst's Comment</i>	Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type)
01-001	001A	(1) Gray, Drywall, Homogeneous (2) White, Joint Compound, Homogeneous	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	15% Cellulose Fiber None Reported
01-002	002A	(1) Gray, Drywall, Homogeneous (2) White, Joint Compound, Homogeneous	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	15% Cellulose Fiber None Reported
01-003	003A	(1) Gray, Drywall, Homogeneous (2) White, Joint Compound, Homogeneous	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	15% Cellulose Fiber None Reported
02-004	004A	(1) White, Texture, Homogeneous	NO ASBESTOS DETECTED	None Reported
02-005	005A	(1) White, Texture, Homogeneous	NO ASBESTOS DETECTED	None Reported
02-006	006A	(1) White, Texture, Homogeneous	NO ASBESTOS DETECTED	None Reported
03-007	007A	(1) White, Texture, Homogeneous	NO ASBESTOS DETECTED	None Reported
03-008	008A	(1) White, Texture, Homogeneous	NO ASBESTOS DETECTED	None Reported
03-009	009A	(1) White, Texture, Homogeneous	NO ASBESTOS DETECTED	None Reported
04-010	010A	(1) White, Insulation, Homogeneous	NO ASBESTOS DETECTED	100% Fibrous Glass
04-011	011A	(1) White, Insulation, Homogeneous	NO ASBESTOS DETECTED	100% Fibrous Glass
04-012	012A	(1) White, Insulation, Homogeneous	NO ASBESTOS DETECTED	100% Fibrous Glass

Report Notes: (PT) Point Count Results

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested as received. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA 600/M4-82-020). Polarized Light Microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative Transmission Electron Microscopy is currently the only method that can be used to determine if the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may be reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight. NVLAP Lab Code 101350-0.

Respectfully submitted,
PSI, Inc.


Approved Signatory
George Skarupa

CHAIN OF CUSTODY – ASBESTOS



2103392(2)

IH Laboratory
850 Poplar Street
Pittsburgh, PA 15220
412-922-4001/Extension 228/425

Project Information			
Project Name	Lord, Aeck and Sargent		
Project Number	05171032		
P.O. Number			
Send Results To			
Company	PSI Kennesaw		
Attention	Robert Graham		
Address	95 Chastain Road, Suite 301, Kennesaw, Georgia 30144		
Telephone	770.424.6200		
Email	Robert.graham@intertek.com Chris.hundley@intertek.com		
Requested Turnaround Time			
Same Day	1-2 Day	3-5 Day	Requested Date
☐	☐	☒	03/16/2021

Send Invoice To		
Company	Same	
Attention		
Address		
Telephone		
Email		
Laboratory Use Only	Yes	No
All Samples In Acceptable Condition	☒	☐
Shipping Charges Apply	☐	☒
Comments:		

Sample Information		PARAMETER																				
Sample ID	Number of Samples	PLM Bulk	Point Count (400)	Point Count (1000)	Lead Wipe	Lead Air	Lead Soil	Lead Paint Chip	Lead TCLP	PCM	PCM – B Rules	TEM AHERA	TEM 7402	TEM Chatfield	TEM Vacuum	TEM Wipe	SC TEM NOB	Total Nuisance Dust	Respirable Dust	Cadmium	Total Chromium	Other
001-012	12	X																				

Relinquished By	Date/Time	Received By	Date/Time
RWG	3-9-2021/1700	<i>Svensen</i>	3/11/2021 9a
Analyst Name:		Analyst Signature:	
Special Instructions/Comments		Stop at First Positive	
		Yes	No
		☐	☒



APPENDIX B – REPORT OF AIRBORNE MOLD SPORE ANALYSIS AND SAMPLE CHAIN OF CUSTODY



SPORE TRAP REPORT

PSI, Inc.
95 Chastain Road
Kennesaw, GA 30144

Attn: Chris Hundley

DATE
Reported: 3/12/21
Analyzed: 3/12/21
Received: 3/11/21
Sampled: 3/9/21

Work Order: 2103394
Project Number: 05171032
Project Name: Lord, Aeck & Sargent - Darrah Hall - St.
Helena Island, SC
Analyst: TV

AIHA-LAP, LLC. Lab #100373

TX License: LAB0145

TEST METHOD: PSI-WI-620-816

LAB NUMBER:	001A			002A			003A		
Client ID:	ST001			ST002			ST003		
Location:	Kitchen			Interpretation Room			Bathroom		
Comments:	Please see last page			Please see last page			Please see last page		
Detection Limit(spores/m ³):	20			20			20		
Hyphal Fragments	100	2000		27	540		300	6000	
Pollen	1	21							
Sample Description:	Micro5			Micro5			Micro5		
	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%
Cladosporium sp.	11	220	0.03	19	380	0.20	4	80	0.01
Ascospores							1	21	0.00
Basidiospores	3	60	0.01				1	21	0.00
Smuts/Myxomycetes	1	21	0.00	5	100	0.05	1	21	0.00
Peronospora/Oidium sp.									
Pen./Asp. Group	34000	680000	99.92	9500	190000	99.70	40000	800000	99.96
Alternaria sp.	1	21	0.00						
Drechslera/Bipolaris	1	21	0.00						
Spegazzinia sp.									
Tetraploa sp.									
Curvularia sp.	2	40	0.01	1	21	0.01			
Stachybotrys sp.	1	21	0.00						
Unknown/Brown*	1	21	0.00	1	21	0.01	1	21	0.00
Torula sp.									
Ulocladium sp.									
Chaetomium sp.	7	140	0.02	2	40	0.02	9	180	0.02
Pithomyces sp.									
Epicoccum sp.				1	21	0.01			
Polythrincium sp.									
Pestalotia sp.									
Cercospora sp.									
Rusts									
Nigrospora sp.									
Ganoderma sp.							1	21	0.00
Background debris (1-5)**	4			4			4		
Sample Volume (liters)	50			50			50		
TOTAL ‡	34028	680,000	100	9529	190,000	100	40018	800,000	100

Total % may not equal 100 due to rounding.



SPORE TRAP REPORT

PSI, Inc.
95 Chastain Road
Kennesaw, GA 30144

Attn: Chris Hundley

DATE
Reported: 3/12/21
Analyzed: 3/12/21
Received: 3/11/21
Sampled: 3/9/21

Work Order: 2103394
Project Number: 05171032
Project Name: Lord, Aeck & Sargent - Darrah Hall - St.
Helena Island, SC
Analyst: TV

AIHA-LAP, LLC. Lab #100373

TX License: LAB0145

TEST METHOD: PSI-WI-620-816

LAB NUMBER:	004A			005A			006A		
Client ID:	ST004			ST005			ST006		
Location:	Bedroom Boys			Outside			Outside		
Comments:	Please see last page			Please see last page			Please see last page		
Detection Limit(spores/m ³):	20			20			20		
Hyphal Fragments	50	1000		80	1600		70	1400	
Pollen				2	40		300	6000	
Sample Description:	Micro5			Micro5			Micro5		
	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%	raw ct.	spores/m ³	%
Cladosporium sp.	3	60	0.01	40	800	2.30	42	840	5.52
Ascospores	1	21	0.00	1	21	0.06	2	40	0.26
Basidiospores	5	100	0.02	1	21	0.06	1	21	0.13
Smuts/Myxomycetes	1	21	0.00	5	100	0.29	7	140	0.92
Peronospora/Oidium sp.									
Pen./Asp. Group	32000	640000	99.95	1300	26000	74.80	4	80	0.53
Alternaria sp.				6	120	0.35	1	21	0.13
Drechslera/Bipolaris									
Spegazzinia sp.									
Tetraploa sp.									
Curvularia sp.	1	21	0.00	3	60	0.17	1	21	0.13
Stachybotrys sp.	1	21	0.00						
Unknown/Brown*	1	21	0.00	2	40	0.12	1	21	0.13
Torula sp.									
Ulocladium sp.									
Chaetomium sp.	2	40	0.01						
Pithomyces sp.									
Epicoccum sp.				380	7600	21.86	700	14000	91.98
Polythrincium sp.									
Pestalotia sp.									
Cercospora sp.									
Rusts									
Nigrospora sp.							2	40	0.26
Ganoderma sp.									
Background debris (1-5)**	4			4			4		
Sample Volume (liters)	50			50			50		
TOTAL ‡	32015	640,000	100	1738	35,000	100	761	15,000	100

Total % may not equal 100 due to rounding.

SPORE TRAP REPORT

PSI, Inc.
95 Chastain Road
Kennesaw, GA 30144

Attn: Chris Hundley

DATE

Reported: 3/12/21
Analyzed: 3/12/21
Received: 3/11/21
Sampled: 3/9/21

Work Order: 2103394
Project Number: 05171032
Project Name: Lord, Aeck & Sargent - Darrah Hall - St.
Helena Island, SC
Analyst: TV

Specific Sample Comments:

001A: Spore count may be underestimated due to excessive number of Pen/Asp spores.
002A: One Aspergillus conidiophore present.
002A: Spore count may be underestimated due to excessive number of Pen/Asp spores.
003A: Spore count may be underestimated due to excessive number of Pen/Asp spores.
004A: Spore count may be underestimated due to excessive number of Pen/Asp spores.
005A: Spore count may be underestimated due to large amount of particulate matter.
006A: Spore count may be underestimated due to large amount of particulate matter.

General Report Comments:

* Unknown/brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

** Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 being very little, while a debris rating of 5 is unreadable.

The higher the rating the more likelihood spores may be underestimated.

A rating of 4 should be interpreted as minimal counts and may actually be higher than reported.

‡ Total spores/m³ has been rounded to two significant figures to reflect analytical precision.

All samples were analyzed at 400x or 600x magnification unless noted.

The reporting limit is one spore/item adjusted for volume. Entire trace was analyzed unless noted.

Results relate only to items tested as received. Results are not corrected for blank data.

This report may not be reproduced except in full, without written approval of PSI, Inc.

Samples will be disposed of within thirty (30) days unless notified in writing by the client.

Results based on volume measurement provided by the client.

Disclaimer: The laboratory is not responsible for interpretation of test results or for methods used during sampling.

All samples were in acceptable condition unless noted.

Respectfully submitted, PSI, Inc.



Cathy McNamee, Approved Signatory

CHAIN OF CUSTODY – MOLD



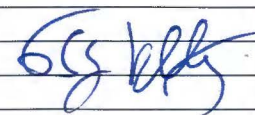
2103394

IH Laboratory
850 Poplar Street
Pittsburgh, PA 15220

412-922-4001/Extension 272/286/420/425

Project Information			
Project Name	Lord Aeck & Sargent – Darrah Hall – St. Helena Island, SC		
Project Number	05171032		
P.O. Number			
Sample Date	03/09/2021		
Send Results To			
Company	PSI Kennesaw – 0517		
Attention	Chris Hundley		
Address	95 Chastain Road, Suite 301 – Kennesaw, GA 30144		
Telephone	770-424-6200		
Email	chris.hundley@psiusa.com		
Requested Turnaround Time			
Same Day	1-2 Day	3-5 Day	Requested Date
☐	☐	☒	3/16/2021

Send Invoice To		
Company	SAME	
Attention		
Address		
Telephone		
Email		
Laboratory Use Only	Yes	No
All Samples In Acceptable Condition	☒	☐
Shipping Charges Apply	☐	☒
Comments:		

Sample Information						Sample Type						Sample Analysis					
Sample ID	Number of Samples	Description	Air	Swab	Tape Lift	Bulk/Dust	Plate	Water	Other	Direct Exam	Fungal Culture & Genus ID (non-Speciation)	Fungal Culture & Genus ID (to 3 species)	Bacteria w/Genus ID (3 most prominent)	Sewage Screen	Legionella Culture	Other	
ST001-ST006	6	Spore Trap (see attached log)	X							X							
Environmental Conditions																	
Weather	Fog	Rain	Wind	Snow	Clouds												
None																	
Light																	
Moderate																	
Heavy																	
Relinquished By						Date/Time			Received By						Date/Time		
RG						03-10-2021/1700									3/11/21 1000		

AIRBORNE MICROBIAL SAMPLING FORM

Client: Lord, Aeck and Sargent	Project No.: 05171032	Page: 1 of 1
Site Address: 2332 Margaret Walker Alexander Drive, Jackson, MS	Collected By: RG	Date Collected: 03/09/2021
Project Site: Medgar and Myrlie Evers Home National Monument	Laboratory: PSI Pittsburgh, Pennsylvania	Date Analyzed:

SAMPLE DATA

[illegible]

REV'D W/CC: GSY *[Signature]* 3/11/21
1000



APPENDIX C - PHOTOGRAPHS



Photo 1: Drywall System (PSI HSM 01 and B&A HSM 5)



Photo 2: Wall Texture (PSI HSM 02 and B&A HSM 8)



Photo 3: Ceiling Texture (PSI HSM 03 and B&A HSM 8)



Photo 4: Attic Insulation (PSI HSM 04)



APPENDIX D – INSPECTOR & LABORATORY CERTIFICATIONS

The Environmental Institute

Robert Graham

Social Security Number - XXX-XX-7840
Intertek PSI - 126 Drury Lane - Canton, Georgia 30114

*Has completed 4 hours of coursework and satisfactorily
passed an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation*

Asbestos in Buildings: Inspector Refresher

March 20, 2020

Course Date

17884

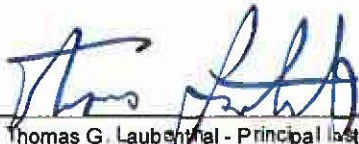
Certificate Number

March 20, 2020

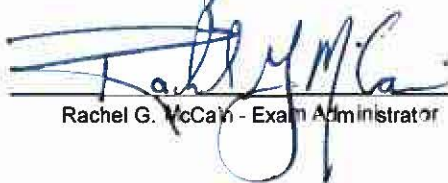
Examination Date

March 19, 2021

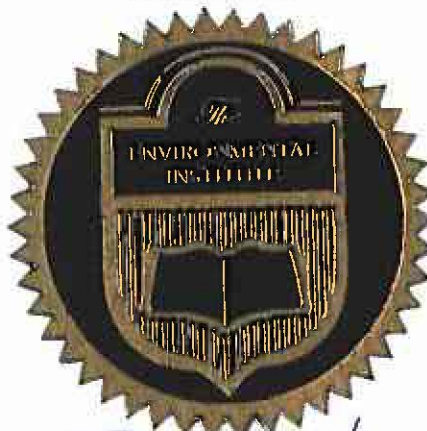
Expiration Date



Thomas G. Laubenthal - Principal Instructor



Rachel G. McCain - Exam Administrator



David W. Hogue - Training Manager

(Approved by the ABIH Certification Maintenance Committee for 1/2 CM point - Approval #11-577)

(Florida Provider Registration Number FL49-0001342 - Course #FL49-0002805)

TEI - 1395 S. Marietta Parkway SE - Building 100, Suite 124 - Marietta, GA 30067

Phone: 770-427-3600 - Website: www.tei-atl.com

State of Mississippi

***Department of Environmental Quality
Office of Pollution Control***

Certificate of Licensure

In accordance with the Asbestos Abatement Accreditation and Certification Act,
Enacted as 1989 Mississippi Law, Chapter 505

Be it known that

Robert W Graham

Having submitted acceptable evidence of qualifications and
training and other appropriate information, is hereby granted this

***Asbestos Inspector
Certification***



***Certificate No.: ABI-00010479
Expiration Date: Mar 20th, 2021
Training Expires on Mar 20th, 2021***

Chief, Asbestos & Lead Program Branch

53364 LIC20200001

The Environmental Institute

Robert Graham

Social Security Number - XXX-XX-7840
Intertek-PSI - 126 Drury Lane - Canton, Georgia 30114

Has completed 24 hours of coursework and satisfactorily passed the hands-on skills assessment and an examination that meets training criteria in accordance with requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 391-3-24 and U. S. EPA TSCA 40 CFR Part 745 for the initial course titled

Lead Inspector: EPA
(Target Housing & Child-Occupied Facilities)

February 24-26, 2020

Course Date

5290

Certificate Number

February 26, 2020

Examination Date

August 26, 2020

EPA Interim Expiration Date

February 25, 2022

Georgia Expiration Date

February 25, 2023

EPA Expiration Date



David W. Hogue - Principal Instructor / Training Manager

(Approved by the ABIH Certification Maintenance Committee for 3 CM points - Approval #11-563)

TEI - 1395 S. Marietta Parkway SE - Building 100, Suite 124 - Marietta, GA 30067

Phone: 770-427-3600 - Website: www.tei-atl.com

(State of Georgia Accredited - Certification No. 20-0799-0061 - January 15, 1997)



Certificate of Completion

THIS ACKNOWLEDGES THAT

Robert Graham

HAS SUCCESSFULLY COMPLETED
THE U. S. ENVIRONMENTAL PROTECTION AGENCY INTRODUCTION TO
MOLD AND MOLD REMEDIATION FOR ENVIRONMENTAL AND PUBLIC
HEALTH PROFESSIONALS COURSE

JANUARY 7, 2020



June 29, 2018

Laboratory ID: 100373

Cathy McNamee
Intertek-PSI, Inc.
850 Poplar Street
Pittsburgh, PA 15220

Dear Ms. McNamee:

Congratulations! The AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC's Analytical Accreditation Board (AAB) has approved Intertek-PSI, Inc. as an accredited Industrial Hygiene, Environmental Lead and Environmental Microbiology laboratory.

Accreditation documentation includes the IHLAP, ELLAP and EMLAP accreditation certificate, scope of accreditation document and a copy of the current AIHA-LAP, LLC license agreement (if your completed agreement is not on file at AIHA-LAP, LLC). The accreditation symbol has been designed for use by all AIHA-LAP, LLC accredited laboratories. If your laboratory chooses to use the symbol in its advertising the laboratory's accreditation, you must complete and return the AIHA-LAP, LLC license agreement to a Laboratory Accreditation Specialist. Once submitted, an electronic copy of the accreditation symbol will be sent to you.

Laboratory accreditation shall be maintained by continued compliance with IHLAP, ELLAP and EMLAP requirements (*see Policy Modules 2B, 2C, 2D, and 6*), which includes proficient participation in AIHA-LAP, LLC approved proficiency testing, demonstration of competency, or round robin program as indicated on the AIHA-LAP "Approved PT and Round Robin" webpage, its associated Scope/PT table, and as required in Policy Module 6, for all Fields of Testing (FoTs) for which the laboratory is accredited. An accredited laboratory that wishes to expand into a new FoT must submit an updated accreditation application to AIHA-LAP, LLC for review by the AAB.

Any changes in ownership, laboratory location, personnel, FoTs/Methods, or significant procedural changes shall be reported to AIHA-LAP, LLC in writing within twenty (20) business days of the change.

The accreditation certificate is the property of AIHA-LAP, LLC and must be returned to us should your laboratory withdraw or be removed from the IHLAP, ELLAP and EMLAP.

Again, congratulations. If you have any questions, please contact Lauren Schnack, Laboratory Accreditation Specialist, at (703) 846-0716.

Sincerely,

Cheryl O. Morton
Managing Director

AIHA Laboratory Accreditation Programs, LLC
3141 Fairview Park Drive, Suite 777, Falls Church, VA 22042 USA
main +1 703-846-0736 *fax* +1 703-207-8558

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R4 01/24/2018

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SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Intertek-PSI, Inc.
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850 Poplar Street
Pittsburgh, PA 15220
Ms. Catherine McNamee
Phone: 412-922-4010 x286 Fax: 412-922-4014
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ASBESTOS FIBER ANALYSIS

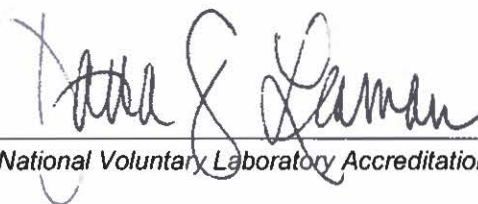
NVLAP LAB CODE 101350-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

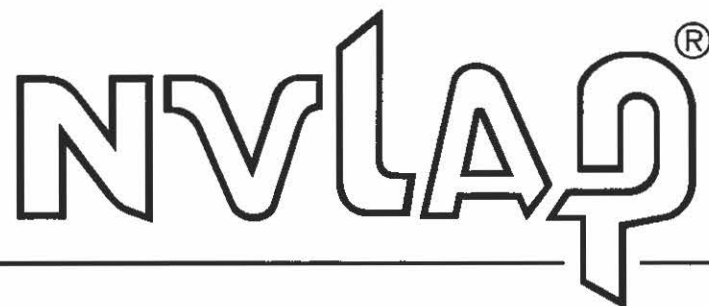
Airborne Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.



For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101350-0

Intertek-PSI, Inc.
Pittsburgh, PA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2020-07-01 through 2021-06-30

Effective Dates



Dana S. Laman
For the National Voluntary Laboratory Accreditation Program



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Intertek-PSI, Inc.

850 Poplar St Pittsburgh, PA 15220-2828

Laboratory ID: LAP-100373

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS



INDUSTRIAL HYGIENE

Accreditation Expires: July 01, 2022



ENVIRONMENTAL LEAD

Accreditation Expires: July 01, 2022



ENVIRONMENTAL MICROBIOLOGY

Accreditation Expires: July 01, 2022



FOOD

Accreditation Expires:



UNIQUE SCOPES

Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Michael Breu
Chairperson, Analytical Accreditation Board

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision18: 03/27/2020

Date Issued: 06/30/2020

APPENDIX

APPENDIX C: REMEDIATION SPECIFICATIONS

SECTION 02 82 00 - ASBESTOS REMEDIATION

PART 1 GENERAL

1.1 REFERENCES

A. AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ASSP Z9.2 (2018) Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems

B. COMPRESSED GAS ASSOCIATION (CGA)

CGA G-7 (2014) Compressed Air for Human Respiration; 6th Edition

C. NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH NMAM (2016; 5th Ed) NIOSH Manual of Analytical Methods

D. U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 340/1-90/018 (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance

EPA 560/5-85-024 (1985) Guidance for Controlling Asbestos-Containing Materials in Buildings (Purple Book)

40 CFR 61-SUBPART M National Emission Standard for Asbestos

E. U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR 1910.147 The Control of Hazardous Energy (LockOut/Tag Out)

29 CFR 1926.51 Sanitation

29 CFR 1926.59 Hazard Communication

29 CFR 1926.103 Respiratory Protection

29 CFR 1926.1101 Asbestos

F. UNDERWRITERS LABORATORIES (UL)

UL 586 (2009; Reprint Dec 2017) UL Standard for Safety High-Efficiency Particulate, Air Filter Units

1.2 DEFINITIONS

1.2.1 ACM

Asbestos Containing Materials.

1.2.2 Amended Water

Water containing a wetting agent or surfactant.

1.2.3 Area Sampling

Sampling of asbestos fiber concentrations which approximates the concentrations of asbestos in the theoretical breathing zone but is not actually collected in the breathing zone of an employee.

1.2.4 Asbestos

The term asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, and actinolite asbestos and any of these minerals that has been chemically treated or altered. Materials are considered to contain asbestos if the asbestos content of the material is determined to be at least one percent.

1.2.5 Asbestos Control Area

That area where asbestos removal operations are performed which is isolated by physical boundaries which assist in the prevention of the uncontrolled release of asbestos dust, fibers, or debris.

1.2.6 Asbestos Fibers

Those fibers having an aspect ratio of at least 3:1 and longer than 5 micrometers as determined by National Institute for Occupational Safety and Health (NIOSH) Method 7400.

1.2.7 Asbestos Permissible Exposure Limit

0.1 fibers per cubic centimeter of air as an 8-hour time weighted average measured in the breathing zone as defined by 29 CFR 1926.1101 or other Federal legislation having legal jurisdiction for the protection of workers health.

1.2.8 Authorized Person

Any person authorized by the Contractor and required by work duties to be present in the regulated areas.

1.2.9 Background

The ambient airborne asbestos concentration in an uncontaminated area as measured prior to any asbestos hazard abatement efforts. Background concentrations for other (contaminated) areas are measured in similar but asbestos free locations.

1.2.10 Competent Person (CP)

A person meeting the requirements for competent person as specified in 29 CFR 1926.1101 including a person capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, and is specifically trained in a training course which meet the criteria of EPA's Model Accreditation Plan (40 CFR 763) for project designer or supervisor, or its equivalent. The competent person must have a current State of Mississippi asbestos contractors or supervisors license.

1.2.11 Contractor

The Contractor is that individual, or entity under contract to perform the herein listed work.

1.2.12 Disposal Bag

A 6 mil thick, leak-tight plastic bag, pre-labeled in accordance with 29 CFR 1926.1101, used for transporting asbestos waste from containment to disposal site.

1.2.13 Disturbance

Activities that disrupt the matrix of ACM, crumble or pulverize ACM, or generate visible debris from ACM. Disturbance includes cutting away small amounts of ACM, no greater than the amount which can be contained in one standard sized glovebag or waste bag, not larger than 60 inches in length and width in order to access a building component.

1.2.14 Encapsulation

The abatement of an asbestos hazard through the appropriate use of chemical encapsulants.

1.2.15 Encapsulants

Specific materials in various forms used to chemically or physically entrap asbestos fibers in various configurations to prevent these fibers from becoming airborne. There are four types of encapsulants as follows which must comply with performance requirements as specified herein.

- a. Removal Encapsulant (can be used as a wetting agent)
- b. Bridging Encapsulant (used to provide a tough, durable surface coating to asbestos containing material)
- c. Penetrating Encapsulant (used to penetrate the asbestos containing material encapsulating all asbestos fibers and preventing fiber release due to routine mechanical damage)
- d. Lock-Down Encapsulant (used to seal off or "lock-down" minute asbestos fibers left on surfaces from which asbestos containing material has been removed).

1.2.16 Friable Asbestos Material

A term defined in 40 CFR 61-SUBPART M and EPA 340/1-90/018 meaning any material which

contains more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Polarized Light Microscopy (PLM), that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

1.2.17 Government Consultant (GC)

That qualified person employed directly by the Government to monitor, sample, inspect the work or in some other way advise the Owner. The GC is normally a private consultant but can be an employee of the Government.

1.2.18 HEPA Filter Equipment

High efficiency particulate air (HEPA) filtered vacuum and exhaust ventilation equipment with a filter system capable of collecting and retaining asbestos fibers. Filters must retain 99.97 percent of particles 0.3 microns or larger as indicated in UL 586.

1.2.19 Model Accreditation Plan (MAP)

EPA training accreditation requirements for persons who work with asbestos as specified in 40 CFR 763.

1.2.20 Negative Pressure Enclosure (NPE)

That engineering control technique described as a negative pressure enclosure in 29 CFR 1926.1101.

1.2.21 NESHAP

National Emission Standards for Hazardous Air Pollutants. The EPA NESHAP regulation for asbestos is at 40 CFR 61-SUBPART M.

1.2.22 Nonfriable Asbestos Material

Material that contains asbestos in which the fibers have been immobilized by a bonding agent, coating, binder, or other material so that the asbestos is well bound and will not normally release asbestos fibers during any appropriate use, handling, storage or transportation. It is understood that asbestos fibers may be released under other conditions such as demolition, removal, or mishap.

1.2.23 Permissible Exposure Limits (PELs)

1.2.24.1 PEL-Time Weighted Average (TWA)

Concentration of asbestos not in excess of 0.1 fibers per cubic centimeter of air (f/cc) as an 8-hour time weighted average (TWA).

1.2.24.2 PEL-Excursion Limit

An airborne concentration of asbestos not in excess of 1.0 f/cc of air averaged over a sampling period of 30 minutes.

1.2.24 Personal Sampling

Air sampling which is performed to determine asbestos fiber concentrations within the breathing zone of a specific employee, as performed in accordance with 29 CFR 1926.1101.

1.2.25 Private Qualified Person (PQP)

That qualified person hired by the Contractor to perform the herein listed tasks.

1.2.26 Qualified Person (QP)

A Registered Architect, Professional Engineer, Certified Industrial Hygienist, consultant or other qualified person who has successfully completed training and is therefore accredited under a legitimate State Model Accreditation Plan as described in 40 CFR 763 as a Building Inspector, Contractor Supervisor, Abatement Worker, and Asbestos Project Designer; and has successfully completed the National Institute of Occupational Safety and Health (NIOSH) 582 course "Sampling and Evaluating Airborne Asbestos Dust" or equivalent. The QP must be qualified to perform visual inspections as indicated in ASTM E1368. The QP must be appropriately licensed in the State of Mississippi.

1.2.27 TEM

Refers to Transmission Electron Microscopy.

1.2.28 Time Weighted Average (TWA)

The TWA is an 8-hour time weighted average airborne concentration of asbestos fibers.

1.2.29 Transite

A generic name for asbestos cement wallboard and pipe.

1.2.30 Wetting Agent

A chemical added to water to reduce the water's surface tension thereby increasing the water's ability to soak into the material to which it is applied.

1.2.31 Worker

Individual (not designated as the Competent Person or a supervisor) who performs asbestos work and has completed asbestos worker training required by 29 CFR 1926.1101, to include EPA Model Accreditation Plan (MAP) "Worker" training; accreditation, if required by the OSHA Class of work to be performed or by the state where the work is to be performed. The worker must be appropriately licensed in the State of Mississippi.

1.3 REQUIREMENTS

1.3.1 Description of Work

The work covered by this section includes the handling and control of asbestos containing materials and describes some of the resultant procedures and equipment required to protect workers, the environment and occupants of the building or area, or both, from contact with airborne asbestos fibers.

The work also includes the disposal of any asbestos containing materials generated by the work. More specific operational procedures must be outlined in the Asbestos Hazard Abatement Plan called for elsewhere in this specification. The asbestos work includes the removal of the following ACM:

- Approximately 30 square feet of Drywall System Texture/Joint Compound from the walls and ceiling of the Interpretive Room.
- Approximately 10 square feet of damaged Exterior Cementitious Siding from the outside walls. Assume approximately 680 square feet for all Exterior Cementitious Siding.

1.3.2 Unexpected Discovery of Asbestos

Notify the Owner if any previously untested building components suspected to contain asbestos are impacted by the work.

1.3.3 Medical Requirements

Provide medical requirements including but not limited to medical surveillance and medical record keeping as listed in 29 CFR 1926.1101.

1.3.3.1 Medical Examinations

Before exposure to airborne asbestos fibers, provide workers with a comprehensive medical examination as required by 29 CFR 1926.1101 or other pertinent State or local directives. This requirement must have been satisfied within the 12 months prior to the start of work on this contract. The same medical examination must be given on an annual basis to employees engaged in an occupation involving asbestos and within 30 calendar days before or after the termination of employment in such occupation. Specifically identify x-ray films of asbestos workers to the consulting radiologist and mark medical record jackets with the word "ASBESTOS."

1.3.3.2 Medical Records

Maintain complete and accurate records of employees' medical examinations, medical records, and exposure data for a period of [50 years][indefinite time] after termination of employment and make records of the required medical examinations and exposure data available for inspection and copying to: The Assistant Secretary of Labor for Occupational Safety and Health (OSHA), or authorized representatives of them, and an employee's physician upon the request of the employee or former employee.

1.3.4 Employee Training

Submit certificates, prior to the start of work but after the main abatement submittal, signed by each employee indicating that the employee has received training in the proper handling of materials and wastes that contain asbestos in accordance with 40 CFR 763; understands the health implications and risks involved, including the illnesses possible from exposure to airborne asbestos fibers; understands the use and limits of the respiratory equipment to be used; and understands the results of monitoring of airborne quantities of asbestos as related to health and respiratory equipment as indicated in 29 CFR 1926.1101 on an initial and annual basis. Organize certificates by individual worker, not grouped by type of certification. Post appropriate evidence of compliance with the training requirements of 40 CFR 763. Train personnel involved in the asbestos control work in accordance with United States Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA) training criteria or State training criteria whichever is more stringent. Document the

training by providing dates of training, training entity, course outline, names of instructors, and qualifications of instructors upon request by the Owner. Furnish each employee with respirator training and fit testing administered by the PQP as required by 29 CFR 1926.1101 and 29 CFR 1926.103. Fully cover engineering and other hazard control techniques and procedures. Asbestos workers must have a current State of Mississippi asbestos worker's license.

1.3.5 Permits and Notifications

Prior to the start of work, obtain necessary permits in conjunction with asbestos removal, encapsulation, hauling, and disposition, and furnish notification of such actions required by Federal, State, regional, and local authorities. Notify the State's environmental protection agency and the Owner in writing 10 working days prior to commencement of work in accordance with 40 CFR 61-SUBPART M. Notify the Owner and other appropriate Government agencies in writing 20 working days prior to the start of asbestos work as indicated in applicable laws, ordinances, criteria, rules, and regulations. Submit copies of all Notifications to the Owner.

1.3.6 Environment, Safety and Health Compliance

In addition to detailed requirements of this specification, comply with those applicable laws, ordinances, criteria, rules, and regulations of Federal, State, regional, and local authorities regarding handling, storing, transporting, and disposing of asbestos waste materials. Comply with the applicable requirements of the current issue of EM 385-1-1, 29 CFR 1926.1101, 40 CFR 61-SUBPART A, 40 CFR 61-SUBPART M, and 40 CFR 763. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this specification, applicable laws, rules, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirement as defined by the Government apply.

1.3.7 Respiratory Protection Program

Establish and implement a respirator program as required by 29 CFR 1926.1101, and 29 CFR 1926.103. Submit a written description of the program to the Owner. Submit a written program manual or operating procedure including methods of compliance with regulatory statutes.

1.3.7.1 Respirator Program Records

Submit records of the respirator program as required by 29 CFR 1926.103, and 29 CFR 1926.1101.

1.3.7.2 Respirator Fit Testing

The Contractor must conduct a qualitative or quantitative fit test conforming to 29 CFR 1926.103 for each worker required to wear a respirator, and any authorized visitors who enter a regulated area where respirators are required to be worn. A respirator fit test must be performed prior to initially wearing a respirator and every 12 months thereafter. If physical changes develop that will affect the fit, a new fit test must be performed. Functional fit checks must be performed each time a respirator is put on and in accordance with the manufacturer's recommendation.

1.3.7.3 Respirator Selection and Use Requirements

Provide respirators and ensure that they are used as required by 29 CFR 1926.1101 and in accordance with CGA G-7 and the manufacturer's recommendations. Respirators must be approved by the National Institute for Occupational Safety and Health NIOSH, under the provisions of 42 CFR 84, for use in

environments containing airborne asbestos fibers. For air-purifying respirators, the particulate filter must be high-efficiency particulate air (HEPA)/(N-,R-,P-100). The initial respirator selection and the decisions regarding the upgrading or downgrading of respirator type must be made by the Contractor's Designated IH based on the measured or anticipated airborne asbestos fiber concentrations to be encountered.

1.3.8 Asbestos Hazard Control Supervisor

The Contractor must be represented on site by a supervisor, trained using the model Contractor accreditation plan as indicated in the Federal statutes for all portions of the herein listed work.

1.3.9 Hazard Communication

Adhere to all parts of 29 CFR 1926.59 and provide the Owner with a copy of the Safety Data Sheets (SDS) for all materials brought to the site.

1.3.10 Asbestos Hazard Abatement Plan

Submit a detailed plan of the safety precautions such as lockout, tagout, tryout, fall protection, and confined space entry procedures and equipment and work procedures to be used in the removal of materials containing asbestos. The plan, not to be combined with other hazard abatement plans, must be prepared, signed, and sealed by the PQP. Provide a Table of Contents for each abatement submittal, which follows the sequence of requirements in the contract.

The plan must include but not be limited to the precise personal protective equipment to be used including, but not limited to, respiratory protection, type of whole-body protection [and if reusable coveralls are to be employed decontamination methods (operations and quality control plan)], the location of asbestos control areas including clean and dirty areas, buffer zones, showers, storage areas, change rooms, removal method, interface of trades involved in the construction, sequencing of asbestos related work, disposal plan, type of wetting agent and asbestos sealer to be used, locations of local exhaust equipment, planned air monitoring strategies, and a detailed description of the method to be employed in order to control environmental pollution. The plan must also include (both fire and medical emergency) response plans.

The Asbestos Hazard Abatement Plan must be approved in writing prior to starting any asbestos work. The Contractor, Asbestos Hazard Control Supervisor, CP and PQP must meet with the Owner prior to beginning work, to discuss in detail the Asbestos Hazard Abatement Plan, including work procedures and safety precautions. Once approved by the Owner, the plan will be enforced as if an addition to the specification. Any changes required in the specification as a result of the plan must be identified specifically in the plan to allow for free discussion and approval by the Owner prior to starting work.

1.3.11 Testing Laboratory

Submit the name, address, and telephone number of each testing laboratory selected for the sampling, analysis, and reporting of airborne concentrations of asbestos fibers along with evidence that each laboratory selected holds the appropriate State license and permits and certification that each laboratory is American Industrial Hygiene Association (AIHA) accredited and that persons counting the samples have been judged proficient by current inclusion on the AIHA Asbestos Analysis Registry (AAR) and successful participation of the laboratory in the Proficiency Analytical Testing (PAT) Program.

Where analysis to determine asbestos content in bulk materials or transmission electron microscopy is required, submit evidence that the laboratory is accredited by the National Institute of Science and Technology (NIST) under National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos analysis.

The testing laboratory firm must be independent of the asbestos contractor and must have no employee or employer relationship which could constitute a conflict of interest.

1.3.12 Landfill Approval

Submit written evidence that the landfill is approved for asbestos disposal by the U.S. Environmental Protection Agency and local regulatory agencies. Within three working days after delivery, submit detailed delivery tickets, prepared, signed, and dated by an agent of the landfill, certifying the amount of asbestos materials delivered to the landfill. Submit a copy of the waste shipment records within one day of the shipment leaving the project site.

1.3.13 Transporter Certification

Submit written evidence that the transporter is approved to transport asbestos waste in accordance with the DOT requirements of 49 CFR 171, 49 CFR 172 and 49 CFR 173 as well as registration requirements of 49 CFR 107 and all other State and local regulatory agency requirements.

1.3.14 Medical Certification

Provide a written certification for each worker and supervisor, signed by a licensed physician indicating that the worker and supervisor has met or exceeded all of the medical prerequisites listed herein and in 29 CFR 1926.1101 and 29 CFR 1926.103 as prescribed by law. Submit certificates prior to the start of work but after the main abatement submittal.

1.4 SUBMITTALS

Submit the following:

SD-03 Product Data

- Amended Water
- Safety Data Sheets (SDS) for All Materials
- Encapsulants
- Respirators
- Local Exhaust Equipment
- Pressure Differential Automatic Recording Instrument
- Vacuums
- Glovebags

SD-06 Test Reports

- Air Sampling Results
- Pressure Differential Recordings for Local Exhaust System
- Encapsulation Test Patches
- Clearance Sampling
- Asbestos Disposal Quantity Report

SD-07 Certificates

- Employee Training
- Notifications
- Respiratory Protection Program
- Asbestos Hazard Abatement Plan
- Testing Laboratory
- Landfill Approval
- Delivery Tickets
- Shipment Records
- Transporter Certification
- Medical Certification
- Private Qualified Person Documentation
- Designated Competent Person
- Worker's License
- Contractor's License
- Federal, State or Local Citations on Previous Projects
- Encapsulants
- Equipment Used to Contain Airborne Asbestos Fibers
- Water Filtration Equipment
- Vacuums
- Ventilation Systems

SD-11 Closeout Submittals

- Permits and Licenses
- Notifications
- Respirator Program Records;
- Protective Clothing Decontamination Quality Control Records
- Protective Clothing Decontamination Facility Notification;
- Rental Equipment

1.5 QUALITY ASSURANCE

1.5.1 Private Qualified Person Documentation

Submit the name, address, and telephone number of the Private Qualified Person (PQP) selected to prepare the Asbestos Hazard Abatement Plan, direct monitoring and training, and documented evidence that the PQP has successfully completed training in and is accredited and where required is certified as, a Building Inspector, Contractor/Supervisor Abatement Worker, and Asbestos Project Designer as described by 40 CFR 763 and has successfully completed the National Institute of Occupational Safety and Health (NIOSH) 582 course "Sampling and Evaluating Airborne Asbestos Dust" or equivalent. The PQP must be appropriately licensed in the State of Mississippi as a Project Monitor. The PQP and the asbestos contractor must not have an employee/employer relationship or financial relationship which could constitute a conflict of interest. The PQP must be a first tier subcontractor.

1.5.2 Designated Competent Person Documentation

The Designated Competent Person must be experienced in the administration and supervision of asbestos abatement projects including exposure assessment and monitoring, work practices, abatement methods,

protective measures for personnel, setting up and inspecting asbestos abatement workareas, evaluating the integrity of containment barriers, placement and operation of local exhaust systems, ACM generated waste containment and disposal procedures, decontamination units installation and maintenance requirements, site safety and health requirements, notification of other employees onsite.

The Designated Competent Person must be on-site at all times when asbestos abatement activities are underway. Submit training certification and a current State of Mississippi Asbestos Contractor's and Supervisor's License. Submit evidence that the Designated Competent Person has a minimum of 2 years of on-the-job asbestos abatement experience relevant to OSHA designated competent person requirements.

1.5.3 Worker's License

Submit documentation that workers meet the requirements of 29 CFR 1926.1101, 40 CFR 61-SUBPART M and have a current State of Mississippi Asbestos Workers License.

1.5.4 Contractor's License

Submit a copy of the asbestos contractor's license issued by the State of Mississippi. Submit the following certification along with the license: "I certify that the personnel I am responsible for during the course of this project fully understand the contents of 29 CFR 1926.1101, 40 CFR 61-SUBPART MEM 385-1-1, and the Federal, State and local requirements for those asbestos abatement activities that they will be involved in." This certification statement must be signed by the Company's President or Chief Executive.

1.5.5 Air Sampling Results

Complete fiber counting and provide results to the GC for review within 16 hours of the "time off" of the sample pump. Notify the Owner immediately of any airborne levels of asbestos fibers in excess of the acceptable limits.

Submit sampling results to the Owner and the affected Contractor employees where required by law within three working days, signed by the testing laboratory employee performing air sampling, the employee that analyzed the sample.

Notify the Contractor and the Owner immediately of any variance in the pressure differential which could cause adjacent unsealed areas to have asbestos fiber concentrations in excess of 0.01 fibers per cubic centimeter or background whichever is higher. In no circumstance must levels exceed 0.1 fibers per cubic centimeter.

1.5.6 Pressure Differential Recordings for Local Exhaust System

Provide a local exhaust system that creates a negative pressure of at least 0.02 inches of water relative to the pressure external to the enclosure and operate it continuously, 24-hours a day, until the temporary enclosure of the asbestos control area is removed. Submit pressure differential recordings for each work day to the GC for review and to the Owner within 24-hours from the end of each work day.

1.5.7 Federal, State or Local Citations on Previous Projects

Submit a statement, signed by an officer of the company, containing a record of any citations issued by Federal, State or local regulatory agencies relating to asbestos activities within the last 5 years (including projects, dates, and resolutions); a list of penalties incurred through non-compliance with asbestos project specifications, including liquidated damages, overruns in scheduled time limitations and resolutions; and situations in which an asbestos-related contract has been terminated (including projects, dates, and reasons for terminations).

If there are none, a negative declaration signed by an officer of the company must be provided.

1.5.8 Preconstruction Conference

Conduct a safety preconstruction conference to discuss the details of the Asbestos Hazard Abatement Plan, Accident Prevention Plan (APP). The safety preconstruction conference must include the Contractor and their Designated Competent Person, Designated IH and Project Supervisor and the Owner.

1.6 SECURITY

A log book must be kept documenting entry into and out of the regulated area. Entry into regulated areas must only be by personnel authorized by the Contractor and the Owner.

Personnel authorized to enter regulated areas must be trained, medically evaluated, and wear the required personal protective equipment.

1.7 EQUIPMENT

1.7.1 Rental Equipment

Provide a copy of the written notification to the rental company concerning the intended use of the equipment and the possibility of asbestos contamination of the equipment.

PART 2 PRODUCTS

2.1 ENCAPSULANTS

Encapsulants must conform to current EPA requirements, contain no toxic or hazardous substances as defined in 29 CFR 1926.59.

2.3 DUCT TAPE

Industrial grade duct tape of appropriate widths suitable for bonding sheet plastic and disposal container.

2.4 DISPOSAL CONTAINERS

Leak-tight (defined as solids, liquids, or dust that cannot escape or spill out) disposal containers must be provided for ACM wastes as required by 29 CFR 1926.1101. Disposal containers can be in the form of:

- a. Disposal Bags

- b. Fiberboard Drums
- c. Cardboard Boxes

2.5 SHEET PLASTIC

Sheet plastic must be polyethylene of 6 mil minimum thickness and must be provided in the largest sheet size necessary to minimize seams. Film must be conforming to ASTM D4397, except as specified below:

2.5.1 Flame Resistant

Where a potential for fire exists, flame-resistant sheets must be provided. Film must conform to the requirements of NFPA 701.

2.5.2 Reinforced

Reinforced sheets must be provided where high skin strength is required, such as where it constitutes the only barrier between the regulated area and the outdoor environment. The sheet stock must consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between 2 layers of polyethylene film. Film must meet flame resistant standards of NFPA 701.

2.6 WETTING AGENTS

Removal encapsulant (a penetrating encapsulant) must be provided when conducting removal abatement activities that require a longer removal time or are subject to rapid evaporation of amended water. The removal encapsulant must be capable of wetting the ACM and retarding fiber release during disturbance of the ACM greater than or equal to that provided by amended water.

PART 3 EXECUTION

3.1 EQUIPMENT

Provide the Owner or the Owner's Representative, with at least two complete sets of personal protective equipment as required for entry to and inspection of the asbestos control area.

Provide equivalent training to the Owner or a designated representative as provided to Contractor employees in the use of the required personal protective equipment.

Provide manufacturer's certificate of compliance for all equipment used to contain airborne asbestos fibers.

3.1.1 Air Monitoring Equipment

The Contractor's PQP must approve air monitoring equipment. The equipment must include, but must not be limited to:

- a. High-volume sampling pumps that can be calibrated and operated at a constant airflow up to 16 liters per minute.

- b. Low-volume, battery powered, body-attachable, portable personal pumps that can be calibrated to a constant airflow up to approximately 3.5 liters per minute, and a self-contained rechargeable power pack capable of sustaining the calibrated flow rate for a minimum of 10 hours. The pumps must also be equipped with an automatic flow control unit which must maintain a constant flow, even as filter resistance increases due to accumulation of fiber and debris on the filter surface.
- c. Single use standard 25 mm diameter cassette, open face, 0.8 micron pore size, mixed cellulose ester membrane filters and cassettes with 50 mm electrically conductive extension cowl and shrink bands for personal air sampling.
- d. Single use standard 25 mm diameter cassette, open face, 0.45 micron pore size, mixed cellulose ester membrane filters and cassettes with 50 mm electrically conductive cowl and shrink bands when conducting environmental area sampling using NIOSH NMAM Methods 7400 and 7402, (and the transmission electric microscopy method specified at 40 CFR 763 if required).

3.1.2 Respirators

Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services.

3.1.2.1 Respirators for Handling Asbestos

Provide personnel engaged in pre-cleaning, cleanup, handling, removal of asbestos materials with respiratory protection as indicated in 29 CFR 1926.1101 and 29 CFR 1926.103..

3.1.3 Exterior Whole Body Protection

3.1.3.1 Outer Protective Clothing

Provide personnel exposed to asbestos with disposable "non-breathable whole body outer protective clothing, head coverings, gloves, and foot coverings.

Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber gloves for comfort but must not be used alone. Make sleeves secure at the wrists, make foot coverings secure at the ankles, and make clothing secure at the neck by the use of tape.

3.1.3.2 Work Clothing

Provide cloth work clothes for wear under the outer protective clothing and foot coverings and either dispose of or properly decontaminate them.

3.1.3.3 Personal Decontamination Unit

Provide a temporary, negative pressure unit with a shower that complies with 29 CFR 1926.51(f)(4)(ii) through (V). Keep street clothing and street shoes in the clean locker. HEPA vacuum and remove asbestos contaminated disposable protective clothing while still wearing respirators at the boundary of the asbestos work area and seal in impermeable bags or containers for disposal. Locate showers between the decontamination locker room and the clean locker room and require that all employees shower before changing into street clothes. Collect used shower water and filter with approved water filtration equipment to remove asbestos contamination. Discharge clean water to the sanitary system. Dispose

of asbestos contaminated work clothing as asbestos contaminated waste. Keep the floor of the decontamination unit's clean room dry and clean at all times. Proper housekeeping and hygiene requirements must be maintained. Provide soap and towels for showering, washing and drying. Cloth towels provided must be disposed of as ACM waste or must be laundered in accordance with 29 CFR 1926.1101. Physically attach the decontamination units to the asbestos control area.

3.1.3.4 Eye Protection

Provide eye protection that complies with ANSI/ISEA Z87.1 when operations present a potential eye injury hazard. Provide goggles to personnel engaged in asbestos abatement operations when the use of a full face respirator is not required.

3.1.4 Regulated Areas

All Class I, II, and III asbestos work must be conducted within regulated areas. The regulated area must be demarcated to minimize the number of persons within the area and to protect persons outside the area from exposure to airborne asbestos. Control access to regulated areas, ensure that only authorized personnel enter, and verify that Contractor required medical surveillance, training and respiratory protection program requirements are met prior to allowing entrance.

3.1.5 Load-out Unit

Provide a temporary load-out unit that is adjacent and connected to the regulated area. Attach the load-out unit in a leak-tight manner to each regulated area.

3.1.6 Warning Signs and Labels

Provide warning signs at all approaches to asbestos control areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos. Containers with preprinted warning labels conforming to the requirements are acceptable

3.1.6.1 Warning Sign

Provide vertical format conforming to 29 CFR 1926.200, and 29 CFR 1926.1101:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

3.1.6.2 Warning Labels

Provide labels conforming to 29 CFR 1926.1101 of sufficient size to be clearly legible, displaying the following legend:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

3.1.7 Local Exhaust System

Provide a local exhaust system in the asbestos control area in accordance with ASSP Z9.2 and 29 CFR 1926.1101 that will provide at least four air changes per hour inside of the negative pressure enclosure. Local exhaust equipment must be operated 24-hours per day, until the asbestos control area is removed and must be leak proof to the filter and equipped with HEPA filters. Maintain a minimum pressure differential in the control area of minus 0.02 inch of water column relative to adjacent, unsealed areas. Provide continuous 24-hour per day monitoring of the pressure differential with a pressure differential automatic recording instrument. The building ventilation system must not be used as the local exhaust system for the asbestos control area. Filters on exhaust equipment must conform to ASSP Z9.2 and UL 586. Terminate the local exhaust system out of doors and remote from any public access or ventilation system intakes.

3.1.8 Tools

Vacuums must be leak proof to the filter and equipped with HEPA filters. Filters on vacuums must conform to ASSP Z9.2 and UL 586. Do not use power tools to remove asbestos containing materials unless the tool is equipped with effective, integral HEPA filtered exhaust ventilation systems. Remove all residual asbestos from reusable tools prior to storage or reuse. Reusable tools must be thoroughly decontaminated prior to being removed from the regulated areas.

3.1.9 Rental Equipment

If rental equipment is to be used, furnish written notification to the rental agency concerning the intended use of the equipment and the possibility of asbestos contamination of the equipment.

3.1.10 Single Stage Decontamination Area

A decontamination area (equipment room/area) must be provided for Class I work involving less than 25 feet or 10 square feet of TSI or surfacing ACM, and for Class II and Class III asbestos work operations where exposures exceed the PELs or where there is no negative exposure assessment. The equipment room or area must be adjacent to the regulated area for the decontamination of employees, material, and their equipment which could be contaminated with asbestos. The area must be covered by an impermeable drop cloth on the floor or horizontal working surface. The area must be of sufficient size to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area.

3.1.10 Decontamination Area Exit Procedures Ensure that the following procedures are followed:

- a. Before leaving the regulated area, remove all gross contamination and debris from work clothing using a HEPA vacuum.
- b. Employees must remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers for disposal or laundering.

- c. Employees must not remove their respirators until showering.
- d. Employees must shower prior to entering the clean room. If a shower has not been located between the equipment room and the clean room or the work is performed outdoors, ensure that employees engaged in Class I asbestos jobs: a) Remove asbestos contamination from their work suits in the equipment room or decontamination area using a HEPA vacuum before proceeding to a shower that is not adjacent to the work area; or b) Remove their contaminated work suits in the equipment room, without cleaning work suits, and proceed to a shower that is not adjacent to the work area.

3.2 WORK PROCEDURE

Perform asbestos related work in accordance with 29 CFR 1926.1101, 40 CFR 61-SUBPART M, and as specified herein. Use wet removal procedures. Wear and utilize protective clothing and equipment as specified herein. No eating, smoking, drinking, chewing gum, tobacco, or applying cosmetics is permitted in the asbestos work or control areas. Personnel of other trades not engaged in the removal and demolition of asbestos containing material must not be exposed at any time to airborne concentrations of asbestos unless all the personnel protection and training provisions of this specification are complied with by the trade personnel. Shut down the building heating, ventilating, and air conditioning system, cap the openings to the system, prior to the commencement of asbestos work. Power to the regulated area must be locked-out and tagged in accordance with 29 CFR 1910.147.

Disconnect electrical service when wet removal is performed and provide temporary electrical service with verifiable ground fault circuit interrupter (GFCI) protection prior to the use of any water or encapsulant. All electrical work must be performed by a licensed electrician. Stop abatement work in the regulated area immediately when the airborne total fiber concentration: (1) equals or exceeds 0.01 f/cc, or the pre-abatement concentration, whichever is greater, outside the regulated area; or (2) equals or exceeds 1.0 f/cc inside the regulated area. Correct the condition to the satisfaction of the Owner, including visual inspection and air sampling.

Work must resume only upon notification by the Owner. Corrective actions must be documented. If an asbestos fiber release or spill occurs [outside of the asbestos control area], stop work immediately, correct the condition to the satisfaction of the Owner including clearance sampling, prior to resumption of work.

3.2.1 Building Ventilation System and Critical Barriers

Building ventilation system supply and return air ducts in a regulated area must be shut down and isolated by lockable switch or other positive means in accordance with 29 CFR 1910.147. Isolated by airtight seals to prevent the spread of contamination throughout the system. The airtight seals must consist of air-tight 2 layers of polyethylene. Edges to wall, ceiling and floor surfaces must be sealed with industrial grade duct tape.

- a. A Competent Person must supervise the work.
- b. For indoor work, critical barriers must be placed over all openings to the regulated area.
- c. Impermeable drop cloths must be placed on surfaces beneath all removal activity.

3.2.2 Protection of Existing Work to Remain

Perform work without damage or contamination of adjacent work. Where such work is damaged or contaminated as verified by the Owner using visual inspection or sample analysis, it must be restored to its original condition or decontaminated by the Contractor at no expense to the Government as deemed appropriate by the Owner. This includes inadvertent spill of dirt, dust, or debris in which it is reasonable to conclude that asbestos may exist. When these spills occur, stop work immediately. Then clean up the spill. When satisfactory visual inspection and air sampling results are obtained from the PQP work may proceed at the discretion of the Owner.

3.2.3 Furnishings

Furniture and equipment will be removed from the area of work by the Government before asbestos work begins.

3.2.4 Precleaning

Wet wipe and HEPA vacuum all surfaces potentially contaminated with asbestos prior to establishment of an enclosure.

3.2.5 Asbestos Control Area Requirements

3.2.5.1 Negative Pressure Enclosure

Removal of asbestos containing wallboard/joint compound require the use of a negative pressure enclosure. Block and seal openings in areas where the release of airborne asbestos fibers can be expected. Establish an asbestos negative pressure enclosure with the use of curtains, portable partitions, or other enclosures in order to prevent the escape of asbestos fibers from the contaminated asbestos work area. Negative pressure enclosure development must include protective covering of uncontaminated walls with a continuous membrane of two layers of minimum 6-mil plastic sheet sealed with tape to prevent water or other damage. Provide two layers of 6-mil plastic sheet over floors and extend a minimum of 12 inches up walls. Seal all joints with tape. Provide local exhaust system in the asbestos control area. Openings will be allowed in enclosures of asbestos control areas for personnel and equipment entry and exit, the supply and exhaust of air for the local exhaust system and the removal of properly containerized asbestos containing materials. Replace local exhaust system filters as required to maintain the efficiency of the system.

3.2.5.2 Regulated Area for Class II Removal

Removal of asbestos containing cementitious shingles are Class II removal activities. Establish designated limits for the asbestos regulated work area with the use of red barrier tape; install critical barriers, splash guards and signs, and maintain all other requirements for asbestos control area except local exhaust. Place impermeable drop cloths on surfaces beneath removal activity extending out 3 feet in all directions. A detached decontamination system may be used. Conduct area monitoring of airborne fibers during the work shift at the designated limits of the asbestos work area and conduct personal samples of each worker engaged in the work. If workers the airborne fiber concentration of the workers or designated limits at any time exceeds background or 0.01 fibers per cubic centimeter, whichever is greater, stop work immediately and correct the situation.

3.2.6 Removal Procedures

Wet asbestos material with a fine spray of amended water during removal, cutting, or other handling so as to reduce the emission of airborne fibers. Remove material and immediately place in 6 mil plastic

disposal bags. Remove asbestos containing material in a gradual manner, with continuous application of the amended water or wetting agent in such a manner that no asbestos material is disturbed prior to being adequately wetted. Where unusual circumstances prohibit the use of 6 mil plastic bags, submit an alternate proposal for containment of asbestos fibers to the Owner for approval. Containerize asbestos containing material while wet. Do not allow asbestos material to accumulate or become dry. Lower and otherwise handle asbestos containing material as indicated in 40 CFR 61-SUBPART M.

3.2.7 Methods of Compliance

3.2.7.1 Mandated Practices

The specific abatement techniques and items identified must be detailed in the Contractor's AHAP. Use the following engineering controls and work practices in all operations, regardless of the levels of exposure:

- a. Vacuum cleaners equipped with HEPA filters.
- b. Wet methods or wetting agents except where it can be demonstrated that the use of wet methods is unfeasible due to the creation of electrical hazards, equipment malfunction, and in roofing.
- c. Prompt clean-up and disposal.
- d. Inspection and repair of polyethylene.
- e. Cleaning of equipment and surfaces of containers prior to removing them from the equipment room or area.

3.2.7.2 Control Methods

Use the following control methods:

- a. Local exhaust ventilation equipped with HEPA filter;
- b. Enclosure or isolation of processes producing asbestos dust;
- c. Where the feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PELs, use them to reduce employee exposure to the lowest levels attainable and must supplement them by the use of respiratory protection.

3.2.7.3 Unacceptable Practices

The following work practices must not be used:

- a. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.
- b. Compressed air used to remove asbestos containing materials, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.

- c. Dry sweeping, shoveling, or other dry clean up.
- d. Employee rotation as a means of reducing employee exposure to asbestos.

3.2.8 Class I Work Procedures

In addition to requirements of paragraphs MANDATED PRACTICES and CONTROL METHODS, the following engineering controls and work practices must be used:

- a. A Competent Person must supervise the installation and operation of the control methods.
- b. For jobs involving the removal of more than 10 square feet of TSI or surfacing material, place critical barriers over all openings to the regulated area.
- c. HVAC systems must be isolated in the regulated area by sealing with a double layer of plastic or air-tight rigid covers.
- d. Impermeable drop cloths (6 mil or greater thickness) must be placed on surfaces beneath all removal activity.
- e. Where a negative exposure assessment has not been provided or where exposure monitoring shows the PEL was exceeded, the regulated area must be ventilated with a HEPA unit and employees must use PPE.

3.2.9 Specific Control Methods for Class I Work

Use Class I work procedures, control methods and removal methods for the following ACM:

- a. Gypsum Wallboard and Joint Compound

3.2.9.1 Negative Pressure Enclosure (NPE) System

The system must provide at least four air changes per hour inside the containment. The local exhaust unit equipment must be operated 24-hours per day until the containment is removed. The NPE must be smoke tested for leaks at the beginning of each shift and be sufficient to maintain a minimum pressure differential of minus 0.02 inch of water column relative to adjacent, unsealed areas. Pressure differential must be monitored continuously, 24-hours per day, with an automatic manometric recording instrument and Records must be provided daily on the same day collected to the Owner. The Owner must be notified immediately if the pressure differential falls below the prescribed minimum. The building ventilation system must not be used as the local exhaust system for the regulated area. The NPE must terminate outdoors unless an alternate arrangement is allowed by the Owner. All filters used must be new at the beginning of the project and must be periodically changed as necessary and disposed of as ACM waste.

3.2.9.2 Mini-Enclosure

Mini-containment (small walk-in enclosure) to accommodate no more than two persons, may be used if the disturbance or removal can be completely contained by the enclosure. The mini-enclosure must be inspected for leaks and smoke tested before each use. Air movement must be directed away

from the employee's breathing zone within the mini-enclosure.

3.2.9.3 Class I Removal Method

Class I ACM must be removed using a control method described above. Prepare work area as previously specified. Establish designated limits for the asbestos regulated work area with the use of red barrier tape, critical barriers, signs, and maintain all other requirements for asbestos control area. Spread one layer of 6-mil seamless plastic sheeting on the floor below the work area. Cut manageable sections of gypsum wallboard and joint compound and immediately place into a 6-mil minimum thickness disposal bag or other approved container. Make every effort to keep the material from falling to the floor of the work area. Use a wire brush and wet clean to remove residual material from studs. Continue wet cleaning until the surface is clean of visible material and encapsulate stud walls. Clean up debris on floor.

Continue wet cleaning until surfaces are free of visible debris. Bag all asbestos debris which has fallen to the floor as asbestos-containing debris. Place all debris in plastic disposal bags of 6-mil minimum thickness. Once the material is in the disposal bag, apply additional water as needed to achieve "adequately wet" conditions for NESHAP compliance. Place bagged asbestos waste under negative pressure with the use of a HEPA vacuum, goose neck and duct tape to seal the bag, wash to remove any visible contamination and place into a second 6-mil minimum thickness disposal bag. Containerize asbestos containing waste while wet. Lower and otherwise handle asbestos containing materials as indicated in 40 CFR 61-SUBPART M. Conduct area monitoring of airborne fibers during the work shift at the designated limits of the asbestos work area and conduct personal samples of each worker engaged in the work. If the quantity of airborne asbestos fibers monitored at the breathing zone of the workers or the designated limits at any time exceeds background or 0.01 fibers per cubic centimeter, whichever is greater, stop work, and immediately correct the situation.

3.2.10 Class II Work Procedures

In addition to the requirements of paragraphs MANDATED PRACTICES and CONTROL METHODS, the following engineering controls and work practices must be used:

- a. A Competent Person must supervise the work.
- b. For indoor work, critical barriers must be placed over all openings to the regulated area.
- c. Impermeable drop cloths must be placed on surfaces beneath all removal activity.

3.2.11 Specific Control Methods for Class II Work

3.2.11.1 Cementitious Siding

Establish designated limits for the asbestos regulated work area with the use of red barrier tape, critical barriers, signs, and maintain all other requirements for asbestos control area except local exhaust. When removing cementitious asbestos-containing siding, shingles or Transite panels use the following work practices. Intentionally cutting, abrading or breaking is prohibited. Each panel or shingle must be sprayed with amended water prior to removal. Nails must be cut with flat, sharp instruments. Unwrapped or unbagged panels or shingles must be immediately lowered to the ground via covered dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift. Place debris into a 6-mil minimum thickness disposal bag or other approved container.

Once the material is in the disposal bag, apply additional water as needed to achieve "adequately wet" conditions for NESHAP compliance. Place bagged asbestos waste under negative pressure with the use of a HEPA vacuum, goose neck and duct tape to seal the bag, wash to remove any visible contamination and place into a second 6-mil minimum thickness disposal bag.

Containerize asbestos containing waste while wet. Conduct area monitoring of airborne fibers during the work shift at the designated limits of the asbestos work area and conduct personal samples of each worker engaged in the work. If the airborne fiber concentration of the workers or designated limits at any time exceeds background or 0.01 fibers per cubic centimeter, whichever is greater, stop work immediately and correct the situation.

3.2.12 Encapsulation Procedures

3.2.12.1 Application

Apply encapsulant using equipment and procedures as recommended by the manufacturer. Keep the encapsulant material stirred to prevent settling. Keep a clean work area. Change pre-filters in the ventilation equipment as soon as they appear clogged by encapsulant aerosol or pressure differential drops below 0.02 Hg.

3.2.14 Air Sampling

Perform sampling of airborne concentrations of asbestos fibers in accordance with 29 CFR 1926.1101, the Contractor's air monitoring plan and as specified herein. Sampling performed in accordance with 29 CFR 1926.1101 must be performed by the Contractor. Sampling performed for environmental and quality control reasons must be performed by the QP. Unless otherwise specified, use NIOSH Method 7400 for sampling and analysis. Monitoring may be duplicated by the Government at the discretion of the Owner. If the air sampling results obtained by the Government differ from those results obtained by the Contractor, the Government will determine which results predominate. Results of breathing zone samples must be posted at the job site and made available to the Owner. Submit all documentation regarding initial exposure assessments, negative exposure assessments, and air-monitoring results.

3.2.14.1 Sampling Prior to Asbestos Work

Provide area air sampling and establish the baseline one day prior to the masking and sealing operations for each removal area. Establish the background by performing area sampling in similar but uncontaminated sites in the building.

3.2.14.2 Sampling During Asbestos Work

The Contractor must provide personal sampling as indicated in 29 CFR 1926.1101. Breathing zone samples must be taken for at least 25 percent of the workers in each shift, or a minimum of two, whichever is greater. Air sample fiber counting must be completed, and results provided within 24-hours (breathing zone samples) after completion of a sampling period.

At the same time the GC will provide area sampling close to the work inside the enclosure, outside the clean room entrance to the enclosure, and at the exhaust opening of the local exhaust system. In addition, provided the same type of work is being performed, the GC will provide area sampling once every work shift close to the work inside the enclosure, outside the clean room entrance to the enclosure, and at the exhaust opening of the local exhaust system.

If sampling outside the enclosure shows airborne levels have exceeded background or 0.01 fibers per cubic centimeter, whichever is greater, stop all work, correct the condition(s) causing the increase, and notify the Owner immediately. The written results must be signed by testing laboratory analyst, testing laboratory principal and the GC. The air sampling results must be documented on a Contractor's daily air monitoring log.

3.2.14.3 Final Clearance Requirements, NIOSH PCM Method

For PCM sampling and analysis using NIOSH NMAM Method 7400, the fiber concentration inside the abated regulated area, for each airborne sample must be less than 0.01 f/cc. The abatement inside the regulated area is considered complete when every PCM final clearance sample is below the clearance limit. If any sample result is greater than 0.01 total f/cc, the asbestos fiber concentration (asbestos f/cc) must be confirmed from that same filter using NIOSH NMAM Method 7402 (TEM) at Contractor's expense. If any confirmation sample result is greater than 0.01 asbestos f/cc, abatement is incomplete, and cleaning must be repeated at the Contractor's expense.

Upon completion of any required recleaning, resampling with results to meet the above clearance criteria must be done at the Contractor's expense.

3.2.14.4 Final Clearance Requirements, NIOSH TEM Method

For TEM sampling and analysis, using the NIOSH NMAM Method 7402, abatement inside the regulated area is considered complete when the arithmetic mean asbestos concentration of the five inside samples is less than or equal to 70 structures per square millimeter (70 S/mm). When the arithmetic mean is greater than 70 S/mm, the three blank samples must be analyzed. If the three blank samples are greater than 70 S/mm, resampling must be done. If less than 70 S/mm, the five outside samples must be analyzed, and a Z-test analysis performed. When the Z-test results are less than 1.65, the decontamination must be considered complete. If the Z-test results are more than 1.65, the abatement is incomplete, and cleaning must be repeated.

Upon completion of any required recleaning, resampling with results to meet the above clearance criteria must be done at the Contractor's expense.

3.2.14.5 Air Clearance Failure

If clearance sampling results fail to meet the final clearance requirements, pay all costs associated with the required recleaning, resampling, and analysis, until final clearance requirements are met.

3.2.15 Lock-Down

Prior to removal of plastic barriers and after pre-clearance clean-up of gross contamination, the QP must conduct a visual inspection of all areas affected by the removal in accordance with ASTM E1368. Inspect for any visible fibers, and to ensure that encapsulants were applied evenly and appropriately. Spray apply a post removal (lock-down) encapsulant to ceiling, walls, floors and other areas exposed in the removal area. The exposed area includes but is not limited to plastic barriers, furnishings and articles to be discarded as well as dirty change room, air locks for bag removal and decontamination chambers.

3.2.16 Site Inspection

While performing asbestos engineering control work, the Contractor must be subject to on-site inspection by the Owner who may be assisted by or represented by safety or industrial hygiene personnel. If the work is found to be in violation of this specification, the Owner or his representative will issue a stop work order to be in effect immediately and until the violation is resolved. All related costs including standby time required to resolve the violation must be at the Contractor's expense.

3.3 CLEAN-UP AND DISPOSAL

3.3.1 Housekeeping

Essential parts of asbestos dust control are housekeeping and clean-up procedures. Maintain surfaces of the asbestos control area free of accumulations of asbestos fibers. Give meticulous attention to restricting the spread of dust and debris; keep waste from being distributed over the general area. Use HEPA filtered vacuum cleaners. **DONOT BLOW DOWN THE SPACE WITH COMPRESSED AIR.** When asbestos removal is complete, all asbestos waste is removed from the work-site, and final clean-up is completed, the Owner will attest that the area is safe before the signs can be removed. After final clean-up and acceptable airborne concentrations are attained but before the HEPA unit is turned off and the enclosure removed, remove all pre-filters on the building HVAC system and provide new pre-filters. Dispose of filters as asbestos contaminated materials.

Reestablish HVAC mechanical, and electrical systems in proper working order. The Owner will visually inspect all surfaces within the enclosure for residual material or accumulated dust or debris. The Contractor must re-clean all areas showing dust or residual materials. If re-cleaning is required, air sample and establish an acceptable asbestos airborne concentration after re-cleaning. The Owner must agree that the area is safe in writing before unrestricted entry will be permitted. The Government must have the option to perform monitoring to determine if the areas are safe before entry is permitted.

3.3.2 Title to Materials

All waste materials, except as specified otherwise, become the property of the Contractor and must be disposed of as specified in applicable local, State, and Federal regulations and herein.

3.3.3 Disposal of Asbestos

3.3.3.1 Procedure for Disposal

Coordinate all waste disposal manifests with the Owner. Collect asbestos waste, contaminated waste water filters, asbestos contaminated water, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing which may produce airborne concentrations of asbestos fibers and place in sealed fiber-proof, waterproof, non-returnable containers (e.g. double plastic bags **6 mils** thick, cartons, drums or cans). Wastes within the containers must be adequately wet in accordance with 40 CFR 61-SUBPART M. Affix a warning and Department of Transportation (DOT) label to each container including the bags or use at least 6 mils thick bags with the approved warnings and DOT labeling preprinted on the bag.

Clearly indicate on the outside of each container the name of the waste generator and the location at which the waste was generated. Prevent contamination of the transport vehicle (especially if the transport vehicle is a rented truck likely to be used in the future for non-asbestos purposes). These

precautions include lining the vehicle cargo area with plastic sheeting (similar to work area enclosure) and thorough cleaning of the cargo area after transport and unloading of asbestos debris is complete. Dispose of waste asbestos material at an Environmental Protection Agency (EPA) or State-approved asbestos landfill off Government property. For temporary storage, store sealed impermeable bags in asbestos waste drums or skids. An area for interim storage of asbestos waste-containing drums or skids will be assigned by the Owner or his authorized representative. Comply with 40 CFR 61-SUBPART M, State, regional, and local standards for hauling and disposal. Sealed plastic bags may be dumped from drums into the burial site unless the bags have been broken or damaged. Damaged bags must remain in the drum and the entire contaminated drum must be buried. Uncontaminated drums may be recycled. Workers unloading the sealed drums must wear appropriate respirators and personal protective equipment when handling asbestos materials at the disposal site.

3.3.3.2 Asbestos Disposal Quantity Report

The Contractor will record and report, to the Owner, the amount of asbestos containing material removed and released for disposal. Deliver the report for the previous day at the beginning of each day shift with amounts of material removed during the previous day reported in square feet as described initially in this specification of asbestos containing material released for disposal.

-- End of Section --

SECTION 02 83 00 - LEAD PAINT REMEDIATION

PART 1 GENERAL

1.1 REFERENCES

A. AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ASSP Z9.2 (2018) Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems

B. ASTM INTERNATIONAL (ASTM)

ASTM E1613 (2012) Standard Test Method for Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), Flame Atomic Absorption Spectrometry (FAAS), or Graphite Furnace Atomic Absorption Spectrometry (GFAAS) Techniques

ASTM E1644 (2017) Standard Practice for Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead

ASTM E1726 (2020) Standard Practice for Preparation of Soil Samples by Hotplate Digestion for Subsequent Lead Analysis

ASTM E1727 (2016) Standard Practice for Field Collection of Soil Samples for Subsequent Lead Determination

ASTM E1728/E1728M (2020) Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination

ASTM E1792 (2020) Standard Specification for Wipe Sampling Materials for Lead in Surface Dust

C. NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH NMAM (2016; 5th Ed) NIOSH Manual of Analytical Methods

D. U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

HUD 6780 (Ch. 7 – 2012 Edition)
Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing

E. U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR 1926.21 Safety Training and Education

29 CFR 1926.33	Access to Employee Exposure and Medical Records
29 CFR 1926.55	Gases, Vapors, Fumes, Dusts, and Mists
29 CFR 1926.59	Hazard Communication
29 CFR 1926.62	Lead
29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
29 CFR 1926.103	Respiratory Protection

F. U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 745	Lead-Based Paint Poisoning Prevention in Certain Residential Structures

G. UNDERWRITERS LABORATORIES (UL)

UL 586	(2009; Reprint Dec 2017) UL Standard for Safety High-Efficiency Particulate, Air Filter Units
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1.2 DEFINITIONS

1.2.1 Abatement

Measures defined in 40 CFR 745, Section 223, designed to permanently eliminate lead-based paint hazards.

1.2.2 Action Level

Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period.

1.2.3 Area Sampling

Sampling of lead concentrations within the lead control area and inside the physical boundaries which is representative of the airborne lead concentrations but is not collected in the breathing zone of personnel (approximately 5 to 6 feet above the floor).

1.2.4 Certified Industrial Hygienist (CIH)

As used in this section refers to a person retained by the Contractor who is certified as an industrial hygienist and who is trained in the recognition and control of lead hazards in accordance with current federal, State, and local regulations. CIH must be certified for comprehensive practice by the American Board of Industrial Hygiene. The Certified Industrial Hygienist must be independent of the Contractor and must have no employee or employer relationship which could constitute a conflict of interest.

1.2.5 Child-Occupied Facility

Real property which is a building or portion of a building constructed prior to 1978 visited regularly by the same child, six-years of age or under, on at least two different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3-hours, and the combined annual visits last at least 60-hours. Child-occupied facilities include but are not limited to, day-care centers, preschools and kindergarten classrooms.

1.2.6 Competent Person (CP)

As used in this section, refers to a person employed by the Contractor who is trained in the recognition and control of lead hazards in accordance with current federal, State, and local regulations and has the authority to take prompt corrective actions to control the lead hazard. The Contractor may provide more than one CP as required to supervise and monitor the work. The CP must be a licensed lead-based paint abatement Supervisor/Project Designer in the State of Mississippi.

1.2.7 Contaminated Room

Refers to a room for removal of contaminated personal protective equipment (PPE).

1.2.8 Decontamination Shower Facility

That facility that encompasses a clean clothing storage room, and a contaminated clothing storage and disposal rooms, with a shower facility in between.

1.2.9 Deleading

Activities conducted by a person who offers to eliminate lead-based paint or lead-based paint hazards or to plan such activities in commercial buildings, bridges or other structures.

1.2.10 Eight-Hour Time Weighted Average (TWA)

Airborne concentration of lead to which an employee is exposed, averaged over an 8-hour workday as indicated in 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127.

1.2.11 Government Consultant (GC)

That qualified person employed directly by the Government to monitor, sample, inspect the work or in some other way advise the Owner. The GC is normally a private consultant but can be an employee of the Government.

1.2.11 High Efficiency Particulate Air (HEPA) Filter Equipment

HEPA filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining lead contaminated particulate. A high efficiency particulate filter demonstrates at least 99.97 percent efficiency against 0.3 micron or larger size particles.

1.2.12 Lead

Metallic lead, inorganic lead compounds, and organic lead soaps. Excludes other forms of organic lead compounds. For the purposes of the section lead-based paint (LBP) and paint with lead (PWL) may also contain cadmium and chromium.

1.2.13 Lead-Based Paint (LBP)

Paint or other surface coating that contains lead in excess of 1.0 milligrams per centimeter squared or 0.5 percent by weight.

1.2.14 Lead-Based Paint Hazards

Paint-lead hazard, dust-lead hazard or soil-lead hazard as identified in 40 CFR 745, Section 65. Any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, lead-based paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects.

1.2.15 Lead Control Area

A system [of control methods] to prevent the spread of lead dust, paint chips or debris to adjacent areas that may include temporary containment, floor or ground cover protection, physical boundaries, and warning signs to prevent unauthorized entry of personnel. HEPA filtered local exhaust equipment may be used as engineering controls to further reduce personnel exposures or building/outdoor environmental contamination.

1.2.16 Lead Permissible Exposure Limit (PEL)

Fifty micrograms per cubic meter of air as an 8-hour time weighted average as determined by 29 CFR 1926.62. If an employee is exposed for more than 8-hours in a work day, determine the PEL by the following formula:

$$\text{PEL (micrograms/cubic meter of air)} = 400 / \text{No. hrs worked per day}$$

1.2.17 Material Containing Lead/Paint with Lead (MCL/PWL)

Any material, including paint, which contains lead as determined by the testing laboratory using a valid test method. The requirements of this section does not apply if no detectable levels of lead are found using a quantitative method for analyzing paint or MCL using laboratory instruments with specified limits of detection (usually 0.01 percent). An X-Ray Fluorescence (XRF) instrument is not considered a valid test method.

1.2.18 Personal Sampling

Sampling of airborne lead concentrations within the breathing zone of an employee to determine the 8-hour time weighted average concentration in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127. Samples must be representative of the employees' work tasks. Breathing zone must be considered an area within a hemisphere, forward of the shoulders, with a radius of 6 to 9 inches and centered at the nose or mouth of an employee.

1.2.19 Physical Boundary

Area physically roped or partitioned off around lead control area to limit unauthorized entry of personnel.

1.3 DESCRIPTION

Construction activities impacting PWL or material containing lead which are covered by this specification include the demolition or removal of material containing lead as follows:

- Window Assemblies (interior and exterior)
- Exterior Metal Work (paint stabilization and repainting)

The work covered by this section includes work tasks and the precautions specified in this section for the protection of building occupants and the environment during and after the performance of the hazard abatement activities.

1.3.1 Protection of Existing Areas To Remain

Project work including, but not limited to, lead hazard abatement work, storage, transportation, and disposal must be performed without damaging or contaminating adjacent work and areas. Where such work or areas are damaged or contaminated, restore work and areas to the original condition.

1.3.2 Coordination with Other Work

Coordinate with work being performed in adjacent areas to ensure there are no exposure issues. Explain coordination procedures in the Lead Compliance Plan and describe how the Contractor will prevent lead exposure to other contractors and Government personnel performing work unrelated to lead activities.

1.3.3 Sampling and Analysis

Submit a log of the analytical results from sampling conducted during the abatement. Keep the log of results current with project activities and brief the results to the Owner as analytical results are

reported.

1.3.3.1 Dust Wipe Materials, Sampling and Analysis

Sampling must conform to ASTM E1728/E1728M or ASTM E1792. Analysis must conform to ASTM E1613 and ASTM E1644.

1.3.3.2 Soil Sampling and Analysis

Sampling must conform to ASTM E1727. Analysis must conform to ASTM E1613 and ASTM E1726.

1.3.3.3 Clearance Monitoring

- a. Collect dust wipe samples inside the lead hazard control area after the final visual inspection and at the locations specified.
 - (1) Floors – 10 micrograms (μg) of lead in dust per square foot (ft^2)
 - (2) Interior Window Sills – 100 $\mu\text{g}/\text{ft}^2$
- b. Collect exterior bare soil samples inside the lead hazard control area after the final visual inspection in the quantities and at the locations specified.
 - (1) Near the building foundation – 1,200 parts per million (ppm)

1.4 SUBMITTALS

Submit the following:

SD-01 Preconstruction Submittals

Competent Person Qualifications
Training Certification
Occupational and Environmental Assessment Data Report
Medical Examinations
Lead Waste Management Plan
Permits and Notifications
Occupant Protection Plan
Lead Compliance Plan
Initial Sample Results
Written Evidence of TSD Approval

SD-03 Product Data

Respirators
Vacuum Filters
Negative Air Pressure System; G
Materials and Equipment
Expendable Supplies

Local Exhaust Equipment
Pressure Differential Automatic Recording Instrument
Pressure Differential Log

SD-06 Test Reports

Sampling and Analysis

Occupational and Environmental Assessment Data Report
Sampling Results
Pressure Differential Recordings For Local Exhaust System

SD-07 Certificates

Testing Laboratory
Third Party Consultant Qualifications
Occupant Notification
Notification of the Commencement of [LBP] Hazard Abatement
Clearance Certification

SD-11 Closeout Submittals

Hazardous Waste Manifest
Turn-In Documents or Weight Tickets

1.5 QUALITY ASSURANCE

1.5.1 Qualifications

1.5.1.1 Competent Person (CP)

Submit name, address, and telephone number of the CP selected to perform responsibilities specified in paragraph COMPETENT PERSON (CP) RESPONSIBILITIES. Provide documented construction project-related experience with implementation of OSHA's Lead in Construction standard (29 CFR 1926.62), Chromium standard (29 CFR 1926.1126), Cadmium standard (29 CFR 1926.1127) which shows ability to assess occupational and environmental exposure to lead, cadmium, chromium; experience with the use of respirators, personal protective equipment and other exposure reduction methods to protect employee health. Demonstrate a minimum of 3 years' experience implementing OSHA's Lead in Construction standard (29 CFR 1926.62). Submit proper documentation that the CP is trained and licensed and certified in accordance with federal, State of Mississippi and local laws. The competent person must be a licensed lead-based paint abatement Supervisor/Project Designer in the State of Mississippi.

1.5.1.2 Training Certification

Submit a certificate for each worker and supervisor, signed and dated by the [accredited] training provider, stating that the employee has received the required lead training specified in 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127 and is certified to perform or supervise de-leading, lead removal or demolition activities in the State of Mississippi.

1.5.1.3 Testing Laboratory

MEMY - XXXXXX

Submit the name, address, and telephone number of the testing laboratory selected to perform the air[soil][and wipe] analysis, testing, and reporting of airborne concentrations of lead. Use a laboratory participating in the EPA National Lead Laboratory Accreditation Program (NLLAP) by being accredited by either the American Association for Laboratory Accreditation (A2LA) or the American Industrial Hygiene Association (AIHA) and that is successfully participating in the Environmental Lead Proficiency Analytical Testing (ELPAT) program to perform sample analysis. Laboratories selected to perform blood lead analysis must be OSHA approved.

1.5.1.4 Third Party Consultant Qualifications

Submit the name, address and telephone number of the third party consultant selected to perform the wipe sampling for determining concentrations of lead in dust. Submit proper documentation that the consultant is trained and certified as an inspector/technician or inspector/risk assessor by the EPA authorized State (or local) certification and accreditation program.

1.5.2 Requirements

1.5.2.1 Competent Person (CP) Responsibilities

- a. Verify training meets all federal, State, and local requirements.
- b. Review and approve Lead Compliance Plan for conformance to the applicable referenced standards.
- c. Continuously inspect LBP/PWL or MCL work for conformance with the approved plan.
- d. Perform (or oversee performance of) air sampling. Recommend upgrades or downgrades (whichever is appropriate based on exposure) on the use of PPE (respirators included) and engineering controls.
- e. Ensure work is performed in strict accordance with specifications at all times.
- f. Control work to prevent hazardous exposure to human beings and to the environment at all times.
- g. Supervise final cleaning of the lead control area, take clearance wipe samples if necessary; review clearance sample results and make recommendations for further cleaning.
- h. Certify the conditions of the work as called for elsewhere in this specification.
- i. The CP must be certified pursuant to 40 CFR 745, Section 226 and is responsible for development and implementation of the occupant protection plan, the abatement report and supervise lead hazard abatement work activities.

1.5.2.2 Lead Compliance Plan

Submit a detailed job-specific plan of the work procedures to be used in the disturbance of lead, LBP/PWL or MCL. Include in the plan a sketch showing the location, size, and details of lead control areas, critical barriers, physical boundaries, location and details of decontamination facilities, viewing ports, and mechanical ventilation system. Include a description of equipment and

materials, work practices, controls and job responsibilities for each activity from which lead is emitted. Include in the plan, eating, drinking, smoking, hygiene facilities and sanitary procedures, interface of trades, sequencing of lead related work, collected waste water and dust containing lead and debris, air sampling, respirators, personal protective equipment, and a detailed description of the method of containment of the operation to ensure that lead is not released outside of the lead control area. Include site preparation, cleanup and clearance procedures. Include occupational and environmental sampling, training and strategy, sampling and analysis strategy and methodology, frequency of sampling, duration of sampling, and qualifications of sampling personnel in the air sampling portion of the plan. Include a description of arrangements made among contractors on multi-contractor worksites to inform affected employees and to clarify responsibilities to control exposures.

1.5.2.3 Occupational and Environmental Assessment Data Report

If initial monitoring is necessary, submit occupational and environmental sampling results to the Owner within three working days of collection, signed by the testing laboratory employee performing the analysis, the employee that performed the sampling, and the CP.

1.5.2.4 Medical Examinations

Submit pre-work blood lead levels and post-work blood lead levels for all workers performing lead activities during the execution of the work. Initial medical surveillance as required by 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127 must be made available to all employees exposed to lead at any time (one day) above the action level. Full medical surveillance must be made available to all employees on an annual basis who are or may be exposed to lead in excess of the action level for more than 30 days a year or as required by 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127. Adequate records must show that employees meet the medical surveillance requirements of 29 CFR 1926.33, 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127 and 29 CFR 1926.103. Provide medical surveillance to all personnel exposed to lead as indicated in 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127. Maintain complete and accurate medical records of employees for the duration of employment plus 30 years.

1.5.2.5 Training

Train each employee performing work that disturbs lead, who performs LBP/MCL/PWL disposal, and air sampling operations prior to the time of initial job assignment and annually thereafter, in accordance with 29 CFR 1926.21, 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127, 40 CFR 745 and State Mississippi and local regulations where appropriate.

1.5.2.6 Respiratory Protection Program

- a. Provide each employee required to wear a respirator a respirator fit test at the time of initial fitting and at least annually thereafter as required by 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127.
- b. Establish and implement a respiratory protection program as required by 29 CFR 1926.103, 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127 and 29 CFR 1926.55.

1.5.2.7 Hazard Communication Program

Establish and implement a Hazard Communication Program as required by 29 CFR 1926.59.

1.5.2.8 Lead Waste Management

The Lead Waste Management Plan must comply with applicable requirements of federal, State, and local hazardous waste regulations and address:

- a. Identification and classification of wastes associated with the work.
- b. Estimated quantities of wastes to be generated and disposed of.
- c. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24-hour point of contact. Furnish two copies of EPA hazardous waste and EPA Identification numbers.
- d. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.
- e. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
- f. Spill prevention, containment, and cleanup contingency measures including a health and safety plan to be implemented in accordance with 29 CFR 1926.65.
- g. Work plan and schedule for waste containment, removal and disposal. Proper containment of the waste includes using acceptable waste containers (e.g., 55-gallon drums) as well as proper marking/labeling of the containers. Clean up and containerize wastes daily.
- h. Include any process that may alter or treat waste rendering a hazardous waste non-hazardous.
- i. Unit cost for hazardous waste disposal according to this plan.

1.5.2.9 Environmental, Safety and Health Compliance

In addition to the detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of federal, State, and local authorities regarding lead. Comply with the applicable requirements of the current issue of 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127, EM 385-1-1, ND OPNAVINST 5100.23. Submit matters regarding interpretation of standards to the Owner for resolution before starting work. Where specification requirements and the referenced documents vary, the most stringent requirements apply.

1.5.3 Pressure Differential Recordings for Local Exhaust System

Provide a local exhaust system that creates a negative pressure of at least **0.02 inches** of water relative to the pressure external to the enclosure and operate it continuously, 24-hours a day, until the temporary enclosure of the lead control area is removed. Submit pressure differential recordings for each work day to the GC for review and to the Owner within 24-hours from the end of each work day.

1.5.4 Licenses, Permits and Notifications

Certify and submit in writing to the state's environmental protection agency responsible for lead hazard abatement activities and the Owner at least 10 days prior to the commencement of work licenses, permits and notifications have been obtained. All associated fees or costs incurred in obtaining the licenses, permits and notifications are included in the contract price.

1.5.5 Pre-Construction Conference

Along with the CP, meet with the Owner to discuss in detail the Lead Waste Management Plan and the Lead Compliance Plan, including procedures and precautions for the work.

1.6 EQUIPMENT

1.6.1 Respirators

Furnish appropriate respirators approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services, for use in atmospheres containing lead dust, fume and mist. Respirators must comply with the requirements of 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127.

1.6.2 Special Protective Clothing

Personnel exposed to lead contaminated dust must wear proper disposable protective whole body clothing, head covering, gloves, eye, and foot coverings as required by 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127. Furnish proper disposable plastic or rubber gloves to protect hands. Reduce the level of protection only after obtaining approval from the CP.

1.6.3 Rental Equipment Notification

If rental equipment is to be used during PWL or MCL handling and disposal, notify the rental agency in writing concerning the intended use of the equipment.

1.6.4 Vacuum Filters

UL 586 labeled HEPA filters.

1.6.5 Abrasive Removal Equipment

The use of powered machine for vibrating, sanding, grinding, or abrasive blasting is prohibited unless equipped with local exhaust ventilation systems equipped with high efficiency particulate air (HEPA) filters.

1.6.6 Negative Air Pressure System

1.6.6.1 Minimum Requirements

Do not proceed with work in the area until containment is set up and HEPA filtration systems are in place. The negative air pressure system must meet the requirements of ASSP Z9.2 including approved HEPA filters in accordance with UL 586. Negative air pressure equipment must be

equipped with new HEPA filters and be sufficient to maintain a minimum pressure differential of minus 0.02 inch of water column relative to adjacent, unsealed areas. Negative air pressure system minimum requirements are listed as follows:

- a. The unit must be capable of delivering its rated volume of air with a clean first stage filter, an intermediate filter and a primary HEPA filter in place.
- b. The HEPA filter must be certified as being capable of trapping and retaining mono-disperse particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent.
- c. The unit must be capable of continuing to deliver no less than 70 percent of rated capacity when the HEPA filter is 70 percent full or measures 2.5 inches of water static pressure differential on a manometric gauge.
- d. Equip the unit with a manometer-type negative pressure differential monitor with minor scale division of 0.02 inch of water and accuracy within plus or minus 1.0 percent. The manometer must be calibrated daily as recommended by the manufacturer.
- e. Equip the unit with a means for the operator to easily interpret the readings in terms of the volumetric flow rate of air per minute moving through the machine at any given moment.
- f. Equip the unit with an electronic mechanism that automatically shuts the machine off in the event of a filter breach or absence of a filter.
- g. Equip the unit with an audible horn that sounds an alarm when the machine has shut itself off.
- h. Equip the unit with an automatic safety mechanism that prevents a worker from improperly inserting the main HEPA filter.

1.6.6.2 Auxiliary Generator

Provide an auxiliary generator with capacity to power a minimum of 50 percent of the negative air machines at any time during the work. When power fails, the generator controls must automatically start the generator and switch the negative air pressure system machines to generator power. The generator must not present a carbon monoxide hazard to workers.

1.6.7 Vacuum Systems

Vacuum systems must be suitably sized for the project, and filters must be capable of trapping and retaining all mono-disperse particles as small as 0.3 micrometers (mean aerodynamic diameter) at a minimum efficiency of 99.97 percent. Properly dispose of used filters that are being replaced.

1.6.8 Heat Blower Guns

Heat blower guns must be flameless, electrical, paint-softener type with controls to limit temperature to 1,100 degrees F. Heat blower must be (grounded) 120 volts ac, and must be equipped with cone, fan, glass protector and spoon reflector nozzles.

1.7 PROJECT/SITE CONDITIONS

1.7.1 Protection of Existing Work to Remain

Perform work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, restore work to its original condition or better as determined by the Owner.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

Keep materials and equipment needed to complete the project available and on the site. Submit a description of the materials and equipment required; including Safety Data Sheets (SDSs) for material brought on site to perform the work.

2.1.1 Expendable Supplies

Submit a description of the expendable supplies required.

2.1.1.1 Polyethylene Bags

Disposable bags must be polyethylene plastic and be a minimum of 6 mils thick (4 mils thick if double bags are used) or any other thick plastic material shown to demonstrate at least equivalent performance; and capable of being made leak-tight. Leak-tight means that solids, liquids or dust cannot escape or spill out.

2.1.1.2 Polyethylene Leak-tight Wrapping

Wrapping used to wrap lead contaminated debris must be polyethylene plastic that is a minimum of 6 mils thick or any other thick plastic material shown to demonstrate at least equivalent performance.

2.1.1.3 Polyethylene Sheeting

Sheeting must be polyethylene plastic with a minimum thickness of 6 mil, or any other thick plastic material shown to demonstrate at least equivalent performance; and be provided in the largest sheet size reasonably accommodated by the project to minimize the number of seams. Where the project location constitutes an out of the ordinary potential for fire, or where unusual fire hazards cannot be eliminated, provide flame-resistant polyethylene sheets which conform to the requirements of NFPA 701.

2.1.1.4 Tape and Adhesive Spray

Tape and adhesive must be capable of sealing joints between polyethylene sheets and for attachment of polyethylene sheets to adjacent surfaces. After dry application, tape or adhesive must retain adhesion when exposed to wet conditions, including amended water. Tape must be minimum 2 inches wide, industrial strength.

2.1.1.5 Containers

When used, containers must be leak-tight and be labeled in accordance with EPA, DOT and OSHA standards.

2.1.1.6 Chemical Paint Strippers

Chemical paint strippers must not contain methylene chloride and be formulated to prevent stain, discoloration, or raising of the substratematerials.

2.1.1.7 Chemical Paint Stripper Neutralizer

Neutralizers for paint strippers must be compatible with the substrate and suitable for use with the chemical stripper that has been applied to the surface.

2.1.1.8 Detergents and Cleaners

Detergents or cleaning agents must not contain trisodium phosphate and have demonstrated effectiveness in lead control work using cleaning techniques specified by HUD 6780 guidelines.

PART 3 EXECUTION

3.1 PREPARATION

3.1.1 Protection

3.1.1.1 Notification

- a. Notify the Owner 10 days prior to the start of any leadwork.

3.1.1.2 Lead Control Area

- a. Physical Boundary - Provide physical boundaries around the lead control area by roping off the area designated in the work plan or providing curtains, portable partitions or other enclosures to ensure that lead will not escape outside of the lead control area. Prohibit the general public from accessing the lead control areas.
- b. Warning Signs - Provide warning signs at approaches to lead control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Signs must comply with the requirements of 29 CFR 1926.62.

3.1.1.3 Furnishings

The Government may remove furniture and equipment from the building before leadwork begins.

Furniture and equipment may remain in the lead control area. Protect and cover furnishings or remove furnishings from the work area and store in a location approved by the Owner.

3.1.1.4 Heating, Ventilating and Air Conditioning (HVAC)

Systems Shut down, lock out, and isolate HVAC systems that supply, exhaust, or pass through the lead control areas. Seal intake and exhaust vents in the lead control area with 6 mil plastic sheet and tape. Seal seams in HVAC components that pass through the lead control area.

Provide temporary HVAC system for areas in which HVAC has been shut down outside the

lead control area.

3.1.1.5 Local Exhaust System

HEPA filters.

Maintain a minimum pressure differential in the lead control area of minus 0.02 inch of water column relative to adjacent, unsealed areas. Provide continuous 24-hour per day monitoring of the pressure differential. The building ventilation system must not be used as the local exhaust system for the lead control area. Filters on exhaust equipment must conform to ASSP Z9.2 and UL 586. Terminate the local exhaust system out of doors and remote from any public access or ventilation system intakes.

3.1.1.6 Negative Air Pressure System Containment

- a. Operate the negative air pressure systems to provide at least 4 air changes per hour inside the containment. Operate the local exhaust unit equipment continuously until the containment is removed. Smoke test the negative air pressure system for leaks at the beginning of each shift. The certified supervisor is responsible to continuously monitor and keep a pressure differential log with an automatic manometric recording instrument. Notify the Owner immediately if the pressure differential falls below the prescribed minimum. Submit the continuously monitored pressure differential log, as specified. Do not use the building ventilation system as the local exhaust system. Terminate the local exhaust system out of doors unless the Owner allows an alternate arrangement. All filters must be new at the beginning of the project and be periodically changed as necessary to maintain specified pressure differential and disposed of as lead contaminated waste.
- b. Discontinuing Negative Air Pressure System. Operate the negative air pressure system continuously during abatement activities unless otherwise authorized by the Owner. At the completion of the project, units must be run until full cleanup has been completed and final clearance testing requirements have been met. Dismantling of the negative air pressure systems must conform to written decontamination procedures as presented in the Lead Compliance Plan. Seal the HEPA filter machine intakes with polyethylene to prevent environmental contamination.

3.1.1.7 Decontamination Shower Facility

Provide clean and contaminated change rooms and shower facilities in accordance with this specification and 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127.

3.1.1.8 Eye Wash Station

Provide suitable facilities within the work area for quick drenching or flushing of the eyes where eyes may be exposed to injurious corrosive materials.

3.1.1.9 Mechanical Ventilation System

- a. Use adequate ventilation to control personnel exposure to lead in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127. To the extent feasible, use local exhaust ventilation or other collection systems, approved by the CP. Evaluate and maintain local exhaust ventilation systems in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR

1926.1127.

- b. Vent local exhaust outside the building and away from building ventilation intakes or ensure system is connected to HEPA filters.
- c. Use locally exhausted, power actuated tools or manual hand tools.

3.1.1.10 Personnel Protection

Personnel must wear and use protective clothing and equipment as specified herein. Eating, smoking, or drinking or application of cosmetics is not permitted in the lead control area. No one will be permitted in the lead control area unless they have been appropriately trained and provided with protective equipment.

3.2 ERECTION

3.2.1 Lead Control Area Requirements

Establish a lead control area by completely establishing barriers and physical boundaries around the area or structure where PWL or MCL removal operations will be performed.

3.3 APPLICATION

3.3.1 Lead Work

Perform leadwork in accordance with approved Lead Compliance Plan. Use procedures and equipment required to limit occupational exposure and environmental contamination with lead when the work is performed in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127, and as specified herein. Dispose of all PWL or MCL and associated waste in compliance with federal, State, and local requirements.

3.3.2 Paint with Lead or Material Containing Lead Removal

Manual or power sanding or grinding of lead surfaces or materials is not permitted unless tools are equipped with HEPA attachments or wet methods. The dry sanding or grinding of surfaces that contain lead is prohibited. Provide methodology for removing lead in the Lead Compliance Plan. Select lead removal processes to minimize contamination of work areas outside the control area with lead contaminated dust or other lead contaminated debris or waste and to ensure that unprotected personnel are not exposed to hazardous concentrations of lead. Describe this removal process in the Lead Compliance Plan.

Provide methodology for lead, LBP/PWL removal and abatement/control and processes to minimize contamination of work areas outside the control area with lead contaminated dust or other lead contaminated debris/waste and to ensure that unprotected personnel are not exposed to hazardous concentrations of lead, cadmium, chromium. Describe this lead, LBP/PWL removal/control process in the Lead Compliance Plan.

3.3.2.1 Paint with Lead or Material Containing Lead- Indoor Removal

Perform manual removal in the lead control areas using enclosures, barriers or containments and

powered locally exhausted tools equipped with HEPA filters. Collect residue and debris for disposal in accordance with federal, State, and local requirements.

3.3.2.2 Paint with Lead or Material Containing Lead - Outdoor Removal

Perform outdoor removal as indicated in federal, State, and local regulations and in the Lead Compliance Plan. The worksite preparation (barriers or containments) must be job dependent and presented in the Lead Compliance Plan.

3.3.3 Personnel Exiting Procedures

Whenever personnel exit the lead controlled area, they must perform the following procedures and must not leave the work place wearing any clothing or equipment worn in the control area:

- a. Vacuum all clothing before entering the contaminated change room.
- b. Remove protective clothing in the contaminated change room and place them in an approved impermeable disposal bag.

[c. Shower.

][c. Wash hands and face at the site, don appropriate disposable or uncontaminated reusable clothing, move to an appropriate shower facility, shower.

] d. Change to clean clothes prior to leaving the clean clothes storage area.

3.4 FIELD QUALITY CONTROL

3.4.1 Tests

3.4.1.1 Air and Wipe Sampling

Conduct sampling for lead in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127 and as specified herein. Air and wipe sampling must be directed or performed by the CP.

- a. The CP must be on the job site directing the air and wipe sampling and inspecting the PWL or MCL removal work to ensure that the requirements of the contract have been satisfied during the entire PWL or MCL operation.
- b. Collect personal air samples on employees who are anticipated to have the greatest risk of exposure as determined by the CP. In addition, collect air samples on at least twenty-five percent of the work crew or a minimum of two employees, whichever is greater, during each workshift.
- c. Submit results of air samples, signed by the CP, within 72-hours after the air samples are taken.
- d. Conduct area air sampling daily, on each shift in which lead and lead-based paint removal operations are performed, in areas immediately adjacent to the lead control area. Conduct sufficient area monitoring to ensure unprotected personnel are not exposed at or above 30 micrograms of lead per cubic meter of air or 2.5 micrograms of cadmium/chromium per cubic

meter of air. If 30 micrograms of lead per cubic meter of air or 2.5 micrograms of cadmium/chromium per cubic meter of air is reached or exceeded, stop work, correct the condition(s) causing the increased levels. Notify the Owner immediately. Determine if condition(s) require any further change in work methods. Resume removal work only after the CP and the Owner give approval.

]3.4.1.2 Sampling After Removal

After the visual inspection, conduct soil sampling if bare soil is present during external removal operations and collect wipe and soil samples according to the HUD protocol contained in HUD 6780 to determine the lead content of settled dust in micrograms per square meter of surface area and parts per million (ppm) for soil.

3.5 CLEANING AND DISPOSAL

3.5.1 Cleanup

Maintain surfaces of the lead control area free of accumulations of dust and debris. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use pressurized air to clean up the area. At the end of each shift and when the lead operation has been completed, clean the controlled area of all visible contamination by vacuuming with a HEPA filtered vacuum cleaner, wet mopping the area and wet wiping the area as indicated by the Lead Compliance Plan. Reclean areas showing dust or debris. After visible dust and debris is removed, wet wipe and HEPA vacuum all surfaces in the controlled area. If adjacent areas become contaminated at any time during the work, clean, visually inspect, and then wipe sample all contaminated areas. The CP must then certify in writing that the area has been cleaned of lead contamination before clearance testing.

3.5.1.1 Clearance Certification

The CP must certify in writing that air samples collected outside the lead control area during paint removal operations are less than 30 micrograms of lead per cubic meter of air; the respiratory protection used for the employees was adequate; the work procedures were performed in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127; and that there were no visible accumulations of material and dust containing lead left in the work site. Do not remove the lead control area or roped off boundary and warning signs prior to the Owner's acknowledgement of receipt of the CP certification.

]3.5.2 Disposal

- a. Dispose of material, whether hazardous or non-hazardous in accordance with all laws and provisions and all federal, State or local regulations. Ensure all waste is properly characterized. The result of each waste characterization (TCLP for RCRA materials) will dictate disposal requirements.
- b. Contractor is responsible for segregation of waste. Collect lead contaminated waste, scrap, debris, bags, containers, equipment, and lead contaminated clothing that may produce airborne concentrations of lead particles. Label the containers in accordance with 29 CFR 1926.62, 29 CFR 1926.1126, 29 CFR 1926.1127 and 40 CFR 261, 40 CFR 262 and corresponding state regulations.

- c. Dispose of lead contaminated material classified as hazardous waste at an [EPA][or][State] approved hazardous waste treatment, storage, or disposal facility off Government property.
- d. Accumulate waste materials in U.S. Department of Transportation (49 CFR 178) approved 55 gallon drums or appropriately sized container for smaller volumes. Properly label each drum to identify the type of hazardous material (49 CFR 172). For hazardous waste, the collection container requires marking/labeling in accordance with 40 CFR 262 and corresponding state regulations during the accumulation/collection timeframe. The Owner or an authorized representative will assign an area for accumulation of waste containers. Coordinate authorized accumulation volumes and time limits with the host installation environmental function.
- e. Handle, store, transport, and dispose lead or lead contaminated waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. Comply with land disposal restriction notification requirements as required by 40 CFR 268.
- f. All lead, cadmium, and chromium waste generation, management, and disposal will be coordinated with the host installation environmental function.

3.5.2.1 Disposal Documentation

Coordinate all disposal or off-site shipments of lead, cadmium, and chromium waste with the host installation environmental function. Submit written evidence of TSD approval to demonstrate the hazardous waste treatment, storage, or disposal facility (TSD) is approved for lead disposal by the EPA, State or local regulatory agencies. Submit one copy of the completed hazardous waste manifest, signed and dated by the initial transporter in accordance with 40 CFR 262. Provide a certificate that the waste was accepted by the disposal facility. Payment for Hazardous Waste

Payment for disposal of hazardous and non-hazardous waste will not be made until a signed copy of the manifest from the treatment or disposal facility is received and approved by the Owner. The manifest must detail and certify the amount of lead containing materials or non-hazardous waste delivered to the treatment or disposal facility.

-- End of Section --

SECTION 02 85 00 - MOLD REMEDIATION

PART 1 GENERAL

1.1 REFERENCES

A. AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA)

AIHA IMOM08-679 (2008) Recognition, Evaluation, and Control of Indoor Mold

AIHA Z9.2 (2006) Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems

B. INSTITUTE OF INSPECTION, CLEANING, AND RESTORATION CERTIFICATION (IICRC)

IICRC S500 (2006) Standard and Reference Guide for Professional Water Damage Restoration

C. NATIONAL AIR DUCT CLEANERS ASSOCIATION (NADCA)

ACR (2006) Standard for Assessment, Cleaning, and Restoration of HVAC Systems

D. U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.134 Respiratory Protection

E. UNDERWRITERS LABORATORIES (UL)

UL 586 (2009) Standard for High-Efficiency Particulate, Air Filter Units

1.2 DEFINITIONS

1.2.1 AIHA

American Industrial Hygiene Association.

1.2.2 AFU

Air filtration unit with High Efficiency particulate air (HEPA) filtered vacuum and / or exhaust ventilation equipment with a filter system capable of collecting and retaining microbial contamination AIHA Z9.2. Filters shall retain 99.97 percent of particles 0.3 microns 1.2 by 10-6 inch or larger as indicated in UL 586.

1.2.3 Containment

Physical separation and engineering controls required to prevent contamination of undamaged materials and occupied areas. The level of containment varies depending on the extent of the

contamination.

1.2.3.1 Full Containment

Use when contaminated surface area is greater than 100 square feet in both residential and nonresidential buildings. At a minimum, full containment shall include the following:

- a. Containment. For non-residential buildings, the containment shall include the area to be remediated, plus enough additional area to allow for all equipment and work activities.
- b. Isolation of Work Areas. Construct polyethylene barriers to isolate the areas to be remediated.
- c. Floor protection. Maintain protection for finished floors through all construction activities.
- d. Air Filtration / Pressurization Control. Install AFUs with HEPA filters in the containment. Configure the AFUs with splitters / diverters to allow some of the air to recirculate within the containment. Discharge the remainder of the air directly to the outside to maintain an overall negative pressure in the containment of 0.02 inch water column minimum to 0.04 inch water column maximum relative to the outside and other adjacent spaces not undergoing remediation. AFUs shall filter a minimum of four air changes per hour and a maximum of six air changes per hour.
- e. Protection for all items remaining in the containment. Protective devices shall prevent physical damage (e.g., scratches and dents) and shall provide a positive seal to prevent dust from settling in or on the items.
- f. Decontamination. Construct a decontamination airlock for entry into and exit from the work area. The airlock shall be used to HEPA vacuum the sealed bags of contaminated debris. When possible, the decontamination airlock shall be located so that the sealed bags can be passed directly from the airlock to the outside, through a door or window.
- g. Containment Entrance. Install a triple-flap poly "door" at the entrance to the airlock, and between the airlock and the work area during demolition to minimize egress and provide a good separation between containment and occupied areas of the house / building.

1.2.4 Decontamination Unit (Airlock)

An enclosed area adjacent to, and connected to, a regulated work area. It consists of various rooms that are used for the decontamination of workers, equipment, and materials.

1.2.5 Dehumidifier

Mechanism or machine to remove moisture from the air.

1.2.6 Detergent

A cleaning agent. The term refers to a prepared compound that may include surfactants, builders, dry solvents, softeners, etc., but does not include true soap.

1.2.7 Disinfectants or Biocide Sanitizing Solutions

One of three groups of antimicrobials registered by the EPA for public health uses. The EPA considers an antimicrobial to be a disinfectant when it destroys or irreversibly inactivates infectious or other undesirable organisms, but not necessarily their spores. **The contractor to conduct test applications at location(s) selected by Owner to verify that the biocide does not negatively impact historic materials.**

1.2.8 EPA

U.S. Environmental Protection Agency.

1.2.9 Fungicidal Agents (EPA)

A coating material that contains an EPA registered fungicide that inhibits the spread and growth of mold with the ability to withstand moist and humid conditions.

1.2.10 HEPA Filter

A High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97 percent of all particulate larger than 0.3 microns.

1.2.11 HVAC

Heating, Ventilating, and Air Conditioning (System).

1.2.12 Microbial Remediation Supervisor

Individual responsible for the execution of the microbial remediation work as defined by the scope of work. This individual shall have documented training in microbial remediation and have at least three years' experience in microbial remediation work. Remediation contractor's on-site supervisor shall have one of the following certifications: Council-Certified Mold Remediator (CMR), or Council-Certified Mold Remediation Supervisor (CMRS) as certified by the American Council for Accredited Certification, or Applied Microbial Remediation Specialist (AMRS), Institute of Inspection, Cleaning, and Restoration Certification (IICRC) or Owner approved equivalent.

1.2.13 Non-Porous Material

A material that does not absorb nor is easily penetrated by liquids, especially water. Generally, non-porous materials have a permeable factor of less than 1. Some examples are metal, glass, plastic, ceramic tile, etc.

1.2.14 Occupied Spaces (Areas)

The phrase "occupied space" within this specification refers to spaces that are occupied by unprotected non-remediation personnel while work is in progress. It also refers to areas adjacent to work areas that are not currently undergoing remediation.

1.2.15 Personal Protective Equipment (PPE)

Any material or device worn to protect a worker from exposure to, or contact with, any harmful

material or force. PPE must be cleaned or disposed of prior to removal from the remediation work area.

1.2.16 Poly

Polyethylene sheet with a minimum thickness of 6 mils.

1.2.17 Porous Material

Permeable materials having the physical properties that allow liquids or gasses to pass through. These materials include but are not limited to the following: gypsum wall board, insulation, wallpaper, ceiling material, carpet, padding, paper goods (i.e., cardboard boxes, loose paper, books, etc.), stuffed furniture, wicker, fabrics, etc.

1.2.18 Semi-porous Material

A material that can absorb liquids if exposed over long periods of time. These materials include but are not limited to wood, concrete, linoleum, vinyl wall covering, wooden or hardboard furniture, plaster, etc.

1.2.19 Ventilation System Mold Remediation Qualifications (VSMR)

An individual certified by the North American Duct Cleaning Association (NADCA) to clean HVAC systems.

1.2.20 Work Area

The area where remediation operations are actively performed and controlled to prevent the spread of dust / spores and entry by unauthorized personnel. A work area is the space, group of spaces, or the building, as defined by the Microbial Assessment Survey.

1.3 REQUIREMENTS

1.3.1 Description of Work

The initial survey is included in the solicitation documents at the end of this specification section.

Provide mold remediation work including the handling and control of mold contaminated materials and the resultant procedures and equipment required to protect workers, the environment and occupants of the building or area, or both, from contact with mold products and spores. The work also includes the disposal of any mold contaminated materials generated by the work. The mold removal work includes the cleaning and sanitizing the interior surfaces of an approximately 3,600 square foot, on-story wood structure. Provide containment and engineering control techniques as outlined in this specification. All mold contaminated material removal work shall be supervised by a microbial remediation supervisor as specified herein.

No work in this specification section shall be provided by any person, contractor, or contracting entity involved in the preparation of the contract documents of which this specification section is a part.

The following microbial remediation specifications apply to the cleaning /removal and disposal of fungal-contaminated porous, semi-porous and non-porous surfaces within various types of structures. The level of containment and requirements for cleaning and remediation of materials will depend on the condition of the space and materials being remediated.

Use proper cleaning procedures, engineering controls, and apply best management practices to remove microbial growth and spore fallout from all surfaces and building materials to minimize the further release of microbial spores. Address semi-porous and nonporous surfaces within the facility in each cleaning phase of the project. Damp wipe and HEPA vacuum all surfaces, at a minimum. Remove and dispose of porous building materials that are supporting microbial growth if found.

1.4 SUBMITTALS

SD-01 Preconstruction Submittals

Preliminary Visual Assessment Report;
Microbial Remediation Plan;
Worker Records;
Respiratory Protection Program;
Microbial Remediation Supervisor Qualifications;
Ventilation System Mold Remediator Qualifications (VSMR);

SD-03 Product Data

Personal Protective Equipment (PPE0;
Air Filtration Units;
Dehumidifiers;
Pressure Differential Measuring Instrument;
Fungicidal Agents, (EPA);
Disinfectants or Biocide Sanitizing Solutions;

SD-06 Test Reports

Daily Reports

SD-11 Closeout Submittals

Submittals at Completion of Remediation Work;

1.4.1 Preconstruction Submittals

Within ten (10) days from the award of the contract and prior to the start of the work, submit to the Owner six copies of the following items for review and permanent file.

1.4.1.1 Preliminary Visual Assessment Report

A written report to document the pre-remediation condition of the work areas compared to the government provided Microbial Assessment Survey and the results of the HVAC systems inspection.

1.4.1.2 Microbial Remediation Plan

Submit a job-specific plan Approved by the Owner for final approval prior to start of work. The plan shall address the following items at a minimum:

- a. Description of materials to be remediated, providing location and quantities (map if available), and methods to be used for remediation.

- b. Types of biocides and fungicidal agents, (EPA).
- c. Containment procedures to include description and locations of engineering controls and decontamination unit to include entry and exit procedures (provide sketch of floor plan showing location of containment barriers and decontamination units). Plan shall include locations of AFUs and AFU discharges to the outside.
- d. Description of personal protective equipment to be used during the remediation.
- e. Construction barricades and barriers in occupied areas.
- f. HVAC Shut down and start-up procedures.
- g. HVAC Evaluation and remediation procedures.
- h. Moisture and relative humidity control procedures and equipment.
- i. Packaging and disposal procedures.
- j. Safety Precautions to include lockout / tag-out, fall protection, confined space entry procedures, and fire protection.
- k. Description of the method to be employed to control cross contamination of areas not in the work area. This shall include a risk assessment related to the suitability of people to occupy areas adjoin the remediation area while remediation activities are ongoing.
- l. Quality Control procedures to include visual inspection.

1.4.1.3 Respiratory Protection Program

Provide written copy of Contractor's Respiratory Protection program.

1.4.1.4 Worker Records

Provide the following documents for all workers, including supervisory personnel. If new workers are added to the crew, provide the same documentation for them.

Employee Instruction and Release Form: Provide documentation showing that each employee has been instructed on the following items:

- a. Use and fit of respirators (for employees entering and working in the containment).
- b. Protective clothing.
- c. Protective measures.
- d. Safety and Emergency Egress Procedures.
- e. Site specific fall protection plan and training.

- f. Microbial remediation hazards and practices including engineering controls and isolation. Training should include "hands on" training for microbial remediation supervisors.
- g. Workers' release forms stating the potential hazards involved with the scope of the work.

Worker Training Certification: Submit copies of training certificates for each employee indicating that the employee has received training at the appropriate level for the work prescribed in the description of work.

1.4.1.5 Microbial Remediation Supervisor Qualifications

Onsite supervisor shall have one of the following certifications: Certified Mold Remediator (CMR), Certified Mold Remediation Supervisor (CMRS), or Applied Microbial Remediation Specialist (AMRS). Submit copies of supervisory training certificates.

1.4.2 Product Data

Within 10 days of contract award, submit product data for items identified for use in Microbial Remediation Plan.

1.4.3 Daily Reports

Prepare a written report for each day that microbial remediation work is being accomplished. Submit this report to the Owner the following day, attached to the Contractor Quality Control Report. Referred to collectively as the IH Daily Report, the report at a minimum shall include measurements of differential pressure and temperature and relative humidity in work areas and detail any non-compliance issues observed.

1.4.4 Submittals at Completion of Remediation Work

Within 14 days of completion, provide the following information:

- a. Supervisor Logs.
- b. IH Daily Reports.
- c. Photographic Logs.
- d. Contractor's Industrial Hygienist Report certifying the microbial remediation is complete.

1.5 RECORD KEEPING

A Daily Project Log shall form a permanent record of the project. Secure and maintain these logs and any other required documentation as part of the permanent project file.

1.5.1 Daily Log

The Microbial Remediation Supervisor shall maintain a Daily Project Log. The Daily Project Log shall be used each day of the project to document the following information.

- a. Date.
- b. Name of Microbial Remediation Supervisor.
- c. Name of Industrial Hygienist monitoring work area.
- d. Number of workers on site.
- e. Equipment utilized.
- f. Brief description of daily work activities.
- g. Listing of any non-compliance noted, emergencies, stop work orders (with detailed explanation), [exhaust system pressure differential recordings] and descriptions of any other significant events.

PART 2 PRODUCTS

2.1 DISINFECTANTS, BIOCIDES, SANITIZING SOLUTIONS AND FUNGICIDAL AGENTS (EPA)

Shall be approved by EPA for the use detailed in the Microbial Remediation Plan and used in accordance with the manufacturer's specifications. **The contractor to conduct test applications at location(s) selected by Owner to verify that the biocide does not negatively impact historic materials.**

PART 3 EXECUTION

3.1 EQUIPMENT

Provide protective clothing and respirators as required by the Microbial Remediation Plan for use by any authorized visitors. Provide manufacturer's certificate of compliance for all equipment used to contain the microbial contamination. Contractor shall not be required to certify that visitors entering work areas be capable of wearing respirators.

3.1.1 Respirators

Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. Provide personnel engaged in set-up, pre-cleaning, cleanup, handling, and removal of contaminated materials with the appropriate respiratory protection as specified in 29 CFR 1910.134.

3.1.2 Protective Clothing

Provide all workers with protective clothing as appropriate for the work being accomplished, as required by the Microbial Remediation Plan.

Do not permit any person to enter the work area without the appropriate protective clothing and equipment.

3.1.3 Warning Signs and Labels

Provide bilingual warning signs printed in English and Spanish at all approaches to the work areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Warning signs may be in the form of continuous plastic tape. The warning signs shall have black characters on a yellow background.

WARNING
DO NOT ENTER
MICROBIAL REMEDIATION WORK IN PROGRESS

Alternate wording for the warning signs will be approved by the Contracting Officer.

3.1.4 Dehumidifiers

Install and use dehumidifiers as needed during the remediation to maintain relative humidity below 60 percent in the work area. Drain the condensate water to a permanent drain, or empty as needed to prevent water overflowing from the dehumidifiers.

3.1.5 Air Filtration Units (AFU)

Install and use AFUs with HEPA filters, and manufacturer specified pre-filters, as part of the exhaust ventilation system to develop and maintain the specified desired air pressure differential inside the enclosed work area relative to the outside areas. The Contractor shall be responsible for acquiring and paying for any licenses needed for use of any equipment, including but not limited to, air pressure differential systems and air filtration systems.

Replace HEPA filters and pre-filters for AFUs as required to maintain pressurization performance requirements during demolition and cleaning. Do not reuse filters. Bag used filters at a minimum in clear 6 mil polyethylene bags within the containment and disposed as contaminated waste.

Discharge air from any AFUs located in the work area containment to the outside environment when creating a negative pressure containment to create a negative pressure relative to occupied areas of 0.02 inch H₂O to 0.04 inch H₂O. Discharge air in excess of that required for creating the proper negative pressure to the work area. The AFUs shall provide four to six air changes per hour in the work area. Under no circumstances may air from AFUs discharge to an occupied area. Coordinate location of window sashes or doors required for discharge openings with the Contracting Officer. Seal around openings used for discharge of exhaust air airtight. Exhaust discharge openings may be constructed of plywood.

Seal all exhaust and intake openings in AFUs with one layer of 6 mil polyethylene sheeting when not in use.

3.1.6 Vacuum Cleaners Equipped with HEPA Filters

Provide vacuum cleaners equipped with HEPA filters designed for continuous operation to perform the work in a timely and efficient manner.

Provide nozzle attachments as required to adequately remove all dust. As a minimum, nozzle attachments shall include crevice and extended bristle brush nozzles. Any vacuum that is not equipped with a HEPA filter shall not be used at any time.

Provide sufficient vacuum cleaners equipped with HEPA filters designed for continuous operation in the work area during microbial remediation inside the containment area.

Provide additional vacuum cleaners equipped with HEPA filters in the enclosed work area during remediation or cleaning work as required by the size (area) of the containment and to maintain timely progress of the work.

3.2 GENERAL REQUIREMENTS

3.2.1 Pre-Microbial Remediation Work Conference

Meet with the Owner prior to beginning work to discuss in detail the Microbial Remediation Plan, including work procedures and safety precautions. Once approved by the Contracting Officer, the plan shall be enforced as if a part of this specification. Any variances to the specification as a result of the plan shall be specifically identified to allow for free discussion and approved by the Owner in writing prior to starting work.

3.2.2 Containment Entry / Exit Procedure

Ensure that each worker and authorized visitor follows entry and exit procedures detailed in the Microbial Remediation Plan.

3.3 REMOVAL PROCEDURES

3.3.1 Protection of Existing Work Areas

Perform work in a manner to minimize the damage or contamination to areas outside or directly adjacent to the work area. Contractor is required to inspect areas inside and outside proposed work areas to identify existing damage and notify Owner prior to start of work.

Where materials outside work area are damaged or contaminated as a result of the Contractor's work efforts as verified by the Owner using visual inspection or sample analysis, it shall be restored to its original condition or decontaminated by the Contractor at no expense to the Government as deemed appropriate by the Contracting officer. Should adjacent or outside areas become contaminated as a result of the Contractor's work efforts the work shall stop immediately. The newly contaminated areas shall be cleaned and verified by visual inspection by the IH. The work may proceed at the discretion of the Owner once the area has been verified as restored.

3.3.2 Remediation of Fungal Contaminated Building Materials

The removal of contaminated materials shall follow in general the listed sequence of work. The Contractor may make changes to improve work flow with the approval of the Contracting Officer.

- a. Provide level of containment and PPE required by the Microbial Remediation Plan.
- b. Disable all HVAC units and exhaust fans in the area to be remediated.
- c. Protect materials to remain in work area. Where possible, all materials to be salvaged should be cleaned in place to prevent possible cross-contamination created by moving materials through non-remediation areas.

- d. Remove undamaged items and materials to be cleaned and salvaged from the work area. Materials shall be stored in an area with relative humidity maintained below 60 percent and where temperatures will not damage the material. Notify Owner of existing damage to items prior to removal.
- e. Set up containments, including protection of materials remaining within the containment and AFUs. Notify Owner that the area is prepared for remediation activities.
- f. Pre-demolition inspection by the Owner.
- g. Demolition and removal / cleaning of contaminated materials.
- h. Post-remediation inspection by the Owner.
- i. Perform final cleaning in the containment.
- j. Clean carpet in the containment.
- k. Clearance inspection by the Owner.
- l. Duct and HVAC cleaning, if necessary.
- m. Deconstruction of containment, removal of AFUs.
- n. Clean previously removed items prior to returning to occupied area.

3.3.3 Remediation Procedures

Procedures for remediation depend on the amount of mold growth and the type of material with fungal growth.

3.3.3.1 Remediation of Non-Porous Materials

The method of remediating non-porous items shall be:

- a. HEPA vacuum all surfaces.
- b. Damp wipe all surfaces using clean water or a detergent solution.

3.3.3.2 Semi-Porous Materials (Unfinished Wood)

The method of remediating unfinished wood-based items, including wood and wood framing in wall cavities, shall be:

- a. Cleaning
 - (1) HEPA vacuum all surfaces.
 - (2) Scrub surfaces with a brush and detergent to remove mold, if found

- (3) HEPA vacuum all surfaces to remove dust.
- (4) Repair finishes as required to match original.

3.3.3.3 Semi-Porous Materials

The method of surface cleaning semi-porous materials such as concrete, vinyl wall covering, linoleum, leather furniture, and finished wood products shall be:

- a. HEPA vacuum all surfaces.
- b. Damp wipe surfaces with using clean water or a detergent solution. Avoid over-wetting the material.

3.3.3.4 Porous Materials

- a. Upholstered Furniture
 - (1) Removal: Discard upholstered furniture that has remained wet for 48 hours or longer, or that have visible mold growth.
 - (2) Cleaning: Clean upholstered furniture that has been exposed to mold spores but does not have visible mold growth by HEPA vacuuming upholstery and wood or metal structure, followed by a damp wipe of semi-porous or non-porous portions of the furniture.

3.4 DETAILED SEQUENCE OF WORK FOR MOLD REMOVAL UNDER CONTAINMENT

3.4.1 Preparation for Remediation Work

- a. Provide level of containment and PPE required for the remediation based on the Microbial Remediation Plan.
- b. Disable all HVAC units and exhaust fans in the area to be remediated.
- c. Remove undamaged materials from the work area if they are to be salvaged but cannot be cleaned in place. Store materials in an area with relative humidity maintained below 60 percent and where temperatures will not damage the material. Notify Owner of existing damage to items prior to removal. Clean materials using procedures detailed in Remediation Procedures.
- d. Remove supply diffusers, return grilles and exhaust grilles. Clean diffusers and grilles using procedures detailed in Remediation Procedures.
- e. Construct containment barriers. Existing walls can be used as a portion of the containment barriers if existing openings in walls (such as doors, wall openings, vents, etc.) are sealed using polyethylene.
- f. Install the AFUs and dehumidifiers.
- g. Seal supply, return, and exhaust openings with polyethylene sheeting and protect intakes to air handling units. Air handling units shall remain off.

- h. Install all equipment needed for removal work in the containment area to minimize egress during demolition.
- i. The Owner will inspect the containment to verify that the containment is properly constructed, and the containment area has an overall negative pressure of 0.02 to 0.04 inch water column relative to the outside and adjacent work areas not undergoing active remediation, prior to beginning demolition work.

3.4.2 Demolition

- a. Remove mold contaminated materials to be discarded, such as paper, and furniture. Double bag material in 6 mil poly bags. Seal poly bags using duct tape inside the containment. HEPA vacuum bags before removing them from the containment or airlock. When possible, pass the bags directly from the containment or airlock to the outside. Transport bags to a dumpster. Do not leave the bags at the building.

3.4.3 Post-Demolition Inspection

- a. The Owner will inspect the containment area to verify that all contaminated materials have been removed.
- b. Allow a minimum of 12 hours after completion of removal work, with AFUs operating, for airborne dust in the containment to settle and / or be removed by the AFUs.

3.4.4 Cleaning after Demolition, and Cleaning of Settled Spores from Porous / Non-Porous Materials

- a. Continue to operate AFUs during cleaning.
- b. Clean exposed surfaces.
 - (1) HEPA vacuum all surfaces.
 - (2) Damp wipe all non-porous exposed surfaces including polyethylene sheets used to protect materials, external surfaces of ductwork, studs, and floors with clean rag and clean potable water or detergent solution.
 - (3) Remove poly sheeting inside the containment.
 - (4) HEPA vacuum all surfaces protected by poly sheeting.
 - (5) Damp wipe non-porous surfaces protected by poly sheeting with clean water or a detergent solution.
 - (6) Clean carpet using procedures in Remediation of Fungal Contaminated Building Materials.
- c. Final clearance inspection will be conducted by the Owner. Clearance inspections will be performed using the procedures detailed in Post-Remediation Inspection. Maintain containments in place until spaces are inspected and accepted by the Government as being fully remediated. The Government will determine whether the Contractor shall conduct additional cleaning and repeat the clearance process.

3.5 FIRE PROTECTION

The Contractor shall provide portable fire extinguishers within the containment area and outside the decontamination unit. Fire extinguishers shall be rated for the class of fire hazards in the work area and shall be sized for coverage of the areas within the containment. At a minimum, one 10 pound ABC fire extinguisher for every 1,000 square feet shall be strategically placed around the containment. Personnel shall be trained for emergency egress and the use of fire extinguishers. Notify fire officials of work activities as required.

3.6 CONSTRUCTION BARRIERS

- a. Provide interior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain. Shoring, bracing or support will be necessary when structural wood studs or metal framing need to be removed and replaced when they cannot be cleaned.
- b. Do not disturb microbial-contaminated building materials while isolating work areas. This precaution prevents the release of microbial spores.
- c. Workers shall wear respirators and other PPE as outlined in the microbial remediation plan when installing critical barriers where microbial contaminated surfaces (walls or surfaces with visible settled dusts) are likely to be disturbed. Operate an AFU if disturbance is likely during setup.
- d. Monitor the air pressure differential across work area containments. The monitoring system shall be in place before the start of remedial activities. Verification by the Industrial Hygienist is required prior to the start of the microbial remediation.

3.7 QUALITY ASSURANCE / QUALITY CONTROL REQUIREMENTS

3.7.1 Contractor Qualifications

Work shall be performed by a qualified remediation contractor. Contractor shall carry insurance that specifically covers mold remediation.

Remediation contractor's on-site supervisor shall have one of the following certifications: Certified Mold Remediator (CMR), Certified Mold Remediation Supervisor (CMRS), or Applied Microbial Remediation Specialist (AMRS). Qualified supervisor shall be onsite whenever active remediation is being performed. Set-up activities may be performed without supervisor present; qualified supervisor shall review set-up prior to start of work.

Mold remediation workers shall be given training in PPE and mold remediation activities as required for their particular job. Microbial remediation plan shall provide details of worker training.

3.7.2 Waste Management and Removal

Keep the site and work area free from accumulations of dust, waste materials, or rubbish caused by Contractor operations and free from any flammable materials or other sources of fire hazard. Remove all waste materials and rubbish from and about the work site in strict accordance with

the specifications and applicable codes and regulations.

3.7.3 Post-Remediation Inspection

Clean up all debris and dust in interior spaces outside the work area resulting from the Contractor's remediation work.

After all visible accumulations of material and debris are removed from the containment, provide the Owner a 24-hour notice for a final clearance visual inspection. The Owner and Contractor's Supervisor shall conduct a thorough visual inspection of the work area. If during this inspection any visible debris and/or microbial contamination are observed, the Contractor shall re-clean the work area without additional cost to the Government.

3.8.3.1 Clearance

a. Clearance Criteria

Clearance will be based on visual assessment (all visible mold removed, all visible dust removed, based on a "white glove" test) by the Owner. "White glove" test shall consist of wiping the surface with a clean cloth of color suitable to reveal expected type of dust. For most surfaces, a white cloth is suitable.

- b. Failed remediation areas will be re-cleaned and the AFUs kept in operation another 12 hours, followed by another visual assessment. Subsequent failures will follow the same routine until a pass condition is secured.

3.8 CLEAN-UP AND DISPOSAL

3.8.1 Disposal of Material

Dispose of contaminated bagged waste materials removed during this remediation as general construction debris. Follow all applicable local, State, and Federal requirements for the disposal of this material.

3.8.2 Material Packaging

Place waste, as waste is removed, into a disposal container promptly. Disposal containers shall consist of at a minimum, two layers of clear 6 mil polyethylene bags. Tape bags in a gooseneck fashion to form an airtight seal and label appropriately. Bag waste from vacuums equipped with HEPA filters in 6 mil polyethylene bags.

3.8.3 Building Exit (Waste Disposal)

HEPA vacuum and damp wipe bags of contaminated waste material prior to removal from the building.

3.8.4 Hazardous Material

Should the Contractor encounter any hazardous materials, notify the Owner immediately for direction.

-- End of Section --

APPENDIX

APPENDIX D: STRUCTURAL REPORT

July 19, 2021

Lord Aeck Sargent

1175 Peachtree Street NE
Suite 2400
Atlanta, Georgia 30361

Attn: Ms. Sarah Pitts
Re: **NPS MEMY Medgar and Myrlie Evers National Monument**
2332 Margaret Walker Alexander Drive
Jackson, Mississippi 39213

Condition Assessment of Medgar and Myrlie Evers House

PEC Project No.: **21183**

Dear Ms. Pitts:

At your request, Palmer Engineering Company met you at the Medgar and Myrlie Evers National Monument at the address indicated above on June 29, 2021. The purpose of our visit was to visually assess the condition of the house structure to identify general conditions, necessary repairs, and deficiencies to improve in future renovations necessary for opening the site to the public

Our review is limited to visual observation of the house from the ground, floor, accessible areas of crawlspace and attic. We performed no structural tests, took no material specimens, nor performed any investigatory demolition. The systems and components have been assessed based on the observations made on site. Analysis has been made only of specific structural elements where noted in the report. No geotechnical investigation was performed. Our discussions and review are limited to the items we discussed on site and presented in this report. We did not observe any other areas of the property.

We also reviewed two documents made available to us:

1. Rehabilitation of the Medgar Evers House Museum, dated 10 February 2013 by WFT Architects, P.A.
2. Medgar Evers Home Renovation, A Historic Structures Report, Number GS#501-052, Dated 1995

Construction

For the purpose of this report, the front of the house facing Margaret Walker Alexander Drive, is the South elevation.

The house is a single-story wood framed house, with low-slope hip roof, and brick foundations. The house is clad in wood siding and brick veneer on the front elevation.

The roof is constructed with 2x8 rafters and 2x6 ceiling joists, 16" on center, with 1x4 deck board sheathing. The roofing is a gravel ballasted roof. The low slope roof makes accessing

the attic space beyond the central vent opening in the hallway, difficult to physically impossible.

The walls are presumed 2x4 wood stud walls with 1x diagonal board sheathing on the exterior.

The floor is constructed with 2x8 and 2x10 floor joists, 2x10 central and rim beams, and 1x diagonal board sheathing. Much of this floor was replaced or reinforced as part of the 2013 renovation.

The foundations are brick piers on concrete footings with a brick curtain infill wall at the perimeter. A concrete slab on grade and trench drain has been added in the crawlspace in the 2013 renovation.

Condition Assessment

In general, the Medgar and Myrlie Evers House is in good structural condition. A photo appendix is attached to the end of this assessment to help understand the items described in the this assessment. Following are general descriptions of the conditions of the house and a list of specific observations of interest, and recommendations for consideration in future maintenance, renovation, and budgeting:

Roof and Ceiling

The roof framing is in good condition and appear to be adequate to support the roof and ceiling. There are areas where rafters have been repaired by sistering and roof sheathing has been replaced with 1x deck boards to match existing. These repairs were generally observed along the front wall of the house. Following are some specific observations and recommendations:

1. The ceiling is attached to furring strips, which are attached to the bottom of the ceiling joists. Ridges can be seen in the ceiling corresponding to the furring strips. This is likely due to creep in the ceiling materials due to gravity loads and periods of high humidity over the life of the structure. This is a common occurrence and is not typically a problem. When performing maintenance or renovations, check to verify the ceiling material is flush to the furring strips. Also look for indications the ceiling material has become soft and cannot hold the fasteners. Typically, additional fasteners with washers are sufficient to add additional holding strength.
2. There are several indications of patches in the ceiling. It appears that these are typically due opening made in the ceiling to access and install the sprinkler system. These do not indicate structural problems.
3. There is a beam in the ceiling over the dining room. This beam appears to be performing as intended. However, the beam size, as seen from a distance, may be undersized for the span and loads. It is also possible there is a flitch plate, which add sufficient capacity. Based on the performance thus far, there is no immediate action necessary. We recommend to observe the make-up of this beam from a closer vantage point if the ceiling is opened up as part of other work to verify the capacity. Reinforcement, if necessary, can be made as part of the other work.



4. Several rafter tails have been repaired by cutting off rotten ends and screwing on infill rafter material. These repairs are detailed in the 2013 documents, are in good condition, and do not reduce the structural performance of the rafters.

Walls

The walls, both interior and exterior walls, appear to be in good condition with a few minor conditions worth noting:

1. The south exterior wall of the front bedroom has indications of water infiltration. There are water stains and peeling paint. This is in the vicinity of roof repairs above, indicating there had been a roof leak. The damage does not appear to be causing failures in the wall. However, when repairing the finishes of this room, some closer investigation should be made. This may require removal of some finishes and replacing wall framing if the water and/or termite damage is significant.
2. The exterior face brick on the south façade is in good condition. However, it appears that the brick may have moved out from the house near the top of the wall. This could be the result of loosened fasteners due to the water infiltration mentioned above. The movement is not significant at this point. We recommend doing nothing until the wall framing is investigated as part of repairs of the wall. In the interim, we recommend caulking the corners between the brick and windows, or siding to keep water and pests from infiltrating the walls.

Floor

The floor has had an extensive renovation in 2013. Damage to the floor framing, prior to 2013, appears to have been rot, powder post beetle infestation, and/or termite infestation. The floor of the front bedroom, hall and northeast bedroom have been completely replaced with new 2x10 pressure treated framing. Most of the joists that remained in place have been sister with an additional joist. The center beam at the center of the house was left in place, due to the wall on top, and sistered with 2x10's on the sides. The floor is in general good condition. Following are specific observations and recommendations:

1. The mechanical system seems to be bleeding conditioned air into the crawlspace, causing condensation on ductwork and other metal parts in the crawlspace. This can also cause condensation on the framing and cause rot in non-treated wood members. We recommend sealing leaks in the ductwork.

We also observed cupping of the hardwood floors. This could be the result of different temperature and humidity level between the top side and underside of the floor. If so, this may be minimized by better control of the atmosphere in the crawlspace.

2. The 2013 renovation drawings call for additional blocking at transition between original floor sheathing and sheathing installed in 2013. There are a couple edges of the sheathing transition that are not supported with this blocking. This was noted at the front bedroom. Consider adding this blocking in future maintenance or renovation project.



3. The floor framing, as reinforced in 2013, is now sized to support 80-100 psf live load, depending on the floor area. The current understanding is that the goal is for the floor to support 100 psf live load as is expected with a new museum public space.

In addition to the locations that appear to be able to support 80 psf, instead of the desired of 100 psf, the joists bearing on the center beam have been supported on a 2x4 ledger, matching the original detail. This notch at the end of the joist is deeper than $\frac{1}{4}$ of the joist depth and does not meet code. More importantly, this is a code requirement because this notch can cause splitting of the joist along the wood grain propagating from the notch. This splitting was observed in a couple joists. Not all joists are visible due to insulation and chicken wire holding the insulation in place.

We recommend adding a mid-span support to add load capacity to the floor, increase stiffness of the floor, and reduce the load on the ends of joists with the notch bearing on the center beam.

The mid-span support could consist of a continuous 4x6 beam at the underside of the existing joists, attached with Simpson H2.5 hangers. The 4x6 will be supported by 4x4 posts, 4'-0" on center with a BC4 post cap, connecting to the beam, and an ABU post base connecting to the existing slab on grade.

At locations where the framing can support the desired 100psf, a potential alternative to the mid-span support is to add joist hangers to support the joists at the center beam. The joist hanger will support the bottom of the joist, reducing the potential for joist splitting at the notch.

4. The center beam reinforcing appears to have splices that do not occur over the supports. They also do not appear to be completely aligned with existing or across the butt joints. It is likely that this was constructed this way in the 2013 renovation as a result of fit-up difficulties in an existing framing system. However, we recommend that this beam be re-evaluated as part of future maintenance or renovation program to determine if additional support is warranted for the desired goals.

Foundations and crawlspace

The foundations appear to be in good condition and performing adequately. The base of the interior piers appeared to be moist at the time of our visit. The floor of the crawlspaces is a concrete slab on grade. The 2013 drawings indicate that this slab is 4" thick reinforced with #3 or #4 bars 18" on center. There is also a trench drawing at the center of the space that drains to a tank with a sump pump at the exterior to the east. Following are specific observations and recommendations:

1. There are two condensate lines that drain to the trench drain in the crawlspace. It appears that one is for the mechanical unit. It is unclear what the second line is for. Only one was dispensing water at the time of our visit and creating a puddle on the slab. We recommend that these condensate lines drain directly to the exterior or sump pit on the exterior to reduce the potential for increased humidity in the



crawlspace.

2. The floor was covered in a film of dirt, and a low hanging section of ductwork had a ring of dirt, indicating that the crawlspace had filled with approximately 4" of water at some point in time. This likely occurred during a storm that also knocked out power to the sump pump.

There are several gaps or openings in the foundation wall. one in particular, in the west wall at the north end of the foundation wall, is fairly large, the size of a full brick, that appear to be letting in a significant amount of water at times. There are streaks in the film of dirt on the slab indicating running water moving over the slab from the region of the hole in the wall, to the trench drain.

We recommend patching the holes in the foundation wall with mortar and brick as appropriate. In addition, we recommend repointing all areas of the foundation wall that has loose or missing mortar. There appears to be only a small portion of mortar needing repair. We estimate 10 -20 square feet.

In addition to repairing and patching the foundation walls, we recommend regrading the exterior to direct all water away from the house and drain freely away from the house.

3. There are a few pieces of wood on the floor of the crawlspace and some still in the position of formwork. We recommend removing all wood debris from the crawlspace to avoid termite infestation. We recommend cleaning all debris in the crawlspace to keep access o the crawlspace, and moving through the crawlspace, easy and free from possible cuts or punctures from debris laying on the slab.

Ms. Pitts, I hope we have addressed the structural concerns regarding the condition of the structure. We appreciate your decision to consult Palmer Engineering for structural expertise. Please do not hesitate to call me if you have any questions or if there is anything else we can do for you.

Sincerely,

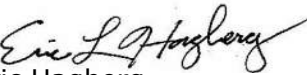

Eric Hagberg
Senior Associate

Photo Appendix



Photo 1 – Ridges in ceiling at attachment to furring strips.



Photo 2 – Patches in ceiling for installation of sprinklers and recessed lights.



Photo 3 – View of attic.



Photo 4 – Repair of rafters and roof sheathing.



Photo 5 – Water damage of south wall of front bedroom.



Photo 6 – Typical repair of rafter tails.



Photo 7 – Exterior of front of house.



Photo 10 – Typical crawlspace. Dirt and debris. Water marks on ductwork.



Photo 8 – Brick veneer at front of house. Slight gap.



Photo 11 – Condensate lines draining in crawlspace.



Photo 9 – Typical foundation wall, face brick and access to crawlspace on east side.



Photo 12 – Cupping of hardwood floors.



Photo 13 – Foundation pier and reinforced center beam.



Photo 16 – Moisture at base of pier.



Photo 14 – Fit up of reinforced beam.



Photo 17 – Erosion of silt from moving water, leaking through west wall.



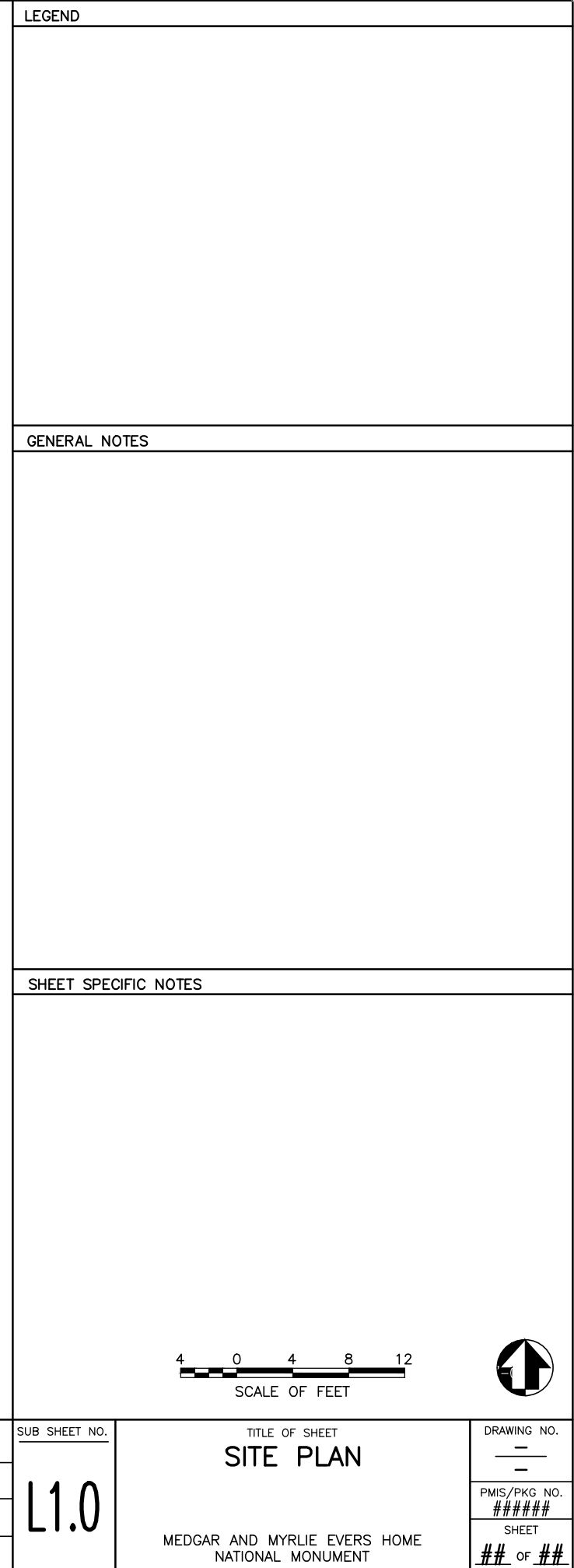
Photo 15 – Split in joist at notch at center beam.



Photo 18 – Formwork left in place.

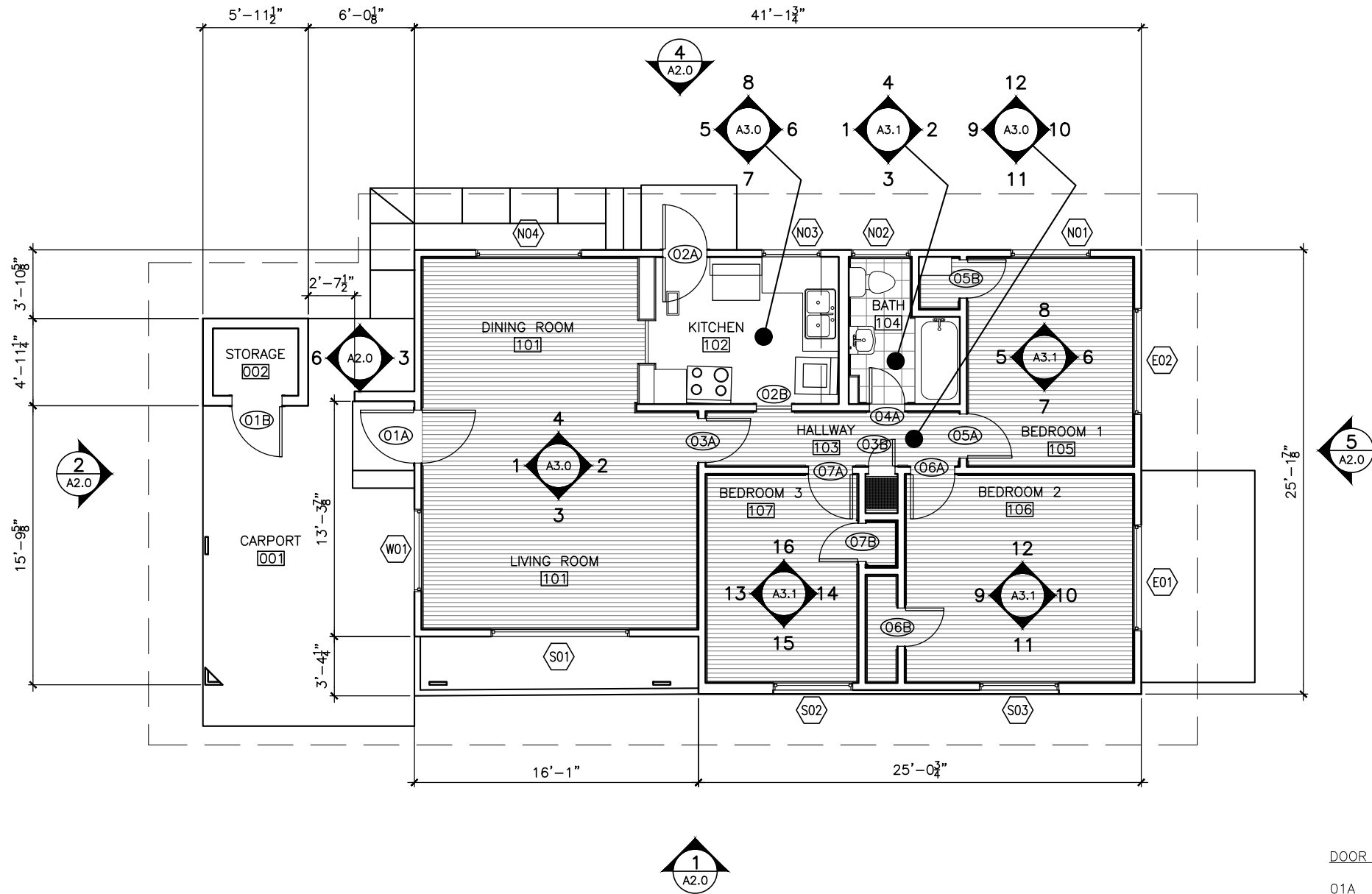
APPENDIX

APPENDIX E: ARCHITECTURAL DRAWINGS



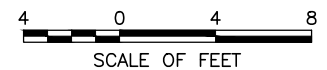
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1 FIRST FLOOR PLAN
A1.0



DOOR WIDTHS

01A	3'-0"	(36")
01B	2'-10"	(34")
02A	2'-6"	(30")
02B	2'-0"	(24")
03A	2'-6"	(30")
03B	1'-6"	(18")
04A	2'-0"	(24")
05A	2'-6"	(30")
05B	2'-2"	(26")
06A	2'-6"	(30")
06B	2'-2"	(26")
07A	2'-6"	(30")
07B	2'-2"	(26")



LEGEND

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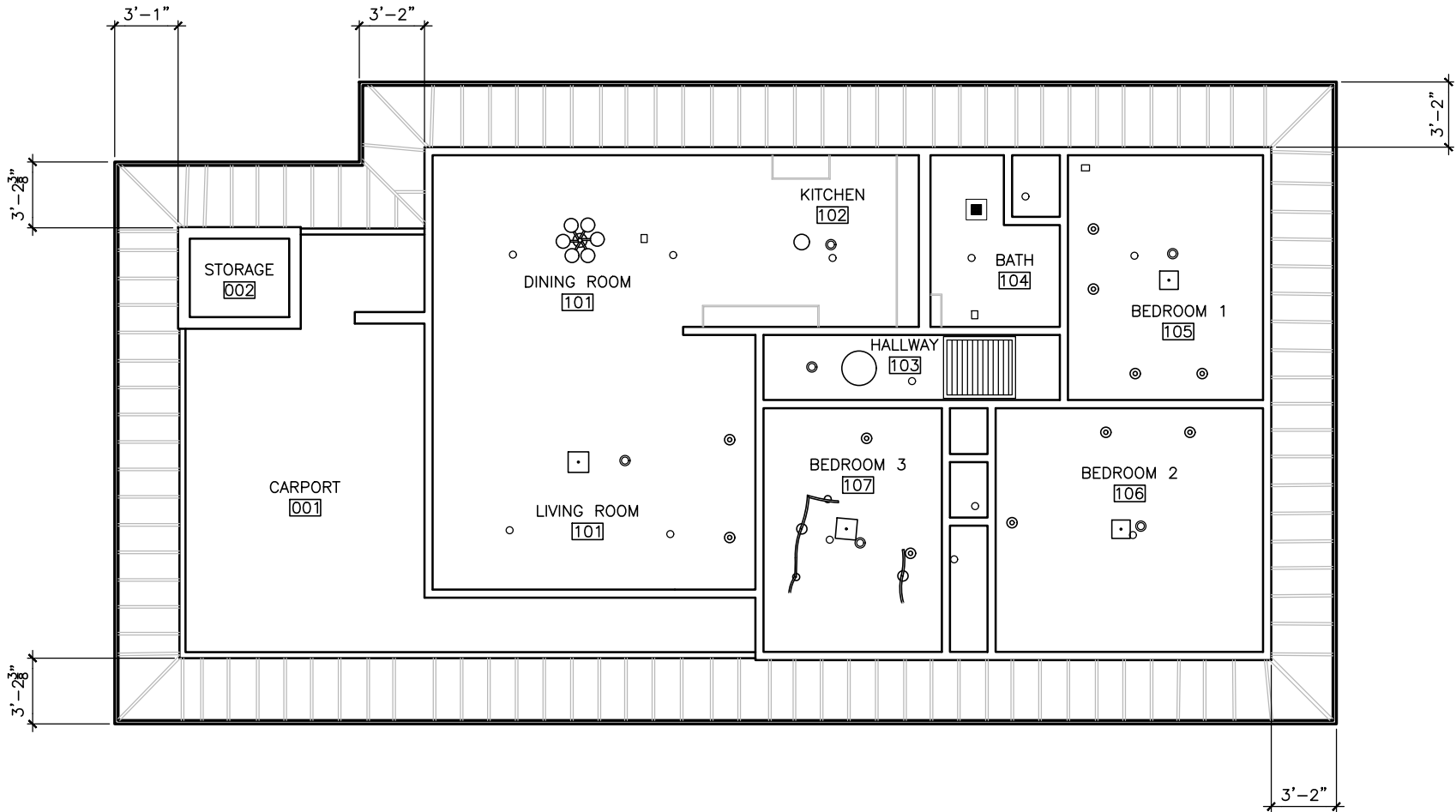
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1 REFLECTED CEILING PLAN
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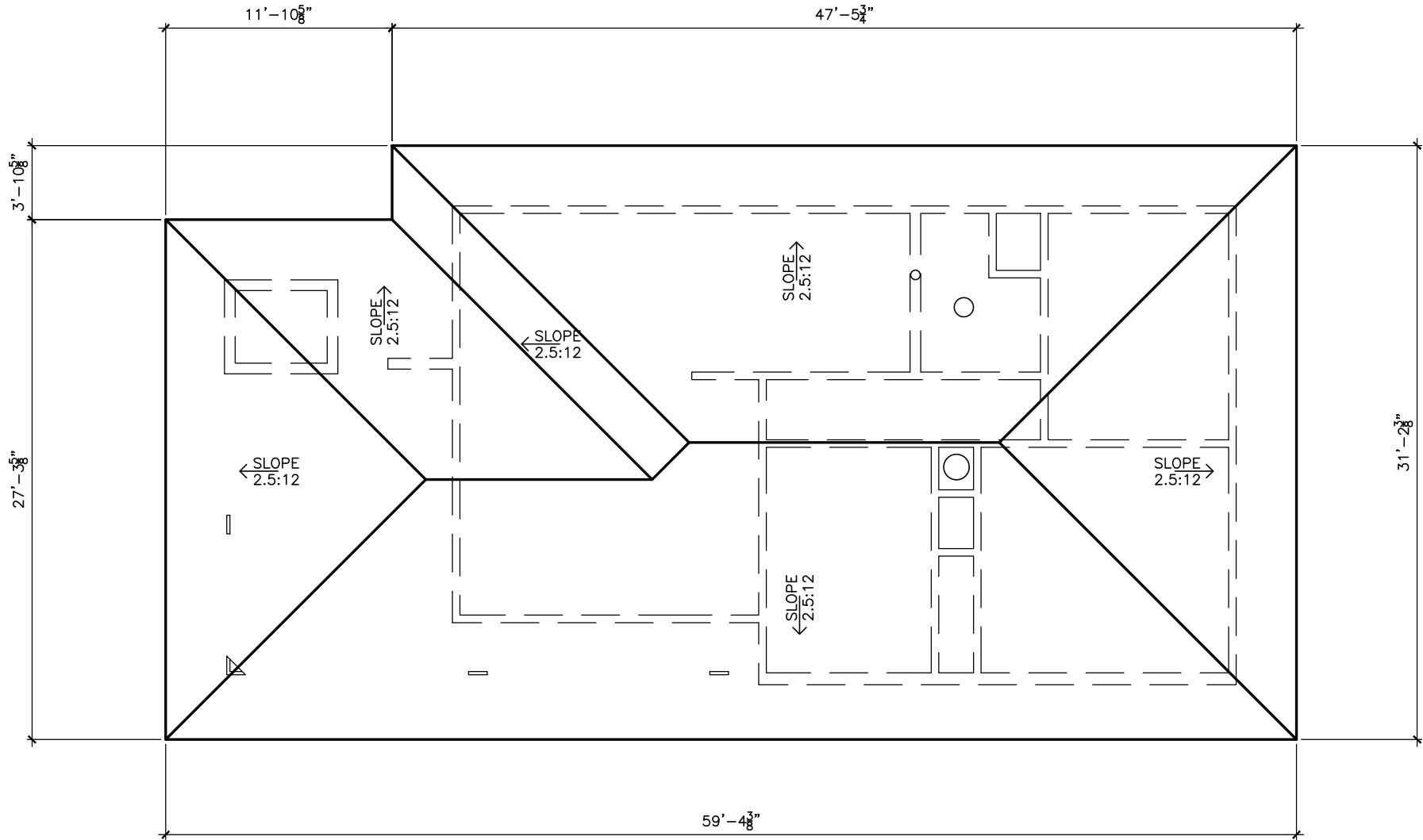
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1 ROOF PLAN
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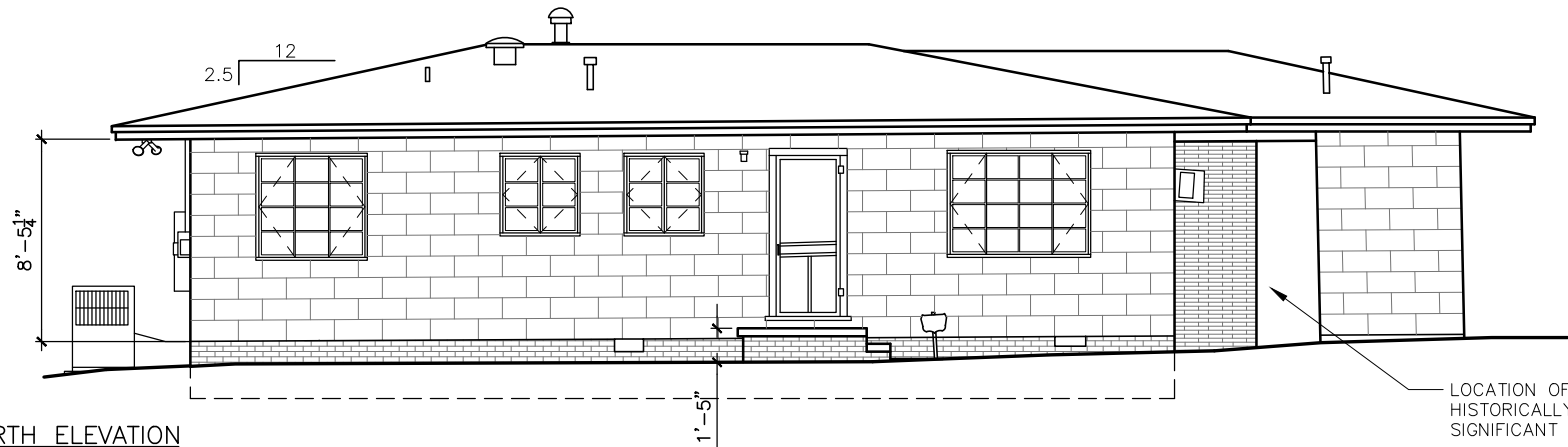
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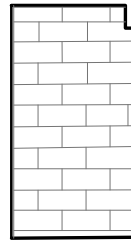
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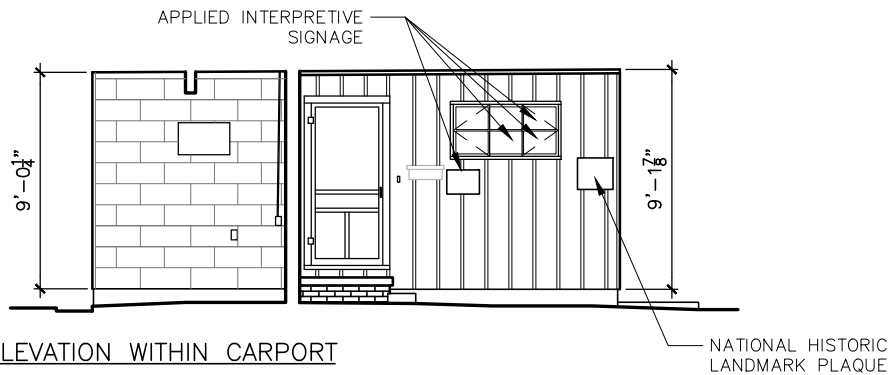


4 NORTH ELEVATION
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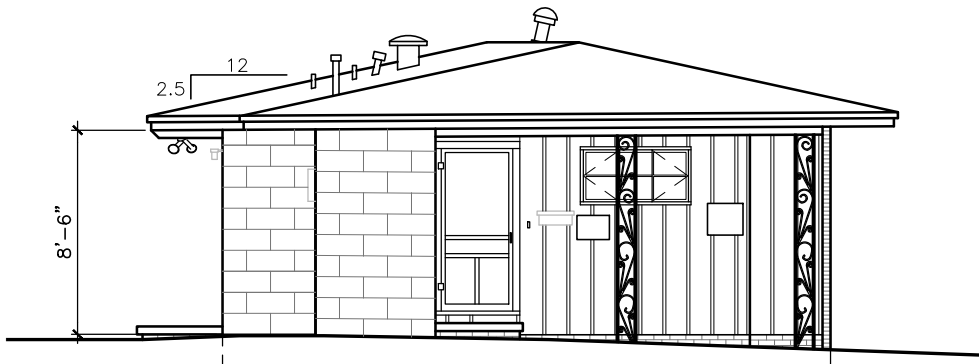
LOCATION OF
HISTORICALLY
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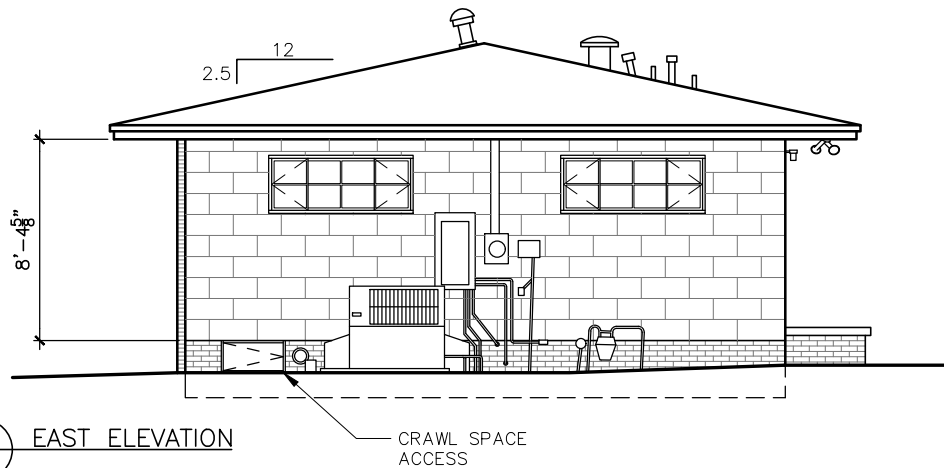
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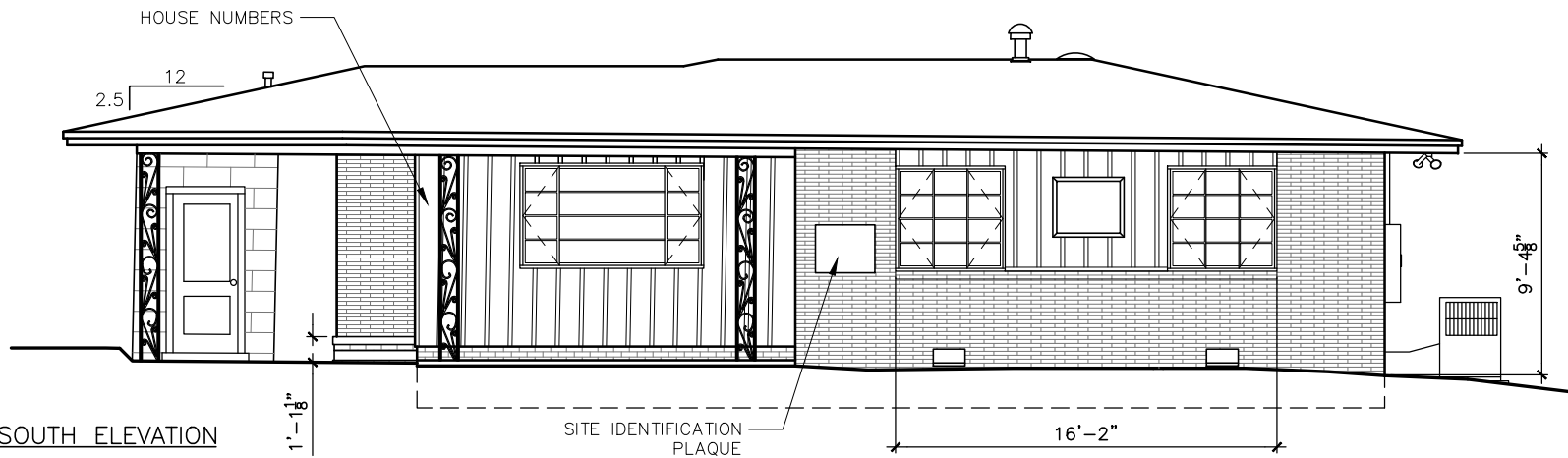
3 WEST ELEVATION WITHIN CARPORT
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2 WEST ELEVATION
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5 EAST ELEVATION
A2.0



1 SOUTH ELEVATION
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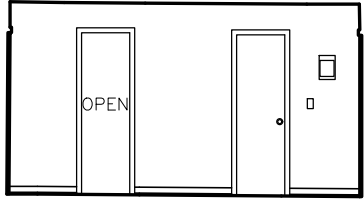
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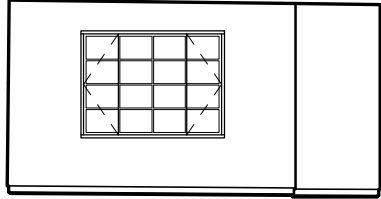
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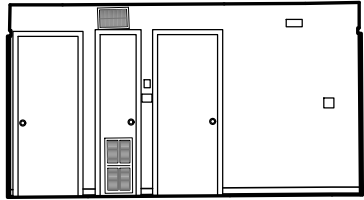
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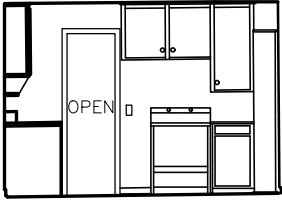
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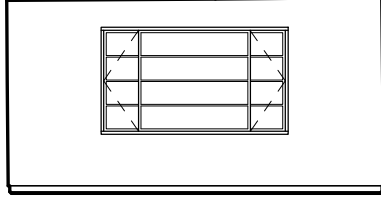
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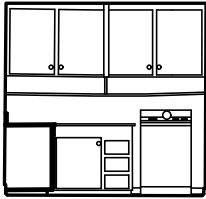
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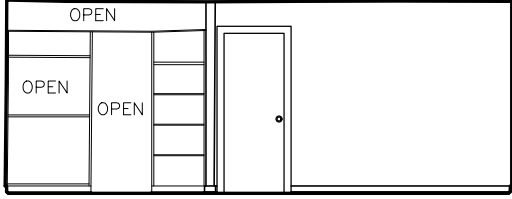
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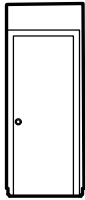
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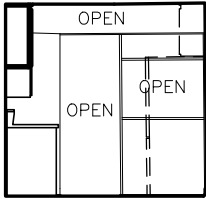
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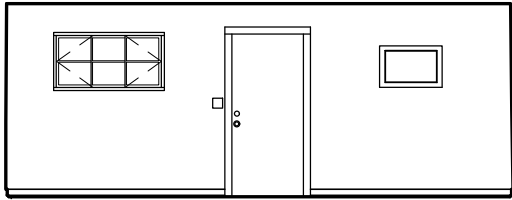
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5
A3.0 KITCHEN — WEST ELEVATION



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A3.0 LIVING/DINING ROOM — WEST ELEVATION

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GENERAL NOTES

A. GENERAL NOTE.

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INTERIOR ELEVATIONS

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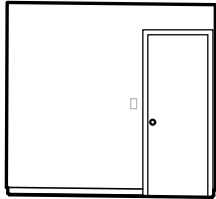
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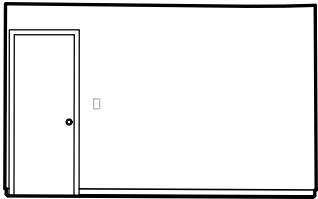
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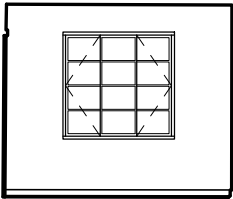
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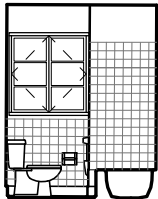
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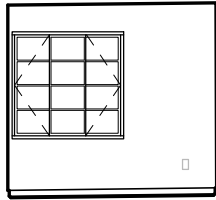
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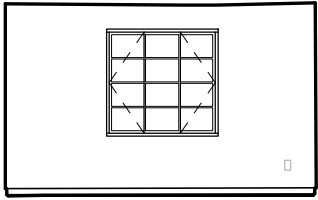
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A3.1
BEDROOM 1 — NORTH ELEVATION



4
A3.1
BATH — NORTH ELEVATION



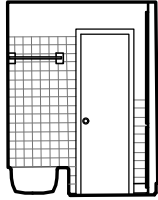
15
A3.1
BEDROOM 3 — SOUTH ELEVATION



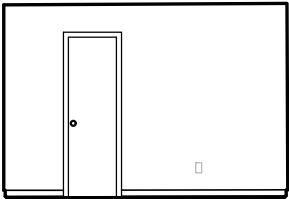
11
A3.1
BEDROOM 2 — SOUTH ELEVATION



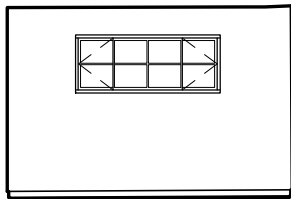
7
A3.1
BEDROOM 1 — SOUTH ELEVATION



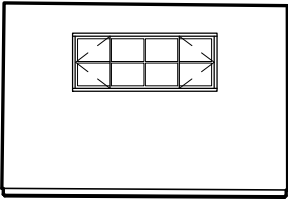
3
A3.1
BATH — SOUTH ELEVATION



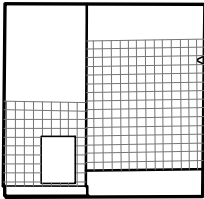
14
A3.1
BEDROOM 3 — EAST ELEVATION



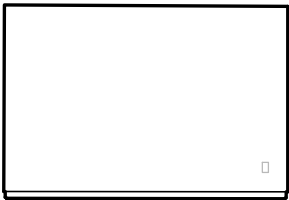
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A3.1
BEDROOM 2 — EAST ELEVATION



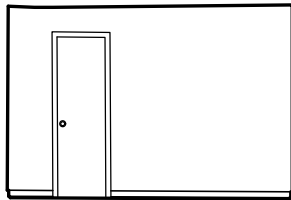
6
A3.1
BEDROOM 1 — EAST ELEVATION



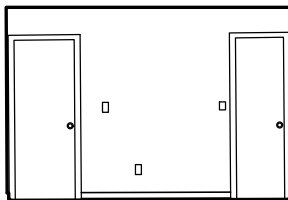
2
A3.1
BATH — EAST ELEVATION



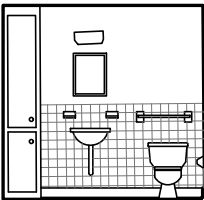
13
A3.1
BEDROOM 3 — WEST ELEVATION



9
A3.1
BEDROOM 2 — WEST ELEVATION



5
A3.1
BEDROOM 1 — WEST ELEVATION



1
A3.1
BATH — WEST ELEVATION

LEGEND

GENERAL NOTES

A. GENERAL NOTE.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



DESIGNED:

XXX

CAD

LAS

TECH. REVIEW:

XXX

DATE:

AUG 2021

SUB SHEET NO.

A3.1

TITLE OF SHEET

INTERIOR ELEVATIONS

MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.

—
—

PMIS/PKG. NO.

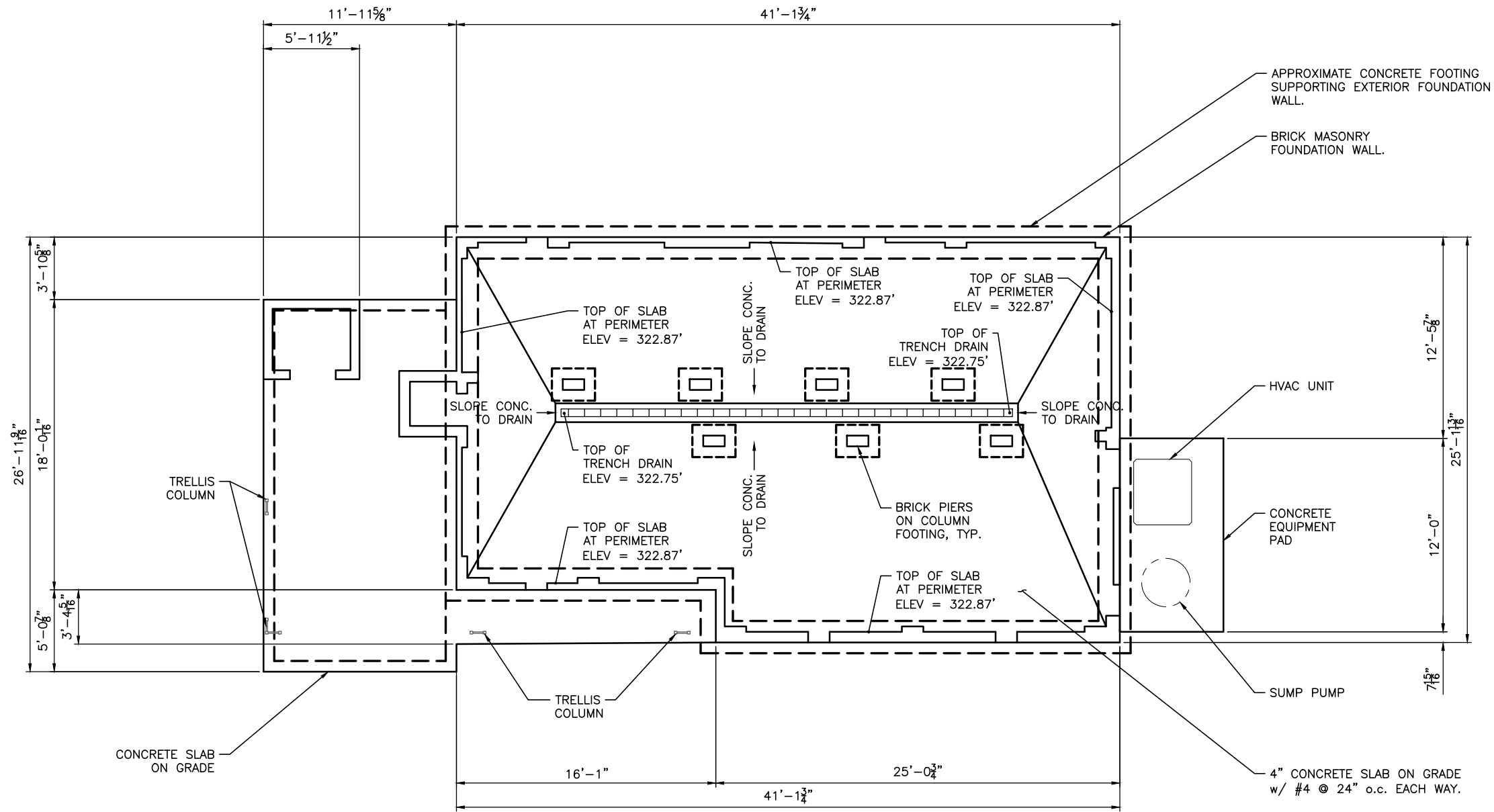
#####

SHEET

OF

APPENDIX

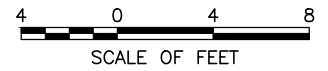
APPENDIX F: ENGINEERING DRAWINGS



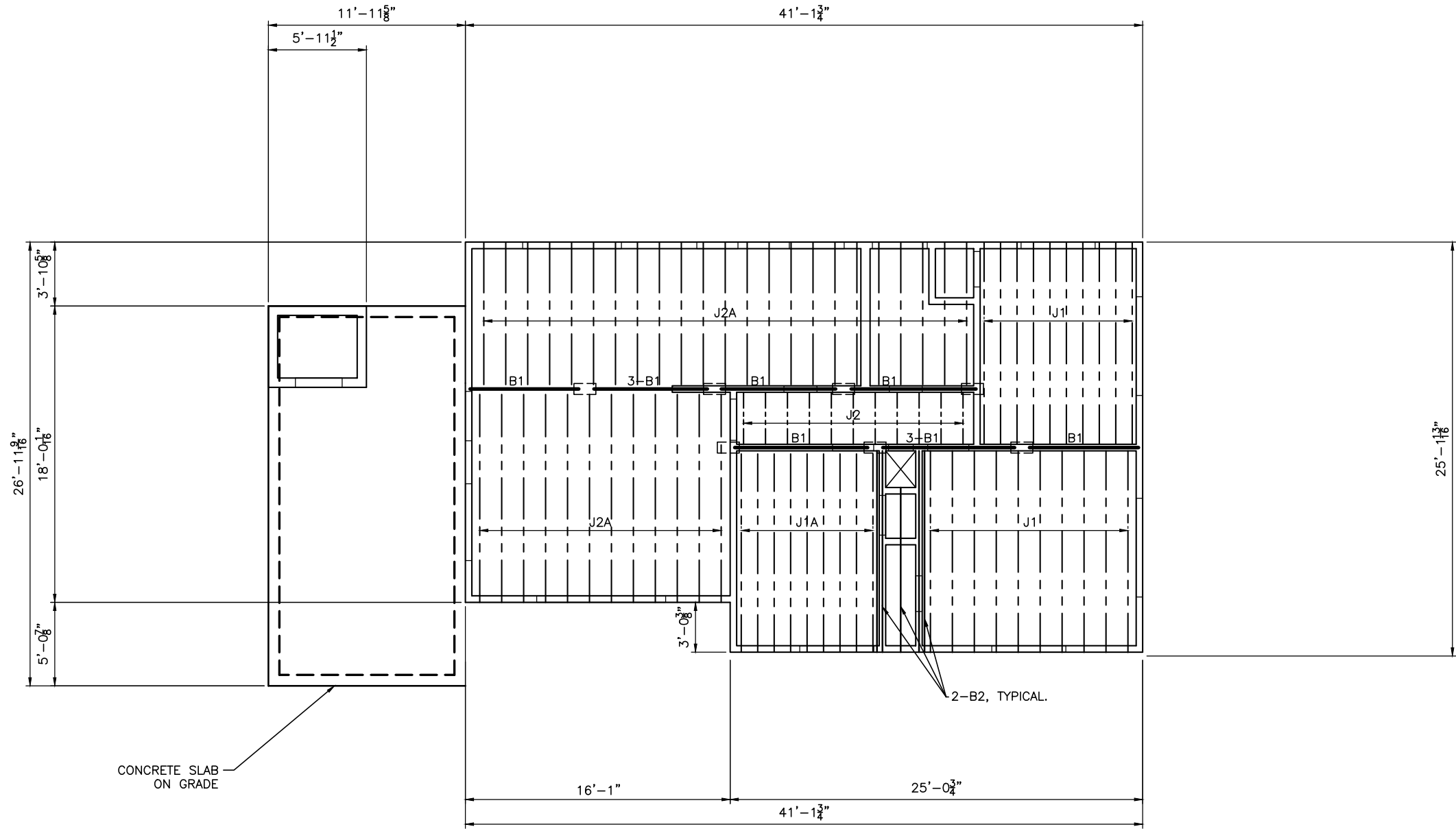
1 PLAN VIEW FOUNDATION PLAN

NOTES:

1. FIELD VERIFY ALL DIMENSIONS.

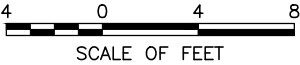


DESIGNED: ELH ELH TECH. REVIEW: DATE: 18/AUG/2021	SUB SHEET NO. S1	TITLE OF SHEET FOUNDATION PLAN MEDGAR AND MYRLIE EVERS HOME NATIONAL MONUMENT	DRAWING NO. --- --- PMIS/PKG NO. --- SHEET XX OF XX
--	-------------------------	--	---

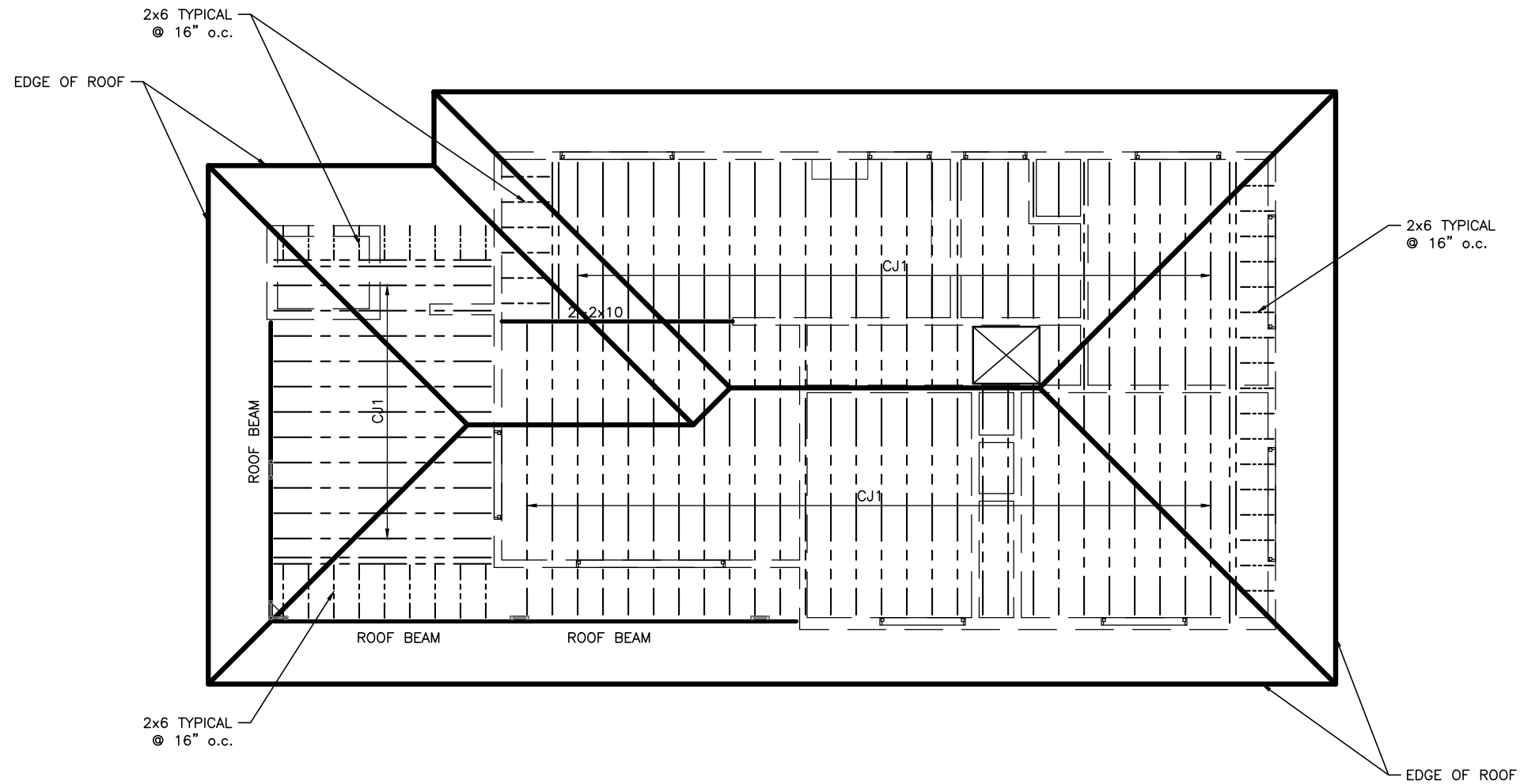


1 PLAN VIEW FIRST FLOOR FRAMING PLAN

- NOTES:
- FIELD VERIFY ALL DIMENSIONS.
- J1 INDICATES PT 2X10 12" ON CENTER
- J1A INDICATES PT 2X10 12" ON CENTER WITH SEVERAL ORIGINAL 2X8 IN PLACE
- J2 INDICATES PT 2X10 16" ON CENTER
- J2A INDICATES PT 2X10 16" ON CENTER WITH ORIGINAL 2X8 IN PLACE
- B1 INDICATES (2) PT 2X10 EACH SIDE OF ORIGINAL (2) 2X8 BEAM
- B2 INDICATES PT 2X10 EACH SIDE OF ORIGINAL 1 OR 2 2X8 BEAM UNDER PARTITION WALLS, TYPICAL.
- INDICATE 3/4" TREATED PLYWOOD SUBFLOOR, TYPICAL



DESIGNED: ELH	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
ELH	S2	FIRST FL. FRAMING PLAN	---
TECH. REVIEW:		MEDGAR AND MYRLIE EVERS HOME NATIONAL MONUMENT	PMIS/PKG NO. ---
DATE: 18/AUG/2021			SHEET XX OF XX



1 PLAN VIEW CEILING FRAMING PLAN

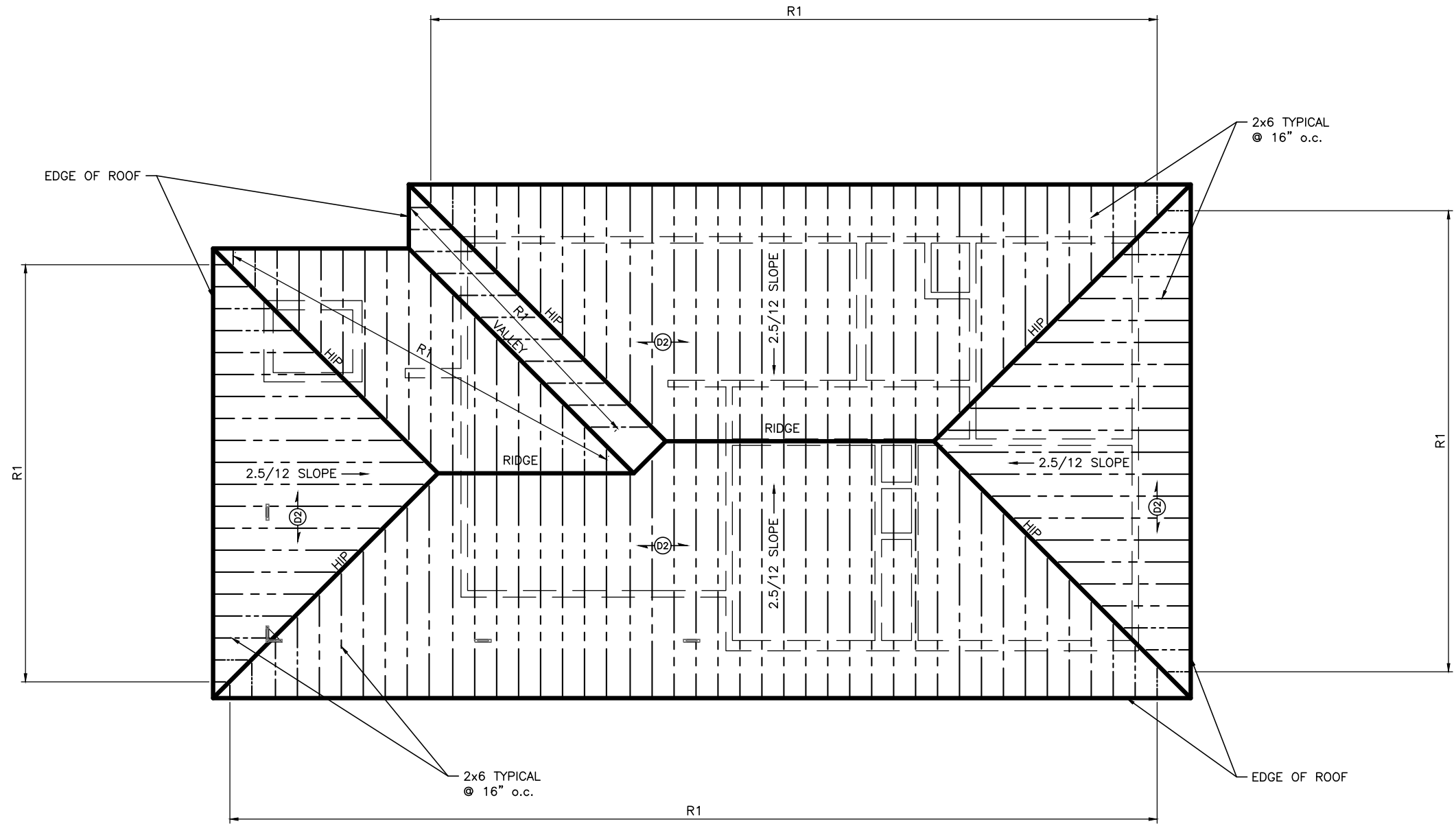
NOTES:

1. FIELD VERIFY ALL DIMENSIONS.

CJ1 INDICATES 2x6 @ 16" o.c. TYPICAL.



DESIGNED: ELH	SUB SHEET NO. S3	TITLE OF SHEET CEILING FRAMING PLAN	DRAWING NO. ---
ELH			PMIS/PKG NO. ---
TECH. REVIEW:			SHEET
DATE: 18/AUG/2021			XX OF XX



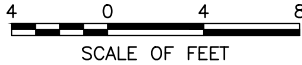
1 PLAN VIEW ROOF FRAMING PLAN

NOTES:

1. FIELD VERIFY ALL DIMENSIONS.

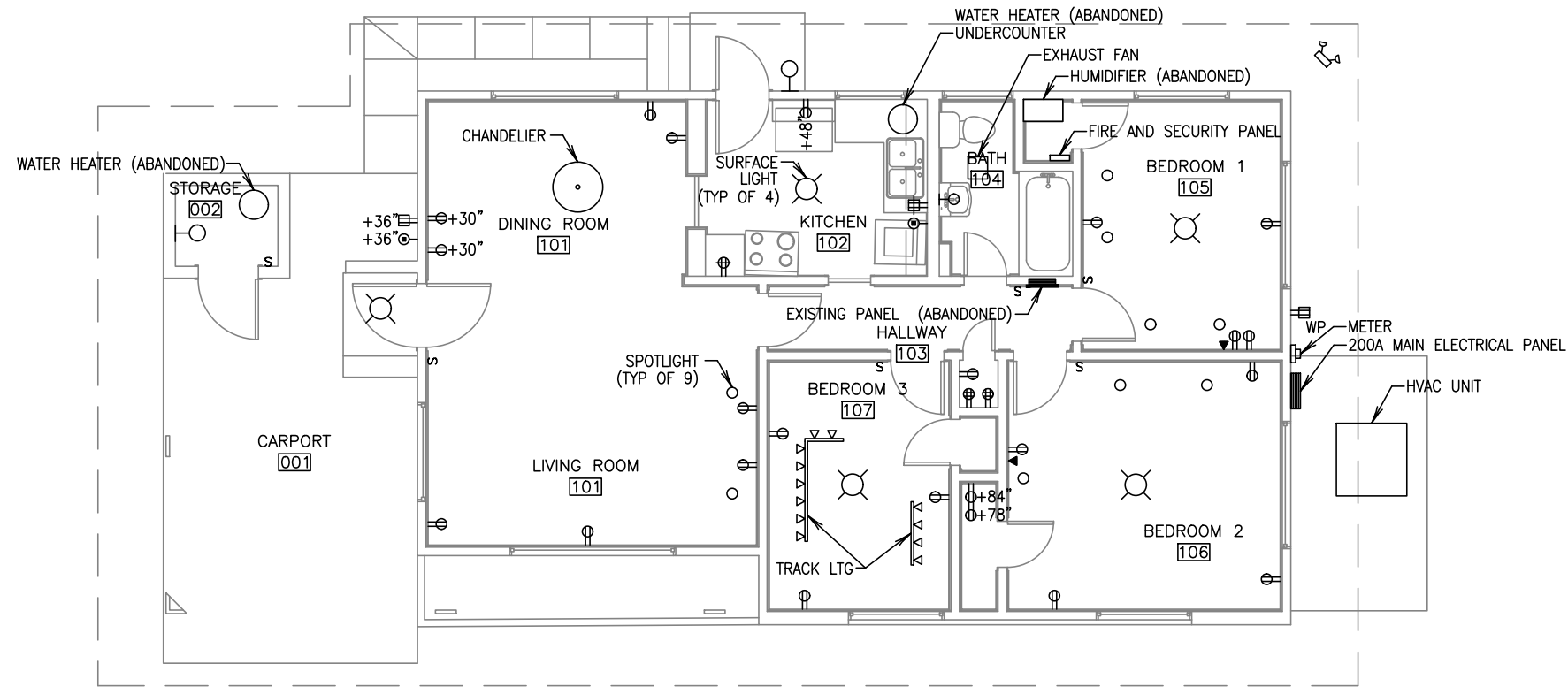
INDICATES 5/8" x 5 1/2" DECK BOARDS – TYPICAL WITH REPAIR PATCHES OF PLYWOOD SHEATHINGS.

R1 INDICATES RAFTERS 2x6 @ 16" o.c. TYPICAL.



DESIGNED: ELH	SUB SHEET NO. S4	TITLE OF SHEET ROOF FRAMING PLAN	DRAWING NO. ---
ELH			PMIS/PKG NO. ---
TECH. REVIEW:			SHEET XX OF XX
DATE: 18/AUG/2021		MEDGAR AND MYRLIE EVERS HOME NATIONAL MONUMENT	

5/20/21 11:24 SCPTTS R22 K:\PROJECTS\11393-00\CADD\01_CENTRAL_FILE\MEWY\16PC00065\DRAWINGS\ELEC\E1.0.DWG XREFS: ...BASES\YE-PLANS.DWG;



1 FIRST FLOOR ELECTRICAL PLAN
E1.0

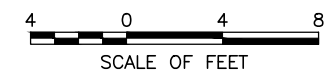
LEGEND

GENERAL NOTES

A. EXISTING CONDITIONS.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



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NAM
DATE:
20 AUG 2021

SUB SHEET NO.
E1.0

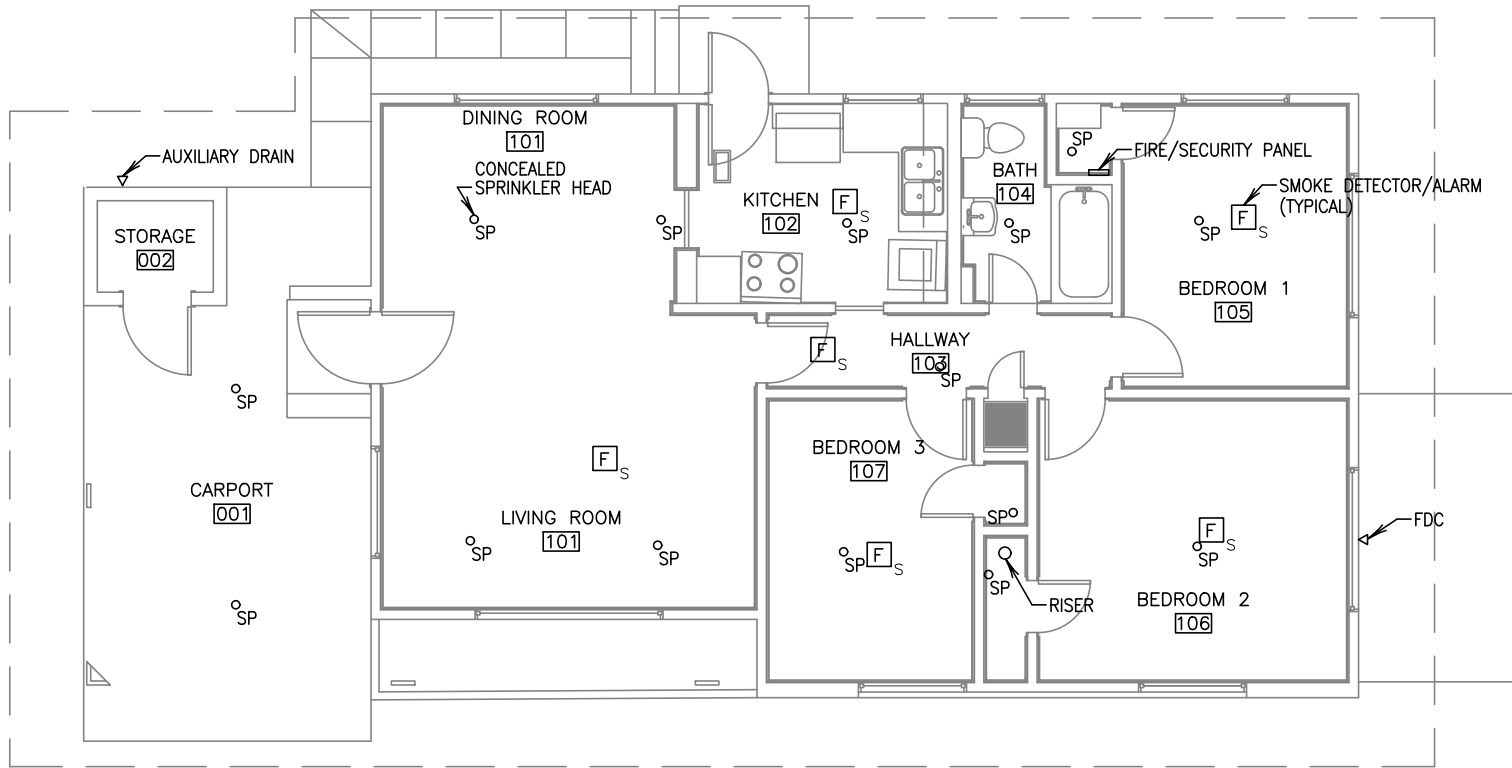
TITLE OF SHEET
**ELECTRICAL
FLOOR PLAN
EXISTING**
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
—
PMIS/PKG. NO.

SHEET
OF

5/20/21 11:24 SCPTTS R22 K:\PROJECTS\11393-00\CADD\01_CENTRAL_FILE\MEMO\16PC00065\DRAWINGS\FAFP\FP1.0.DWG XREFS: ...BASES XF-PLANS.DWG;

1 FIRST FLOOR FIRE PROTECTION PLAN
FP1.0



LEGEND

GENERAL NOTES

- A. FIRE ALARM SYSTEM: HARD-WIRED ADDRESSABLE SYSTEM WITH SMOKE DETECTORS WITH SOUNDER BASE.
- B. FIRE PROTECTION SYSTEM: WET PIPE SYSTEM PROTECTS 1ST AND ATTIC LEVELS. IN ATTIC PIPING IS INSULATED WITH TEMPERATURE MAINTENANCE CABLE.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



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TECH. REVIEW:
HDC
DATE:
20 AUG 2021

SUB SHEET NO.

FP1.0

TITLE OF SHEET
**FIRE PROTECTION
FLOOR PLAN**

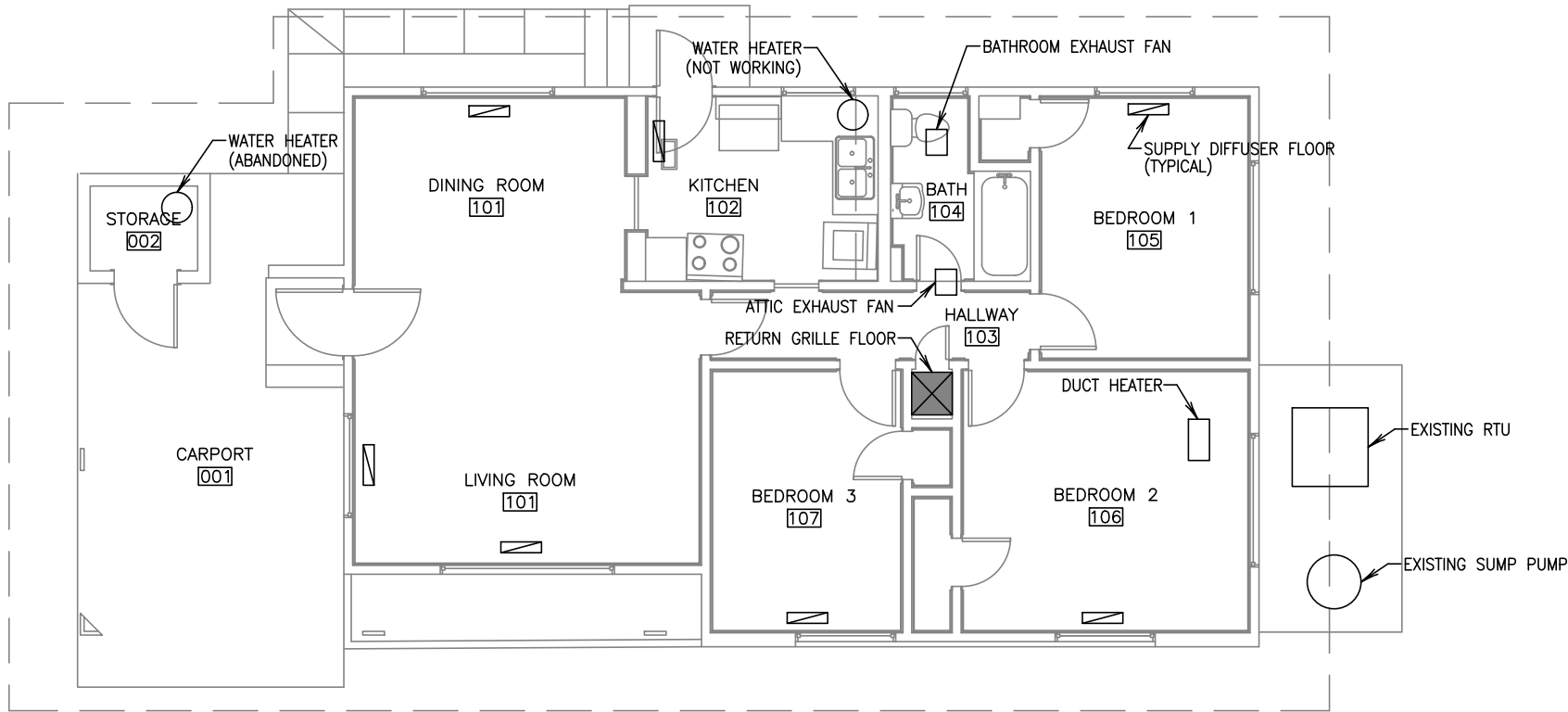
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
—
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PMIS/PKG. NO.

SHEET
OF

5/20/21 11:24 SCPTT5 R22 K:\PROJECTS\11393-00\CADD\01_CENTRAL_FILE\MECH\116PC00065\DRAWINGS\MECH\M1.0.DWG XREFS: ...BASES\XM-PLANS.DWG;

1 FIRST FLOOR MECHANICAL PLAN
M1.0



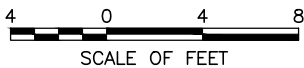
LEGEND

GENERAL NOTES

- A. HVAC SYSTEM: EXTERIOR MOUNTED RTU BOTH HEATS AND COOLS THE BUILDING. GAS IS USED AS THE MAIN SOURCE FOR HEAT WITH A SUPPLEMENTAL ELECTRIC DUCT HEATING UNIT.
- A.A. THERE IS A HUMIDIFIER UNIT HOWEVER IT APPEARS TO BE ABANDONED AND NOT WORKING.
- B. PLUMBING: BOTH WATER HEATERS ARE NOT FUNCTIONING AND APPEAR ABANDONED. OTHER FIXTURES IN THE BUILDING PROVIDE COLD WATER TO THE SINKS. THERE IS A WORKING IRRIGATION SYSTEM.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



DESIGNED:
XXX
CADD
XXX
TECH. REVIEW:
XXX
DATE:
20 AUG 2021

SUB SHEET NO.

M1.0

TITLE OF SHEET
**MECHANICAL AND
PLUMBING
FLOOR PLAN**
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
—
—
PMIS/PKG. NO.

SHEET
OF

APPENDIX

APPENDIX G: COST ESTIMATE

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????
Estimate Date: September 9, 2021
Prepared By: Dan Ergle
Company: ADE Construction Consultants, Inc.
Address: 1298 Rockbridge Road, Suite A
City, State Zip: Stone Mountain, GA. 30087
Phone: (770) 921-2701

BACKGROUND SUPPORTING MATERIAL (Scope of Work):

Estimated construction cost for the Medgar and Myrlie Evers Home upgrades are derived from the Condition Assessment report dated July 2021 prepared by Lord Aeck Sargent, Palmer Engineering, Newcomb & Boyd, and Professional Service Industries, Inc.

SOURCE OF COST DATA:

RS MEANS BCCD 2021 and historical construction costs.

ESTIMATE ASSUMPTIONS:

Work will be scheduled for normal working hours with no weekend or overtime anticipated. The facility will be closed to the public for the duration of the project.

MAJOR CHANGES FROM PREVIOUS ESTIMATE:

Design Contingency has been increased.

**United States Department of the Interior
National Park Service
Class C Construction Cost Estimate**

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????
Estimate Date: September 9, 2021

DESCRIPTION OF MARK-UP & ADD-ONS:

Location Factor:	<u>0.00%</u>	The site is located in Jackson, Mississippi which is a major commercial center with a City Cost Index of 84.6. However, due to the special nature of this project and the small scope of work involved for each trade, a reduced percentage may not be applicable.
Remoteness Factor:	<u>0.00%</u>	The Remoteness Factor is not applicable to the scope of this project.
Wage Rate Factor:	<u>0.00%</u>	RS Means wage rates (adjusted for location) used in this estimate meet or exceed published Davis-Bacon wage rates for Hinds County per Wage Determinations OnLine.gov .
State & Local Taxes:	<u>8.00%</u>	Sales tax rate per Avalara.com for state and local taxes in Atlanta, Ga which are applied to material and equipment unit costs only.
Design Contingency:	<u>25.00%</u>	Due to the inherent nature of the work and the basis of this cost estimate being a condition assessment and no design, a 25% contingency is consistent with this work. The high contingency is expected to cover unanticipated scope revealed during design.
Standard General Conditions:	<u>10.00%</u>	Typical for this type of project and conditions
Government General Conditions:	<u>5.00%</u>	Covers the cost of doing business with the additional government requirements involved.
Historic Preservation Factor:	<u>10.00%</u>	The current estimate includes a 10.0% premium for the protection and maintenance of existing historic fabric and incorporating historical materials, means and methods for construction.
Contractor Overhead:	<u>10.00%</u>	Typical for this type of project and conditions
Contractor Profit:	<u>10.00%</u>	Typical for this type of project and conditions
Bonds and Permits:	<u>2.80%</u>	2.8% is included in the current estimate for the General Contractor's Payment and Performance Bonds.
Contracting Method Adjustment:	<u>5.00%</u>	Not determined at this point.
Annual Inflation Escalation Factor:	<u>5.00%</u>	Projected annual inflation rate, however, today's market is very volatile and uncertain.
Time Until Project Midpoint (Months)	<u>24</u>	Number of months from estimate (or data) date until the projects midpoint of construction.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

BASIS OF ESTIMATE

PROJECT INFORMATION

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????
Estimate Date: September 9, 2021

OTHER COMMENTS:

Fire Protection SF estimate costs:
Wet System \$3.40/sf
Dry System \$4.20/sf
Dry with Nitrogen Generator \$5.50/sf
Preaction System \$5.75sf

**United States Department of the Interior
National Park Service
Class C Construction Cost Estimate**

PROJECT COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Alpha: MEMY
PMIS: ?????

Estimate By: Dan Ergle
Date: 09/09/21

Reviewed By: ST/SCP
Date: 09/09/21

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Asset 1 - Option A	1	VALUE	\$145,041	\$145,041
	Subtotal Direct Construction Costs				\$145,041
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				\$0
	Direct Cost Subtotal without GFP				\$145,041
	Published Location Factor	0.00%			\$0
	Remoteness Factor	0.00%			\$0
	Federal Wage Rate Factor	0.00%			\$0
	State & Local Taxes	8.00%			\$11,603
	Design Contingency	25.00%			\$36,260
	Total Direct Construction Costs				\$192,905
	Standard General Conditions	10.00%			\$19,290
	Government General Conditions	5.00%			\$9,645
	Historic Preservation Factor	10.00%			\$19,290
	Subtotal NET Construction Cost				\$241,131
	Overhead	10.00%			\$24,113
	Profit	10.00%			\$24,113
	Estimated NET Construction Cost				\$289,357
	Bonds & Permits	2.80%			\$8,102
	Contracting Method Adjustment	5.00%			\$14,468
	Inflation Escalation	24	Months	5.00%	\$31,973
	Total Estimated NET Cost of Construction				\$343,900

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A10	FOUNDATIONS					
A1010-1	Repair Gaps In Foundation Walls - Allowance	10	EA	\$ 100.00	\$1,000	
A1010-2	Repoint Foundation Walls On Interior - Allowance	264	SF	\$ 20.00	\$5,280	
A1010-3	Remove Miscellaneous Debris From Crawl Space	1	LS	\$ 300.00	\$300	
A1010-4	Remove Form Work From Crawl Space	1	LS	\$ 500.00	\$500	
SUBTOTAL FOUNDATIONS		1	VALUE	\$ 7,080.00	\$7,080	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20	BASEMENT CONSTRUCTION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL BASEMENT CONSTRUCTION		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10	SUPERSTRUCTURE					
B1010-1	Augument Beam In Dining Room Ceiling - Allowance	8	LF	\$ 100.00	\$800	
B1010-2	Added Blocking For Floor Sheathing - Allowance	20	LF	\$ 15.00	\$300	
B1010-3	Add Mid Span Floor Support - 4"x6" Beam	39	LF	\$ 45.00	\$1,755	
B1010-4	Simpson H2.5 Hangers	30	EA	\$ 10.00	\$300	
B1010-5	Simpson BC4 Post cap	10	EA	\$ 28.00	\$280	
B1010-6	Simpson ABU Post Base	10	EA	\$ 45.00	\$450	
B1010-7	4" x 4" Post - 3' Long	10	EA	\$ 50.00	\$500	
B1010-8	Premium For Confined Space Work	1	LS	\$ 7,500.00	\$7,500	
SUBTOTAL SUPESTRUCTURE		1	VALUE	\$ 11,885.00	\$11,885	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20	EXTERIOR CLOSURE					
B2010-1	Replace Broken Asbestos Siding With Look-alike Material - Allowance	40	SF	\$ 40.00	\$1,600	
B2010-2	Remove Broken Abestos Siding - See F10	40	SF	\$ -		
B2010-3	Clean And Repoint Brick Foundation Walls	264	SF	\$ 20.00	\$5,280	
B2010-4	Remove Plaque And Patch Wall - 2' x 2'	1	LS	\$ 150.00	\$150	
B2010-5	Install Flashing At Siding to Brick Transition	121	LF	\$ 8.50	\$1,029	
B2010-6	Clean/Repair/Paint Steel Windows	184	SF	\$ 50.00	\$9,200	
B2010-7	Paint Asbestos Siding	707	SF	\$ 2.50	\$1,768	
B2010-8	Paint Board And batten Siding	289	SF	\$ 2.50	\$723	
B2010-9	Paint Soffit	537	SF	\$ 2.50	\$1,343	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A				Total Cost:		\$145,041
B2010-10	Paint Exterior Doors	3	EA	\$ 65.00	\$195	
B2010-11	Investigate Brick Anchorage Condition	1	LS	\$ 2,500.00	\$2,500	
B2010-12	Reattach Loose Brick Work - Allowance	207	SF	\$ 10.00	\$2,070	
B2010-13	Paint Wrought Iron Supports	5	EA	\$ 100.00	\$500	
SUBTOTAL EXTERIOR CLOSURE		1	VALUE	\$ 26,356.00	\$26,356	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B30	ROOFING					
B3010-1	Install Gravel Stop	180	LF	\$ 5.50	\$990	
B3010-2	Inspect Roof And Patch As Required	1988	SF	\$ 3.00	\$5,964	
B3010-3	Respread Ballast - Add Too As Needed	1988	SF	\$ 2.00	\$3,976	
SUBTOTAL ROOFING		1	VALUE	\$ 10,930.00	\$10,930	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C10	INTERIOR CONSTRUCTION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL INTERIOR CONSTRUCTION		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C20	STAIRCASES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL STAIRCASES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C30	INTERIOR FINISHES					
				\$ -	\$0	
C3010-1	Miscellaneous Repairs To Walls And Ceiling	1	LS	\$ 1,500.00	\$1,500	
C3010-2	Reattach Shoe Mold - Allowance	1	LS	\$ 150.00	\$150	
C3010-3	Remove And Period Refirgerator - Allowance	1	EA	\$ 2,500.00	\$2,500	
C3010-4	Remove and Replace Period Stove - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-5	Remove And Period Dishwasher - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-6	Remove And Replace Period Washing Machine - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-7	Paint Interior Walls	2656	SF	\$ 1.50	\$3,984	
C3010-8	Paint Ceilings	1053	SF	\$ 1.50	\$1,580	
C3010-9	Paint Analysis - Allowance	1	LS	\$ 4,500.00	\$4,500	
C3010-10	Stain Doors And Paint Frames	8	EA	\$ 130.00	\$1,040	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

SUBTOTAL INTERIOR FINISHES				1	VALUE	\$ 21,253.50	\$21,254
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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D10	CONVEYING SYSTEMS					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL CONVEYING SYSTEMS		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D20	PLUMBING					
D2010-1	Remove existg HW heater in Rm 109	1	Ea	\$ 200.00	\$200	
D2010-2	Provide new instant HE heater for kitchen	1	Ea	\$ 850.00	\$850	
D2010-3	Remove existng elec kitchen undercabinet water heater	1	EA	\$ 200.00	\$200	
SUBTOTAL PLUMBING		1	VALUE	\$ 1,250.00	\$1,250	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D30	HVAC					
D3010-1	Remove as necessary duct & insulation in crawlspace	1	Allow	\$ 900.00	\$900	
D3010-2	Reinsulate all crawlspace duct insulation & repair leaks	1	Allow	\$ 1,600.00	\$1,600	
D3010-3	Extend Condensate Lines To Exterior	40	LF	\$ 10.00	\$400	
D3010-4	Premium For Confined Space Work	1	LS	\$ 1,500.00	\$1,500	
SUBTOTAL HVAC		1	VALUE	\$ 4,400.00	\$4,400	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D40	FIRE PROTECTION					
D4010-1	Select demo of existing sprinkler system	12	Hrs	\$ 48.00	\$576	
D4010-2	New fire sprinkler system	1	Allow	\$ 3,600.00	\$3,600	
SUBTOTAL FIRE PROTECTION		1	VALUE	\$ 4,176.00	\$4,176	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50	ELECTRICAL					
D5010-1	Select demo & safe off	8	hrs	\$ 48.00	\$384	
D5010-2	Replace exist'g panel w/ new 200A w/ new breakers	1	Ea	\$ 1,500.00	\$1,500	
D5010-3	Cover open J boxes	1	Lot	\$ 300.00	\$300	
D5010-4	Provide cover for irrigation power controller	1	Ea	\$ 125.00	\$125	
D5010-5	Remove exist'g security system	8	hrs	\$ 48.00	\$384	
D5010-6	Upgrade and rework security system	1	Allow	\$ 750.00	\$750	
D5010-7	Upgrade & replace FA system	1	Allow	\$ 1,200.00	\$1,200	
SUBTOTAL ELECTRICAL		1	VALUE	\$ 4,643.00	\$4,643	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
E10	EQUIPMENT					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL EQUIPMENT		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
E20	FURNISHINGS					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL FURNISHINGS		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F10	SPECIAL CONSTRUCTION					
F1010-1	Mold Investigation And Remediation - Allowance	1	LS	\$ 4,000.00	\$4,000	
F1010-2	LBP And ACM Abatement - Allowance	1	LS	\$ 10,000.00	\$10,000	
SUBTOTAL SPECIAL CONSTRUCTION		1	VALUE	\$ 14,000.00	\$14,000	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20	SELECTIVE BUILDING DEMOLITION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SELECTIVE BUILDING DEMOLITION		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G10	SITE PREPARATION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE PREPARATION		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G20	SITE IMPROVEMENTS					
G2010-1	Grade Site To Improve Drainage	5092	SF	\$ 1.00	\$5,092	
G2010-2	Fill Depressions	63	SF	\$ 10.00	\$630	
G2010-3	Sod Entire Yard	5092	SF	\$ 0.40	\$2,037	
G2010-4	Rework Existing Swale	109	LF	\$ 20.00	\$2,180	
G2010-5	Create New Swale	76	LF	\$ 20.00	\$1,520	
G2010-6	Remove Chain Link Fence	234	LF	\$ 3.00	\$702	
G2010-7	Install New Chain Link Fence 4'	234	LF	\$ 20.00	\$4,680	
G2010-8	Repair Damaged Irrigation Sprinkler Heads - Allowance	1	LS	\$ 100.00	\$100	
G2010-9	Repair/Reset Clothes Line Poles	2	EA	\$ 175.00	\$350	
G2010-10	Repair Rear Steps And Stoop	1	LS	\$ 1,500.00	\$1,500	
G2010-11	Pressure Wash Rear Steps And Stoop	26	SF	\$ 10.00	\$260	
G2010-12	Install ADA Ramp At Rear Stoop - 23' x 4'	92	SF	\$ 25.00	\$2,300	
G2010-13	Portable ADA Ramp At Carport Door	1	LS	\$ 2,500.00	\$2,500	
G2010-14	Remove Trash Hedges	134	LF	\$ 5.00	\$670	
G2010-15	Remove Plants In Front Planter	5	EA	\$ 15.00	\$75	
G2010-16	Protect Historic Holly Hedge	10	LF	\$ 10.00	\$100	
G2010-17	Restore Carport Flower Bed - Allowance	23	LF	\$ 20.00	\$460	
G2010-18	New Plantings In Front Planter - Allowance	45	SF	\$ 15.00	\$675	
G2010-19	New Perimeter Hedge	236	LF	\$ 15.00	\$3,540	
G2010-20	Remove Hackberry Tree	1	EA	\$ 1,500.00	\$1,500	
G2010-21	Salvage Suitable Parts Of Hackberry Tree For Reuse	1	LS	\$ 750.00	\$750	
G2010-22	Dumpster And Cleanup	1	LS	\$ 1,500.00	\$1,500	
SUBTOTAL SITE IMPROVEMENTS		1	VALUE	\$ 33,120.80	\$33,121	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G30	SITE CIVIL/MECHANICAL UTILITIES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE CIVIL/MECHANICAL UTILITES		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G 40	SITE ELECTRICAL UTILITIES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE ELECTRICAL UTILITIES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G50	OTHER SITE CONSTRUCTION - DRIVEWAY					
				\$ -	\$0	
G5010-1	Option A - Pressure Wash And Clean	248	SF	\$ 10.00	\$2,480	
G5010-2	Option A - Remove Joint Sealant	55	LF	\$ 15.00	\$825	
G5010-3	Option A - Route Joints And Clean Joint	55	LF	\$ 25.00	\$1,375	
G5010-4	Option A - Install New Joint Sealant	55	LF	\$ 15.00	\$825	
G5010-5	Option A - Saw Cut Contraction Joints	68	LF	\$ 6.50	\$442	
				\$ -	\$0	
SUBTOTAL OTHER SITE CONSTRUCTION		1	VALUE	\$ 5,947.00	\$5,947	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ertle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option A

Total Cost: \$145,041

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST - Asset 1 - Option A		1	VALUE	\$ 145,041.30	\$145,041	

**United States Department of the Interior
National Park Service
Class C Construction Cost Estimate**

PROJECT COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Alpha: MEMY
PMIS: ?????

Estimate By: Dan Ergle
Date: 09/09/21

Reviewed By: ST/SCP
Date: 09/09/21

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Asset 1 - Option B	1	VALUE	\$186,446	\$186,446
	Subtotal Direct Construction Costs				\$186,446
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				\$0
	Direct Cost Subtotal without GFP				\$186,446
	Published Location Factor	0.00%			\$0
	Remoteness Factor	0.00%			\$0
	Federal Wage Rate Factor	0.00%			\$0
	State & Local Taxes	8.00%			\$14,916
	Design Contingency	25.00%			\$46,612
	Total Direct Construction Costs				\$247,974
	Standard General Conditions	10.00%			\$24,797
	Government General Conditions	5.00%			\$12,399
	Historic Preservation Factor	10.00%			\$24,797
	Subtotal NET Construction Cost				\$309,967
	Overhead	10.00%			\$30,997
	Profit	10.00%			\$30,997
	Estimated NET Construction Cost				\$371,960
	Bonds & Permits	2.80%			\$10,415
	Contracting Method Adjustment	5.00%			\$18,598
	Inflation Escalation	24	Months	5.00%	\$41,100
	Total Estimated NET Cost of Construction				\$442,073

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A10	FOUNDATIONS					
A1010-1	Repair Gaps In Foundation Walls - Allowance	10	EA	\$ 100.00	\$1,000	
A1010-2	Repoint Foundation Walls On Interior - Allowance	264	SF	\$ 20.00	\$5,280	
A1010-3	Remove Miscellaneous Debris From Crawl Space	1	LS	\$ 300.00	\$300	
A1010-4	Remove Form Work From Crawl Space	1	LS	\$ 500.00	\$500	
SUBTOTAL FOUNDATIONS		1	VALUE	\$ 7,080.00	\$7,080	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20	BASEMENT CONSTRUCTION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL BASEMENT CONSTRUCTION		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10	SUPERSTRUCTURE					
B1010-1	Augument Beam In Dining Room Ceiling - Allowance	8	LF	\$ 100.00	\$800	
B1010-2	Added Blocking For Floor Sheathing - Allowance	20	LF	\$ 15.00	\$300	
B1010-3	Add Mid Span Floor Support - 4"x6" Beam	39	LF	\$ 45.00	\$1,755	
B1010-4	Simpson H2.5 Hangers	30	EA	\$ 10.00	\$300	
B1010-5	Simpson BC4 Post cap	10	EA	\$ 28.00	\$280	
B1010-6	Simpson ABU Post Base	10	EA	\$ 45.00	\$450	
B1010-7	4" x 4" Post - 3' Long	10	EA	\$ 50.00	\$500	
B1010-8	Premium For Confined Space Work	1	LS	\$ 7,500.00	\$7,500	
SUBTOTAL SUPESTRUCTURE		1	VALUE	\$ 11,885.00	\$11,885	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20	EXTERIOR CLOSURE					
B2010-1	Replace Broken Asbestos Siding With Look-alike Material - Allowance	40	SF	\$ 40.00	\$1,600	
B2010-2	Remove Broken Abestos Siding - See F10	40	SF	\$ -		
B2010-3	Clean And Repoint Brick Foundation Walls	264	SF	\$ 20.00	\$5,280	
B2010-4	Remove Plaque And Patch Wall - 2' x 2'	1	LS	\$ 150.00	\$150	
B2010-5	Install Flashing At Siding to Brick Transition	121	LF	\$ 8.50	\$1,029	
B2010-6	Clean/Repair/Paint Steel Windows	184	SF	\$ 50.00	\$9,200	
B2010-7	Paint Asbestos Siding	707	SF	\$ 2.50	\$1,768	
B2010-8	Paint Board And batten Siding	289	SF	\$ 2.50	\$723	
B2010-9	Paint Soffit	537	SF	\$ 2.50	\$1,343	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B						Total Cost:	\$186,446
B2010-10	Paint Exterior Doors	3	EA	\$ 65.00		\$195	
B2010-11	Investigate Brick Anchorage Condition	1	LS	\$ 2,500.00		\$2,500	
B2010-11	Reattach Loose Brick Work - Allowance	207	SF	\$ 10.00		\$2,070	
B2010-12	Paint Wrought Iron Supports	5	EA	\$ 100.00		\$500	
SUBTOTAL EXTERIOR CLOSURE		1	VALUE	\$ 26,356.00		\$26,356	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B30	ROOFING					
B3010-1	Install Gravel Stop	180	LF	\$ 5.50	\$990	
B3010-2	Inspect Roof And Patch As Required	1988	SF	\$ 3.00	\$5,964	
B3010-3	Respread Ballast - Add Too As Needed	1988	SF	\$ 2.00	\$3,976	
SUBTOTAL ROOFING		1	VALUE	\$ 10,930.00	\$10,930	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C10	INTERIOR CONSTRUCTION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL INTERIOR CONSTRUCTION		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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Date: 09/09/21
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Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C20	STAIRCASES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL STAIRCASES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C30	INTERIOR FINISHES					
				\$ -	\$0	
C3010-1	Miscellaneous Repairs To Walls And Ceiling	1	LS	\$ 1,500.00	\$1,500	
C3010-2	Reattach Shoe Mold - Allowance	1	LS	\$ 150.00	\$150	
C3010-3	Remove And Period Refirgerator - Allowance	1	EA	\$ 2,500.00	\$2,500	
C3010-4	Remove and Replace Period Stove - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-5	Remove And Period Dishwasher - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-6	Remove And Replace Period Washing Machine - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-7	Paint Interior Walls	2656	SF	\$ 1.50	\$3,984	
C3010-8	Paint Ceilings	1053	SF	\$ 1.50	\$1,580	
C3010-9	Paint Analysis - Allowance	1	LS	\$ 4,500.00	\$4,500	
C3010-10	Stain Doors And Paint Frames	8	EA	\$ 130.00	\$1,040	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

SUBTOTAL INTERIOR FINISHES				1	VALUE	\$ 21,253.50	\$21,254
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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D10	CONVEYING SYSTEMS					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL CONVEYING SYSTEMS		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D20	PLUMBING					
D2010-1	Remove existg HW heater in Rm 109	1	Ea	\$ 200.00	\$200	
D2010-2	Provide new instant HE heater for kitchen	1	Ea	\$ 850.00	\$850	
D2010-3	Remove existng elec kitchen undercabinet water heater	1	EA	\$ 200.00	\$200	
SUBTOTAL PLUMBING		1	VALUE	\$ 1,250.00	\$1,250	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D30	HVAC					
D3010-1	Remove as necessary duct & insulation in crawlspace	1	Allow	\$ 900.00	\$900	
D3010-2	Reinsulate all crawlspace duct insulation & repair leaks	1	Allow	\$ 1,600.00	\$1,600	
D3010-3	Extend Condensate Lines To Exterior	40	LF	\$ 10.00	\$400	
D3010-4	Premium For Confined Space Work	1	LS	\$ 1,500.00	\$1,500	
SUBTOTAL HVAC		1	VALUE	\$ 4,400.00	\$4,400	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D40	FIRE PROTECTION					
D4010-1	Select demo of existing sprinkler system	12	Hrs	\$ 48.00	\$576	
D4010-2	New fire sprinkler system	1	Allow	\$ 3,600.00	\$3,600	
SUBTOTAL FIRE PROTECTION		1	VALUE	\$ 4,176.00	\$4,176	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50	ELECTRICAL					
D5010-1	Select demo & safe off	8	hrs	\$ 48.00	\$384	
D5010-2	Replace exist'g panel w/ new 200A w/ new breakers	1	Ea	\$ 1,500.00	\$1,500	
D5010-3	Cover open J boxes	1	Lot	\$ 300.00	\$300	
D5010-4	Provide cover for irrigation power controller	1	Ea	\$ 125.00	\$125	
D5010-5	Remove exist'g security system	8	hrs	\$ 48.00	\$384	
D5010-6	Upgrade and rework security system	1	Allow	\$ 750.00	\$750	
D5010-7	Upgrade & replace FA system	1	Allow	\$ 1,200.00	\$1,200	
SUBTOTAL ELECTRICAL		1	VALUE	\$ 4,643.00	\$4,643	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
E10	EQUIPMENT					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL EQUIPMENT		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
E20	FURNISHINGS					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL FURNISHINGS		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F10	SPECIAL CONSTRUCTION					
F1010-1	Mold Investigation And Remediation - Allowance	1	LS	\$ 4,000.00	\$4,000	
F1010-2	LBP And ACM Abatement - Allowance	1	LS	\$ 10,000.00	\$10,000	
SUBTOTAL SPECIAL CONSTRUCTION		1	VALUE	\$ 14,000.00	\$14,000	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20	SELECTIVE BUILDING DEMOLITION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SELECTIVE BUILDING DEMOLITION		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G10	SITE PREPARATION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE PREPARATION		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G20	SITE IMPROVEMENTS					
G2010-1	Grade Site To Improve Drainage	5092	SF	\$ 1.00	\$5,092	
G2010-2	Fill Depressions	63	SF	\$ 10.00	\$630	
G2010-3	Sod Entire Yard	5092	SF	\$ 0.40	\$2,037	
G2010-4	Rework Existing Swale	109	LF	\$ 20.00	\$2,180	
G2010-5	Create New Swale	76	LF	\$ 20.00	\$1,520	
G2010-6	Remove Chain Link Fence	234	LF	\$ 3.00	\$702	
G2010-7	Install New Chain Link Fence 4'	234	LF	\$ 20.00	\$4,680	
G2010-8	Repair Damaged Irrigation Sprinkler Heads - Allowance	1	LS	\$ 100.00	\$100	
G2010-9	Repair/Reset Clothes Line Poles	2	EA	\$ 175.00	\$350	
G2010-10	Repair Rear Steps And Stoop	1	LS	\$ 1,500.00	\$1,500	
G2010-11	Pressure Wash Rear Steps And Stoop	26	SF	\$ 10.00	\$260	
G2010-12	Install ADA Ramp At Rear Stoop - 23' x 4'	92	SF	\$ 25.00	\$2,300	
G2010-13	Portable ADA Ramp At Carport Door	1	LS	\$ 2,500.00	\$2,500	
G2010-14	Remove Trash Hedges	134	LF	\$ 5.00	\$670	
G2010-15	Remove Plants In Front Planter	5	EA	\$ 15.00	\$75	
G2010-16	Protect Historic Holly Hedge	10	LF	\$ 10.00	\$100	
G2010-17	Restore Carport Flower Bed - Allowance	23	LF	\$ 20.00	\$460	
G2010-18	New Plantings In Front Planter - Allowance	45	SF	\$ 15.00	\$675	
G2010-19	New Perimeter Hedge	236	LF	\$ 15.00	\$3,540	
G2010-20	Remove Hackberry Tree	1	EA	\$ 1,500.00	\$1,500	
G2010-21	Salvage Suitable Parts Of Hackberry Tree For Reuse	1	LS	\$ 750.00	\$750	
G2010-22	Dumpster And Cleanup	1	LS	\$ 1,500.00	\$1,500	
SUBTOTAL SITE IMPROVEMENTS		1	VALUE	\$ 33,120.80	\$33,121	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G30	SITE CIVIL/MECHANICAL UTILITIES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE CIVIL/MECHANICAL UTILITES		1	VALUE	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G 40	SITE ELECTRICAL UTILITIES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE ELECTRICAL UTILITIES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G50	OTHER SITE CONSTRUCTION - DRIVEWAY					
				\$ -	\$0	
G5010-1	Option B - Pressure Wash And Clean	248	SF	\$ 10.00	\$2,480	
G5010-2	Option B - Remove / Salvage All Panels	248	SF	\$ 75.00	\$18,600	
G5010-3	Option B - Store Panels For Reuse	248	SF	\$ 50.00	\$12,400	
G5010-4	Option B - Excavate For 6" GAB Base/ Haul Off Spoils	5	CY	\$ 40.00	\$200	
G5010-5	Option B - Place 6" GAB Base And Compact	5	CY	\$ 95.00	\$475	
G5010-6	Option B - Equipment For Handling Panels	1	LS	\$ 2,500.00	\$2,500	
G5010-7	Option B - Replace Panels	248	SF	\$ 35.00	\$8,680	
G5010-8	Option B - Saw Cut Contraction Joints	68	LF	\$ 6.50	\$442	
G5010-9	Option B - Seal Joints - Allowance	55	LF	\$ 15.00	\$825	
G5010-10	Option B - Install Steel Edging	50	LF	\$ 15.00	\$750	
				\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate

LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1	Asset 1 - Option B					Total Cost:	\$186,446
SUBTOTAL OTHER SITE CONSTRUCTION		1	VALUE	\$ 47,352.00		\$47,352	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ertle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option B

Total Cost: \$186,446

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST - Asset 1 - Option B		1	VALUE	\$ 186,446.30	\$186,446	

**United States Department of the Interior
National Park Service
Class C Construction Cost Estimate**

PROJECT COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Alpha: MEMY
PMIS: ?????

Estimate By: Dan Ergle
Date: 09/09/21

Reviewed By: ST/SCP
Date: 09/09/21

Item No.	Description	Quantity	Unit	Cost/Unit	Total
1	Asset 1 - Option C	1	VALUE	\$182,903	\$182,903
	Subtotal Direct Construction Costs				\$182,903
	Value of Government Furnished Property (GFP) Included in Direct Cost (see footnote)*				\$0
	Direct Cost Subtotal without GFP				\$182,903
	Published Location Factor	0.00%			\$0
	Remoteness Factor	0.00%			\$0
	Federal Wage Rate Factor	0.00%			\$0
	State & Local Taxes	8.00%			\$14,632
	Design Contingency	25.00%			\$45,726
	Total Direct Construction Costs				\$243,261
	Standard General Conditions	10.00%			\$24,326
	Government General Conditions	5.00%			\$12,163
	Historic Preservation Factor	10.00%			\$24,326
	Subtotal NET Construction Cost				\$304,077
	Overhead	10.00%			\$30,408
	Profit	10.00%			\$30,408
	Estimated NET Construction Cost				\$364,892
	Bonds & Permits	2.80%			\$10,217
	Contracting Method Adjustment	5.00%			\$18,245
	Inflation Escalation	24	Months	5.00%	\$40,319
	Total Estimated NET Cost of Construction				\$433,672

* GFP costs are only used when the Government pre-purchases items, or provides other materials out of Government inventory, to be installed by contractor. Adjustments and Markup on GFP only include Inflation Escalation; No other adjustment factors or O&P markup have been applied.

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C

Total Cost: \$182,903

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A10	FOUNDATIONS					
A1010-1	Repair Gaps In Foundation Walls - Allowance	10	EA	\$ 100.00	\$1,000	
A1010-2	Repoint Foundation Walls On Interior - Allowance	264	SF	\$ 20.00	\$5,280	
A1010-3	Remove Miscellaneous Debris From Crawl Space	1	LS	\$ 300.00	\$300	
A1010-4	Remove Form Work From Crawl Space	1	LS	\$ 500.00	\$500	
SUBTOTAL FOUNDATIONS		1	VALUE	\$ 7,080.00	\$7,080	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
A20	BASEMENT CONSTRUCTION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL BASEMENT CONSTRUCTION		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B10	SUPERSTRUCTURE					
B1010-1	Augument Beam In Dining Room Ceiling - Allowance	8	LF	\$ 100.00	\$800	
B1010-2	Added Blocking For Floor Sheathing - Allowance	20	LF	\$ 15.00	\$300	
B1010-3	Add Mid Span Floor Support - 4"x6" Beam	39	LF	\$ 45.00	\$1,755	
B1010-4	Simpson H2.5 Hangers	30	EA	\$ 10.00	\$300	
B1010-5	Simpson BC4 Post cap	10	EA	\$ 28.00	\$280	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C					Total Cost:	\$182,903
B1010-6	Simpson ABU Post Base	10	EA	\$ 45.00	\$450	
B1010-7	4" x 4" Post - 3' Long	10	EA	\$ 50.00	\$500	
B1010-8	Premium For Confined Space Work	1	LS	\$ 7,500.00	\$7,500	
SUBTOTAL SUPESTRUCTURE		1	VALUE	\$ 11,885.00	\$11,885	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
B20	EXTERIOR CLOSURE					
B2010-1	Replace Broken Asbestos Siding With Look-alike Material - Allowance	40	SF	\$ 40.00	\$1,600	
B2010-2	Remove Broken Abestos Siding - See F10	40	SF	\$ -		
B2010-3	Clean And Repoint Brick Foundation Walls	264	SF	\$ 20.00	\$5,280	
B2010-4	Remove Plaque And Patch Wall - 2' x 2'	1	LS	\$ 150.00	\$150	
B2010-5	Install Flashing At Siding to Brick Transition	121	LF	\$ 8.50	\$1,029	
B2010-6	Clean/Repair/Paint Steel Windows	184	SF	\$ 50.00	\$9,200	
B2010-7	Paint Asbestos Siding	707	SF	\$ 2.50	\$1,768	
B2010-8	Paint Board And batten Siding	289	SF	\$ 2.50	\$723	
B2010-9	Paint Soffit	537	SF	\$ 2.50	\$1,343	
B2010-10	Paint Exterior Doors	3	EA	\$ 65.00	\$195	
B2010-11	Investigate Brick Anchorage Condition	1	LS	\$ 2,500.00	\$2,500	
B2010-11	Reattach Loose Brick Work - Allowance	207	SF	\$ 10.00	\$2,070	
B2010-12	Paint Wrought Iron Supports	5	EA	\$ 100.00	\$500	
SUBTOTAL EXTERIOR CLOSURE		1	VALUE	\$ 26,356.00	\$26,356	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
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Estimate By: Dan Ergle
Date: 09/09/21
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Date: 09/09/21

Summary Item 1 Asset 1 - Option C Total Cost: \$182,903

B30	ROOFING					
B3010-1	Install Gravel Stop	180	LF	\$ 5.50	\$990	
B3010-2	Inspect Roof And Patch As Required	1988	SF	\$ 3.00	\$5,964	
B3010-3	Respread Ballast - Add Too As Needed	1988	SF	\$ 2.00	\$3,976	
SUBTOTAL ROOFING		1	VALUE	\$ 10,930.00	\$10,930	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C10	INTERIOR CONSTRUCTION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL INTERIOR CONSTRUCTION		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C20	STAIRCASES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C					Total Cost:	\$182,903
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL STAIRCASES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
C30	INTERIOR FINISHES					
				\$ -	\$0	
C3010-1	Miscellaneous Repairs To Walls And Ceiling	1	LS	\$ 1,500.00	\$1,500	
C3010-2	Reattach Shoe Mold - Allowance	1	LS	\$ 150.00	\$150	
C3010-3	Remove And Period Refirgerator - Allowance	1	EA	\$ 2,500.00	\$2,500	
C3010-4	Remove and Replace Period Stove - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-5	Remove And Period Dishwasher - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-6	Remove And Replace Period Washing Machine - Allowance	1	EA	\$ 2,000.00	\$2,000	
C3010-7	Paint Interior Walls	2656	SF	\$ 1.50	\$3,984	
C3010-8	Paint Ceilings	1053	SF	\$ 1.50	\$1,580	
C3010-9	Paint Analysis - Allowance	1	LS	\$ 4,500.00	\$4,500	
C3010-10	Stain Doors And Paint Frames	8	EA	\$ 130.00	\$1,040	
SUBTOTAL INTERIOR FINISHES		1	VALUE	\$ 21,253.50	\$21,254	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D10	CONVEYING SYSTEMS					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	

United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
Park Alpha: MEMY
PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C					Total Cost:	\$182,903
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL CONVEYING SYSTEMS		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D20	PLUMBING					
D2010-1	Remove existg HW heater in Rm 109	1	Ea	\$ 200.00	\$200	
D2010-2	Provide new instant HE heater for kitchen	1	Ea	\$ 850.00	\$850	
D2010-3	Remove existng elec kitchen undercabinet water heater	1	EA	\$ 200.00	\$200	
SUBTOTAL PLUMBING		1	VALUE	\$ 1,250.00	\$1,250	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D30	HVAC					
D3010-1	Remove as necessary duct & insulation in crawlspace	1	Allow	\$ 900.00	\$900	
D3010-2	Reinsulate all crawlspace duct insuation & repair leaks	1	Allow	\$ 1,600.00	\$1,600	
D3010-3	Extend Condensate Lines To Exterior	40	LF	\$ 10.00	\$400	
D3010-4	Premium For Confined Space Work	1	LS	\$ 1,500.00	\$1,500	
SUBTOTAL HVAC		1	VALUE	\$ 4,400.00	\$4,400	

United States Department of the Interior
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PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C

Total Cost: \$182,903

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D40	FIRE PROTECTION					
D4010-1	Select demo of existing sprinkler system	12	Hrs	\$ 48.00	\$576	
D4010-2	New fire sprinkler system	1	Allow	\$ 3,600.00	\$3,600	
SUBTOTAL FIRE PROTECTION		1	VALUE	\$ 4,176.00	\$4,176	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
D50	ELECTRICAL					
D5010-1	Select demo & safe off	8	hrs	\$ 48.00	\$384	
D5010-2	Replace exist'g panel w/ new 200A w/ new breakers	1	Ea	\$ 1,500.00	\$1,500	
D5010-3	Cover open J boxes	1	Lot	\$ 300.00	\$300	
D5010-4	Provide cover for irrigation power controller	1	Ea	\$ 125.00	\$125	
D5010-5	Remove exist'g security system	8	hrs	\$ 48.00	\$384	
D5010-6	Upgrade and rework security system	1	Allow	\$ 750.00	\$750	
D5010-7	Upgrade & replace FA system	1	Allow	\$ 1,200.00	\$1,200	
SUBTOTAL ELECTRICAL		1	VALUE	\$ 4,643.00	\$4,643	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
E10	EQUIPMENT					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	

United States Department of the Interior
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Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C						Total Cost:	\$182,903
Level 3 Code	Description	0	Unit	\$	-	\$0	
Level 3 Code	Description	0	Unit	\$	-	\$0	
Level 3 Code	Description	0	Unit	\$	-	\$0	
Level 3 Code	Description	0	Unit	\$	-	\$0	
Level 3 Code	Description	0	Unit	\$	-	\$0	
SUBTOTAL EQUIPMENT		1	VALUE	\$	-	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
E20	FURNISHINGS					
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
Level 3 Code	Description	0	Unit	\$	-	\$0
SUBTOTAL FURNISHINGS		1	VALUE	\$	-	\$0

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F10	SPECIAL CONSTRUCTION					
F1010-1	Mold Investigation And Remediation - Allowance	1	LS	\$ 4,000.00	\$4,000	
F1010-2	LBP And ACM Abatement - Allowance	1	LS	\$ 10,000.00	\$10,000	
SUBTOTAL SPECIAL CONSTRUCTION		1	VALUE	\$ 14,000.00	\$14,000	

United States Department of the Interior
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LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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PMIS Number: ?????

Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C

Total Cost: \$182,903

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
F20	SELECTIVE BUILDING DEMOLITION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SELECTIVE BUILDING DEMOLITION		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G10	SITE PREPARATION					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
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Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE PREPARATION		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
Park: Medgar and Myrlie Evers Home National Monument
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Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
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Summary Item 1 Asset 1 - Option C

Total Cost: \$182,903

G20 SITE IMPROVEMENTS						
G2010-1	Grade Site To Improve Drainage	5092	SF	\$ 1.00	\$5,092	
G2010-2	Fill Depressions	63	SF	\$ 10.00	\$630	
G2010-3	Sod Entire Yard	5092	SF	\$ 0.40	\$2,037	
G2010-4	Rework Existing Swale	109	LF	\$ 20.00	\$2,180	
G2010-5	Create New Swale	76	LF	\$ 20.00	\$1,520	
G2010-6	Remove Chain Link Fence	234	LF	\$ 3.00	\$702	
G2010-7	Install New Chain Link Fence 4'	234	LF	\$ 20.00	\$4,680	
G2010-8	Repair Damaged Irrigation Sprinkler Heads - Allowance	1	LS	\$ 100.00	\$100	
G2010-9	Repair/Reset Clothes Line Poles	2	EA	\$ 175.00	\$350	
G2010-10	Repair Rear Steps And Stoop	1	LS	\$ 1,500.00	\$1,500	
G2010-11	Pressure Wash Rear Steps And Stoop	26	SF	\$ 10.00	\$260	
G2010-12	Install ADA Ramp At Rear Stoop - 23' x 4'	92	SF	\$ 25.00	\$2,300	
G2010-13	Portable ADA Ramp At Carport Door	1	LS	\$ 2,500.00	\$2,500	
G2010-14	Remove Trash Hedges	134	LF	\$ 5.00	\$670	
G2010-15	Remove Plants In Front Planter	5	EA	\$ 15.00	\$75	
G2010-16	Protect Historic Holly Hedge	10	LF	\$ 10.00	\$100	
G2010-17	Restore Carport Flower Bed - Allowance	23	LF	\$ 20.00	\$460	
G2010-18	New Plantings In Front Planter - Allowance	45	SF	\$ 15.00	\$675	
G2010-19	New Perimeter Hedge	236	LF	\$ 15.00	\$3,540	
G2010-20	Remove Hackberry Tree	1	EA	\$ 1,500.00	\$1,500	
G2010-21	Salvage Suitable Parts Of Hackberry Tree For Reuse	1	LS	\$ 750.00	\$750	
G2010-22	Dumpster And Cleanup	1	LS	\$ 1,500.00	\$1,500	
SUBTOTAL SITE IMPROVEMENTS		1	VALUE	\$ 33,120.80	\$33,121	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
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United States Department of the Interior
National Park Service
Class C Construction Cost Estimate
LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C Total Cost: \$182,903

G30	SITE CIVIL/MECHANICAL UTILITIES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE CIVIL/MECHANICAL UTILITES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G 40	SITE ELECTRICAL UTILITIES					
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
Level 3 Code	Description	0	Unit	\$ -	\$0	
SUBTOTAL SITE ELECTRICAL UTILITIES		1	VALUE	\$ -	\$0	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
G50	OTHER SITE CONSTRUCTION - DRIVEWAY					
				\$ -	\$0	

United States Department of the Interior
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LINE ITEM COST SUMMARY

Project: MEDGAR AND MYRLIE EVERS HOME UPGRADES
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Park Alpha: MEMY
PMIS Number: ?????

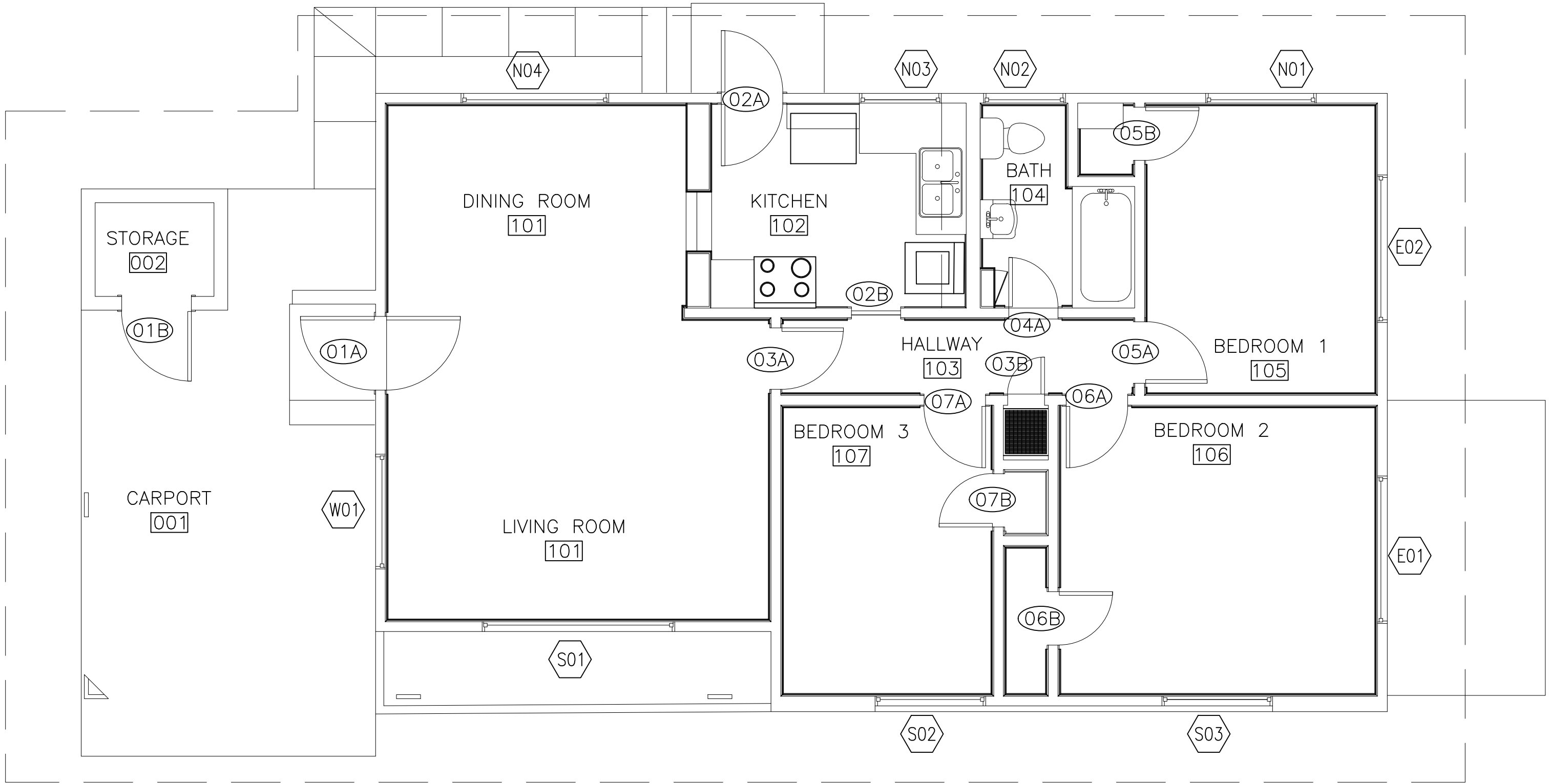
Estimate By: Dan Ergle
Date: 09/09/21
Reviewed By: ST/SCP
Date: 09/09/21

Summary Item 1 Asset 1 - Option C						Total Cost:	\$182,903
G5010-1	Option C - Pressure Wash And Clean	248	SF	\$	10.00	\$2,480	
G5010-2	Option C - Remove / Salvage All Panels	248	SF	\$	75.00	\$18,600	
G5010-3	Option C - Store Panels For Reuse	248	SF	\$	50.00	\$12,400	
G5010-4	Option C - Saw Cut Select Areas For Reuse	50	SF	\$	50.00	\$2,500	
G5010-5	Option C - Excavate For 6" GAB Base Haul Off	5	CY	\$	40.00	\$200	
G5010-6	Option C - Place 6" GAB Base And Compact	5	CY	\$	95.00	\$475	
G5010-7	Option C - Replace Select Panels - Allowance	100	SF	\$	50.00	\$5,000	
G5010-8	Option C - Saw Cut Contraction Joints	68	LF	\$	6.50	\$442	
G5010-9	Option C - Place 4" Concrete Slab	148	SF	\$	6.50	\$962	
G5010-10	Option C - Install Steel Edging	50	LF	\$	15.00	\$750	
				\$	-	\$0	
SUBTOTAL OTHER SITE CONSTRUCTION		1	VALUE	\$	43,809.00	\$43,809	

Uniformat II WBS Code	Description	Quantity	Unit	Cost/Unit	Total Cost	Remarks
TOTAL COST -Asset 1 - Option C		1	VALUE	\$ 182,903.30	\$182,903	

Appendix B:
Existing Condition Drawings

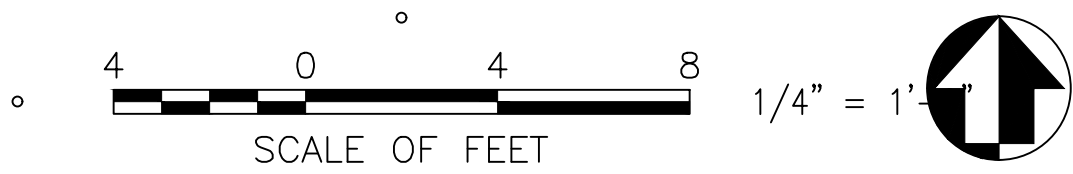
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GENERAL NOTES

SHEET SPECIFIC NOTES



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TECH. REVIEW:
XXX
DATE:
MARCH 2024

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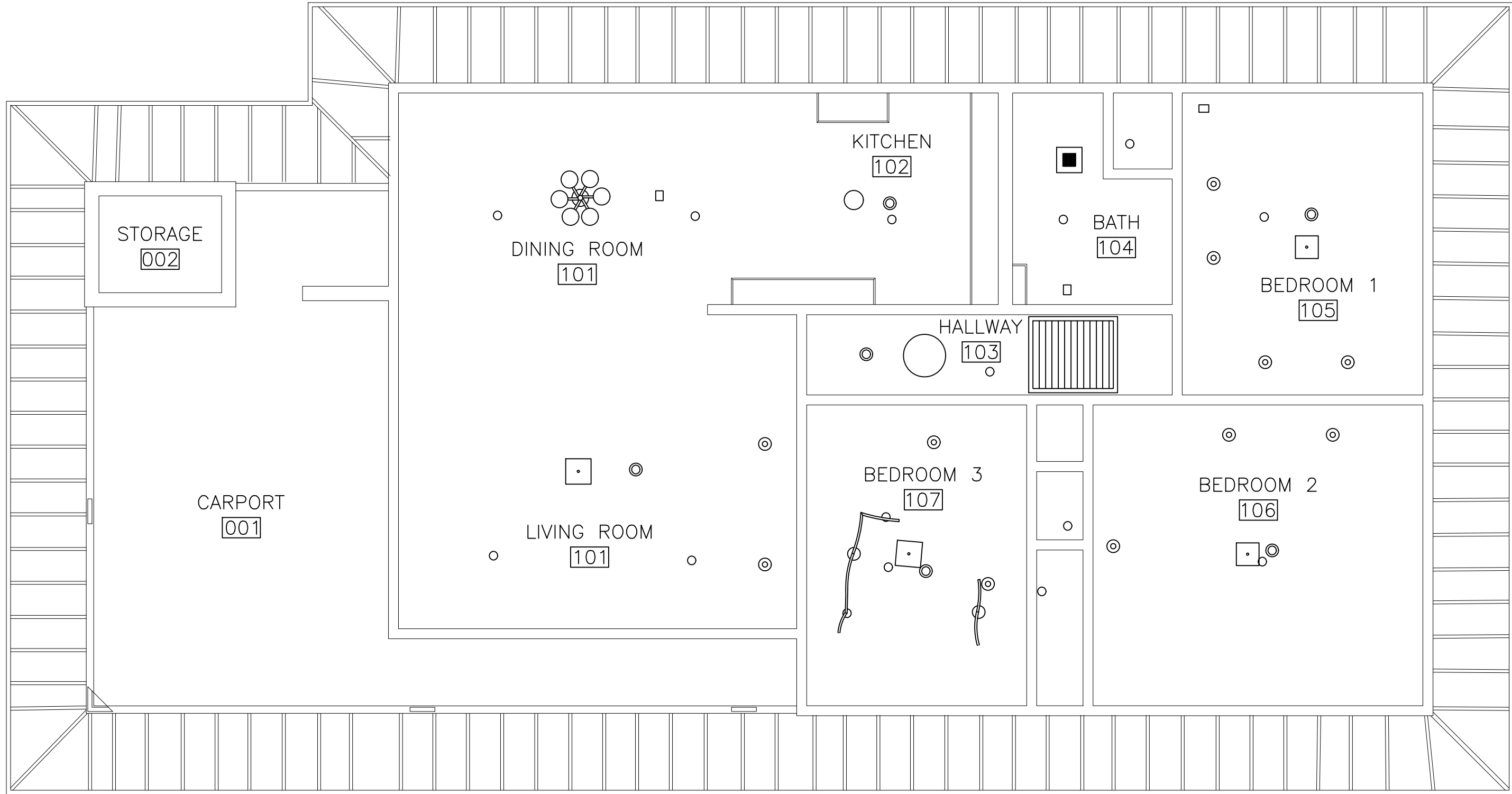
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FLOOR PLAN

MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
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PMIS/PKG NO.
260-191671
SHEET
1 OF 6

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A1.1



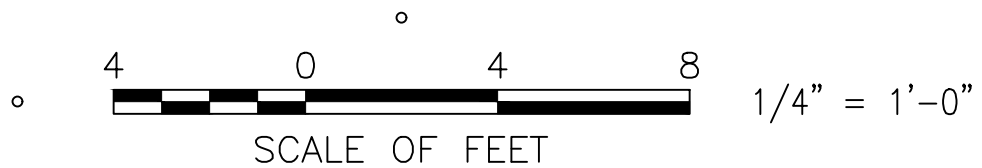
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GENERAL NOTES

A. GENERAL NOTE.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



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TECH. REVIEW:
XXX
DATE:
MARCH 2024

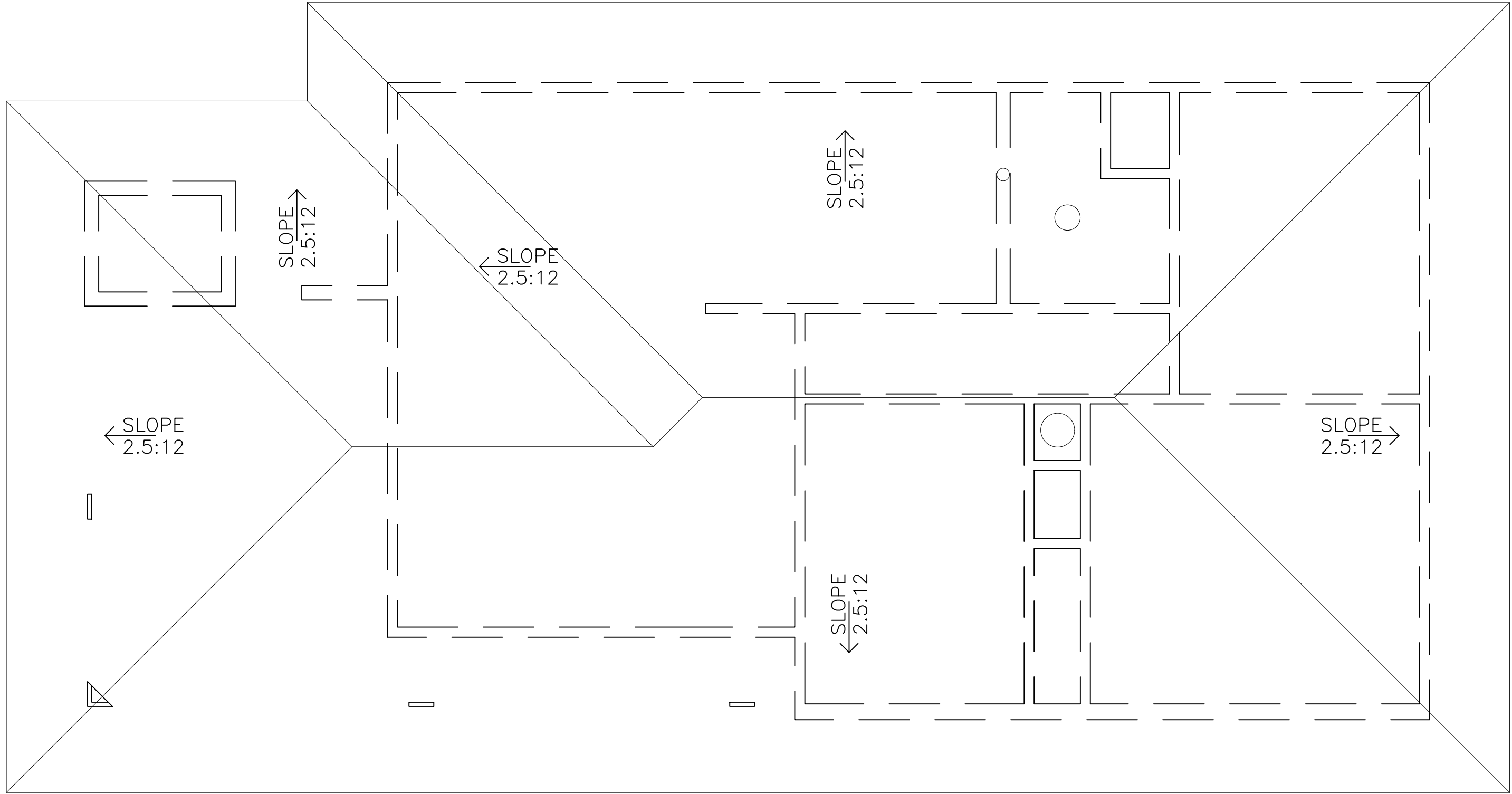
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TITLE OF SHEET
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PLAN
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
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—
PMIS/PKG NO.
260-191671
SHEET
2 OF 6

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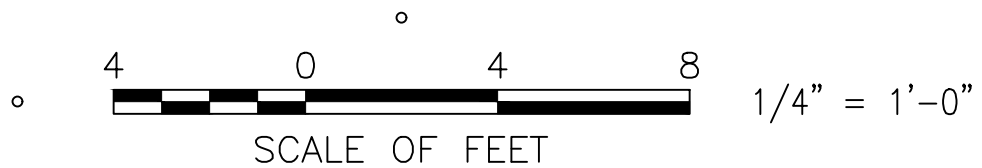
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GENERAL NOTES

A. GENERAL NOTE.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



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TECH. REVIEW:
XXX
DATE:
MARCH 2024

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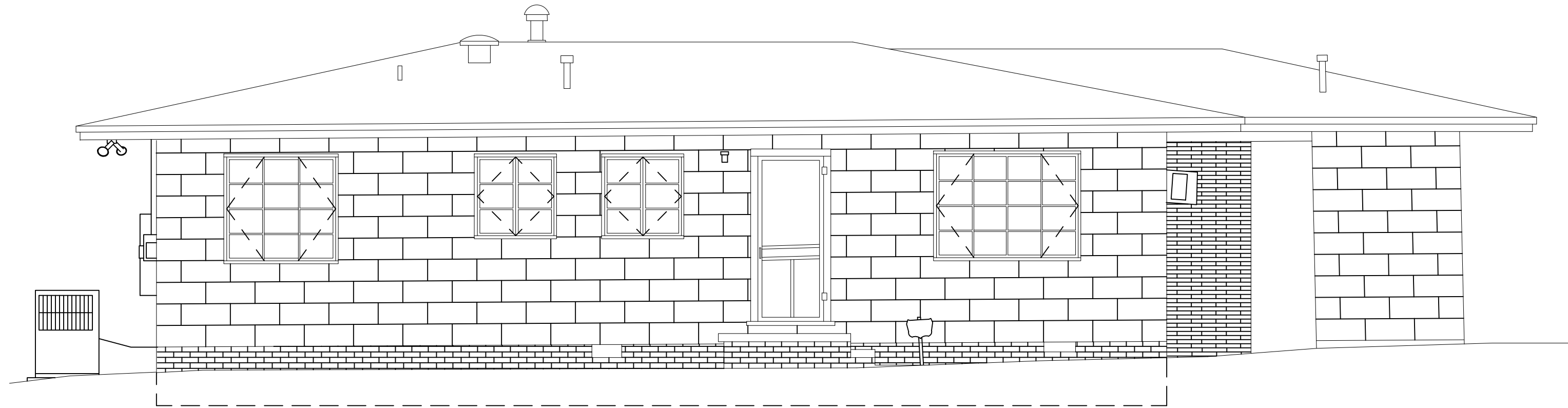
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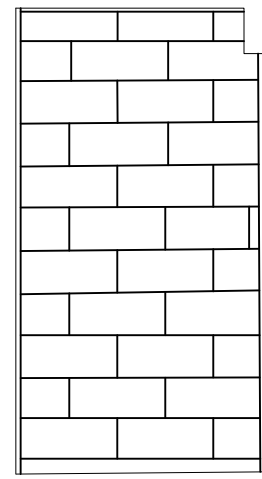
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
—
—
PMIS/PKG NO.
260-191671
SHEET
3 OF 6

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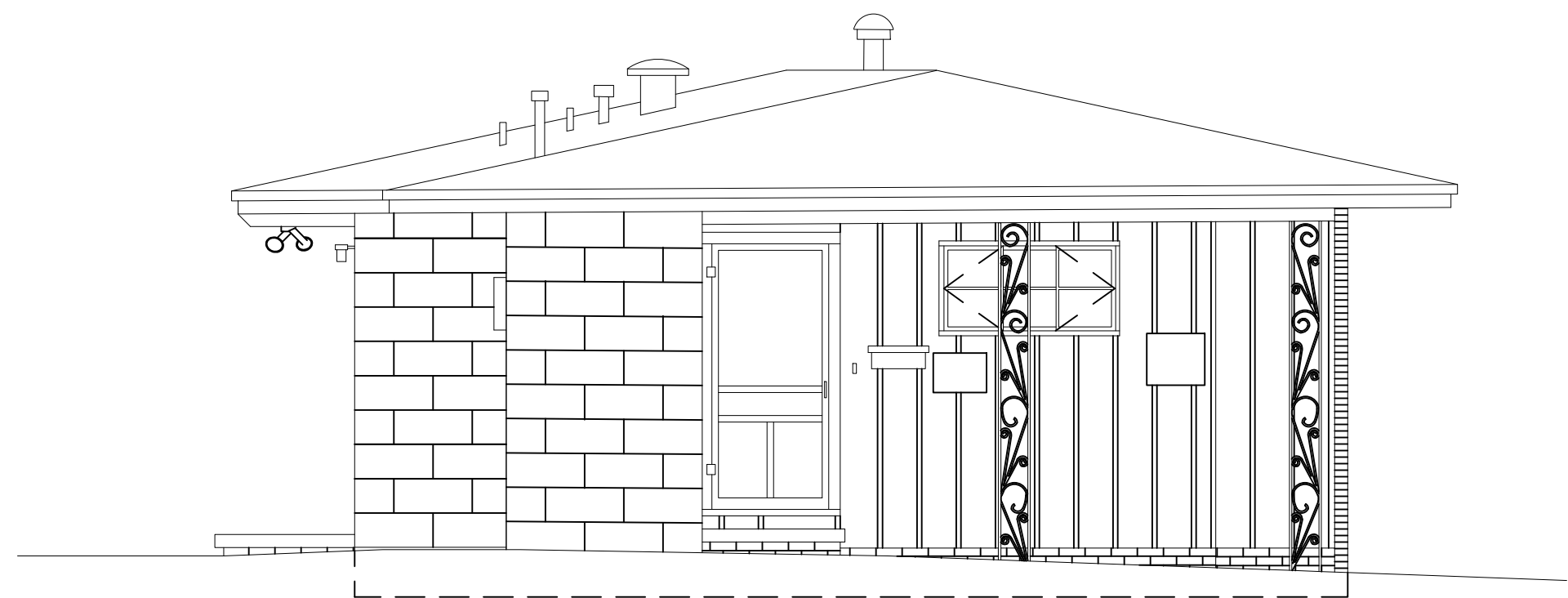
4 NORTH ELEVATION
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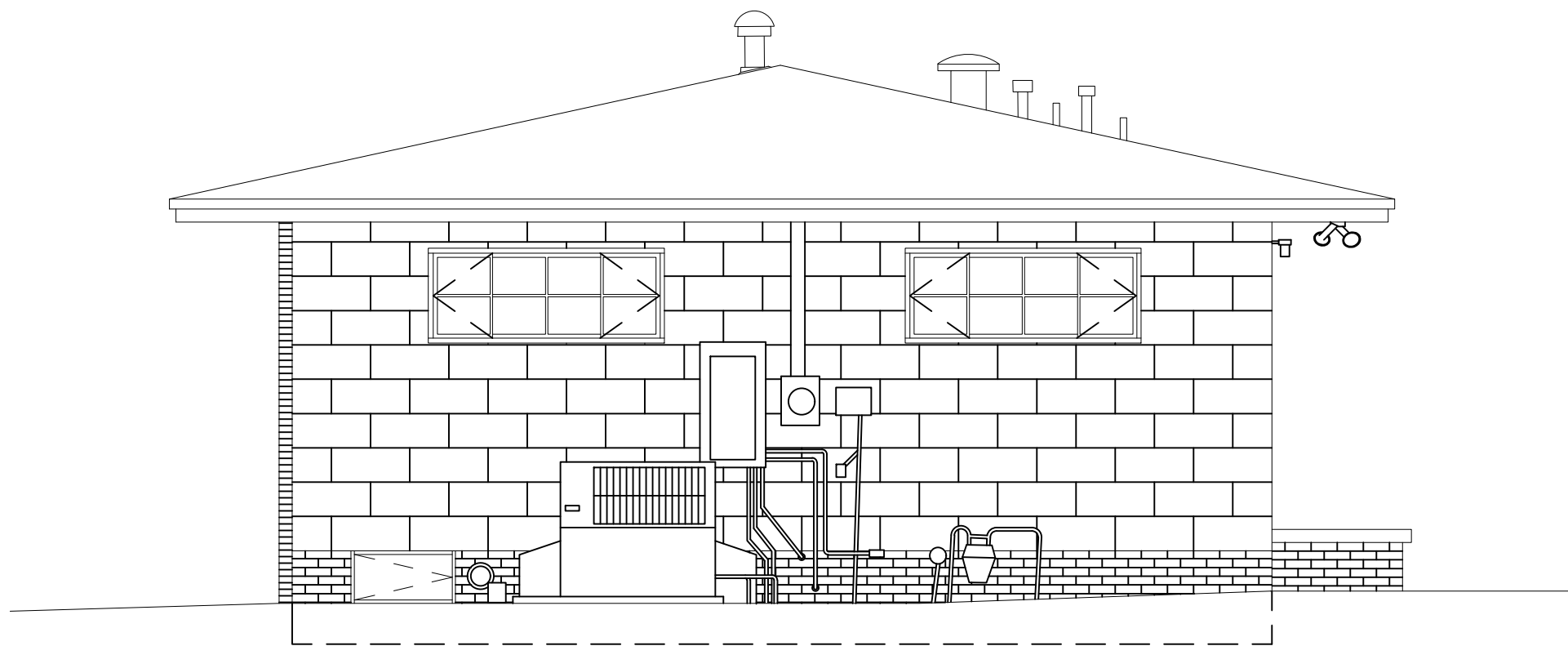
6 EAST STORAGE ELEV.
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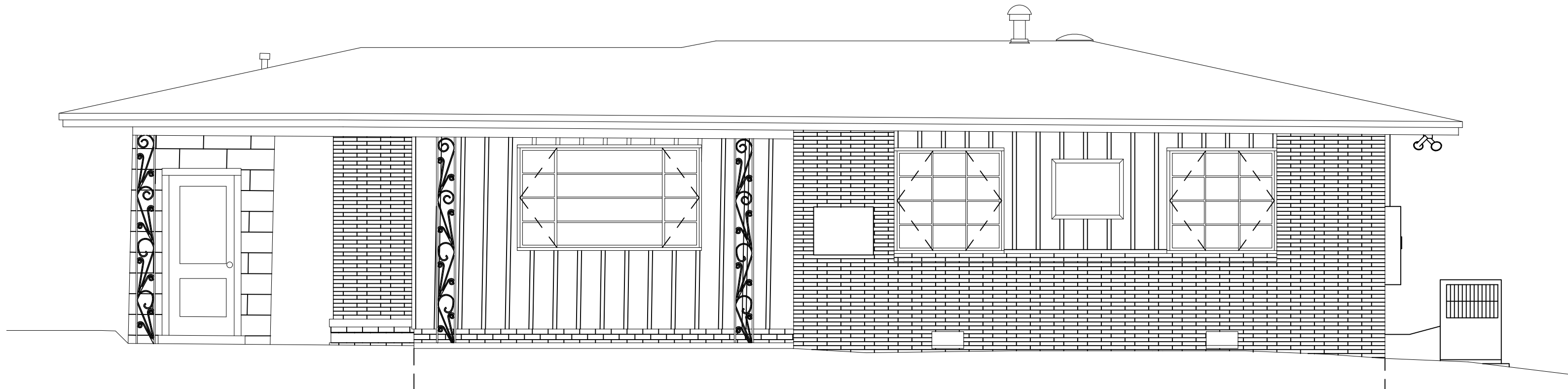
3 WEST ELEVATION WITHIN CARPORT
A2.0



2 WEST ELEVATION
A2.0



5 EAST ELEVATION
A2.0



1 SOUTH ELEVATION
A2.0

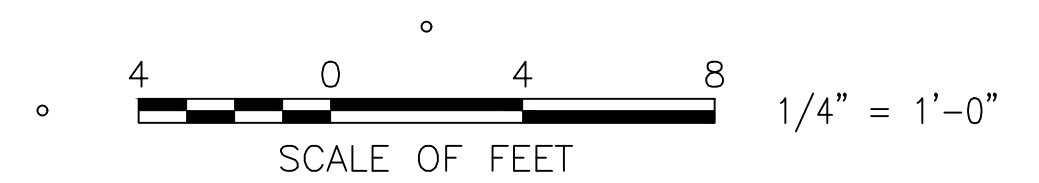
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GENERAL NOTES

A. GENERAL NOTE.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



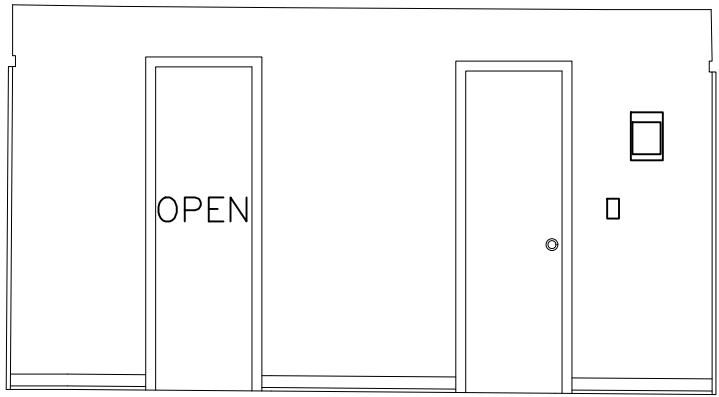
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DATE:
MARCH 2024

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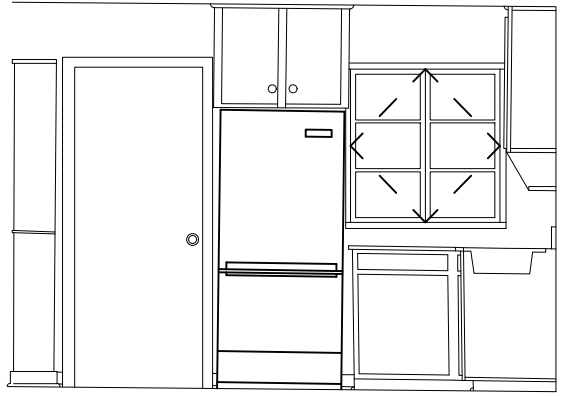
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EXTERIOR ELEVATIONS
MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.
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—
PMIS/PKG NO.
260-191671
SHEET
4 OF 6

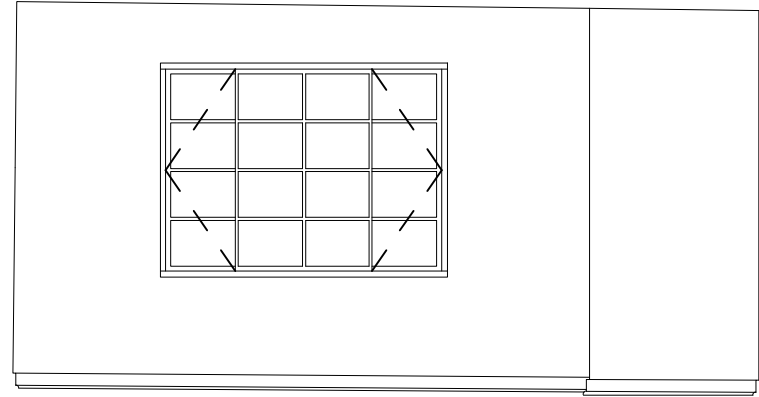
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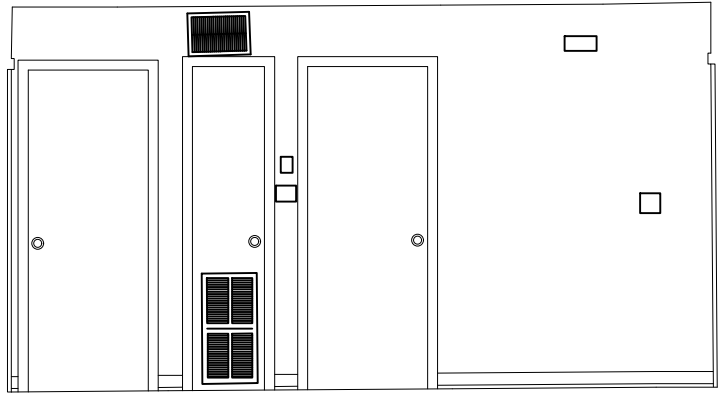
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A3.0 HALLWAY — NORTH ELEVATION



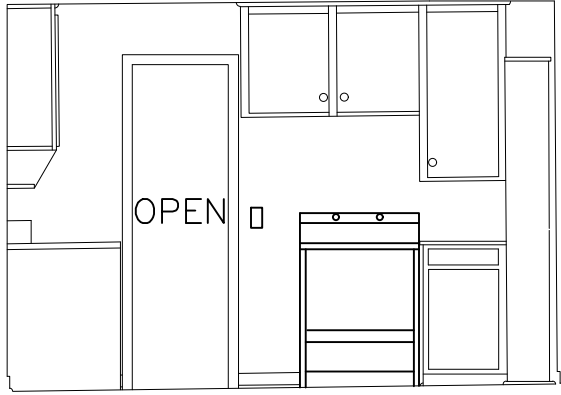
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A3.0 KITCHEN — NORTH ELEVATION



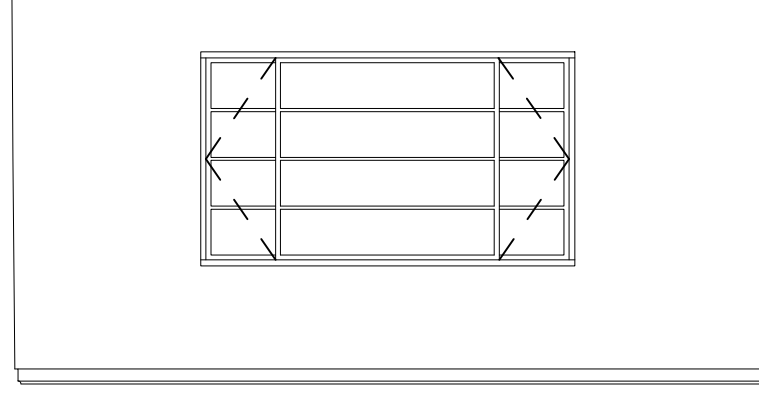
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A3.0 DINING ROOM — NORTH ELEVATION



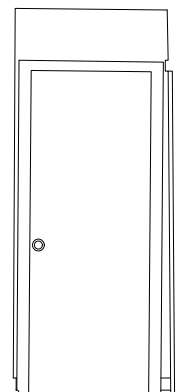
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A3.0 HALLWAY — SOUTH ELEVATION



7
A3.0 KITCHEN — SOUTH ELEVATION



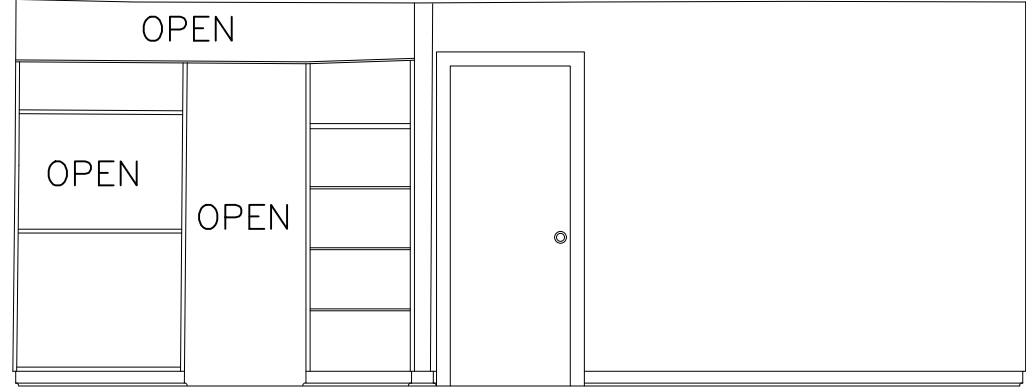
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A3.0 LIVING ROOM — SOUTH ELEVATION



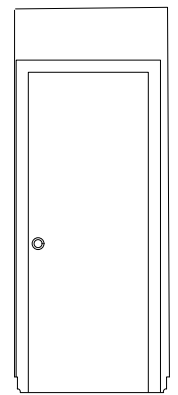
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A3.0 HALLWAY — EAST ELEVATION



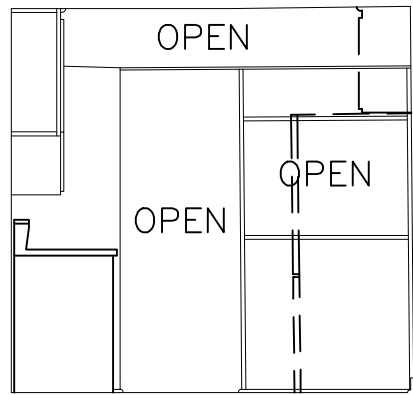
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A3.0 KITCHEN — EAST ELEVATION



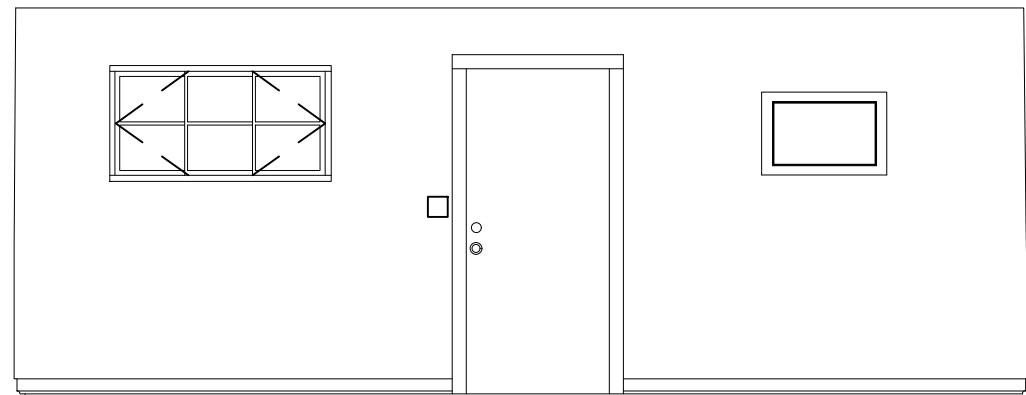
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A3.0 LIVING/DINING ROOM — EAST ELEVATION



9
A3.0 HALLWAY — WEST ELEVATION



5
A3.0 KITCHEN — WEST ELEVATION



1
A3.0 LIVING/DINING ROOM — WEST ELEVATION

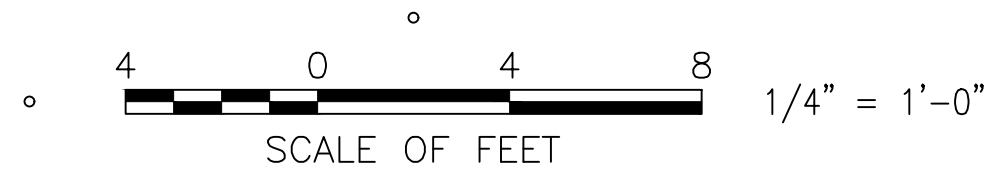
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GENERAL NOTES

A. GENERAL NOTE.

SHEET SPECIFIC NOTES

1. SHEET SPECIFIC NOTE.



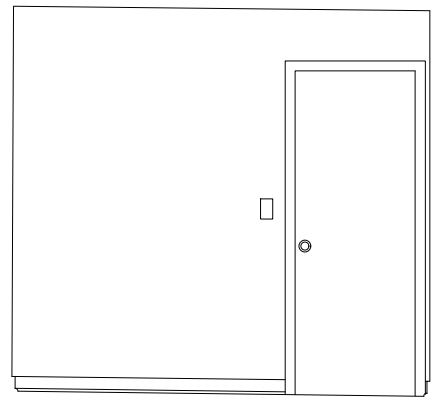
DESIGNED:
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TECH. REVIEW:
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DATE:
MARCH 2024

SUB SHEET NO.
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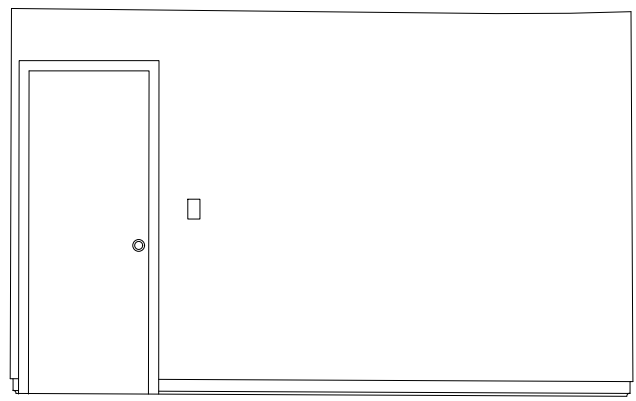
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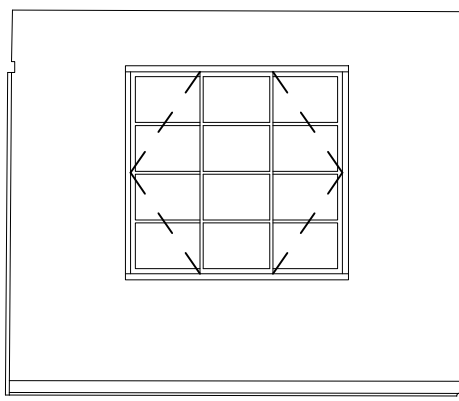
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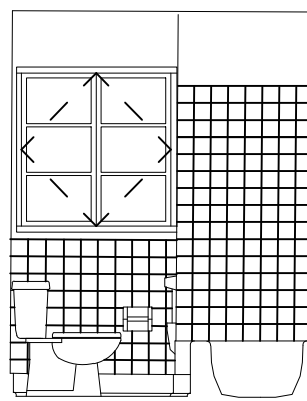
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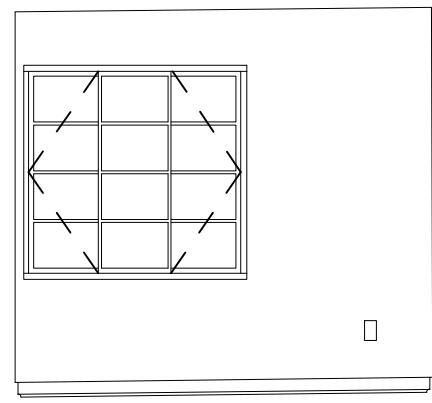
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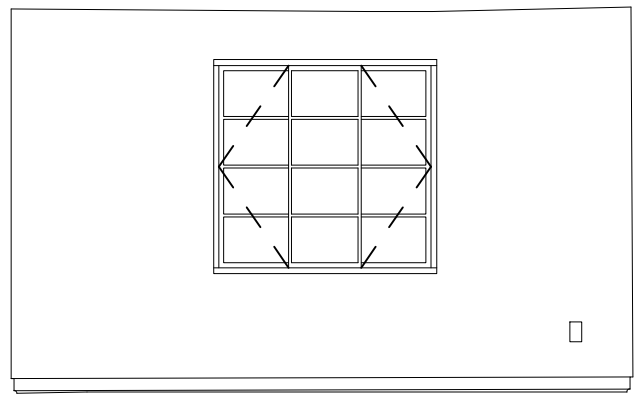
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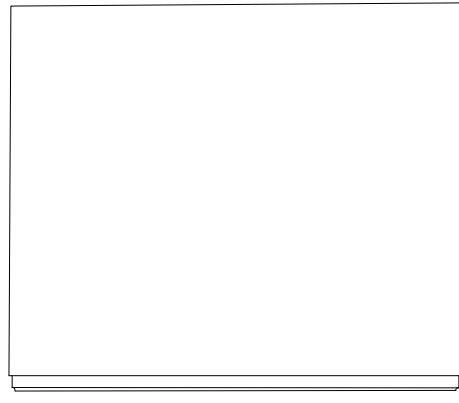
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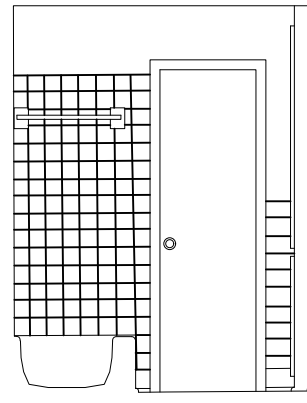
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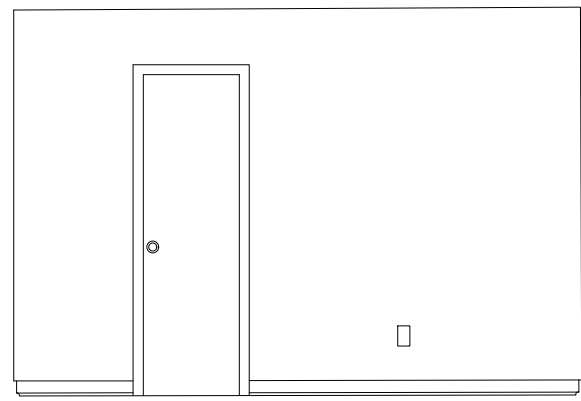
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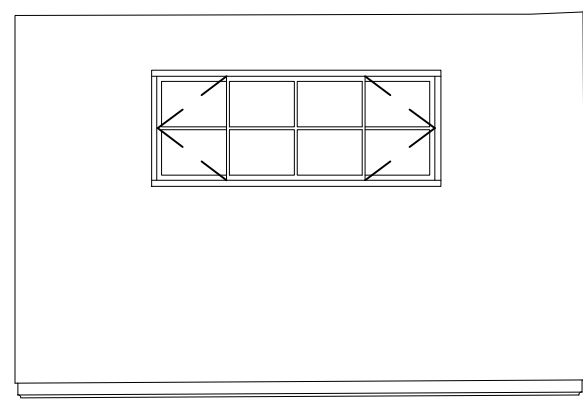
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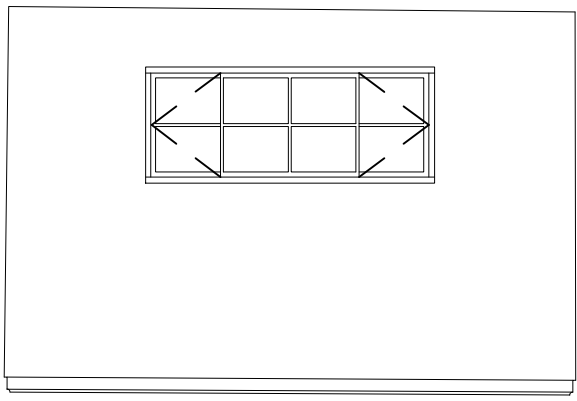
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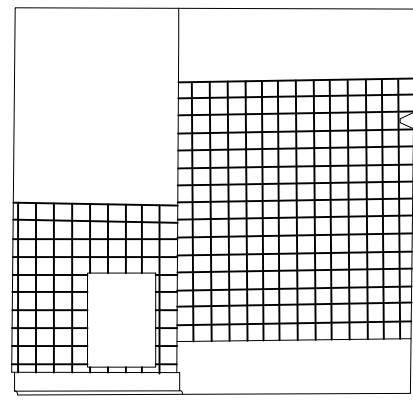
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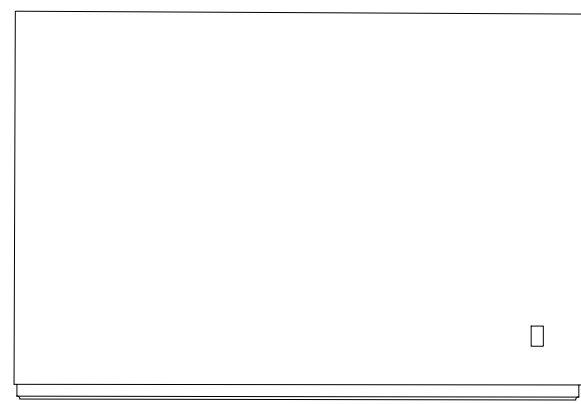
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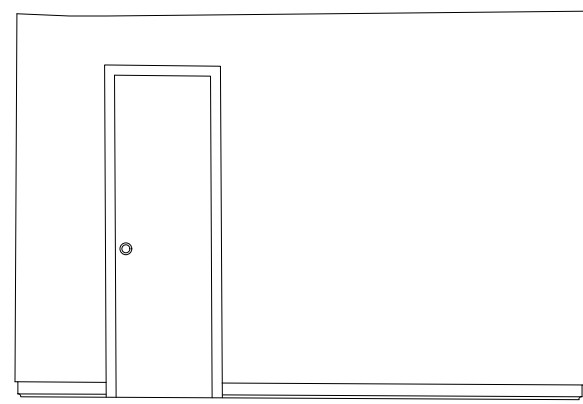
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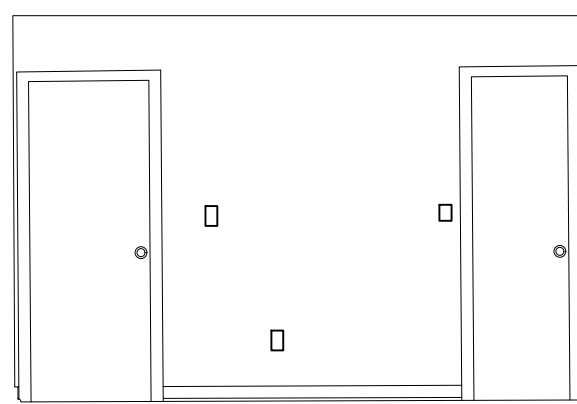
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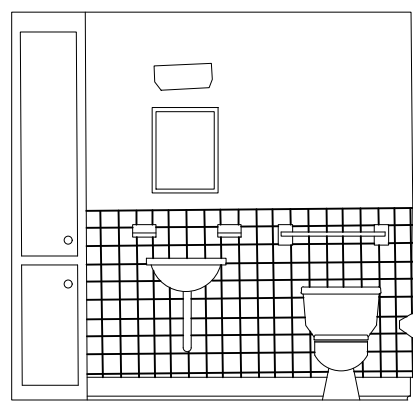
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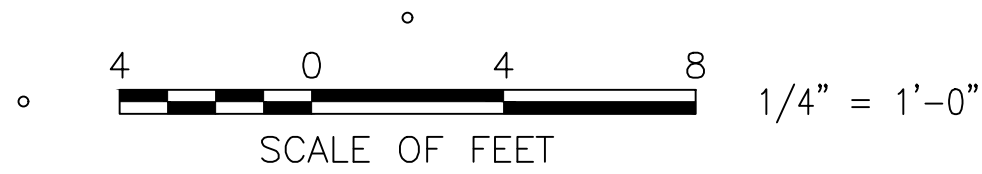
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MARCH 2024

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TITLE OF SHEET

INTERIOR ELEVATIONS

MEDGAR AND MYRLIE EVERS HOME
NATIONAL MONUMENT

DRAWING NO.

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PMIS/PKG NO.

260-191671

SHEET

6 OF 6

Appendix C:
1995 Historic Structure Report

Medgar Evers Home Renovation

2332 Margaret Walker Alexander
Jackson, Mississippi

GS #501-052

**A Historic Structure Report
1995**



By
WFT Architects, P.A.

PROJECT DESCRIPTION

Program

The home of Medgar Evers was donated to Tougaloo College by Evers's widow, Myrlie Evers-Williams. This historic site was not only the home of the civil rights leader and his family, but was also the site of his assassination. This historic structure report was undertaken to document the house in its existing condition, determine the condition of the house at the time of the assassination and recommend a plan for the home's renovation and restoration.

To document the significance of the home as a historic structure, the report necessarily includes a study of the man whose life makes the structure significant, and a study of the community he lived in and the civil rights activity of which he was a major part. A mass of specific information is available to those who wish to research the civil rights movement in Mississippi and Evers's life, but only a few publications are available to provide the general public with an intermediate understanding of the significant events in Evers's life as they coincide with the atmosphere and significant events of the period. While current publications have increased the availability of information in a readable form, the composition of an introduction to Evers's life positioned in a synopsis of the Mississippi civil rights movement was considered paramount.

A variety of research methods were used to determine the condition of the home and the surrounding neighborhood in 1963, the year Evers was assassinated. Neighbors of the Evers family and one of the two subdivision developers were interviewed. Descriptions written by Myrlie Evers-Williams were informative, and photographic evidence of the home's 1963 condition was also found in publications, newsreel footage and the evidence files from the trial of Evers's assassin, Byron De La Beckwith. The current conditions and the 1963 conditions were compared, and the proposed use of the home as a museum was considered. Out of this research, a plan for restoration was developed, and subsequently recommended to the Owner.

Solution

The recommended restoration plan was accepted, and the project started in early 1994. Accurate measurements were taken and the house was thoroughly photographed. Current conditions and features were then compared to those that existed in 1993 as documented in the Historic Structure Report. Those that were incongruous or were recently changed were scheduled to be replaced with materials and details true to the early 60's. Because the house is not very old, the difficulty was not in replicating materials or fixtures but in finding ones that were actually produced 30 years ago. Items such as the authentic Roman-brick on the front of the house, asbestos siding, light fixtures and plumbing fixtures were identified and eventually located. Scrapings were made to determine the original colors used inside and out. These were later confirmed by the builder and Mrs. Evers-Williams. In addition to the restoration work, some new lighting and a new mechanical system with humidity control were included to support the anticipated museum functions.

The house and the driveway where Evers was shot have been designated historic landmarks. Since the restoration was completed in early 1996, the house was also used in scenes of the upcoming movie about Medgar Evers directed by Rob Reiner, starring Whoopie Goldberg and Alec Baldwin.

Medgar Evers Home Renovation

2332 Margaret Walker Alexander Drive
Jackson, Mississippi

GS #501-052

**A Historic Structure Report
1995**

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INTRODUCTION

The truth of written history is often questioned with one common criticism, the influence of the majority on the written text. This influence can often lead to a less than complete and/or less than objective compilation of important events, persons, and facts. While this influence can be intentional, it is usually not. Often even the most objective and thorough historian cannot write an objective history because so many of the documents he will use in his or her research, those documents of daily life, were produced and preserved by the group or groups in power. White supremacy was prominent throughout Medgar Evers's life. On the rare occasion that his daily efforts to uncover and end civil injustice were reported by the local segregationist newspaper, the result was not completely objective. This influence of the majority and many other factors have limited the availability of information on Medgar Evers and also the Civil Rights Movement in general. Over his lifetime Evers was a major instigator for change, but his assassination brought him the most attention, and if a citizen has been told about Medgar Evers, he or she may remember little more than this. The activity that will surround and follow the renovation of Medgar Evers's home and the exhibits that it will contain will aid both past and future efforts to educate all about the long struggle for civil rights and not just the major battles.

Another reason that the history of the Civil Rights Movement is less available is an earnest effort to teach children a comprehensive national history. This effort often leads to a teaching of local and national histories as separate subjects or in some cases to the exclusion of local histories. A simple time constraint can often reduce both of these to only summaries of major events. For the Civil Rights Movement, this is detrimental because some of the most valuable information includes the many years of small struggles that ultimately fueled the larger ones. Many students know about the assassinations of Martin Luther King, and others may know about the assassination of Medgar Evers. But even fewer will know about some of the everyday struggles that took place in their own state. Again, a visit to the museum that will be Medgar Evers's home will expose people to these smaller struggles.

The home will join a list of varied Mississippi landmarks that are visited by many. Some of the most memorable of these are antebellum mansions, and when compared to Medgar Evers's home, they form a vivid contrast. The grandeur of these mansions is evidence of the wealth and power of the owners and often the labor of black slaves. The house that Medgar Evers and his wife owned is not grand. It is evidence of little wealth but a great deal of power. He was shot not because he held power over others but because he inspired black people to hold power over their own lives. The humble house of this leader, as an object, does not inspire awe. The small house and site of his assassination, and the neighborhood of similar houses that surround it make palpable the very simple longings for freedom and opportunity that drove the movement. Because this landmark was the home of a significant civil rights leader and will house the relics of his life and work, it will provide the opportunity for a concrete experience that may bridge the gap between reading about history and understanding it. As a museum and a house in this historic district, the renovated structure will inform those who visit of the many sacrifices that took place in Jackson and in Mississippi and will also present a more modern link in the succession of Mississippi Landmarks that communicate the history of the state.

ACKNOWLEDGEMENTS

Many people have given their time and assistance in the preparation of this report. We would like to offer our thanks. We do not have names for all of those who helped us, but we have tried to include all of the offices and departments in which they work.

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Office of the Chancery Clerk of Hinds County

Office of the Circuit Clerk of Hinds County

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Ed Bryson, Director of Communications, Office of the Mayor

Chris Todd at the *Clarion-Ledger*

Mr. Leroy Burnett

Neighbors of the Evers Family:

Mrs. Johnny Pearl Young

Mrs. Grace Sweet

Mrs. Bernice Bell

Mrs. Shirley Wells

MEDGAR WYLIE EVERS, A LIFE DEDICATED AND GIVEN

Medgar Wylie Evers was born on July 2, 1925 in Decatur, Mississippi and now rests in Arlington National Cemetery. In 1943 Evers was drafted into the army and participated in the Normandy Invasion and Northern France Campaigns.¹ When he returned, he took the first step into his life's work by registering and attempting to vote in his home town.² He earned his degree in business administration from Alcorn A & M College and met and married his wife, Myrlie Beasley Evers, while a student there. After graduation he took a job as an insurance salesman with a company founded by Dr. T.R.M. Howard and other Negro men from the Delta. In 1951 Medgar began to pursue a lifelong obsession with making a difference in the lives of Mississippi blacks.³

Living in the all black town of Mound Bayou, the Evers were introduced to the lives of sharecroppers in the Mississippi River Delta. Medgar met many sharecroppers in his work and was shocked by their poverty. He struggled to understand both the obvious and subtle methods of perpetuating this oppression of black farmers and their families, and what he learned led him to work with the National Association for the Advancement of Colored People.⁴ He became the official state administrator. When he was not selling insurance and sometimes when he was, he was attempting to revitalize small NAACP chapters and create new ones in and around the area.⁵ In addition to Medgar's official visits to Delta families, he and his wife, Myrlie, often paid them social visits, and they began to understand the cultivated fear that prevented protest and change.⁶ Dr. Howard and other Negro leaders had formed a group in Mound Bayou to address the oppression of Negroes in the Delta. Medgar also worked with this group to encourage a boycott of gas stations that would not allow blacks in their restrooms.⁷

By 1953 there was a network of NAACP chapters in Mississippi, and Evers had been a part of the growth of that network. At a Mound Bayou area NAACP meeting, the importance of desegregating the University of Mississippi was discussed. With an idea of serving his community and his cause

¹Clarion-Ledger Jackson Daily News, June 16, 1963.

²Medgar Evers (as told to Francis H. Mitchell), "Why I Live in Mississippi," *Ebony*, September 1963, pp. 142-144.

³Mrs. Medgar Evers with William Peters, *For Us, the Living* (Garden City, New York: Doubleday & Company, Inc., 1967), p. 87.

⁴Evers, *For Us, the Living*, p. 85.

⁵John Dittmer, *Local People: The Struggle for Civil Rights in Mississippi* (Urbana and Chicago: University of Illinois Press, 1994), p. 49.

⁶Evers, *For Us, the Living*, p. 87.

⁷George A Sewell and Margaret L. Dwight, *Mississippi Black History Makers* (Jackson: University Press of Mississippi, 1984), p. 119.

by becoming a lawyer, Medgar Evers decided to make his application to the School of Law. Thurgood Marshall, special counsel for the NAACP, was retained as his attorney.⁸ During the time in 1954 between the submittal of Medgar Evers' application and its rejection, the nation's Supreme Court and the state of Mississippi strongly expressed their diametrically opposed positions. In May of 1954, the Supreme Court ruled that public school segregation was unconstitutional, and a Mississippi circuit court judge, Tom Brady, gave a speech which later became the book, *Black Monday*. This speech outlined an aggressive strategy to fight integration and any action which might possibly lead to integration, and in July the first of the illustrious White Citizens' Councils was formed in Indianola, Mississippi to begin that organized fight.⁹ In September of 1954, after the school term had begun, Evers was notified of his rejection to the University of Mississippi. He was informed that his letters of recommendation were unacceptable because they came from the county in which he was born and had spent most of his life instead of the county in which he currently lived.¹⁰

Medgar Evers did not reapply to the University of Mississippi because he was offered the opportunity to make his fight against racism in Mississippi a full time occupation. Evers became the state field secretary for the NAACP, the organization's first salaried, staff position in Mississippi.¹¹ On January 23, 1955 Medgar Evers opened the state NAACP office on Farish Street in Jackson, and later that year moved it to the black owned Masonic Temple Building on Lynch Street. He traveled around the state investigating crimes against black people. The evidence he collected was published nationally to increase awareness of the civil rights violations common and otherwise commonly forgotten in Mississippi. As field secretary Evers fought against continued segregation, attempted to convince black citizens to register and vote and recruited new NAACP members. These last two tasks were not easily accomplished. Members of the NAACP and others active in similar endeavors were often victimized. The White Citizens' Councils published the names of those who signed petitions that addressed school desegregation or other grievances, and other activists were exposed by council members' word of mouth. With their identities exposed to council supporters, activists became targets for economic repression.¹² Credit and mortgages were often denied to them, loans were called in prematurely, jobs were lost, and businesses were destroyed.¹³ The NAACP and a black owned bank in Memphis, Tennessee provided financial aid to those activists targeted by the councils.¹⁴ In addition to determining needs and allocating the

⁸Evers, *For Us, the Living*, p. 102.

⁹Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, p. 45.

¹⁰Evers, *For Us, the Living*, p. 118.

¹¹John R. Salter, Jr., *Jackson, Mississippi: An American Chronicle of Struggle and Schism* (Malabar, FL: Robert E. Krieger Publishing Company, 1987), p. 24

¹²Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, p. 50.

¹³Ibid.

¹⁴Evers, *For Us, the Living*, p. 142.

available funds to those who needed it, Evers provided personal assistance and support to these victims.

In addition to economic retaliation, there was also violent retribution. Medgar Evers and eight other black leaders were named on a Ku Klux Klan death list. When black men like George Lee, Lamar Smith and Gus Courts were murdered for registering to vote, voting or encouraging Negroes to register, Evers pushed for fair investigations or at least for any investigation.¹⁵ When Clyde Kennard attempted to enter Mississippi Southern College in 1960 and ended up rejected, framed and jailed, Evers and many others continued efforts to free him and to prevent foreclosure on his family's farm.

Between the late 1950's and 1963, activity in the Civil Rights Movement in Mississippi was growing rapidly but not necessarily steadily.¹⁶ The appearance and growth of other civil rights organizations heightened activity and also complicated it. The National office of the NAACP was too conservative or slow to suit young civil rights supporters, and new groups threatened NAACP efforts.¹⁷ Evers seemed torn between his loyalties to the association and to the cause and continued to work with members of other groups in varying degrees of cooperation. He and many others participated in and organized sit-ins, protests, and demonstrations. On a return trip to Jackson from North Carolina in 1958, Medgar Evers took a front seat on a bus in Meridian. He was taken to the police station and questioned, but he returned to the same seat. The bus was motioned to a stop by a taxi driver who entered the bus and hit Evers in the face before he was ordered to leave. Evers calmly kept his seat until he reached Jackson. A few years later demonstrators exposed themselves to similar treatment by sitting at segregated lunch counters, marching or picketing. In 1962 James Meredith applied to Ole Miss. Evers and the NAACP fought for and ensured his admission, and riots followed. Large numbers of Tougaloo Southern Christian College and Jackson State College students were active in the movement, and in 1963 animal stockades at the state fairgrounds in Jackson were used as emergency jails for demonstrators, jails that could be closely compared to concentration camps.¹⁸ Many of the young demonstrators stayed several days in this temporary jail. They either would not accept bail or could not afford it. Their courage brought many fearful adults into the movement, and the police began to almost occupy black neighborhoods. Police officers constantly followed Evers, and one patrol car attempted to hit him.¹⁹

Several nights a week, mass meetings were held to inspire and inform. These meetings served to spread awareness of the successes and failures of the movement often not covered by local television

¹⁵Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, pp. 54,79.

¹⁶Salter, *Jackson, Mississippi: An American Chronicle of Struggle and Schism*, p. 178.

¹⁷Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, pp. 117-118.

¹⁸Salter, *Jackson, Mississippi: An American Chronicle of Struggle and Schism*, pp. 151-152.

¹⁹Adam Nossiter, *Of Long Memory: Mississippi and the Murder of Medgar Evers* (New York: Addison-Wesley Publishing Company, 1994), p. 61.

and radio stations or papers. They also served as a forum to determine what future steps might be taken. At one of these mass meetings in 1963, Evers announced a plan to boycott businesses who supported White Citizens' Councils. The boycotts started with Barq's soft drinks, Hart's bread and McRae's Department Stores.²⁰ Later boycotts included all of the stores on Capitol Street to protest the treatment of Negro customers in the stores and to protest the owners' refusals to hire Negroes.²¹

In the midst of such activity, the state NAACP demanded a bi-racial committee to work toward desegregation and to end discrimination in Jackson. If the demands for a bi-racial committee were not met, the city was promised increased activity and protest.²² Mayor Allen Thompson refused and stated that black committee members selected by the state NAACP or other outside "agitators" would not represent local black interests.²³ The mayor pledged in a local television broadcast to continue the status quo, and Medgar Evers asked for equal air time to respond. He delivered a speech listing the simple and vast reasons that Negro citizens demanded segregation and appealed to white citizens to empathize with the black person's position. Myrlie Evers noted the positive change in some of the phone calls she received from white citizens, and the black community noted a positive change in their daily relations with some white citizens.²⁴ It seemed that Evers had influenced the opinions of some white Mississippians.

While some white citizens empathized, others grew angry. A firebomb was thrown into the Evers' carport, and the family became increasingly more cautious. Evers grew noticeably tired and drawn. The guns by the bed and around the house and the German shepherd in the back yard did not seem to be enough. Medgar became aware of a clear shot that could be made from the empty lot across the street to the driver's side of the family's cars.²⁵ He instructed the family to leave the carport light off unless all were in the house, and when they came home at night, they were to exit on the right side of the car.²⁶

On June 11, 1963 Alabama's Governor George Wallace attempted to block the entry of two black students into the University of Alabama. That evening in a televised address, President John F. Kennedy spoke about the question of equal rights and outlined those ideas that would later become the Civil Rights Act of 1964. A few minutes into the next day, Medgar Evers was shot in the back as he got out of his car in the driveway of his Jackson home. His life had been threatened for years

²⁰Evers, *For Us, the Living*, p. 256.

²¹Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, p.86.

²²Salter, *Jackson, Mississippi: An American Chronicle of Struggle and Schism*, p. 107.

²³Salter, *Jackson, Mississippi: An American Chronicle of Struggle and Schism*, p. 108.

²⁴Evers, *For Us, the Living*, p. 268.

²⁵Evers, *For Us, the Living*, p. 287.

²⁶Ibid.

and he had been warned recently that an assassination attempt would come soon.²⁷ The next day President Kennedy would send a letter of condolence to Medgar Evers's widow, Myrlie Evers. Many notable local, state and national leaders were among the roughly 3,550 blacks and 50 whites who attended the funeral.²⁸ Roy Wilkins, Executive Secretary of the NAACP, Martin Luther King, Jr. of the Southern Christian Leadership Coalition, Ralph Bunch, Undersecretary of the United Nations, Whitney Young of the National Urban League and T.R.M. Howard were among the many leaders at the funeral.²⁹ The 17 block funeral march was followed by the first outbreak of black violence in protest in Jackson.³⁰ Both black and white leaders pleaded for peace among those who were angered by the assassination.

The violence after the funeral quieted, and sadly the Jackson movement also quieted. The Kennedy Administration intervened to negotiate an immediate solution. The administration advised the proposal of a compromise that had already been rejected by the black community, a compromise that offered only minute changes and protected fully the white power structure, and it advised that black leaders halt demonstrations and continue their efforts in registering voters.³¹

Before other civil rights groups became active in the state, Medgar Evers was the foremost leader of civil rights activity in Mississippi. It is hard to define all of the parts that Medgar Evers played in the Mississippi Civil Rights Movement. He certainly did not organize all of the activities in Mississippi's movement, but his influence or his aid were a part of many of them and in Jackson most of them. Many in the state and the nation dedicated their time and energy to the movement, several dedicated their lives to it, and several lost their lives to it. Medgar Evers was one of the few who could be credited with all of the above.

Byron de la Beckwith was tried for the murder of Medgar Evers twice in the two years following the murder. Two mistrials had been declared when two white juries chosen in questionable selection processes could not reach a consensus. In 1992, the Mississippi Supreme Court decided that the case would be heard again. Because of pretrial publicity, the jury was selected in Panola County.³² Even with the sad truth that most of the jury of eight blacks and four whites did not know who Medgar Evers was, Beckwith was finally convicted of Evers's murder on February 5, 1994 in Jackson.³³

²⁷Elaine Davenport, "Evers Murder Case to be tried again June 1," *Jackson Advocate*, March 12-18, 1992, pp. 3A, 10A.

²⁸Sewell and Dwight, *Mississippi Black History Makers*, p. 122.

²⁹Ibid.

³⁰Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, p. 167.

³¹Dittmer, *Local People: The Struggle for Civil Rights in Mississippi*, p. 168.

³²*Clarion-Ledger*, February, 6, 1994, p. 13A.

³³Verne, E. Smith, "What Did You Do in the Struggle?" *Newsweek*, February 21, 1994, p.

DEVELOPMENT OF THE ELRAINE SUBDIVISION

Located northwest of the Jackson, Mississippi, central business district, the home of Medgar Wylie Evers sits in the first subdivision developed by black entrepreneurs. According to deed records, the land which would later become the Elraine Subdivision was part of the Capital City Poultry and Truck Farms Subdivision owned by Capital Land and Investment Company. Hinds County Map A-283, dated July 1927, showed unimproved land east of Missouri Street. Land west of Missouri Street was already developed and subdivided into lots. Later, during the turbulent civil rights decades of the 50's and 60's, Missouri Street would become the line of demarcation between white residents and black residents in this section of Jackson.¹

In addition to Missouri Street, three other streets defined the subdivision by 1941. County Road to the north which is now Ridgeway Street, Munsey Avenue on the south and Miami Street on the east were all in place. Hinds County Map A-357 also showed Guynes Street running parallel and between County Road and Munsey Avenue along with 81 distinct parcels. A Quit Claim Deed in December of 1952 conveyed the land from Capital Land Investment Company to W.B. McCarty, Jr. who later sold it to Winston J. Thompson, one of two black entrepreneurs who would soon build the houses that comprise this historically African American neighborhood.

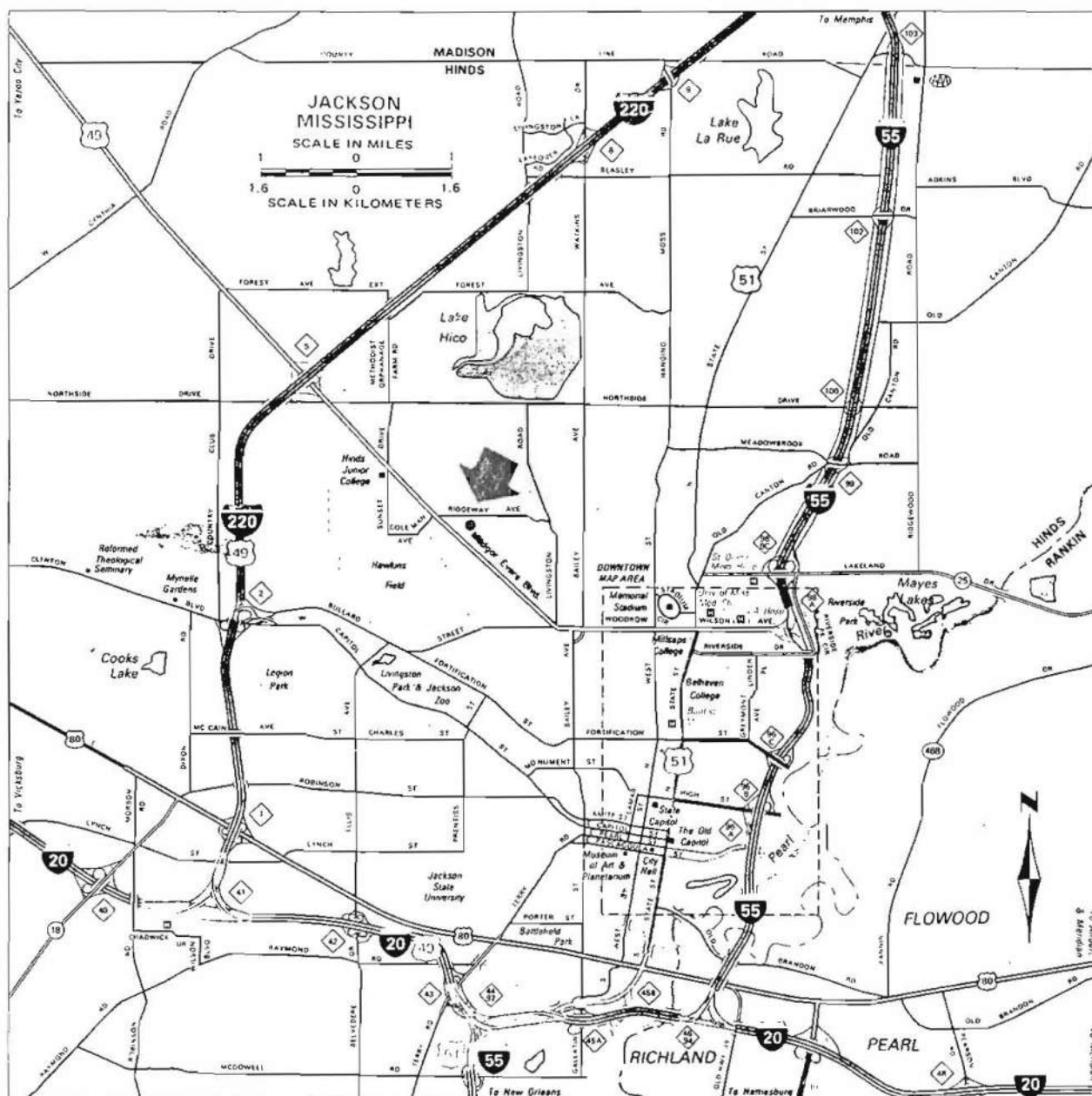
After serving his enlistment in the Army, Mr. Thompson returned to Jackson and worked in the real estate business prior to purchasing the Elraine Subdivision land in 1955. Shortly thereafter, he and his partner, Leroy Burnett, began designing and building 850 and 950 square feet, ranch style homes along Guynes Street. The first one was purchased by Sigmond and Margaret Walker Alexander. They moved onto Guynes Street in 1955, and on January 13, 1981 the street was renamed Margaret Walker Alexander Drive in honor of her outstanding achievements as a writer, poet and educator. Mrs. Alexander still lives in the same house today. In 1956 Dennis C. Sweet and his wife, Grace, bought the house at 3604 Missouri Street. Their daughter, Denise Sweet Owens, would eventually become one of the first two African American Chancery Court Judges in the State of Mississippi.² The Evers home at 2332 Guynes Street was built either that same year or in 1957. Mrs. Evers recalled that the house cost \$9,500 when they bought it.³ Records show a Warranty Deed executed between W.J. Thompson and Medgar W. Evers on April 27, 1956 and then a Deed of Trust from Evers to the Prudential Insurance Company on May 10, 1956.

Eventually, Thompson and Burnett completed 36 homes in the subdivision between 1955 and 1957 on lots approximately 75 feet wide by 90 feet deep. Two black entrepreneurs developing a subdivision for blacks in racially troubled, 1950's Mississippi is remarkable, but when one realizes

¹Mrs. Medgar Evers with William Peters, *For Us, the Living* (Garden City, New York: Doubleday & Company, Inc., 1967), p. 229.

²Recorded Notes of Mrs. Grace Sweet, 1993.

³Evers, *For Us, the Living*, p. 226.



that this particular subdivision was almost completely surrounded by established white neighborhoods, it is even more remarkable. In her book Mrs. Evers describes the situation.

A block away from our house was a section of white homes. The unwritten law of the neighborhood was that our children never played with theirs. It was not that we didn't want them to know white children; we did. It was just that in Jackson, Mississippi, it was too dangerous. An altercation, a childish fight could be magnified into race war. We all knew who would win such a contest.

The boundary was Missouri Street, a block from our house, and across that line catcalls and names were sometimes hurled between white and Negro children who generally didn't know what they were saying or why.⁴

But, even blacks already living in the new subdivision were not pleased with the prospect of Medgar Evers living nearby. By this time, he was well known for his work with the NAACP, and Mrs. Evers recalls.

The subdivision attracted mainly Negro teachers, and we had no sooner put our money down and begun to count the days until our house would be completed that we began hearing rumors of a petition to keep us out. There was nothing personal about it; it was just that Medgar's work and his notoriety threatened some of the more timid. There was talk that the wrong house might be burned down by mistake, that to have us in their midst would be dangerous for the whole community. Medgar tried to track these stories down but could never find anything definite. There was probably never a formal petition, but there was plenty of fear.⁵

For the most part the Elaine Subdivision remains very much intact. The trees have grown taller and many of the homes have been altered or added onto. The Evers home appears virtually as it did on June 12, 1963 when Medgar Evers was assassinated in his driveway by a bullet from the rifle of Byron de la Beckwith. Since then, the home site has been designated a Mississippi Landmark and a Jackson Landmark Site, and the original Elaine Subdivision has been named a Jackson Historic District.

⁴Evers, *For Us, the Living*, p. 229.

⁵Evers, *For Us, the Living*, p. 226.

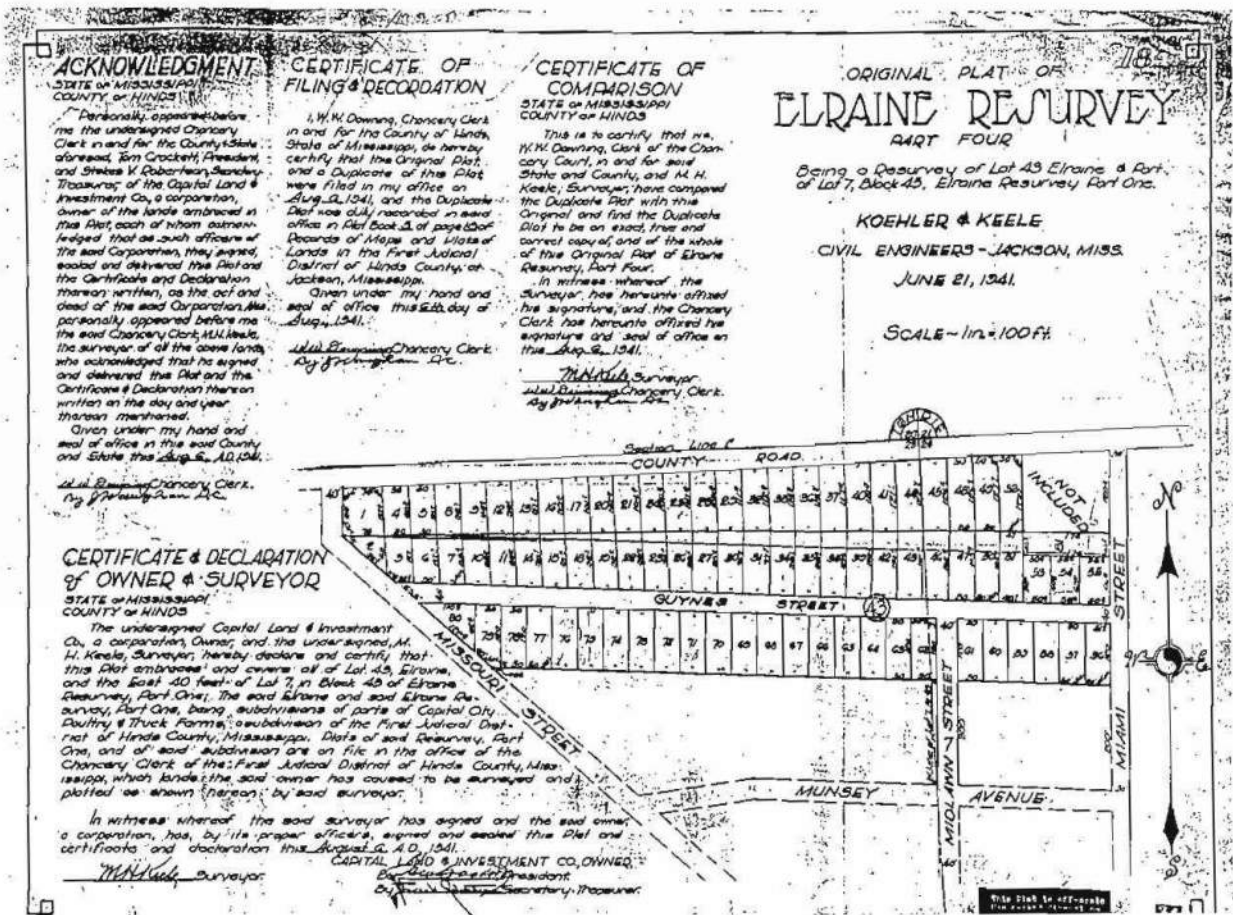


Figure 3. Copy of the 1941 plat of the Elaine Resurvey, Part Four on file at the Streets, Bridges and Drainage Division of the City of Jackson.

THE EVERS HOME SITE AND CONTEXT

The first recorded plat of the Elrairie Subdivision Part Four was dated June 21, 1941. It was actually a resurvey of the original Elrairie Part One with respect to lot 43 Elrairie and Part of Lot 7, Block 45. This particular plat depicts 81 lots along County Road and Guynes Street. All were approximately 50 feet wide (Figure 3). In the late 1950's, when the property was purchased by W.J. Thompson, the lots along Guynes Street were evidently widened to 75 feet by dividing every third lot in half. Current tax maps clearly illustrate the difference between the smaller, original lots on Ridgeway Street (County Road) and the larger ones facing Margaret Walker Alexander Drive (Guynes Street). Even the legal description of the property where the Evers home sits verifies the change in lot size. The house at 2332 Margaret Walker Alexander Drive occupies Lot Eleven (11) and the West Half (W 1/2) of Lot Fourteen (14).¹

The lot is approximately 75 feet wide by 91 feet deep and is not quite a true rectangle. The lots along Ridgeway Street and Margaret Walker Alexander Drive are laid out in what was a common orthogonal pattern, except at the intersection with Missouri Street. Here the end lots terminate the long rows of regularly shaped lots by breaking away from the orthogonal grid to meet the oblique angle of the intersection of two streets. According to Mrs. Grace Sweet, one of the first homeowners in the new neighborhood in the mid 1950's, the streets were originally paved, but did not have curbs or gutters. These were installed some 20 years later.

Selecting a lot for one's home is ordinarily a matter of personal preference. Factors such as size, topography, cost and perhaps the presence of trees or other attractive amenities are considered. In the case of Medgar and Myrlie Evers, the choice was not so simple. On the contrary, it was quite extraordinary. They chose this particular lot out of fear.

[The fear was not] exclusively that of our neighbors-to-be. In choosing the site for our house, we had both been drawn to a corner lot, larger than most, which could be bought for the same price. Talking about it together, Medgar pointed out that the corner lot was more exposed, less protected by other houses, closer to the main highway, and hence easier to reach and get away from. It may seem incredible to the average American home buyer, but security from attack was a consideration we discussed at length, and in the end it dictated our final choice of a lot tucked securely between two other houses.²

¹Plat Book 5, Page 18, Office of the Chancery Clerk of Hinds County at Jackson, Mississippi.

²Mrs. Medgar Evers with William Peters, *For Us, the Living* (Garden City, New York: Doubleday & Company, Inc., 1967), p. 227.

Because Ridgeway Street serves as a collector, traffic counts are considerably higher than they are on Margaret Walker Alexander Drive. Consequently the cohesiveness of the neighborhood seems more apparent along Margaret Walker Alexander Drive. This may be one reason that many long-term residents still live in this area of the subdivision. The homes built by Winston Thompson and Leroy Burnett were very similar if not identical, and a common setback from the street must have added a sense of uniformity and familiarity that contributed to the neighborhood's cohesiveness. Today, however, many of these same homes have been altered and added to, forever changing the original appearance of the neighborhood.



Figure 4. Portion of current tax map containing the original lot lines and the 36 larger lots created by dividing every third lot in half.

THE EVERS HOME

Description of the Home

The homes designed and built by Winston Thompson and Leroy Burnett were advertised as "ranch houses," a style that was extremely popular throughout the United States during the '40's, '50's and '60's. Originating in California in the 1930's, the ranch house became synonymous with suburban development. With the disappearance of the streetcar and ascendancy of the automobile, compact houses on small lots became obsolete. Post World War II families enjoyed low density, suburban neighborhoods of sprawling ranch style homes on large lots. The location of these neighborhoods was no longer limited by the need to be near the streetcar line, because the automobile afforded easy access to new suburban neighborhoods with large lots and scores of ranch houses. The long facades of this new form of housing were further emphasized by the ubiquitous garage or carport which soon became a common element of the ranch house.

In their book, *A Field Guide to American Houses*, Virginia and Lee McAlester describe the ranch style house as one where

asymmetrical one-story shapes with low-pitched roofs dominate. Three common roof forms are used: the hipped version is probably the most common, followed by the cross-gabled, and, finally, side-gabled examples. There is usually a moderate or wide eave overhang. This may be either boxed or open, with the rafters exposed as in Craftsman houses. Both wood and brick wall cladding are used, sometimes in combination. Builders frequently add modest bits of traditional detailing, usually loosely based on Spanish or English Colonial precedents. Decorative iron or wooden porch supports and decorative shutters are the most common. Ribbon windows are frequent as are large picture windows in living areas.¹

Unquestionably, the Medgar W. Evers home is a typical example of the American ranch house. Although the home was designed as a relatively small version, it was not uncommon to find homes in the 900-1200 square foot range that were built shortly after World War II and into the 1950's. The one-story front facade of the Everses' home is both long and asymmetrical with a single car carport on the west end that visually adds to its overall length. The low 2.5:12 pitched roof originally had built-up roofing with a light colored gravel coating that was later changed to a shingle roof.² A continuous, three foot wide overhang is supported by exposed rafters with a 6" fascia and a 1" x 2" drip edge. Unlike the elaborately shaped rafter tails derived from earlier Craftsman style bungalows,

¹Virginia McAlester and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1984), p. 479.

²Leroy Burnett, visit to house, January 13, 1995.



Figure 5. A 1963 *Clarion-Ledger* newspaper photograph showing the Evers home from across Missouri Street.

these rafters are simply cut parallel to the ground plane. With the exception of the carport, the wood frame structure is built on a conventional foundation where red brick curtain walls fill the voids between brick piers.

A limited palette of exterior materials was used throughout the subdivision. Asbestos siding was the primary wall cladding, but a combination of wooden board and batten siding and brick was an option that added extra cost and was chosen for the front elevation of the Evers house. Ornamental wrought iron supports carry the roof around the perimeter of the carport and frame the large, steel picture window of the living room as it steps back from the line of the front facade (see Figure 6). In the carport, the entry to the house is defined by a raised, red brick and concrete stoop and a 3'-6" long wing wall made with the same Roman bricks as those on the front facade. Minor changes in brick color and paint color as well as variations in roof form and entry placement added variety to the original 36 houses that were otherwise nearly identical.

The informal plan of the house is efficient. All the interior rooms are connected by a 38" wide, double loaded hallway at the center of the house. Living and dining are accommodated in one large, open space, and the main entry is here too. It opens from the carport directly into the living and dining room space. A rear door in the kitchen provides access to and from the backyard. Three bedrooms, a bathroom and the kitchen are arranged around the central hallway completing the straightforward plan.

There may have been no air conditioning in the few years after the house was built, but heating was supplied by a central floor furnace in the hallway. Shortly after the Evers bought the house, they had to replace the floor furnace with a downflow furnace shoehorned into a portion of the bedroom closet. The 6,850 square foot lot slopes gently from northwest to southeast, and areas of poor drainage are evident in the accumulation of surface water. As it does now, this poor drainage caused water to accumulate under the house, and it damaged the floor furnace.³ A patch in the hardwood floor still marks its original location. A through-wall air conditioning unit was placed in the dining room shortly before 1963.⁴ Some time later another through-wall air conditioning unit was placed in the corner bedroom. An opening in the south wall is evidence of its existence, but a *Clarion-Ledger* staff photo taken at the time of the murder in 1963 shows no sign of the unit or its opening.

Leroy Burnett inspected the Everses' home on January 13, 1995, and found that very little has changed since he designed it in 1956.

³Interview with Mrs. Grace Sweet, January 11, 1995.

⁴Newsreel D-20, Mississippi Department of Archives and History.

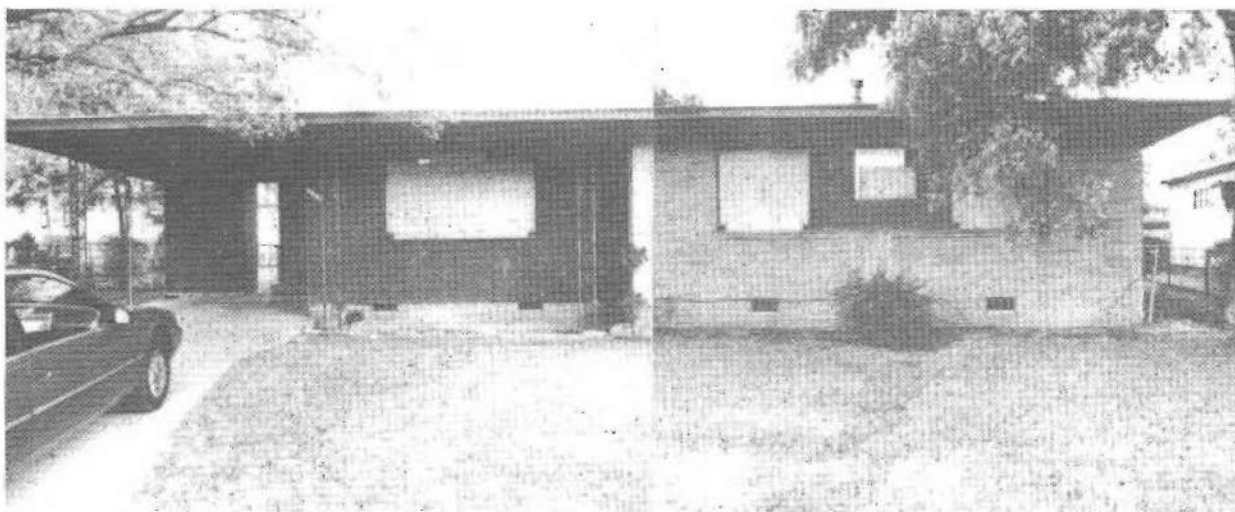


Figure 6. 1994 photograph of the front (south) elevation of the house.

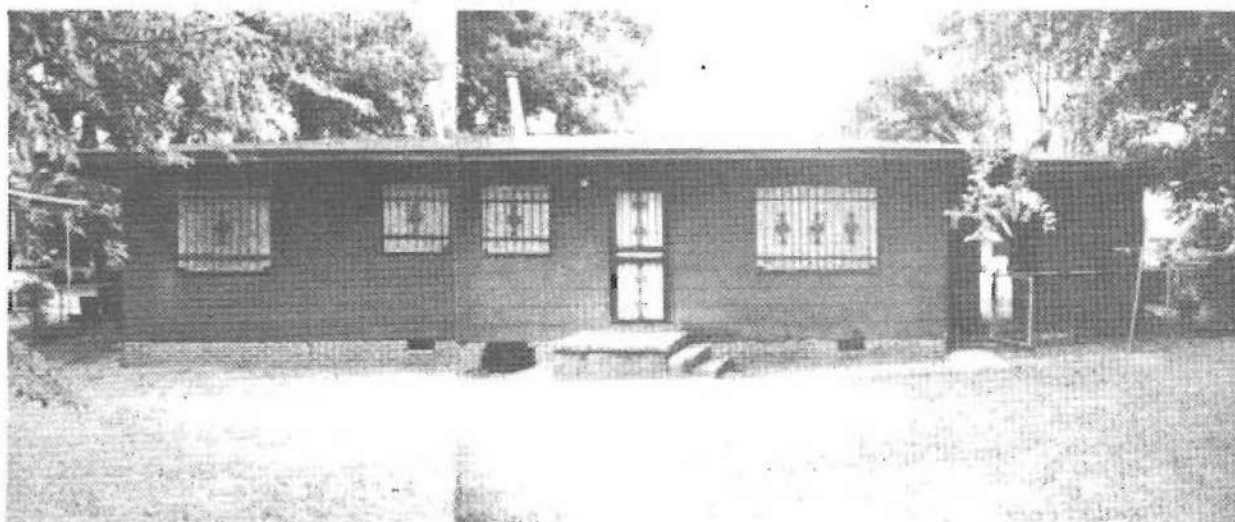


Figure 7. 1994 photograph of the rear (north) elevation of the house with decorative burglar bars which were more recent additions.

Description and Analysis of the Exterior as It Exists

The Medgar Evers Home has been donated by Mrs. Myrlie Evers to Tougaloo College, and the State of Mississippi is providing funds for its renovation. The house is now unoccupied. The house has not received significant renovation since it was built in the mid to late 1950's, but it is structurally sound and requires only minimal patching of materials and removal of damaged materials.

The exterior wall surfaces have not been significantly altered.¹ The primary exterior material is asbestos siding that starts at the soffit and continues down to form a skirt above the foundation wall. Board and batten wood siding sheathes part of the south and west faces, and long textured bricks form part of the south wall and also form a planter that is currently in need of repair.

Foundation

The conventional foundation consists of brick piers with brick curtain walls that span between exterior piers. Cast iron brick vents in the curtain wall allow for ventilation in the crawlspace. One on the north face is missing, and the others are in good condition. Foundation brick is typical red brick unlike the veneer brick on the south face. Other than minor patching to the curtain wall and repointing of mortar cracks, a problem exists with the collection of water in the crawlspace.

All elevations: minor cracks in mortar joints require repointing.

North elevation: The brick opening for crawlspace access requires patching, and a hole near the back stoop requires patching.

East elevation: The crawlspace access is also slightly damaged and requires patching.

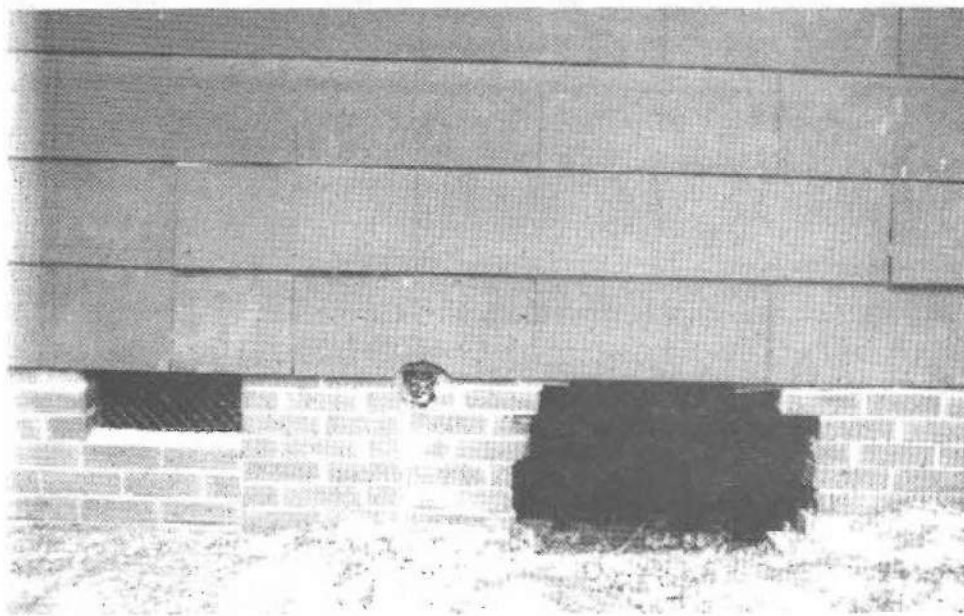


Figure 8. Hole in the brick curtain wall next to the rear stoop. The original siding found on the north, west and east elevations is asbestos.

¹Interview with Leroy Burnett, January 11, 1995.

Floor

Two 2 x 10's span between piers, and a ledger strip supports 2 x 8 floor joists at 16" on center. The subfloor is constructed of one layer of 1 x 8 boards laid diagonal to the joists. Excepting some damage to the floor on the southeast bedroom of the house, the floor is in good condition, and any problems with termite infestation or dry rot appear minimal.

Exterior Walls

The typical wall section (see Figure 11) has 11 1/2" asbestos lap siding on the exterior with metal trim at the corners. The metal corner trim is painted, but 1963 photos indicate that it was unpainted. Behind the siding is building felt and 1 x 8 diagonal sheathing. 2 x 4 studs support the wall, and 3/8" textured gypsum forms a surface for the interior. Some pieces of asbestos siding have been replaced as the original ones have broken. The pieces that are not original to the house can be identified by a more pronounced and wider vertical pattern on the surface.

Some areas of the south and west faces have board and batten siding. In that wall section (see Figure 12) the asbestos siding is replaced with 3/8" plywood as board and 1 5/8" wood battens.

Another area of the south face has a decorative brick veneer that runs from the soffit and down in front of the foundation piers to the ground.

North elevation: There are 5-6 broken pieces of siding along the foundation edge and 1 near the door.

East elevation: There are 7-8 broken pieces of asbestos siding along the foundation wall and 3-4 randomly across the surface.

South elevation: The paint on the board and batten siding is peeling and deteriorating. Both an early coat of lime green paint and a later coat of dark green paint are evident. An area of board and batten siding framed by the brick veneer has a decorative plywood panel that is currently painted white and is trimmed in the home's typical interior door casing. This panel is interrupted by a patched opening that held an air conditioner some time after 1963.² The brick veneer on the south face is in excellent shape except for missing and loose bricks near the soffit and loose bricks that form both the sill for two windows and the sill for the area of board and batten siding.

West elevation: The brick wall at the entry stoop matches the brick veneer on the south face. The wing wall has no cracks but has separated slightly from the wall of the main house. The west face of the house has 3 broken pieces of asbestos siding along the foundation and 2 in the surface above the foundation wall. The board and batten siding on this face is also losing its paint and shows an early coat of lime green paint and a later coat of dark green paint.

Storage shed: The north face of the storage shed is missing 2-3 pieces of broken asbestos siding, the west face is missing 2, the east face is missing 7, and the south face is missing 8.

²*Clarion-Ledger* staff photo.

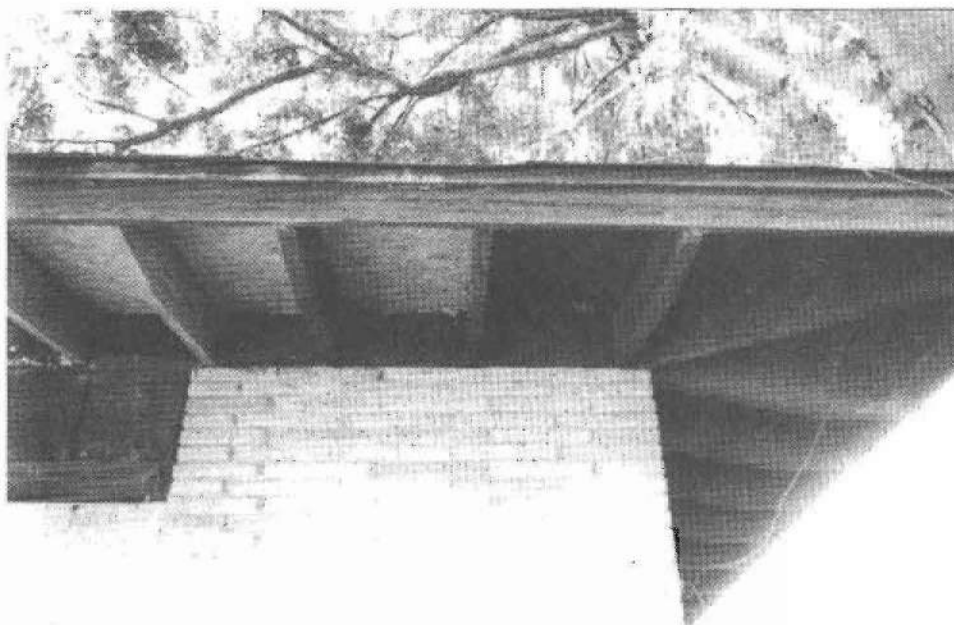


Figure 9. Original exposed rafters along the deep overhang and Roman bricks found on the front (south) elevation are evident in this 1994 photograph.

Roof

The shingle roof has suffered damage as indicated by the areas of water damage on the interior, but it has been repaired by the owner, Tougaloo College. The structure of the roof, which consists of 2 x 8 joists and rafters 16" on center, is still intact and in good condition. The soffits, exposed rafter tails and fascia have some damage on the south and east faces which will require minimal repair, but most of the eaves have suffered only the deterioration of paint. Two rafter tails have recently been replaced.

Doors and Windows

All of the windows and the carport door are presently covered in sheets of particle board that are screwed into the exterior trim. Windows on the north and east sides of the house have been equipped with painted cast iron burglar bars attached on the exterior. The door on the north face is also equipped with a barred security door.

The steel windows have no extensive damage. The glazing compound is brittle and can be chipped away, and some steel is exposed because of worn and peeling paint. Both exterior doors are currently intact and usable. The kitchen door has a deteriorating wood threshold. The carport door is missing a small area of its jamb.

Miscellaneous

North elevation: The concrete and brick stoop has suffered minor cracking and spalling probably associated with the water that collects in the crawlspace and outside of the foundation wall. There are two porcelain light fixtures, one attached to the exterior wall surface east of the door and one attached to the bottom of a rafter tail on the northeast corner.

South elevation: There is a cable TV line that runs across this face just above the vents in the foundation wall and penetrates the board and batten siding. The house numbers on the board and batten siding near the carport are the same numbers that appeared on the house in 1963.³

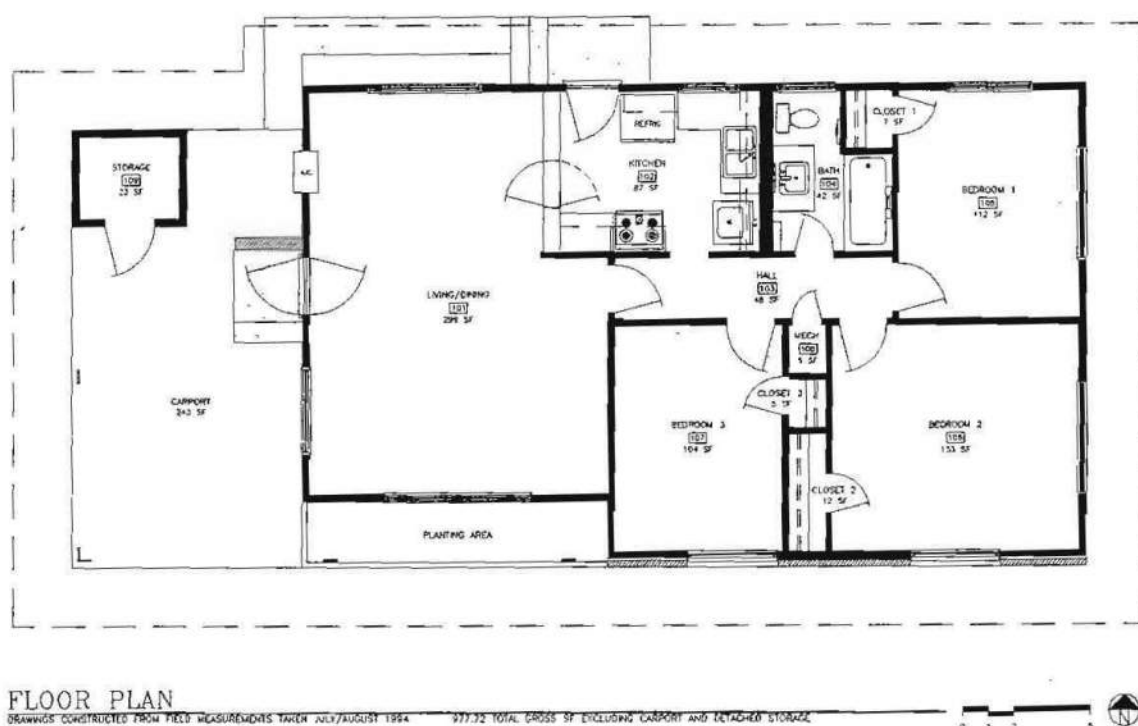


Figure 10. Measured drawing of the floor plan. Except for the addition of an indoor, downflow furnace (Closet 108) just prior to 1963, the plan remains unchanged since it was built in 1956.

³Newsreel D-20, Mississippi Department of Archives and History.

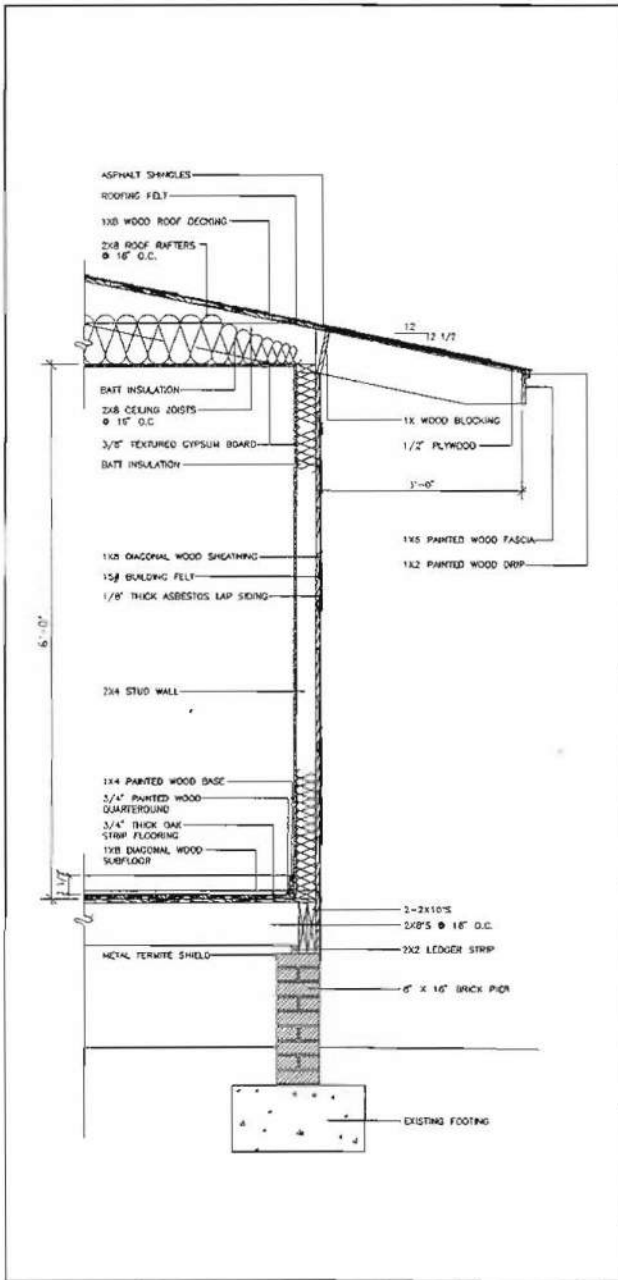


Figure 11. Measured drawing of typical wall section showing asbestos siding and exposed rafter tails.

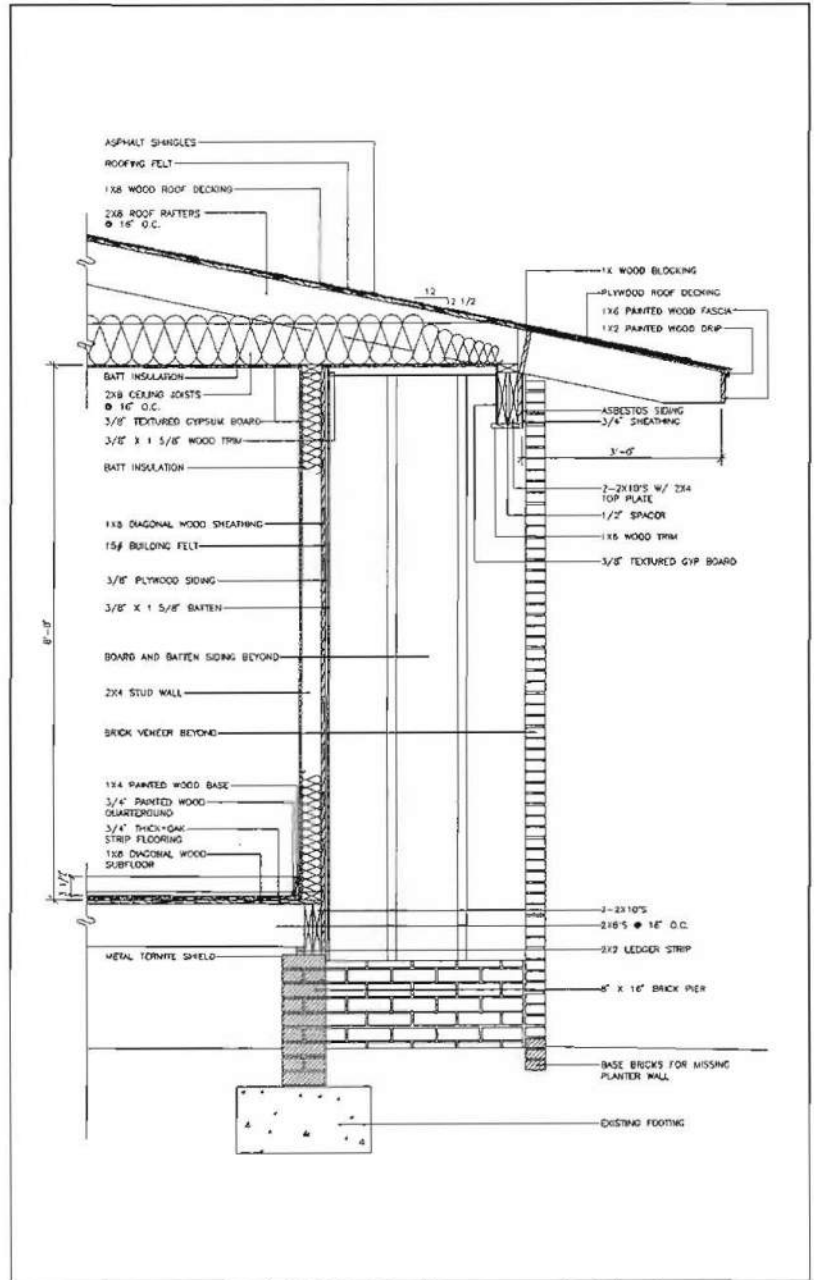


Figure 12. Measured drawing of wall section showing the optional wood board and batten siding and Roman brick chosen by the Evers and used on the front (south) elevation.

Room-By-Room Descriptions and Analysis of Interior

Carport

Floor

Concrete.

Ceiling

A textured gypsum ceiling is currently painted dark green. Two areas of the ceiling in the carport and part of the ceiling that wraps around the south facade have been patched and are unfinished. These include a 4' x 7' area in the carport and a 2' x 2' area in the ceiling above the south facade.

Wrought Iron Columns

Four decorative wrought iron columns support the carport roof and a portion of the overhang of the south facade. Except for the deteriorated bases, all are in good condition. Beneath the current dark green coat of paint is a light green (chips collected).

Roof Beams

The exterior beams that support the carport roof are sheathed in asbestos siding on the outside face, 1 x 6 wood on the bottom and gypsum board on the inside face. They are also currently painted dark green.

Lighting

A single light fixture above the stoop contains one socket for an incandescent bulb. It is in need of repair, and its globe shown in 1963 photographs is missing.

Miscellaneous

An air conditioner installed in the dining room projects into the carport behind the brick wall at the entry. This air conditioner was installed before June of 1963, and at that time a freezer stood abehind the wing wall and a black mailbox hung on the wall to the right of the entry. These items are all present in photographs taken the night of the murder.

Storage Closet

Floor

Smooth concrete.

Ceiling

None.

Walls

Interior walls are unfinished, exposed studs. There is one shelf and a clothes rod. Exterior walls have asbestos siding with some patching evident. Broken siding is also clearly visible. Outside corners are finished with a metal corner piece which has been damaged in some places.

Doors

The closet door is a painted two panel wood door with original hinges. The door knob appears to be a more recent addition.

Lighting

One overhead porcelain fixture.

Miscellaneous

A gas water heater is located in this storage closet.



Figure 13. District Attorney's Office photograph taken the night of the assassination. This photograph shows the trail Evers left as he struggled into the carport after he was shot. The white objects are NAACP shirts that he intended to carry into the house. Note the unpainted metal corner trim on the storage closet that exists painted in 1994. Note that the wood trim at the ceiling, the storage closet door and door casing are painted a light color that probably matched the light green color of the board and batten siding.



Figure 14. Evers was shot as he exited this light colored car. The bullet then continued through the lower left corner of the large front window. The house numbers shown in this photograph are the same numbers that currently exist on the house. Screens are evident on operable windows.

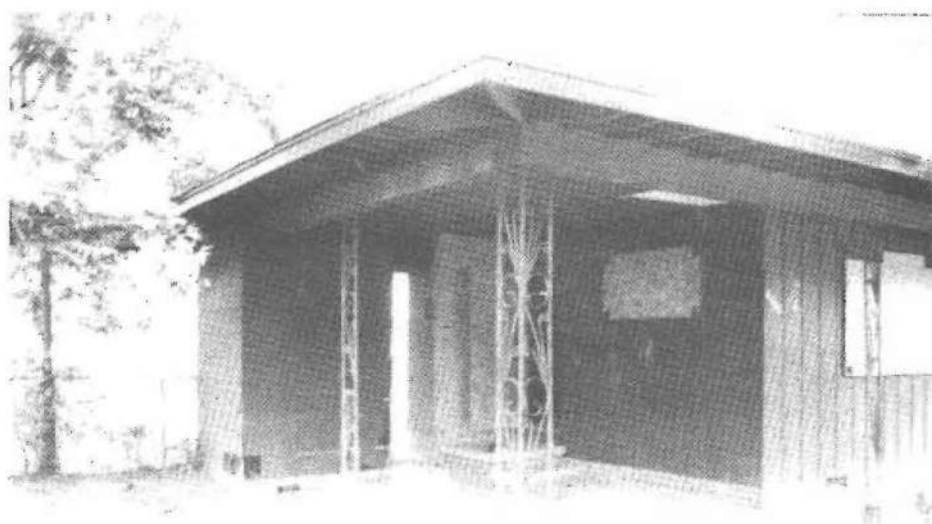


Figure 15. 1994 view of the carport. Note the original decorative, wrought iron posts supporting the roof. Note also the dark paint that replaced the original light green paint on the storage closet door and the board and batten siding.



Figure 16. This District Attorney's Office photograph of the crime scene shows the freezer, screen door and mailbox that no longer exist at the home. A trail of blood from Evers's wound is evident on the carport floor.



Figure 17. A view of the rear of the carport showing the brick wing wall behind the entry door and an air conditioner that appears in 1963 photographs.



DETECTIVE TRACES BULLET'S PATH

Jackson Det. Sgt. R. Q. Turner attempts to determine the path of a bullet fired from ambush which killed NAACP Field Secretary Medgar Evers here early today. Evers was standing beside his automobile when he was shot in the back.

The bullet passed through his body, pierced a window in his home (arrow), crashed through a wall and was found in the kitchen.—Daily News Staff Photo by Jack Thornell.

Figure 18. Newspaper clipping from the Mississippi Archives and History subject file.

Living/Dining Room

Floor

The original hardwood floors are in good condition except for a 1'-6" x 1'-6" deteriorated area at the kitchen entrance.

Ceiling

The painted, textured gypsum board has extensive water damage in the dining room area but only slight staining in the living room area. There is a crack that runs the width of the room and marks the line between the living and dining rooms.

Walls

Painted textured gypsum board, 3/8" thick.

Doors

The exterior door is relatively new. It is a stained, solid core, flush wood door with new brass hardware. This entrance door also had a wood framed, screen door (see Figure 17).¹ Marks from the hinges are still evident on the jamb. The door to the hall is a painted, hollow core, flush wood door, and both doors have the typical interior door casing. The worn brass plated hardware on this door appears to be original. There is hardware on the floor and on the lower portion of the shelf between the kitchen and dining room that suggests a pivoting door once existed here.

Windows

The three painted, steel frame windows have single pane glass. The minimal trim consists of painted 3/4" thick wood sills and painted 1" thick wood jambs which extend 3/8" beyond the face of the gypsum board wall. There are no casings.

The south window has a fixed center panel with four equal lights dividing it vertically. Equal, operable casements on each side of the fixed panel, also have four equal lights dividing them vertically.

The west window has three equal panels. The fixed center panel has two equal lights dividing it vertically, and the operable casements on each side of the fixed panel also have two equal lights dividing them vertically. Both operable panels have metal screens with metal frames.

The north window has a fixed center panel with eight equal lights dividing it vertically and horizontally. Equal casements on each side of fixed panel have four equal lights dividing them vertically.

Base

The painted 3/4" x 3 1/2" wood base has a painted 3/4" quarter round at the floor.

Lighting

The two ceiling fixtures are missing shades. The one in the living room has three sockets for incandescent bulbs, and the one in the dining room has two sockets for incandescent bulbs.

¹Newsreel D-20, Mississippi Department of Archives and History.

Miscellaneous

An air conditioner is installed through the west wall in the northwest corner of the dining room. The opening is cased with 2 1/4" painted, stepped wood trim.

Shelves made of painted 3/4" thick wood separate the kitchen from the dining room and frame an opening between these two rooms. The pivoting door in this opening is missing.

Figure 19. View of the living room, 1994.



Figure 20. View of the dining room. A pivoting door was located in the opening between the wood shelves that separate the dining room and kitchen.

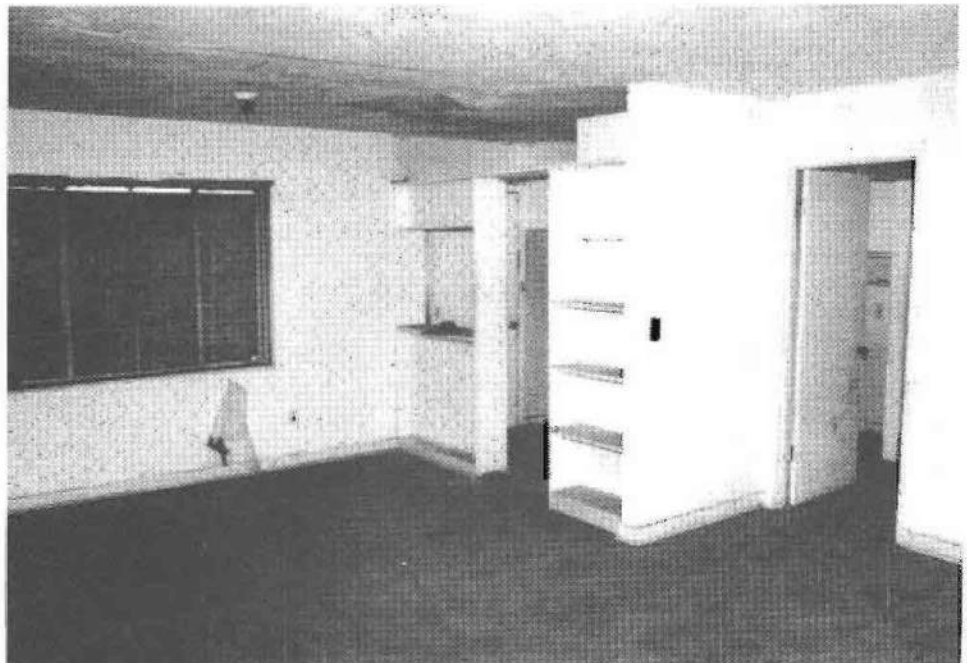




Figure 21. District Attorney's Office photograph taken the night of the assassination. This photo shows the picture window on the south wall of the living room through which the bullet travelled. Neither the light colored shear curtains nor the metal venetian blinds remain in the house. The existing textured wall surface was obviously present in 1963.

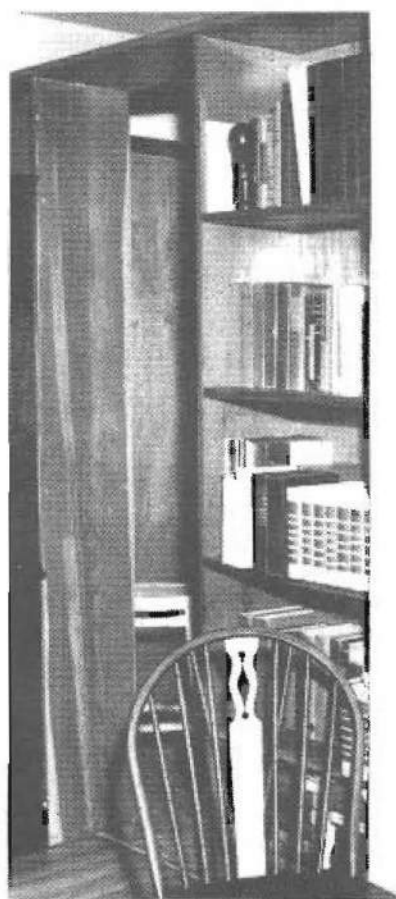


Figure 22. District Attorney's Office photograph taken the night of the assassination. This view of the interior wall that the bullet passed through indicates that interior and exterior doors were stained and not painted as they exist in 1994. The painted wood shelves that exist between the dining room and kitchen were also finished with stain.

Kitchen

Floor

A peeling and torn sheet vinyl floor replaces the original asphalt tile floor. A neighbor, Mrs. Bell, called this tile regulation tile. The vinyl floor is installed over a vapor barrier of asphalt building paper and plywood underlayment.

Ceiling

Painted, textured gypsum board, 3/8" thick.

Walls

Gypsum board walls show a first coat of light green paint, a second coat of light yellow paint and a final coat of white paint. Pressed metal tile or tile board above counters on the south, east and north walls also contains the same layers and colors of paint as the walls.

Doors

The exterior door is a painted, hollow core, flush wood door with typical wood casing and a latch set that has been replaced. A swinging door between the kitchen and dining room is missing. The opening to the hall is cased and is trimmed with typical, colonial wood casing.

Windows

There is a painted, steel window with single pane glass on the north wall. The minimal trim consists of painted 3/4" thick wood sills and painted 1" thick wood jambs which extend 3/8" beyond the face of the gypsum board wall, and there are no casings. The window consists of two equal panels. The fixed panel has three equal lights dividing it vertically, and the operable casement has three equal lights dividing it vertically.

Base

The painted 3/4" x 3 1/2" wood base has a painted 3/4" quarter round at the floor.

Lighting

There is a single overhead fixture with one socket for an incandescent bulb and a missing shade.

Cabinets

Cabinets on the north, south and east walls are made primarily of 5/8" plywood. The outside of these cabinets is painted, but a former neighbor to the Evers, Mrs. Bell, stated that the cabinets were clear finish knotty pine. Some shelves are 3/4" plywood, and all counters are 3/4" plywood with a green laminate top and metal edges. The green laminate is probably original because of its match to the original green paint on the walls and tile. Drawer pulls in place are probably original. Screw holes and round marks in the cabinet doors indicate small knobs, but none are remaining.

Miscellaneous

The double bowl sink is porcelain with a metal edge. The sink is probably original, but much of the porcelain has worn off. The existing faucet with plastic taps is probably not original.



Figure 23. District Attorney's Office photograph taken the night of the assassination. The bullet dislodged or shattered a piece of tile on this kitchen wall, and the tile has never been replaced. The stove and other appliances shown are no longer in the house, and the wallpaper shown behind the stove no longer exists. All of the outlet and switch plates were originally brown like the one shown. They have since been painted.



Figure 24. District Attorney's Office photograph taken the night of the assassination. The stained wood cabinets shown still exist in the same form, but they were painted some time after 1963. The countertop and sink also exist in the same form, but the sink faucet has been replaced. The washer shown is no longer in the house. Some of the drawer pulls shown remain, but none of the round door hardware remains.

Bedroom 1

Floor

The hardwood floor is in good condition.

Ceiling

About a third of the painted, textured gypsum board ceiling has fallen, and the rest is heavily stained and covered with mildew.

Walls

The painted, textured gypsum board is lightly stained with mildew.

Doors

Both doors are painted; hollow core, flush wood doors. Each has original hardware and typical casing. On the side edge of the door to the hall, a small area of the veneer has cracked and is loose.

Windows

Both windows are painted, steel windows with single pane glass. The minimal trim consists of painted 3/4" thick wood sills and painted 1" thick wood jambs which extend 3/8" beyond the face of the gypsum board wall. There are no casings.

The east window has one center fixed panel with four equal lights dividing it vertically and horizontally. Equal, operable casements on each side of the fixed panel have two equal lights dividing them vertically.

The north window has three equal panels. The center fixed panel has four equal lights dividing it vertically. Operable casements on each side of the fixed panel have four equal lights dividing them vertically.

Base

The painted 3/4" x 3 1/2" wood base has a painted 3/4" quarter round at the floor.

Lighting

There is one ceiling fixture with a missing shade and sockets for two incandescent bulbs.

Closet

This closet provides access to the bath tub plumbing which is exposed in the south wall. The ceiling is heavily damaged, and the walls are heavily stained with mildew. One shelf and a metal clothes rod run the length of the closet.

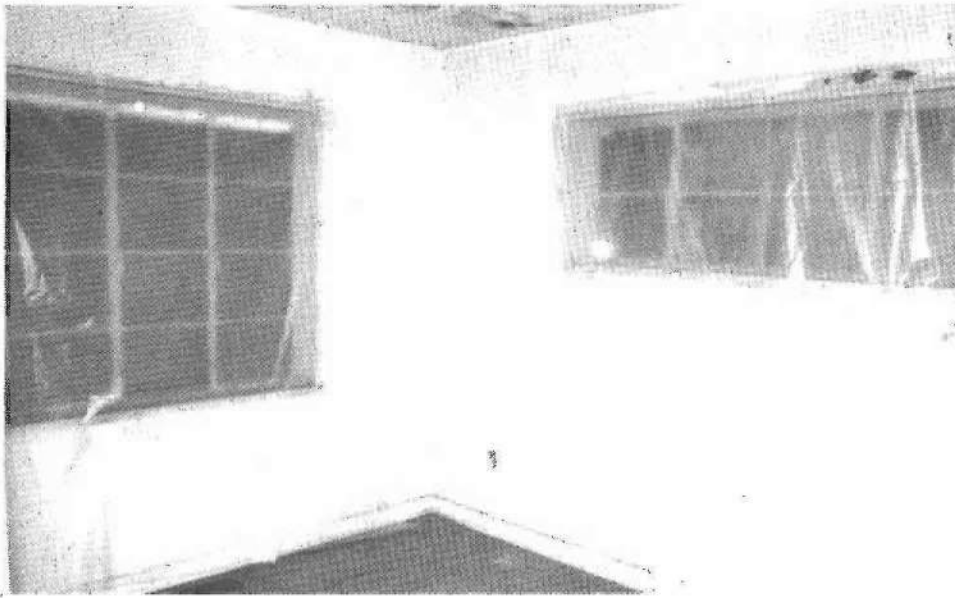


Figure 25. Photograph of the northeast corner of Bedroom 1, 1994.



Figure 26. Photograph taken in 1994 of the bathtub plumbing access located in the closet of Bedroom 1.

Figure 27. 1994 photograph of Bedroom 2 showing damaged floor and ceiling areas.



Figure 28. The fallen and deteriorated ceiling allows a view of the attic space above Bedroom 2 in this 1994 photograph. Areas of patched roof decking visible in the photograph have halted the leaks that caused the water damage.



Bedroom 2

Floor

The hardwood floor is in fair condition except for a line of severe damage 2-5 boards wide and running the length of the room from east to west. These boards have warped and buckled from water that was admitted by roof leaks which have since been repaired.

Ceiling

Forty to fifty percent of the painted, textured gypsum board ceiling has fallen along with attic insulation from above. The remaining gypsum board is heavily stained and mildewed.

Walls

All four walls are textured and painted gypsum board, but inadequate ventilation and lack of heat have caused extensive mildew growth on all of them.

Doors

Both the door to the hall and the closet door are painted, hollow core, flush wood doors. Both have original hardware and typical wood casing. The closet door has significant damage along the bottom where water has caused the veneer to peel and crack.

Windows

Both windows are painted, steel windows with single pane glass. The minimal trim consists of painted 3/4" thick wood sills and painted 1" thick wood jambs which extend 3/8" beyond the face of the gypsum board wall. There are no casings.

The south window has three equal panels. The center fixed panel has four lights dividing it vertically. Operable casements on each side of the fixed panel have four lights dividing them vertically, and a metal screen with a metal frame is attached to each operable panel.

The east window has one center fixed panel with four lights dividing it vertically and horizontally. Equal, operable casements on each side of the fixed panel have two lights dividing them vertically.

Base

The painted 3/4" x 3 1/2" wood base has a painted 3/4" quarter round at the floor.

Lighting

One ceiling fixture with a missing shade has sockets for two incandescent bulbs.

Closet

The gypsum board ceiling is damaged and partially gone. There is one shelf and a metal clothes rod.

Bedroom 3

Floor

The original hardwood floor is in good condition.

Ceiling

The painted, textured gypsum board is slightly stained across its entire surface and damaged near the window.

Walls

The painted, textured gypsum board is stained and slightly damaged near the window.

Doors

The door to the hall and the closet door are painted, hollow core, flush wood doors. The latch set is missing on the door to the hall, but the hardware on the closet door is probably original. Both doors have typical wood casing.

Windows

There is a painted, steel window with single pane glass on the south wall. The minimal trim consists of painted 3/4" thick wood sills and painted 1" thick wood jambs which extend 3/8" beyond the face of the gypsum board wall, and there are no casings. The window has three equal panels. The center fixed panel has four equal lights dividing it vertically, and operable casements on each side have four equal lights dividing them vertically. A metal screen with a metal frame is with the window but unattached.

Base

The painted 3/4" x 3 1/2" wood base has a painted 3/4" quarter round at the floor.

Lighting

One overhead fixture with a missing shade and sockets for two incandescent bulbs is located on the ceiling in the center of the room.

Closet

When the heater was installed, space was taken from the closet in this bedroom. The rear wall of the heater closet extends past the door jamb and into the bedroom closet considerably reducing its original size. The closet contains one painted 3/4" thick wood shelf and one metal clothes rod.



Figure 29. 1994 photograph of Bedroom 3.



Figure 30. This photograph shows the back wall of the mechanical closet that extends into the closet opening in Bedroom 3. The mechanical closet encloses area that was once a part of the bedroom closet.

Bathroom

Floor

A peeling and torn sheet vinyl floor covering replaces the original asphalt tile floor. A vapor barrier of building felt is used over plywood underlayment similar to the kitchen.

Ceiling

The entire painted, gypsum board ceiling is heavily damaged. A large section above the tub is missing and insulation is sagging between the exposed ceiling joists.

Walls

Light green and white ceramic tiles are arranged in horizontal stripes that surround the bath tub up to 6'-7". A 4'-0" high wainscot of green and white tile stripes cover the other walls. The top course of tiles is a darker green, and these same green tiles form the top and side edges of the tub surround. The wall area behind the toilet has been patched extensively. The patching suggests that this area did not have a striped pattern. It had only light green tiles except for the darker green bullnose tiles at the top edge. All of the tile is intact and in good condition except for two cracks in the grout above the sink. The cracks are 1'-0" to 1'-4" long and meet at a 90 degree angle.

Doors

The door is a painted, hollow core, flush wood door that has been fitted with a latch set that is not original to the house. It has the typical wood casing.

Windows

One painted, steel window with single pane glass is positioned in the north wall. The minimal trim consists of a painted 3/4" thick wood sill and painted 1" thick wood jambs which extend 3/8" beyond the face of the gypsum board wall. There is no casing. The window has two equal panels. The fixed panel has three equal lights dividing it vertically, and the operable casement has three equal lights dividing it vertically.

Base

The wall tile sits on top of a continuous 1 x 6 painted wood base.

Lighting

One porcelain fixture without a shade is mounted above the sink.

Cabinets

A painted vanity cabinet is made of 3/4" plywood and has a plastic laminate top. The vanity was probably added at a later date. Even though the sink color matches the other original fixtures, the plastic laminate does not appear to be original, and Mr. Burnett, the designer, has stated that the original sink was wall hung. This statement seems correct, because the tile wainscot is continuous behind the existing vanity.

Bath Fixtures

The seat and tank of the original pink toilet have been replaced, but the bowl is original. The existing shower head has been replaced, but the pink porcelain tub and faucet appear to be original. The pink porcelain sink in the vanity is not original, and the faucet is probably also a later addition.

Miscellaneous

A white ceramic toilet paper holder on the north wall, a white ceramic towel rack, soap dish and toothbrush holder on the west wall and a broken white ceramic towel rack on the south wall are original, but the rods in the towel racks were probably wood, not plastic.

A painted 3/4" plywood linen cabinet is recessed into the wall next to the vanity and a 16"x 20" medicine cabinet with a mirrored door is located above the sink.



Figure 31. 1994 photograph of the bathroom shows the vanity and sink that were added after 1963 and a sheet vinyl floor that replaced the asphalt tile floor.



Figure 32. 1994 photograph of tub and tub surround.

Hall

Floor

The hardwood floor is in good condition. A barely noticeable patch in the floor at the west end of the hall marks the location of the original floor furnace grill.

Ceiling

The painted, textured gypsum board is in good condition. There is a large square opening in the ceiling where an attic fan may have been. The opening is covered with a large, loose fitting cloth, obviously a makeshift seal for the hole.

Closet

When the Evers abandoned their floor furnace and installed a downflow gas furnace inside the house, this closet was carved out of the closet serving bedroom 3. The hollow core, flush wood door is painted and seems to have the original hardware and typical casing found throughout the house. Return air grilles for the furnace are high on the wall of each adjacent bedroom. The furnace no longer works.

Electrical Devices

What appears to be the original door chime hangs high on the south wall, and the electrical panel is located on the north wall just east of the bathroom door. Two small gauge wires are visible below the door chimes, and they probably mark the location of the thermostat.

Figure 33. In this 1994 photograph, a blanket patches the opening that once held an attic fan.



Leroy Burnett
1042 Pecan Blvd.
Jackson, MS 39209

7 February 1995

P.O. Box 12344
Jackson, MS 39236

Dear Mr. _____,

As you requested, I met you at the Medgar Evers home on Margaret Walker Alexander Drive on January 13, 1995. I walked around the entire house and could only find one significant change. The original built-up roof with a light colored gravel coating has been replaced with a shingle roof. I also toured the interior of the house. I did not attempt to note minor changes in color or minor replacements required for maintenance, but as the designer of this house and the rest of the houses in this section of the Elraine Subdivision, I can state that the floor plan has not been changed since it was built. The only major material changes on the interior were linoleum floors installed in the kitchen and bathroom. These floors replaced the original asphalt tile floors.

Sincerely,



Leroy Burnett
Formerly Vice President
Thompson Investment Co.

CHART COMPARING 1963 CONDITIONS TO 1994 CONDITIONS

FEATURE	ORIGINAL IN 1963	EXISTING IN 1994	CHANGE/ ALTERATION
A. EXTERIOR			
1. Conventional foundation with red, modular brick piers and curtain wall.	YES	YES	UNCHANGED
2. Wood framing for walls, roof and floor. 2"x8" floor joists and 1"x8" subfloor.	YES	YES They are generally in good condition.	UNCHANGED
3. 3/8" thick plywood siding and wood battens.	YES	YES	UNCHANGED
4. 24"x11 1/2"x1/8" thick asbestos siding and painted metal corner trim.	YES	YES	The metal corner trim was not painted in 1963.
5. Roman brick veneer.	YES	YES	UNCHANGED Planter wall is missing.
6. Steel fixed and casement windows.	YES	YES	UNCHANGED
7. 2"x8" roof rafters, 2.5:12 pitch hip roof, 1"x8" and plywood roof decking, exposed rafter tails.	YES	YES	UNCHANGED Roof leaks have damaged some rafters, and decking repairs are visible.
8. 1"x6" fascia with 1"x2" drip.	YES	YES	Metal gravel stop was removed with built-up roof.
9. Built-up roof with metal gravel stop/drip edge along perimeter of hip roof with light colored gravel surface.	YES	NO	An asphalt shingle roof replaced the original built-up roof.
10. Vent stacks on roof.	YES One rose from the floor furnace and one from the newer upflow furnace.	YES	UNCHANGED
11. Dark green exterior paint on all siding and trim.	NO	YES	The dark green color was a later change. Scrapings and photos indicate a light green as the original color.
12. Decorative wrought iron posts.	YES	YES	UNCHANGED
13. Burglar bars on windows and doors of north and east elevations.	NO	YES	ALTERED Bars were a later addition.
14. Gypsum board ceilings in carport.	YES	YES	Some areas have been patched and remain unpainted.
15. Brick and concrete stoops.	YES	YES	UNCHANGED
16. Site drainage.	Surface drainage only.	Surface drainage only.	UNCHANGED

FEATURE	ORIGINAL IN 1963	EXISTING IN 1994	CHANGE/ ALTERATION
B. INTERIOR			
1. Walls- 3/8" textured gypsum board walls and ceiling.	YES The kitchen and bathroom walls were not textured.	YES	UNCHANGED
2. Hardwood strip flooring.	YES	YES	UNCHANGED
3. Painted 1"x" wood base with shoe mould.	YES	YES	UNCHANGED
4. "Colonial" door casings.	YES	YES	UNCHANGED
5. 5/4" thick window trim.	YES	YES	UNCHANGED
6. Metal framed screens for operable windows.	YES	YES Some	ALTERED Not all screens remain.
7. Flush, solid core wood entry doors.	YES	NO	The main entry door has been replaced with another solid core door. Tougaloo has the original door. The rear entry door may be original.
8. Flush, hollow core interior doors.	YES	YES	ALTERED Original doors had a clear finish, evident in photos. They were painted more recently.
9. Wood framed screen door.	YES	NO	The carport screen door has been removed.
10. Two panel wood storage closet door.	YES	YES	UNCHANGED
11. Interior and exterior door hardware.	YES	NO	Lock sets in the two exterior doors have been replaced. The bathroom latch has been replaced, and the latch to bedroom 3 is missing. The latch on the storage closet door has also been replaced.
12. Pivoting kitchen door.	YES	NO	This door between the kitchen and dining room is missing. Pivot hardware at the floor and door head is the only remaining physical evidence that the door existed.
13. Pine kitchen cabinets and shelves.	YES	YES	ALTERED The configuration of the cabinets and shelves has not changed. However the original hardware is missing, and the cabinets and shelves have been painted. Photographic evidence shows that the pine had a clear finish.
14. Kitchen cabinet hardware, chrome or nickel plated. Semi-concealed hinges.	YES	YES	UNCHANGED
Round, dish-shaped door pulls.	YES	NO	ALTERED Original pulls are missing or have been changed.

FEATURE	ORIGINAL IN 1963	EXISTING IN 1994	CHANGE/ ALTERATION
B. INTERIOR (cont.)			
14. Kitchen cabinet hardware, chrome or nickel plated. (cont.) Drawer pulls.	YES	YES	UNCHANGED
15. White porcelain double kitchen sink with metal edging.	YES	YES	UNCHANGED The porcelain finish is severely worn.
16. Lever handle, chrome faucet in kitchen.	YES	NO	ALTERED The original faucet has been replaced.
17. Green plastic laminate countertop with metal edge and trim.	YES	YES	UNCHANGED
18. Embossed metal backsplash above base cabinets.	YES	YES	ALTERED The original green backsplash has been painted yellow and later white.
19. Kitchen appliances- bottom freezer/refrigerator, Kenmore gas range and front loading washer.	YES	NO	REMOVED All appliances have been removed.
20. Asphalt tile floors in kitchen and bathroom.	YES	NO	ALTERED The original asphalt tile was replaced with sheet vinyl over a new plywood substrate.
21. Ceramic tile tub surround and wainscot in bathroom.	YES green and white	YES	ALTERED Some dissimilar white tiles have been used to patch the wainscot on the west wall of the bathroom.
22. Bathroom fixtures- porcelain tub, toilet and wall-hung sink.	YES pink color	NO	ALTERED The tub is original, but the toilet tank and seat have been replaced. The original wall-hung sink has been replaced with a vanity and recessed, rectangular lavatory.
23. Linen cabinet in bathroom.	YES	YES	UNCHANGED
24. Wall-mounted gas space heater in bathroom.	YES	YES	UNCHANGED
25. Sink and tub faucets.	YES	NO	ALTERED The tub faucet appears to be original. The shower head has been replaced, and the sink faucet was most likely replaced when the vanity and new sink were added.
26. Switches and receptacles.	YES brown	YES	ALTERED The original switches, receptacles and cover plates have been painted.
27. Light fixtures.	YES Each room had one ceiling fixture.	NO	ALTERED Ceiling fixtures are missing entirely, or only pieces remain. None of the glass shades or globes exist.

FEATURE	ORIGINAL IN 1963	EXISTING IN 1994	CHANGE/ ALTERATION
B. INTERIOR (cont.)			
28. Plumbing.	YES	YES Galvanized pipes are deteriorated.	UNCHANGED
29. Heating system floor furnace replaced by downflow furnace.	YES	YES	UNCHANGED The floor furnace was removed. A "Perfection" downflow furnace remains but is inoperable.
30. Air conditioning units in living/dining room and bedroom 2.	YES There was only one through-wall unit.	YES The living/dining room unit remains.	ALTERED A second through-wall unit was added after 1963 in bedroom 2. The hole in the south wall is still present, but the unit has been removed. Additional wiring was installed for this air conditioner probably when it was installed.
31. Electrical wiring.	YES The wiring is non- metallic sheathed cable.	YES Original wiring is old and not in compliance with current codes.	ALTERED Additional receptacles were added to the original system in bedroom 1, bedroom 2 and in the carport where a freezer was located.

RENOVATION AND RESTORATION OBJECTIVE

The importance of Medgar Evers's life work and his tragic death to the history of Mississippi and to the broader Civil Rights Movement are concisely documented at the beginning of this report. With his home and the site of his assassination virtually unaltered today, there is an extraordinary opportunity to showcase them and the story they tell. The primary goal should be a careful renovation/ restoration of both the house and the grounds to their 1963 appearance. Since recent changes have been negligible, this goal can reasonably be achieved through repair and replication methods coupled with a planned maintenance program that will insure the continued stability of the property.

A limited initial budget may not permit completion of the interior furnishings. At this time, there is very little documentation of interior furnishings and arrangements, and it appears that Mrs. Evers will be the only viable source for this information. Obtaining authentic furniture and accessories may also be a problem. Obviously '50's and '60's furniture and accessories are not antiques, and items from this era are rarely found as a collection. This research to date has discovered only one store that specializes in items from this era.¹ They are usually found among a multitude of miscellaneous items from the last 40 years. The search would be a protracted one, but the authenticity of the furnishings is important. An attempt to fill the house with unrelated pieces would serve only to diminish the significance of the project as a whole.

A sensitive landscape plan should be developed that reflects the planting that existed in 1963. Currently, specific evidence identifying the particular plants, their locations and their appearance in 1963 is sparse. Information on the landscaping is limited to a short reel of news footage, one newspaper photograph and recollections of neighbors and friends. Again, photographs and memories held by Mrs. Evers will be the most accurate and informative. Every attempt should be made to gain her help.

An additional concern in the renovation/restoration of the home involves parking. The number of anticipated visitors to the Evers home will undoubtedly cause traffic and parking problems, and it is unlikely that the influx of cars and busses can be accommodated by existing on-street parking. Decisions about parking and access should result in the least possible disturbance to this historic district. Three vacant lots located nearby on Missouri Street were purchased out of the project funds allocated by the Mississippi Legislature in 1994, and the idea of using these lots to provide off-street parking seems reasonable. Initially, unobtrusive security fencing and lighting should be installed along with hard surface paving. Some type of information or visitors center could conceivably be a future addition.

¹see "Possible Sources for Collection of Artifacts" at the end of text.

RECOMMENDED RENOVATION/RESTORATION PROGRAM

Given the years of vacancy and neglect, the Medgar Evers home is in fair condition. A leaky roof and the lack of heat or air conditioning have taken their toll on the interior. Fortunately efforts by Tougaloo College, the present owner, have stopped the leaks and temporarily stalled further deterioration. Mildew and dry rot are the most obvious problems, but the floor and roof structures remain sound. Although not readily apparent, termite damage may be uncovered as work proceeds. The presence of asbestos containing material (ACM) will also be an unavoidable factor. There is little doubt that the siding on the rear and sides of the house contains asbestos, and it is unlikely that a suitable substitute can be found. The location and type of other ACM's will be determined by scheduled inspection and testing procedures.

The house has been repainted several times since 1956. The original exterior and interior colors are no longer visible. Some verbal evidence of colors and finishes has been obtained, but careful uncovering of paint layers should reveal the original paint and stains. Samples should then be computer analyzed in order to match the colors and promote accuracy of the color scheme.

Site Drainage

Site drainage is poor, and water accumulates in the crawl space under the house. A system of French drains will be necessary to prevent future water related problems once the renovation/restoration work is complete. A catch basin and drain line may be required to divert water away from and around the house, if French drains alone are insufficient.

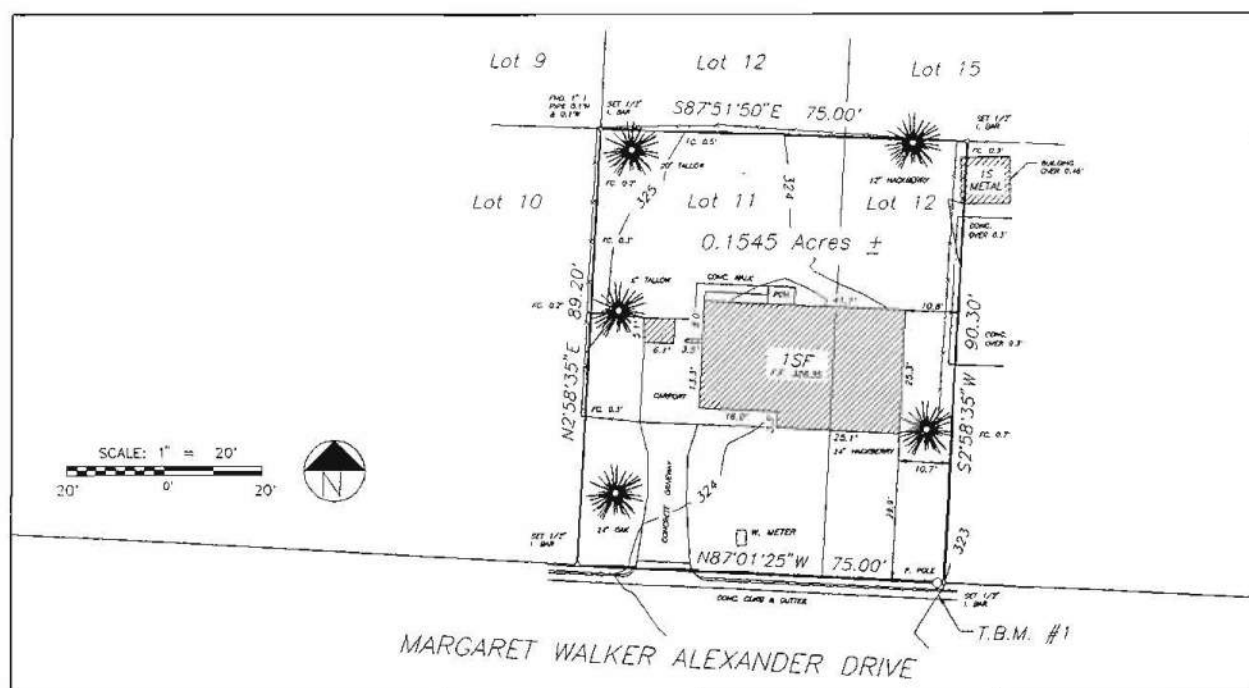


Figure 34. Site plan of the Evers homesite from a 1995 survey done by Case & Associates, Inc.

Mechanical Systems

The original gas floor furnace was replaced with a "Perfection" downflow furnace installed in an inside closet. A through-the-wall air conditioning unit was added in the dining room before 1963, and another was added in the south wall of Bedroom 2 after 1963. Neither the remaining unit in the west wall of the dining room nor the downflow furnace are presently operable. Both should be reconditioned and remain as integral parts of the house. New heating, cooling and controlled humidity systems will be needed to preserve the house and to protect the collection of artifacts and furnishings inside. Existing ducts under the house are inadequate for the new systems and should be replaced by new ducts. The installation of new ductwork should not adversely affect the appearance of the interior since the present floor register locations should be adequate for the new system. If additional floor registers are required, their placement and design should be consistent with the originals.

Plumbing

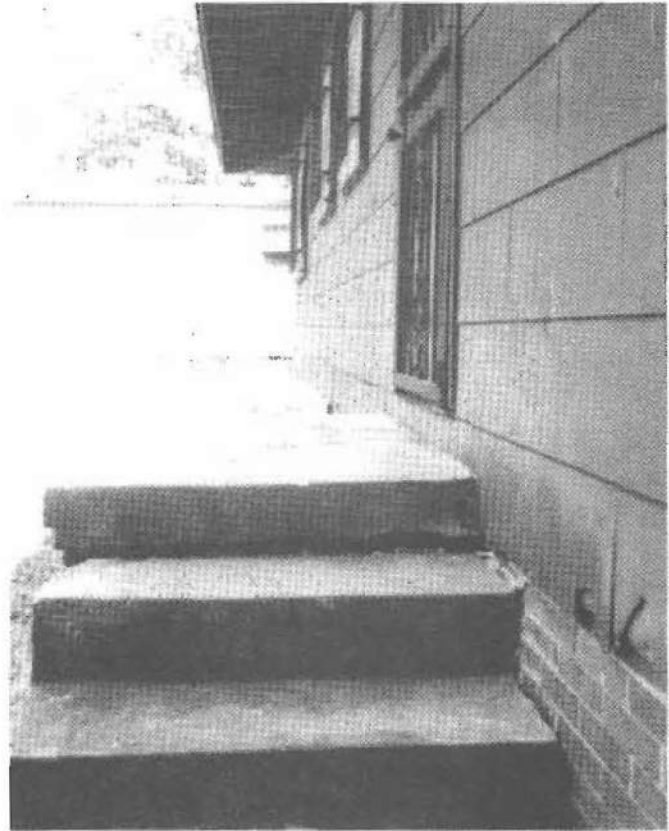
There is only one bathroom in the house. The existing sink and vanity have replaced the original wall-hung lavatory. The different color of the toilet tank and seat indicate that they were replaced, but the other fixtures appear to be original. The bathroom is small by today's standards, and circulation space is minimal. It is not currently accessible to disabled persons and cannot be made accessible without major changes to the fabric of the house. The bathroom should be accurately restored to its original condition, and both the bathroom and kitchen should be made fully functional. The existing, galvanized steel plumbing and waste lines are rusted and deteriorated, and to be functional, they would have to be replaced. Adapting the bathroom to serve as a public restroom in compliance with ADA requirements is inadvisable. The project would best be served if public restrooms were provided as part of a visitors' center on or near the Missouri Street property.

In addition to plumbing work in the bathroom and kitchen, an automatic sprinkler system should be installed to protect both the house and the artifacts that it will contain.

Accessibility

The Americans with Disabilities Act and the Standard Building Code requirements for accessibility to the main level of the house can best be achieved by construction of a ramp. However, the location of a ramp is limited to the rear door of the house that opens into the kitchen or the main door of the house that opens from the carport into the living/dining area. The rear door is too narrow to be an accessible entrance, and the kitchen will not permit adequate maneuvering space for wheelchairs. A suitable ramp at the main door would encroach upon the space of the carport and appear totally incongruous. In addition, none of the doors inside are wide enough for wheelchairs making the entire house inaccessible. The size and layout of the house were dictated by the need for efficiency and economy, so even minimal changes to the fabric of the house would be significant. It would not be feasible to make the changes necessary to provide mandated accessibility to persons with disabilities and still preserve the fabric of the house. Section 4.1.7 of *ADA Rules and Regulations* gives some discretion to the State Historic Preservation Officer regarding the compliance of historic buildings. An opinion should be requested from the SHPO before the preservation plan is adopted.

Figure 35. 1994 photograph of the stoop on the north side of the house.



Electrical System

The original electrical system is old and consists primarily of nonmetallic sheathed cable that does not conform to current codes. Old wiring should be abandoned and a completely new code compliant system should be installed including a new breaker panel concealed in a closet or at least out of public view. The existing panel in the hallway should remain for display purposes only. Existing receptacles and switches should be rewired and new devices and coverplates installed to match the original ones. Any new receptacles or switches should be carefully placed to appear consistent with the original design.

Rooms were generally lit with individual ceiling fixtures. Most of these remain but are broken. They can, however, influence the selection of fixtures, globes and shades. Replicas should be found and used where possible. Authentic lamps can provide additional lighting as part of displays. The limited use of recessed light fixtures should also be considered where higher levels of illumination are needed for viewing documents, photographs and other artifacts.

To further protect the house and its contents, new fire detection and security systems should be installed. Both systems should be designed to quickly alert local police and fire departments. The new security system will eliminate the need for burglar bars on the north and east windows, and these bars, which were installed after 1963, should be removed.

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- Young, Johnny Pearl. December 1994 - January 1995, Jackson, Miss.
- Wells, Shirley. December 1994, Jackson, Miss.
- Sweet, Grace. December 1994 - January 1995, Jackson, Miss.
- Bell, Bernice. December 1994 - January 1995, Jackson, Miss.

POSSIBLE SOURCES FOR COLLECTION OF ARTIFACTS

Collections with photographs by Charles Moore:

National Portrait Gallery
F Street at 8th, Northwest
Washington, DC 20560
(202) 357-1637
Will Stapp - Curator of Photography

Hargrett Rare Books & Manuscripts Library
University of Georgia Libraries
University of Georgia
Athens, GA 30602
(404) 542-7123
Thomas E. Camden, Head

Time Inc. Picture Collection
Concourse, Time & Life Building
Rockefeller Center
New York, NY 10020
(212) 522-3690
Chief

Gallery of Fine Arts at the Southeast Center
for Photo/Graphic Studies
Daytona Beach Community College
1200 Volusia Avenue
Daytona Beach, FL 32114
(904) 255-8131
Dan Biferie, Director

International Museum of Photography at
George Eastman House
900 East Avenue
Rochester, NY 14607
(716) 271-3361
David Wooters, Print Archivist

Collections with Photographs by John Loengard:

International Center of Photography
1130 Fifth Avenue
New York, NY 10128
(212) 860-1777
Miles Barth, Curator, Archives &
Collections

Vassar college Art gallery
Box 23
Vassar College
Poughkeepsie, NY 12601
(914) 437-5235
Rebecca Lawton, Curator of Collections

Time Inc. Picture Collection
(as shown above)

International Museum of Photography at
George Eastman House
(as shown above)

Collections with Photographs by Flip Schulke:

Division of Photographic History
National Museum of American History
14th Street and Constitution Avenue,
Northwest
Washington, DC 20560
(202) 357-2059

International Museum of Photography at
George Eastman House
(as shown above)

Time Inc. Picture Collection
(as shown above)

Possible Source for Furnishings:

Flashback in Memphis, TN

APPENDIX A



Figure A-1. District Attorney's Office photograph of the Evers home taken the night of the assassination.



Figure A-2. District Attorney's Office photograph of the crime scene that shows the trail left by Evers after he was shot.



Figure A-3. 1963 photograph of the south face of the Evers home showing the hole in the picture window made by the bullet that killed Medgar Evers.

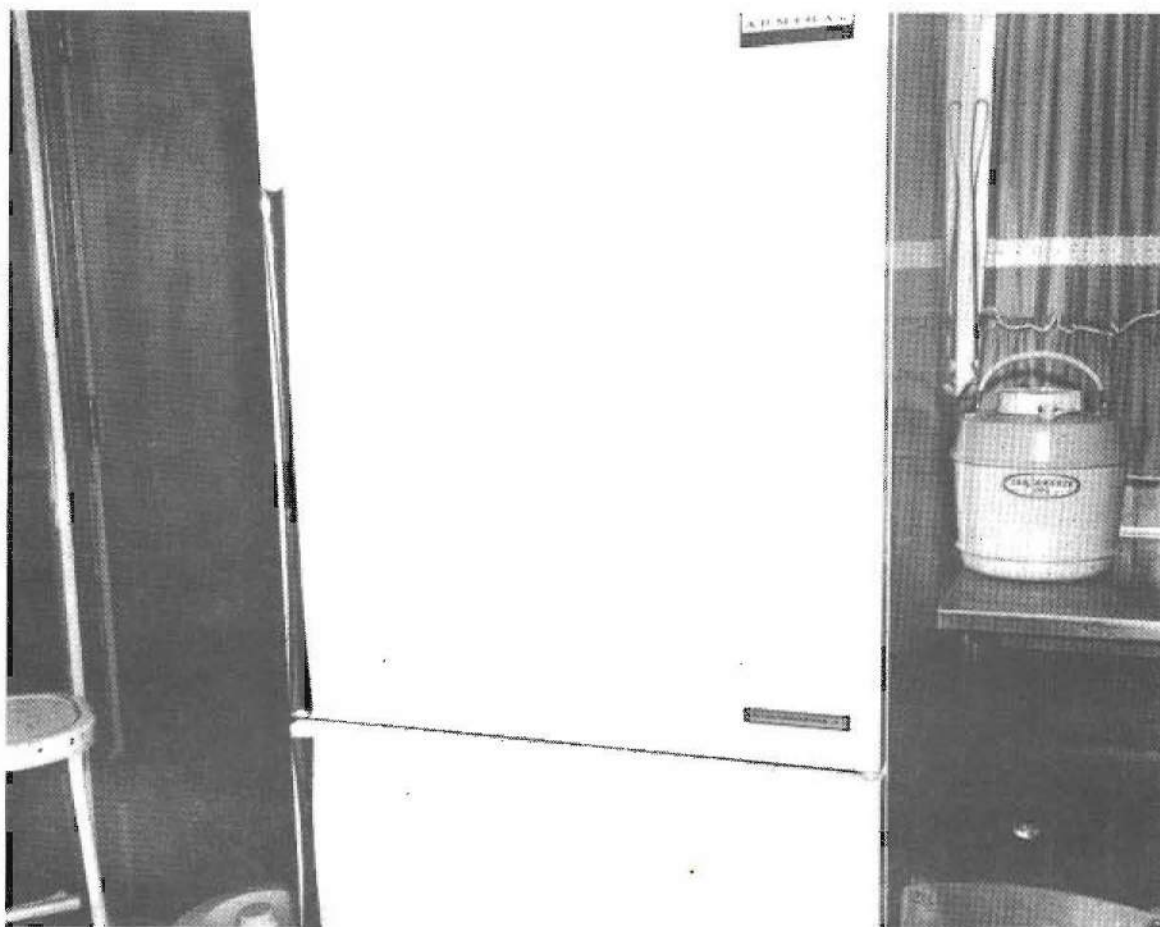


Figure A-4. The bullet that killed Evers continued on a path through the Evers home. This 1963 photograph shows the mark that it left on the refrigerator before it came to rest on the kitchen counter.



Evers' Home Front Elevation After 1996 Restoration



View of Living Room (1996)

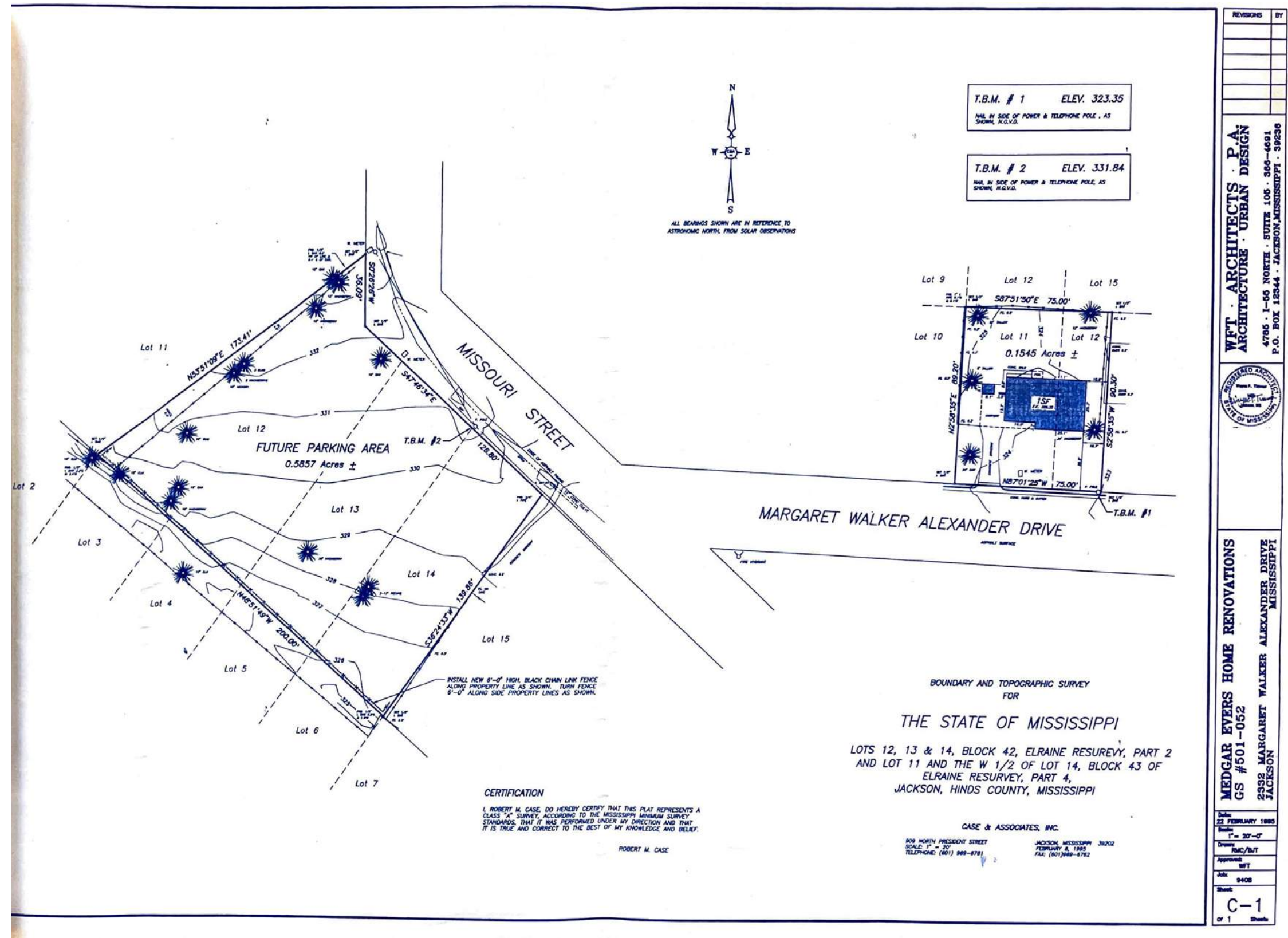


View of Dining Room (1996)

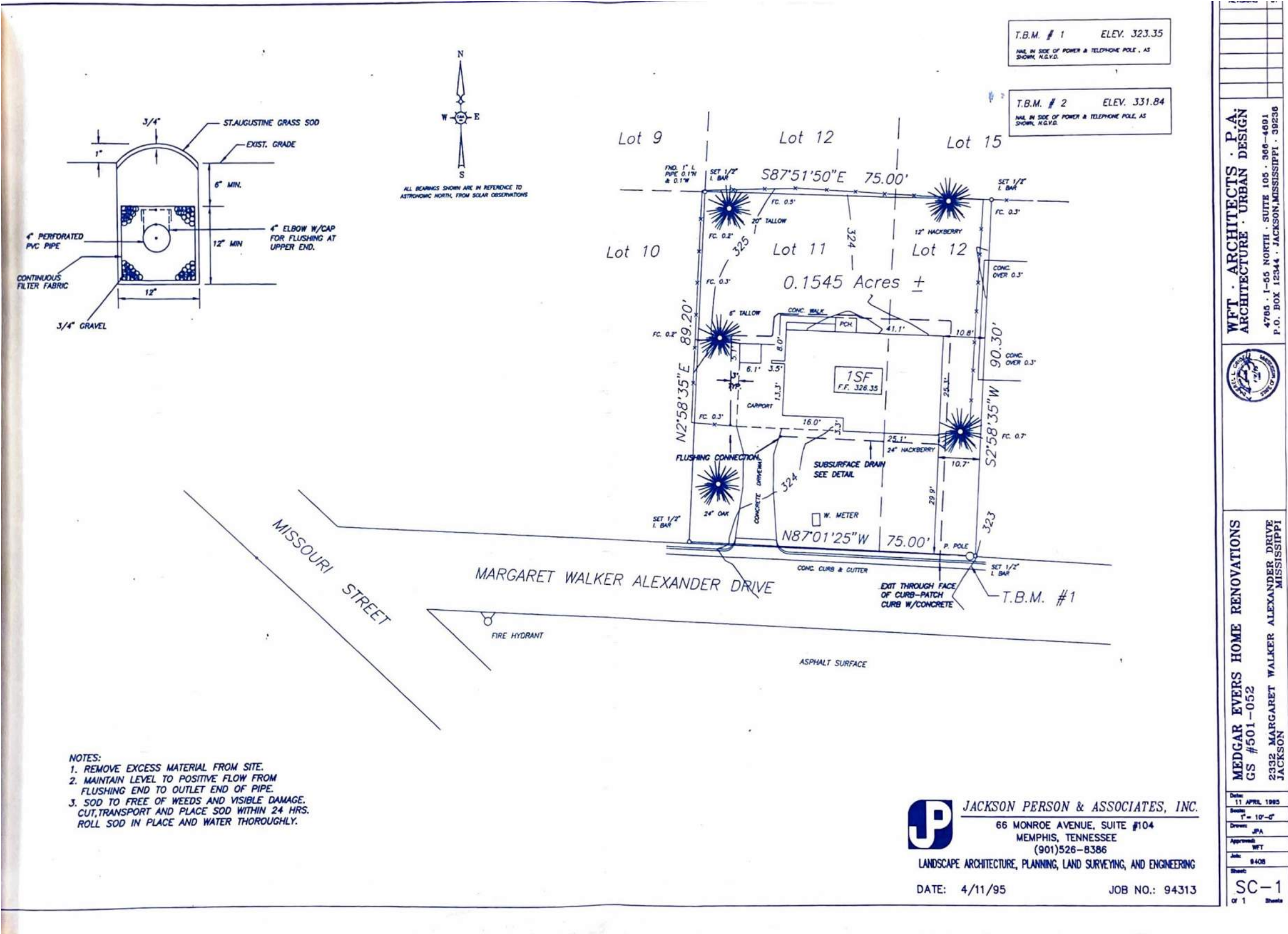


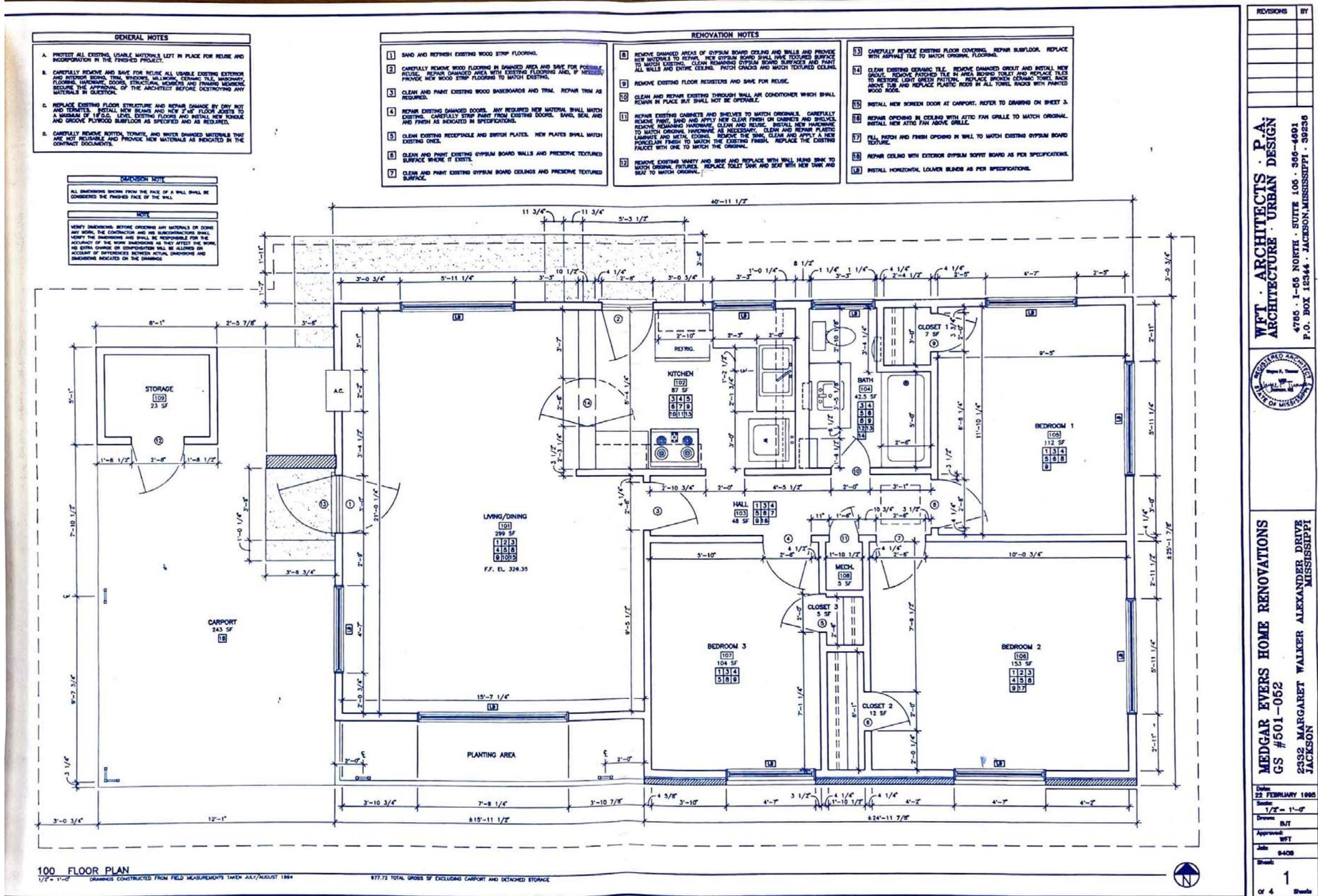
View From Dining Room Into Kitchen (1996)

Appendix D:
1995 Rehabilitation Drawings



Boundary and Topographic Survey by Case & Associates from the 1995 rehabilitation.





Floor plan by WFT Architects from the 1995 rehabilitation.

GENERAL NOTES

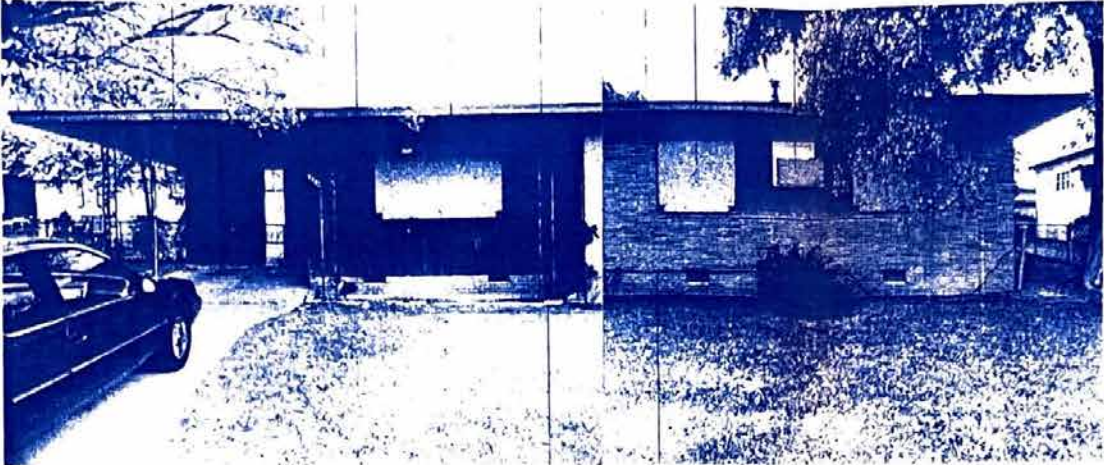
A. PROTECT ALL EXISTING USABLE MATERIALS LEFT IN PLACE FOR REUSE AND INCORPORATION IN THE FINISHED PRODUCT.

B. SAVE ALL EXISTING INTERIOR AND EXTERIOR SIDING, TRIM, WINDOWS, MILLWORK, CERAMIC TILE, MASONRY, FLOORING, HARDWARE, DOORS, AND STRUCTURAL ELEMENTS. SECURE THE APPROVAL OF THE ARCHITECT BEFORE REMOVING OR DESTROYING ANY MATERIALS IN QUESTION.

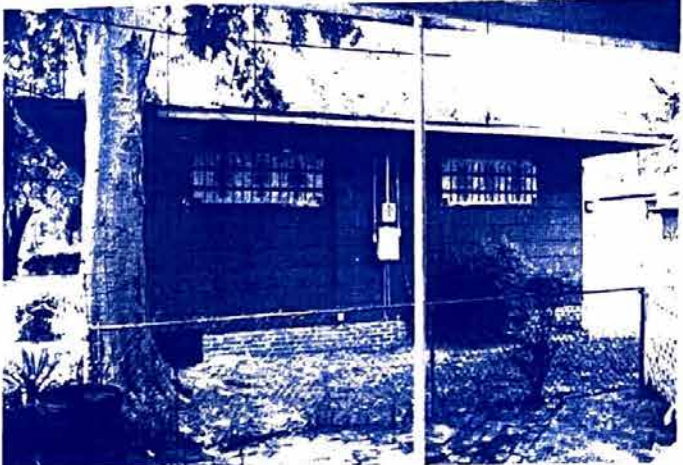
C. NEW MATERIALS SHALL REPLICATE THE ORIGINAL MATERIALS IN DIMENSIONS, PROFILE AND FINAL APPEARANCE.

D. CAREFULLY REMOVE ANY WATER AND TERMITES DAMAGED MATERIALS THAT ARE NOT REUSABLE AND PROVIDE NEW MATERIALS TO MATCH THE ORIGINAL MATERIALS AS INDICATED IN THE CONTRACT DOCUMENTS.

E. WHEN PAINT REMOVAL IS REQUIRED, USE THE MOST GENTLE MEANS POSSIBLE. HAND SCRAPING AND CHEMICALS APPROVED IN ADVANCE BY THE ARCHITECT ARE RECOMMENDED. DO NOT SANDBLAST.



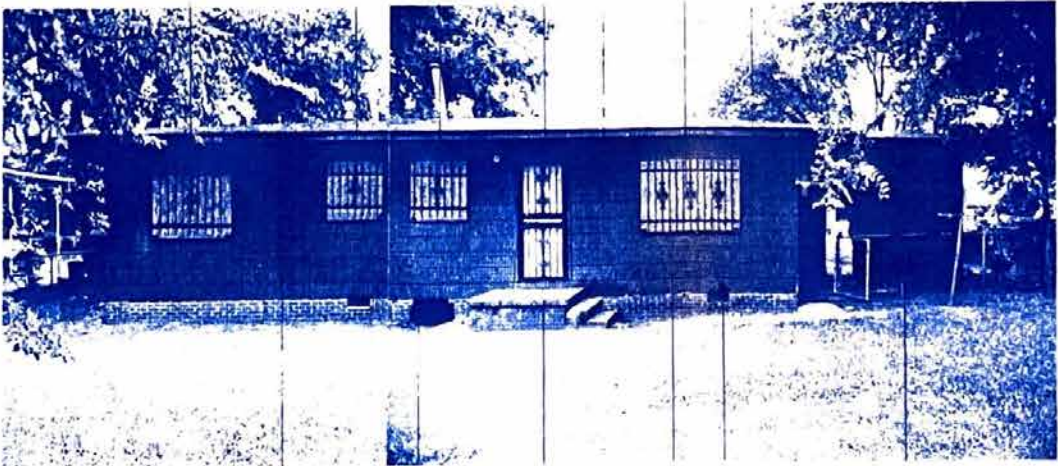
SOUTH ELEVATION



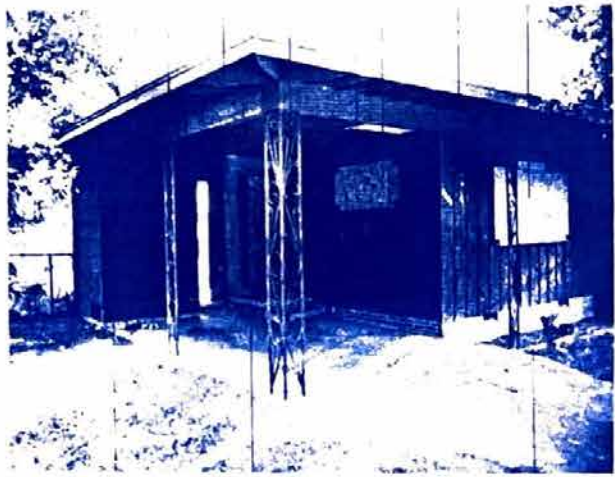
EAST ELEVATION

REPAIR AND REHABILITATION NOTES

- CLEAN AND REPAINT EXISTING BOARD AND BATTEN SIDING. CAREFULLY REMOVE EXISTING PEELING AND FLAKING PAINT IN ACCORDANCE WITH THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION.
- CLEAN AND REPAINT CAST IRON COLUMNS AT CARPORT.
- CLEAN AND REPAINT WOOD FASCIA.
- CLEAN EXISTING SOFFITS AND RAFTER TAILS AND PROVIDE NEW MATERIAL TO REPAIR DAMAGED SOFFITS AND RAFTER TAILS. PAINT SOFFITS AND RAFTER TAILS.
- CLEAN AND REPAINT BURGLAR BARS OVER WINDOWS AND DOORS.
- PROVIDE BRICK TO MATCH EXISTING FOUNDATION WALL AND REPAIR WALL. INSTALL NEW BRICK VENTS TO MATCH EXISTING.
- REPLACE BROKEN AND MISSING ASBESTOS SIDING. REPLACE METAL CORNER TRIM. PAINT SIDING AND TRIM.
- REMOVE BOARDS OVER WINDOWS AND DOORS. CLEAN, REPAIR AND REPAINT WINDOWS. REMOVE DEGRADED SEALANT AND INSTALL NEW SEALANT AROUND ENTIRE WINDOW. REPLACE BROKEN GLASS.
- REPAIR CONCRETE STEPS AND STOOP.
- RECONSTRUCT BRICK PLANTER WALL, MATCH EXISTING BRICK.
- REPAIR OPENING THROUGH WALL.
- REMOVE EXISTING CATV CABLE.



NORTH ELEVATION



WEST ELEVATION

WFT ARCHITECTS P.A.
ARCHITECTURE URBAN DESIGN
4785 I-55 NORTH SUITE 105 366-4491
P.O. BOX 12344 JACKSON, MISSISSIPPI 39236

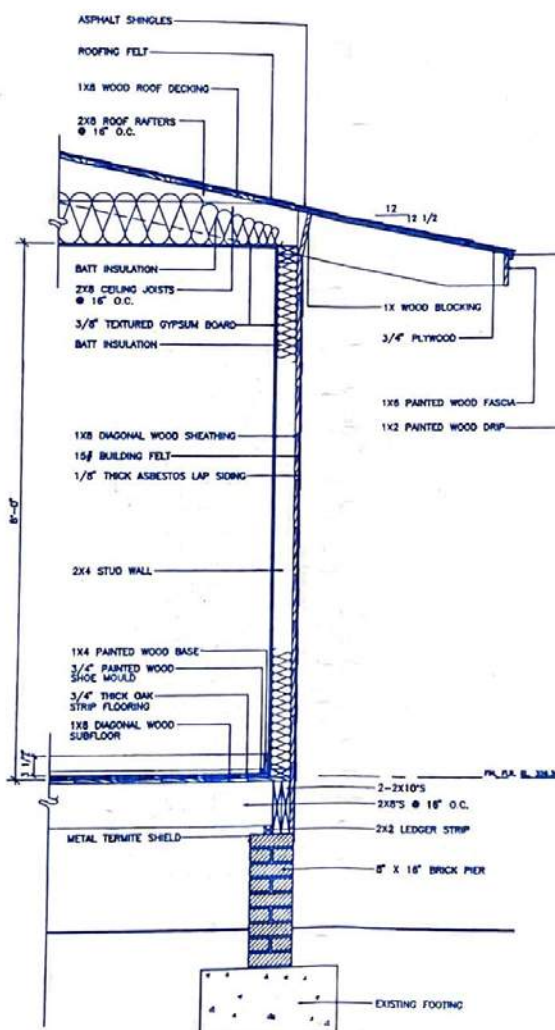
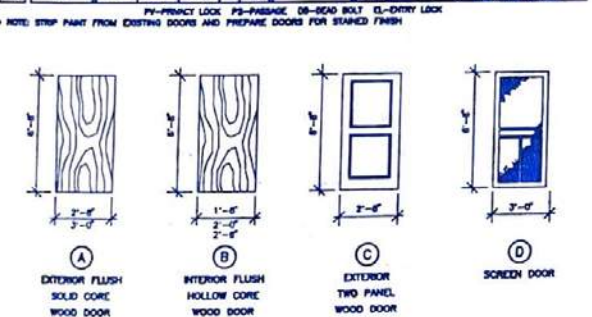
MEDGAR EVERS HOME RENOVATIONS
GS #501-052
2332 MARGARET WALKER ALEXANDER DRIVE
JACKSON, MISSISSIPPI

Scale: 1/4" = 1'-0"
Drawn: JMD
Reviewed: WFT
Job: 2416
Sheet: 4 of 4

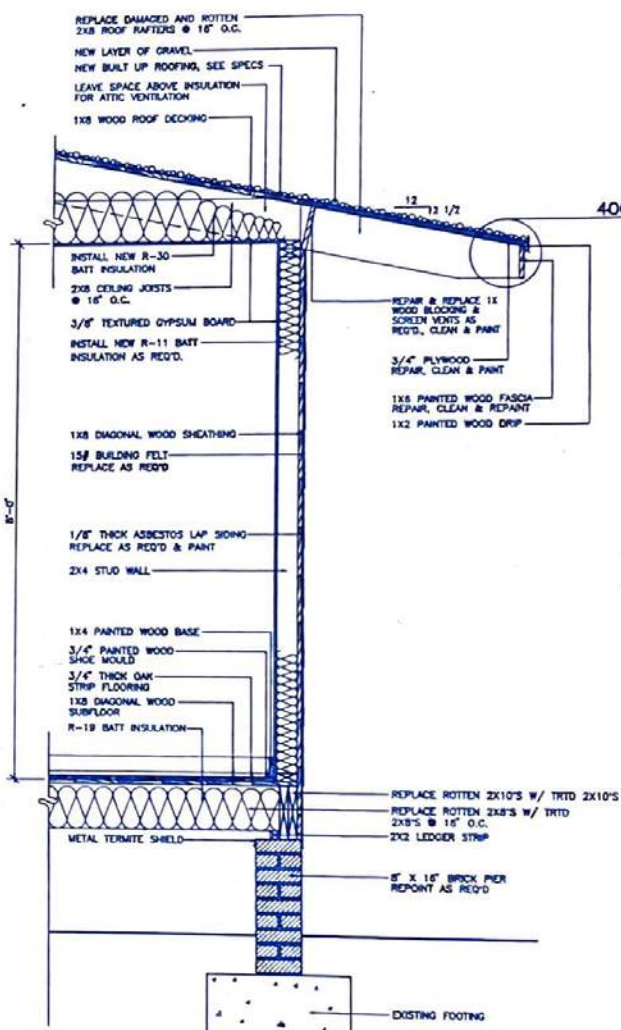
Elevations by WFT Architects from the 1995 rehabilitation.

ROOM FINISH SCHEDULE									
NO.	ROOM NAME	FLOOR FINISH	WALL FINISH	CEILING FINISH	ROOFING	PAINT	STAIN	GLASS	REMARKS
101	LIVING/DINING	HARDWOOD	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
102	KITCHEN	V.C.T.	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
103	HALL	HARDWOOD	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
104	BATH	V.C.T.	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
105	BEDROOM 1	HARDWOOD	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
106	BEDROOM 2	HARDWOOD	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
107	BEDROOM 3	HARDWOOD	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
108	MECHANICAL	CONCRETE	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	
109	STORAGE	CONCRETE	PLY. BO.	PLY. BO.	ASPH. SHINGLES	PR	ST	GL	

DOOR SCHEDULE									
NO.	DESCRIPTION	WIDTH	HEIGHT	THICK	TYPE	SWELL	FINISH	WEATHER	REMARKS
1	NEW	2'-0"	6'-6"	1 1/4"	A	WO	WO	EL/DB	STAINED FINISH
2	NEW	2'-0"	6'-6"	1 1/4"	A	WO	WO	EL/DB	STAINED FINISH
3	EXISTG	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
4	EXISTG	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
5	EXISTG	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
6	NEW	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
7	EXISTG	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
8	NEW	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
9	EXISTG	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
10	EXISTG	2'-0"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
11	EXISTG	1'-6"	6'-6"	1 1/4"	B	WO	WO	EXIST	STAINED FINISH
12	EXISTG	2'-0"	6'-6"	1 1/4"	C	WO	WO	EXIST	STAINED FINISH
13	NEW	2'-0"	6'-6"	1"	D	WO	CUSTOM	PULL	PAINT
14	NEW	2'-0"	6'-6"	1 1/2"	B	WO	NONE	NONE	PIVOTING DOOR STAINED FINISH



301 TYPICAL EXISTING WALL SECTION
1" = 1'-0"



302 PROPOSED TYPICAL WALL SECTION
1" = 1'-0"

REVISED

BY

WFT ARCHITECTS P.A.

ARCHITECTURE URBAN DESIGN

4785 I-55 NORTH SUITE 105 366-4891

P.O. BOX 12344 JACKSON, MISSISSIPPI 39236

REGISTERED ARCHITECT

STATE OF MISSISSIPPI

W. F. T. ARCHITECTS P.A.

1995

MEDGAR EVERS HOME RENOVATIONS

GS #501-052

2332 MARGARET WALKER ALEXANDER DRIVE JACKSON MISSISSIPPI

DATE

22 FEBRUARY 1995

SCALE

AS NOTED

DRAWN

AMD

APPROVED

WFT

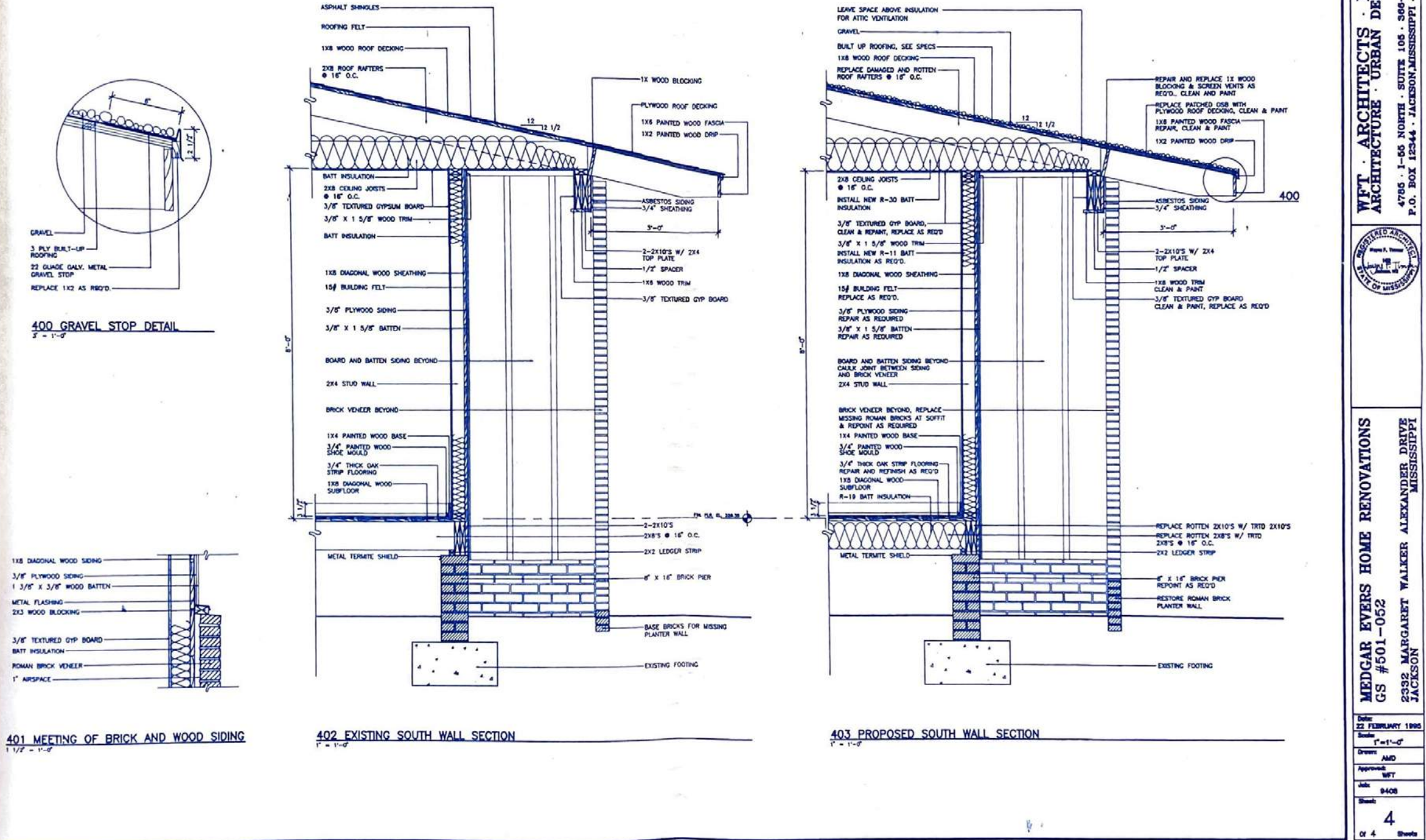
JOB

9408

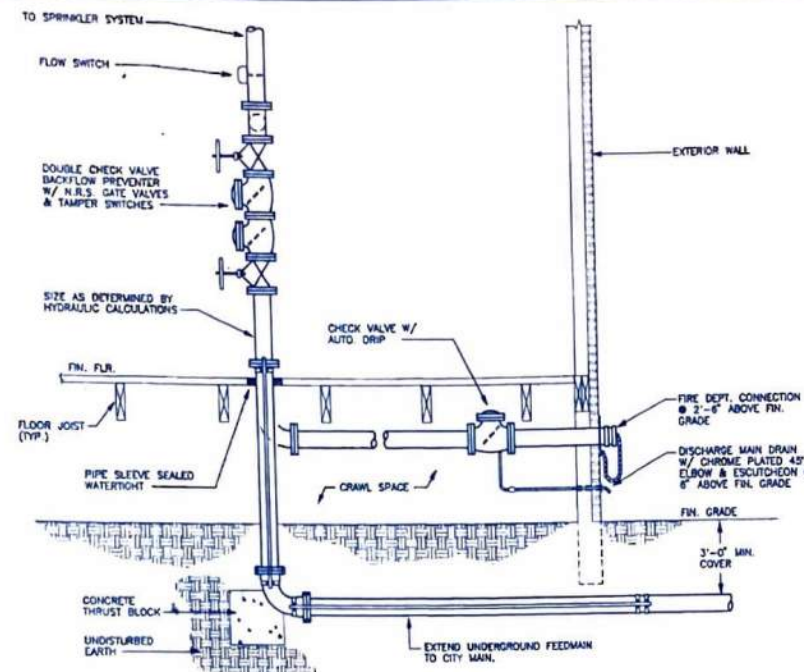
SHEET

3

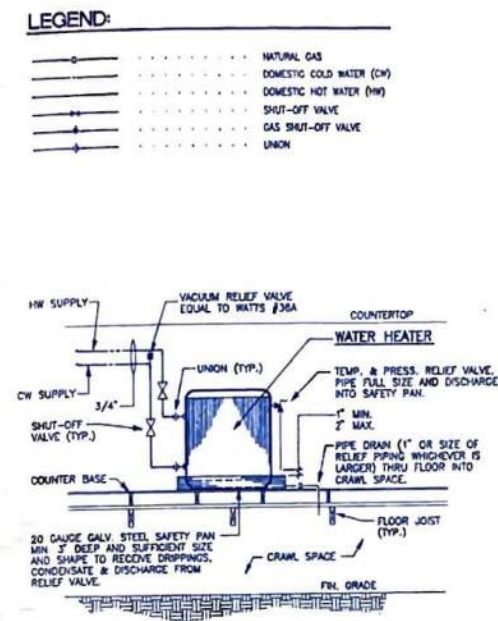
OF 4 SHEETS



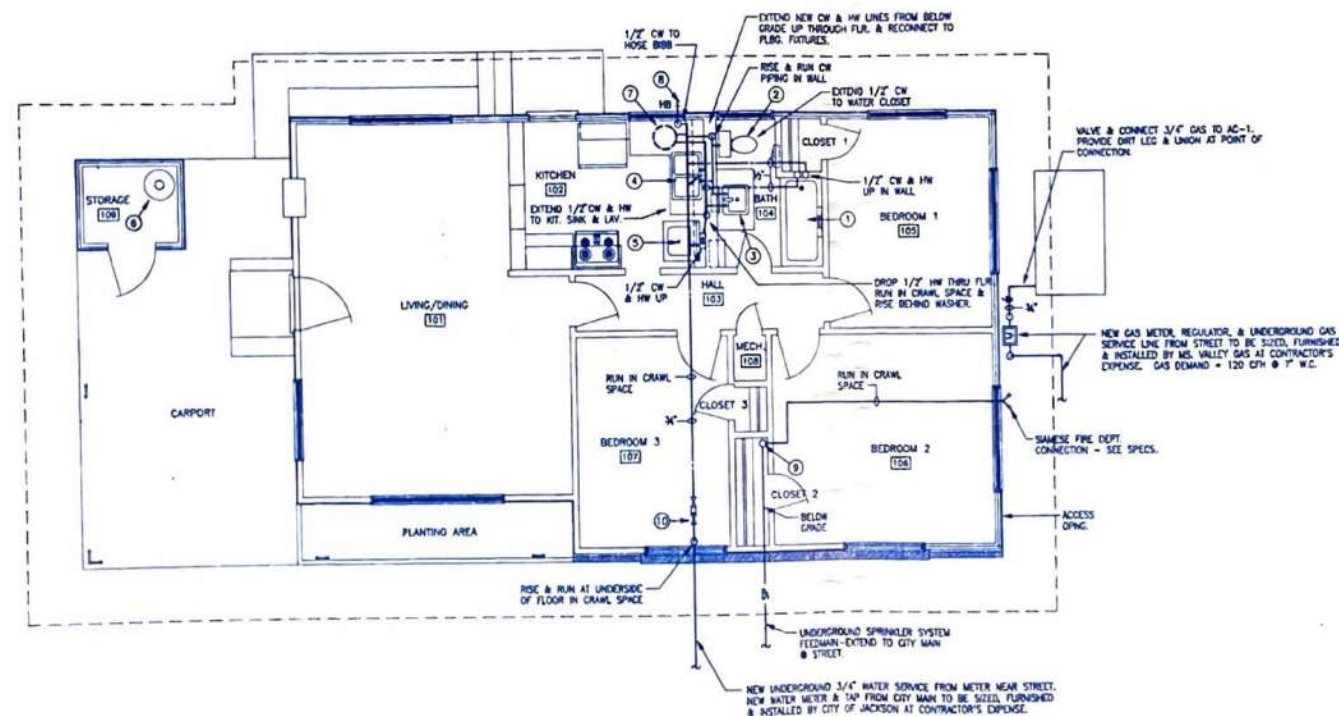
Existing and proposed south wall sections and details by WFT Architects from the 1995 rehabilitation.



3 SPRINKLER RISER DETAIL
P1 NOT TO SCALE



2 WATER HEATER PIPING DETAIL
P1 NOT TO SCALE



NORTH

 FLOOR PLAN - PLUMBING

SCALE: $1/4" = 1'-0"$

FIRE PROTECTION NOTE:

ALL AREAS OF THE BUILDING INCLUDING ATTIC SPACES SHALL BE PROTECTED WITH AN AUTOMATIC WET SPRINKLER SYSTEM HYDRAULICALLY DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13 AND SPECIFICATIONS SECTION 15501. ALL SPRINKLER PIPING INSTALLED IN THE ATTIC SHALL BE HEAT TRACED AND INSULATED WITH 1" THICK ARMA-FLEXED INSULATION TO PROTECT PIPING DOWN TO 0°F. FURNISH SAME HEAT TRACER AS SPECIFIED FOR DOMESTIC WATER IN SPECIFICATION SECTION 15400.

NOTES:

- 1) CLEAN EXISTING TUB INCLUDING CHROME DRAIN & OUTFLOW. REPLACE EXISTING SHOWER VALVE, SPOT & SHOWER HEAD & W/ POLISHED CHROME SHOWER VALVE & SPOT. SHOWER HEAD COULD TO UNDRN BRASS MODEL 530 OR APPROX. EQUAL.
- 2) CLEAN EXISTING WATER CLOSET BOWL. REPLACE EXISTING TANK, TRAP LIVER, FLAT VALVE, SEAT, ANGLE SUPPLY & STOP. W/ NEW ACCESSORIES. TRAP LIVER & FLAT VALVE - BRIGGS MODEL #430 OR APPROVED EQUAL. COLOR SHALL BE PINK TO MATCH EXISTING. SEAT - KOHLER K-47116 ROUND FRONT W/ COVER OR EQUAL. COLORED SHALL BE PINK TO MATCH EXISTING BOWL. ANGLE SUPPLY & STOP - INQUIRE MODEL 1168 OR EQUAL.
- 3) REPLACE EXISTING LAVATORY & TRAP W/ NEW FIXTURE AS FOLLOWS:
LAVATORY - BRIGGS MODEL #402 - COLOR SHALL BE PINK TO MATCH ADJACENT FIXTURES.
TRAP & POP-UP DRAIN - UNDRN BRASS MODEL 530A ANGLE SUPPLY & STOP - INQUIRE MODEL 1163 OR EQUAL. TRAP - INQUIRE MODEL #8712 OR EQUAL.
- 4) CLEAN EXISTING DOUBLE COMPARTMENT SINK. REPLACE FAUCET, DRAIN, ANGLE SUPPLIES, & TRAP W/ NEW ACCESSORIES AS FOLLOWS:
FAUCET - 185 MODEL 8-1172 LESS HOSE SPRAY OR APPROVED EQUAL.
STRAINER - TWO (2) INQUIRE MODEL 151 BASKET STRAINERS OR EQUAL.
TRAP - INQUIRE MODEL #8712 OR EQUAL.
DRAIN - INQUIRE MODEL 11161/617 OR EQUAL.
ANGLE SUPPLY & STOP - INQUIRE MODEL 1167 OR EQUAL.
- 5) STOP-UP NEW C/W IN W/ PIPING WITH ANGLE VALVES FOR CONNECTION TO CLOTHES WASHING. & C/W IN W/ PIPING EXPOSED ABOVE CEILING SHALL BE GALV. STEEL PIPE, 1/2" O.D. PIPING & LOCATION OF ANGLE VALVES TO MATCH EXISTING BOUCHER.
- 6) DISTING GAS WATER HEATER TO REMAIN. PAINT & REPAIR WATER HEATER TO PUT IN GOOD CONDITION. COLOR TO MATCH ORIGINAL COLOR. GAS SERVICE TO HEATER SHALL REMAIN IN PLACE. GAS SERVICE TO HEATER SHALL BE CUT-OFF TO MAKE HEATER INOPERABLE.
- 7) INSTALL NEW ELECTRIC. LINE OF USE WATER HEATER WITHIN KITCHEN CABINET. WATER HEATER SHALL BE INSTALLED IN CHASE SPACED. HEATER SHALL BE EQUAL TO LOGSHEAR W/ WATER ACCESS/ 8" IN 19 GALLON STORAGE VOLUME, 2 X 6, 120 VOLT, 1 PHASE.
- 8) REPLACE EXISTING HOSE BIBB WITH NEW HOSE BIBB EQUAL TO WOODFORD MODEL 24 W/ METAL WHEEL HANDLE & VACUUM BREAKER.
- 9) NEW SPRINKLER INSET TO SERVE AUTOMATIC WET SPRINKLER SYSTEM. SEE SPRINKLER IRIS DETAIL THIS SHEET.
- 10) INSTALL 3/4" DOUBLE CHECK BACKFLOW PREVENTER CLOSET TO WATTS 8057-C/1 ABOVE GROUND IN CHASE SPACED. BACKFLOW PREVENTER SHALL BE BRONZE CONSTRUCTION W/ BALL VALVE ON INLET & OUTLET.

DEMOLITION NOTE:

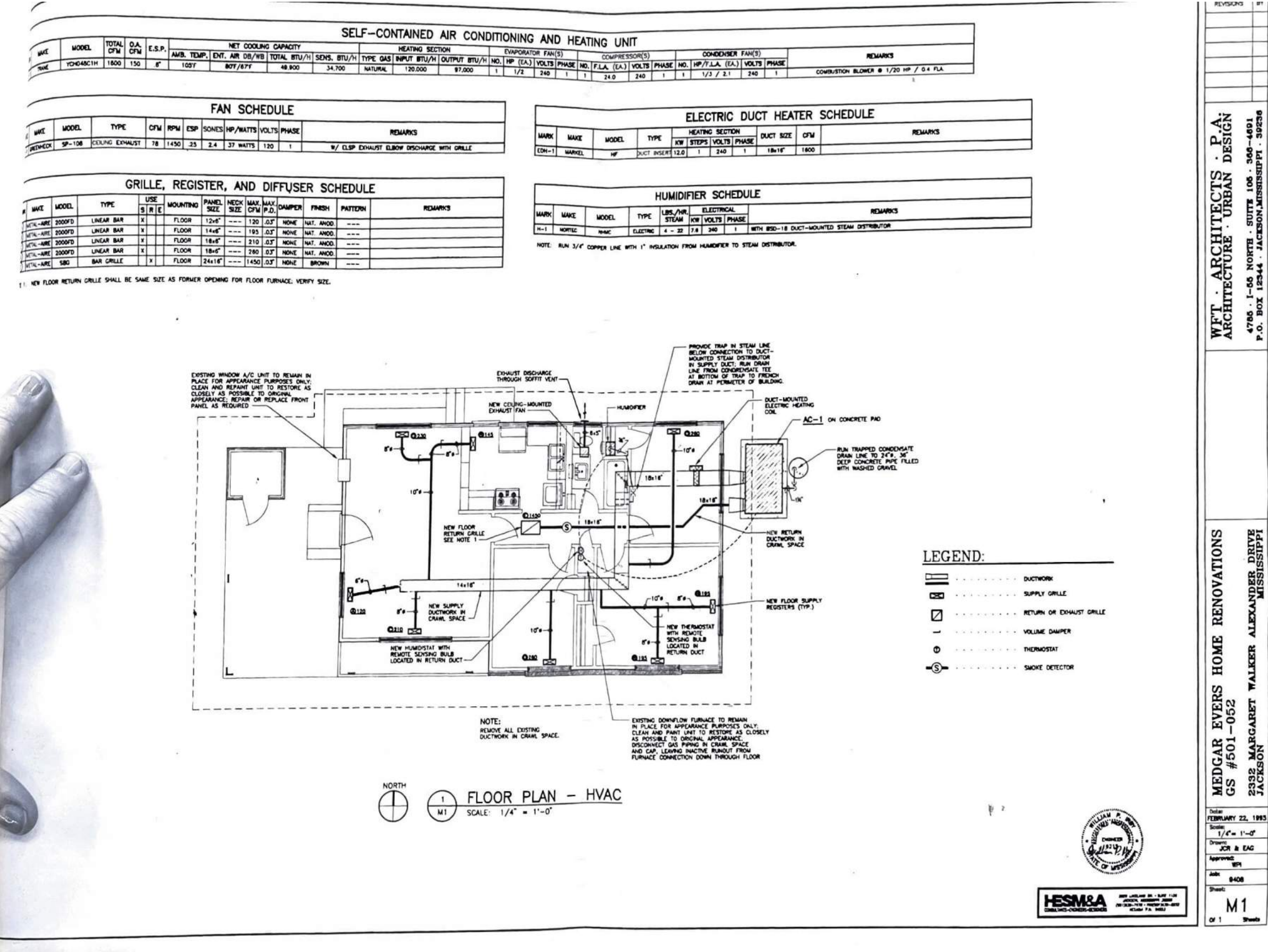
REMOVE ALL EXISTING WATER PIPING. REMOVE EXISTING PLUMBING
FIXTURES & TRIM WHERE NOTED ON FLOOR PLAN TO BE REPLACED.

GENERAL NOTE:

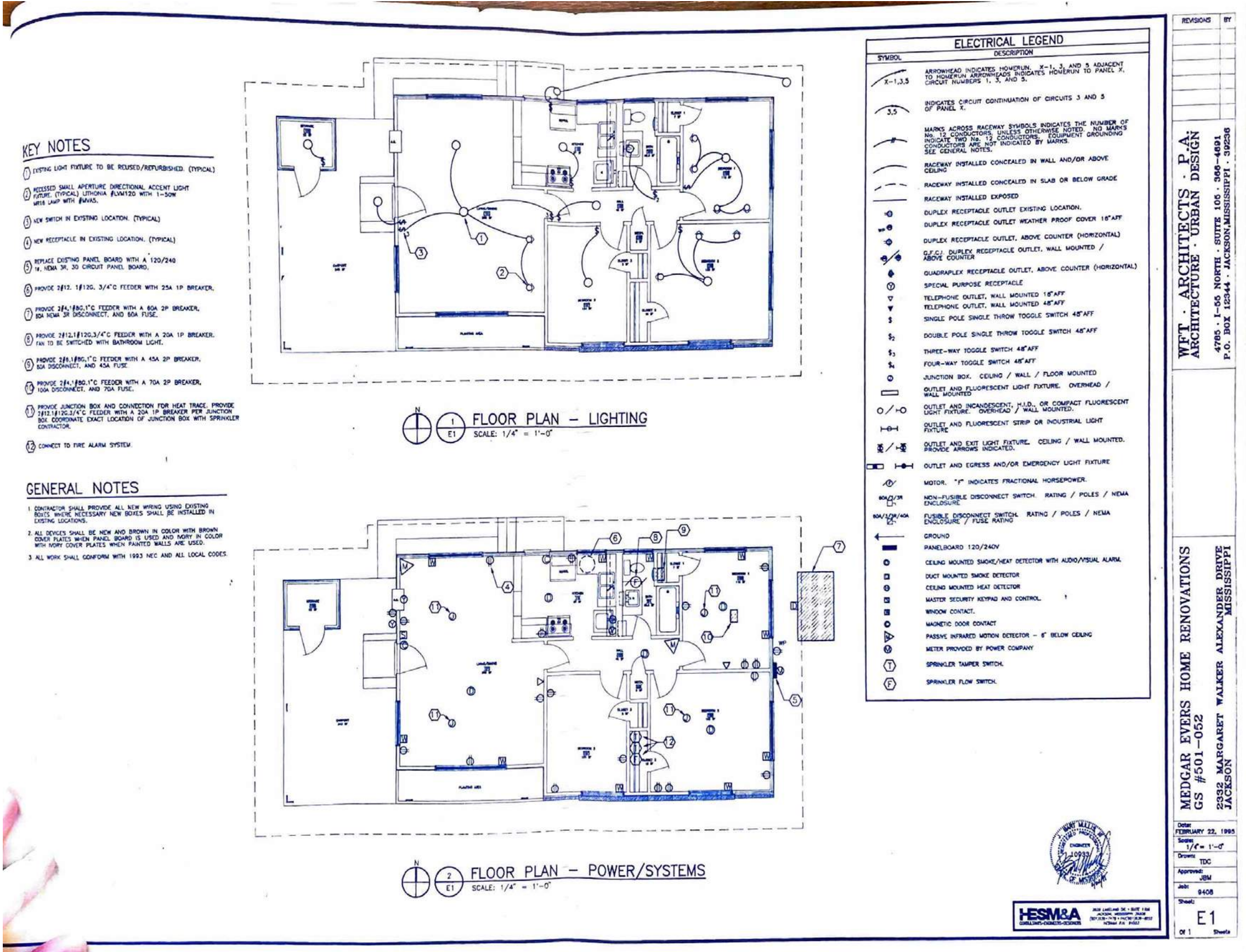
CONTRACTOR SHALL CLEAN ALL EXISTING PLUMBING FIXTURES & TRIM SHOWN ON DRAWINGS TO REFINISH. FIXTURES & TRIM SHALL BE CAREFULLY CLEANED TO PUT IN BEST CONDITION POSSIBLE. ALL NEW FIXTURES AND TRIM SHOWN TO BE INSTALLED SHALL MATCH EXISTING ADJACENT FIXTURE COLORS AS CLOSE AS POSSIBLE. NEW FIXTURES, FAUCETS, EXPOSED ANGLE SUPPLIES, DRAINNS, ETC. ARE INTENDED TO MATCH AS CLOSELY AS POSSIBLE THE FIXTURES & TRIM ORIGINALLY IN PLACE DURING THE 1980'S.



MEDGAR EVERS HOME RENOVATIONS GS #501-052 2232 MARGARET WALKER ALEXANDER DRIVE JACKSON, MISSISSIPPI	WFT · ARCHITECTS · P.A. ARCHITECTURE · URBAN DESIGN 4785 · 1-55 NORTH · SUITE 105 · 368-4891 P.O. BOX 12344 · JACKSON, MISSISSIPPI · 39236
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HVAC plan and mechanical schedules by HESM&A s from the 1995 rehabilitation.



Appendix E:
NPS Exterior Paint Color Assessment, 2023



United States Department of the Interior

NATIONAL PARK SERVICE

Atlanta Federal Center
1924 Building
100 Alabama Street, SW
Atlanta, GA 30303



IN REPLY REFER TO:

A.1.2 (PMIS 323431)

August 7, 2023

Memorandum

To: Project File 323431
Medgar and Myrlie Evers Home Historic Structure Report

From: Barbara Judy, Branch Manager, Park Historic Structures and Cultural Landscapes
Stewardship

Subject: Exterior Paint Color, Medgar and Myrlie Evers Home National Monument

The Evers Home was recently painted a vivid green-blue on the exterior, in preparation for use of the home in a movie about the Everses. During development of the Medgar and Myrlie Evers Home Historic Structure Report (HSR), it was judged relevant to investigate approximately how closely this color resembled the color of the home during the Evers family occupation.

NPS contractor DHM collected paint samples from six exterior locations at the Evers Home. The unmounted samples were examined by Barbara Judy, using an Eagle Model SRM104TB dissecting microscope under 2X magnification and halogen illumination.

Results suggest that the paint color underlying the recent or modern paint blue-green paint is a dark green, potentially with glossy finish.

Recent Exterior Paint Color	Underlying Exterior Paint Color
317U Pantone (approximate) OR	575C Pantone (approximate)
Sherwin Williams SW 6751 Refresh (better match)	Sherwin Williams SW 6439 Greenwald (better match)

Comparison of the two colors highlights a real difference in appearance. Before undertaking an exterior repainting campaign, a full paint color and paint composition (including sheen) investigation should be undertaken to confirm the tentative results reported above.

Paint color investigation results by sample location:

Sample No.	Results
1	Visible dark green layer as first layer on wood substrate, glossy finish visible.
2	This sample contained only a single layer of the recent exterior paint color, with no earlier layers captured for analysis.

Interior Region 2 • South Atlantic-Gulf

Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi
North Carolina, Puerto Rico, South Carolina, Tennessee, U.S. Virgin Islands

3	This sample has a hint of a deeper green earlier layer, but insufficient amount for analysis.
4	This sample contained only a single layer of the recent exterior paint color, with no earlier layers captured for analysis.
5	Visible dark green layer as first layer on wood substrate, glossy finish visible.
6	One limited fragment showed an olive green layer sandwiched between two blue-green layers.

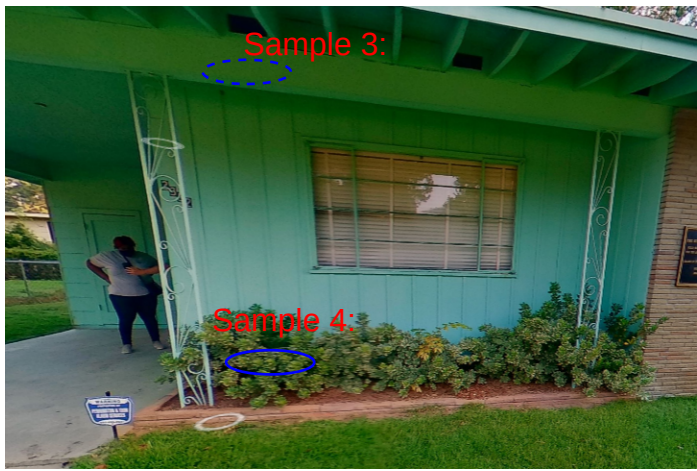
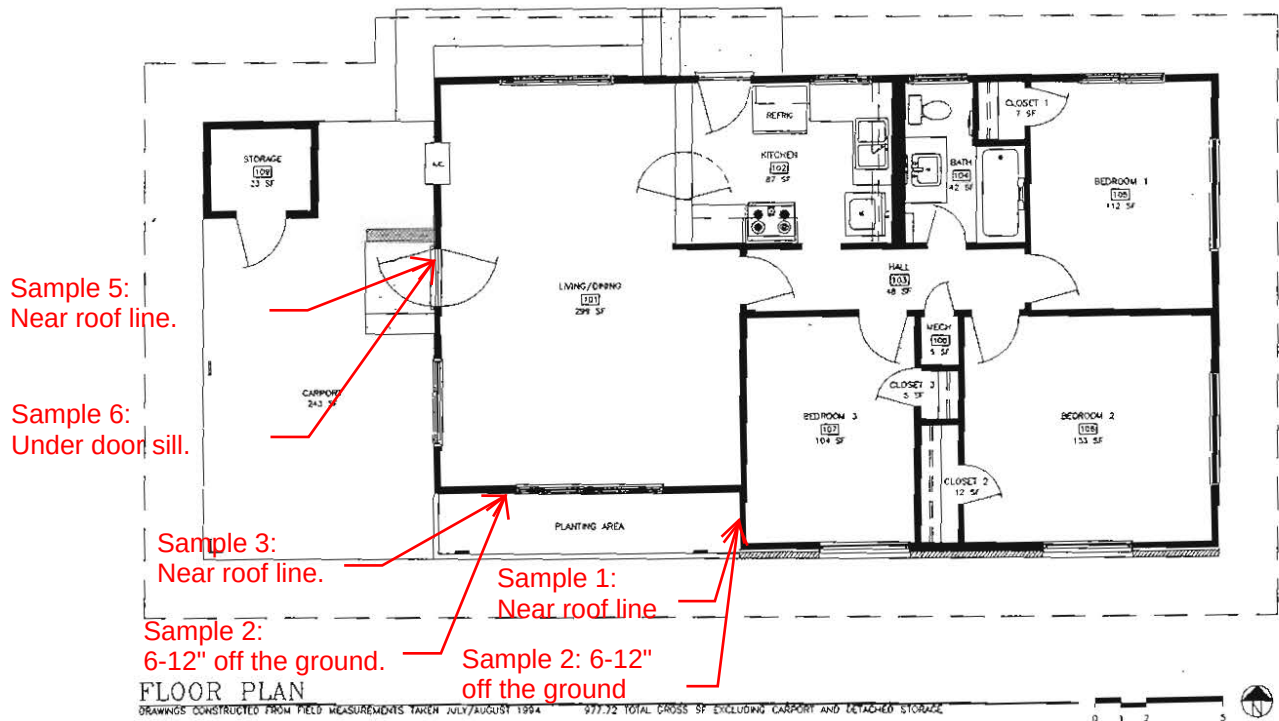
The physical paint samples and this memorandum will be provided to the park superintendent for inclusion in the park archives.

End of Memorandum



balling probably
tion wall. There
he door and one

the vents in the
on the board and
1963.³



n of an indoor, downflow furnace (Closet 108) just prior to 1963,

of Archives and History.

Appendix F: Receipts for Home Goods & Expenses

The following receipts for home goods purchases and other family expenses made by Medgar and Myrlie Evers were discovered during archival research.

PURCHASER MUST EXECUTE

(Business Concerns should answer only the questions which apply)

Date March 25, 1957To Wells Furniture Co. Town Jackson State Miss.
(Corporate, Firm or Trade Name of Dealer)

For the purpose of securing credit for the purchase of the articles mentioned in the contract on the reverse side hereof, the Undersigned makes the following representations:

Print Purchaser's Name	<u>Medgar W. Evers</u>	Husband or Wife Name	<u>Mrs Myrtle B.</u>	Residence or nearest Phone	<u>6-9822</u>
Home Address	<u>2332 Gaynes St</u>	(No. and Street)	<u>Jackson, Miss.</u>	(City and State)	How Long (Years) (Months) <u>9</u>
Previous Home Address	<u>1129 Maple St Apt. 16 B</u>	<u>Jackson, Miss.</u>	(City and State)	How Long (Years) (Months) <u>1</u> <u>6</u>	
Age	<u>32</u>	White ☐ Colored ☒ Single ☐ Married ☒	Number of Dependents including Wife	<u>3</u>	Monthly Income \$ <u>425.00</u>
Own Home ☒		Financed in What Company			
Rent Home ☐		(No. of Street)		(City and State)	Mortgage \$
Recorded in Name of	<u>Both</u>	Present Value \$			
Name Present Employer	<u>N.A.A.C.P</u>	What Position	<u>Dis. Sec.</u>		
Business Address	<u>1072 W. Lynch St.</u>	If in business for self, what business?		How Long (Years) (Months) <u>2</u> <u>6</u>	
Name Former Employer	<u>Magnolia Mut. Insurance Co.</u>	(Address)	<u>Mt. Bayoo, Miss.</u>	How Long (Years) (Months) <u>2</u> <u>5</u>	
Bank Checking Account	<u>Deposit Guaranty Bank</u>	(No. and Street)	<u>Jackson, Miss.</u>	(City and State)	
First Trade References	<u>Deposit Guaranty Bank</u>	(Address)			
Second Trade References	<u>Biljac Olds Co.</u>	(Address)	<u>Jackson, Miss.</u>		
Third Trade References	<u>Associates Disc. Corp.</u>	(Address)	<u>Jackson, Miss.</u>		
Name and Address of a Relative Not Living With	<u>Mrs. Eddie Harper</u>	<u>1011 Woodrow Wilson Drive</u>	<u>Jackson, Miss.</u>		
<u>2332 Gaynes St. Jackson, Miss.</u>					
(Purchaser's Mailing Address)					

ASSIGNMENT AND WARRANTIES

Jackson Miss. April 2, 1957
(City or Town) (State) (Date)

FOR VALUE RECEIVED, the Undersigned does hereby sell, assign, and transfer all of his right, title and interest in and to the contract on the reverse side hereof, and the chattels described therein, to Deposit Guaranty Bank & Trust Co., Jackson, Miss., Assignee, its successors and Assigns, with power to take legal proceedings in the name of assignee or of the Undersigned. The Undersigned warrants: that the down payment was made by Buyer in cash and not its equivalent, unless otherwise expressly stated in the contract, and that no part thereof was loaned, directly or indirectly, by Undersigned to Buyer; that said chattels are free from all liens and encumbrances whatsoever except said contract; that said contract is valid, and there are no liens superior thereto; that at the time of the execution of said contract said chattels were new and Buyer was 21 years of age or over and had legal capacity to execute said contract and the note mentioned therein; that there is now owing the amount set forth in said contract; that all description of said chattels in said contract are correct and sufficient; that all of said chattels have been delivered and completely installed in accordance with the terms of the sale of the same to Buyer; that if the undersigned is required, either by contract or by practices established by the manufacturer, to service any of said chattels, such service will be performed; that there are now no disputes between Buyer and the Undersigned with respect to said chattels, or any offsets or counterclaims to said note. In case of a breach of any of said warranties, the Undersigned will, upon demand, made at anytime thereafter by the holder thereof, repurchase said note and contract for the amount then unpaid thereon.

Dated April 2, 1957By Wells Furniture Co. (Seal)
(Corporate, Firm or Trade name of Dealer)

Address of Assignee:

200 East Capitol Street, Jackson, Hinds County, Mississippi.

By Walter Wells
(Owner, Officer or Firm Member)

By Walter Wells (Seal)
(Owner, Officer or Firm Member)

Wells Furniture Co. (Seal)
(Corporate, Firm or Trade name of Dealer)

Undersigned jointly and severally do hereby waive presentment, demand, protest, notice of protest, non-payment or dishonor, and notice of the sale of any collateral security, and do authorize any extension or extensions in the time or times of payment without notice. In case of non-payment of any amounts due hereon, we severally agree to pay the same.

In Case of Recourse dealer and/or endorsers
Sign Below

Without Recourse

By _____ (Seal)
(Officer, Firm Member or Owner)

NOTE

348.00 Jackson Miss. April 2, 1957

(City) (State) (Date)

FOR VALUE RECEIVED, THE UNDERSIGNED JOINTLY AND SEVERALLY PROMISES TO PAY TO THE ORDER OF

Wells Furniture Co. The Sum Of Three Hundred Forty Eight--and--NO/100

(Corporate, Firm or Trade Name of Dealer)

24 monthly installments of \$ 14.50 each and final installment of \$, the first installment

payable May 15th, 1957, balance of installments payable on even date of each succeeding month thereafter until this note is fully paid, with interest after maturity at the highest lawful rate. If any installment of this note is not paid when due the entire amount unpaid shall be due and payable forthwith at the election of the holder of this note without notice. The acceptance of any installment hereof by the holder after the time when it becomes due as herein set forth shall not be held to establish a custom, or waive any rights of the holder to enforce prompt payment of any further installments of otherwise.

If this note or any installment thereof shall not be paid when due and this note shall be placed in the hands of an attorney for collection hereof or of any installment the undersigned jointly and severally agrees to pay a reasonable attorney's fee.

The undersigned and all endorsers and other parties hereto hereby waive presentment for payment, demand, protest and notice of demand, protest and non-payment.

WITNESS: *Wells Furniture Co.* (Signed)

(X) *Richard W. Ewe* (Buyer's Signature)

TP 12

CREDIT
BILLING COPY

Sears 648369

SEARS, ROEBUCK AND CO.

SRC	CLC	EAA	MCA		CASH	SELLING STORE NO.
✓						
DIV.	SALES NO.	DATE	APPROVAL			
71	430	* / 8				
NAME	MEDGAR EVERS					NO. OR NAME OF STORE CARRYING ACCOUNT
ADDRESS	2332 GUYNES					
	JACKSON, MISS.					
CITY	2226					
QUAN.	STOCK NO.	DESCRIPTION	PRICE	AM'T SALE		
6		Bedding Plants @ 69		4	14	
		Tot		17		
				4	31	
This purchase is made under my Sears Revolving Charge Agreement for the credit sales price consisting of the above cash price plus the credit service charge.			☐ FLOOR		TOTAL	
			☐ DOCK		4.31	
			☐ WHSE.		DEP.	
			☐		BAL.	
Mrs. Myrle B. Evers			PURCHASED BY			

APR 8 - 1963

Receipt for Bedding Plants, Sears, Roebuck & Company, April 8, 1963. (Receipt in Box 3, Financial Receipts Folder, Evers Family Papers at the Mississippi Dept of Archives and History)



THE KROGER CO.

No 39417

LAYAWAY RECEIPT

Date 2-27

Received from M. W. Evers
CUSTOMER
Ten dollars and XX cents: \$ 10.00
as a deposit on Power Mower
TYPE OF MERCHANDISE



Eugene Kessel
AUTHORIZED SIGNATURE

Kroger Co. Receipt Showing Layaway Deposit for A Power Mower for M.W. Evers, February 27 (year not written). (Receipt in Box 3, Financial Receipts Folder, Evers Family Papers at the Mississippi Dept of Archives and History)

Form 1923

THANK YOU!

CREDIT BILLING COPY

Sears 648253

SEARS, ROEBUCK AND CO.

SRC	CLC	EAA	MCA	CASH	SELLING STORE NO.
✓					
DIV.	SALES NO.	DATE	APPROVAL		
71	357	4/2			
NAME					NO. OR NAME OF STORE CARRYING ACCOUNT
ADDRESS					
CITY					2226
QUAN.	STOCK NO.	DESCRIPTION	PRICE	AM'T SALE	
4		Roses	39	1 56	
12		Pots	3	86	
10		Bulbs	9	1 08	
10		Bulbs		59	
				3 59	
				14	
				3 73	
This purchase is made under my Sears Revolving Charge Agreement for the credit sales price consisting of the above cash price plus the credit service charge.			☐ FLOOR ☐ DOCK ☐ WHSE. ☐ _____		
PURCHASED BY			TOTAL	DEP.	
Mrs. Myrlie B. Evers				BAL.	

APR 2 - 1963

F 1999 REV. 1-62 SPECIAL PRINTED IN U.S.A.

CREDIT BILLING COPY

Sears 648369

SEARS, ROEBUCK AND CO.

SRC	CLC	EAA	MCA	CASH	SELLING STORE NO.
✓					
DIV.	SALES NO.	DATE	APPROVAL		
71	430	4/8			
NAME					NO. OR NAME OF STORE CARRYING ACCOUNT
ADDRESS					
CITY					2226
QUAN.	STOCK NO.	DESCRIPTION	PRICE	AM'T SALE	
6		Saddling Plants @ 69		4 14	
		Tot		17	
				4 31	
This purchase is made under my Sears Revolving Charge Agreement for the credit sales price consisting of the above cash price plus the credit service charge.			☐ FLOOR ☐ DOCK ☐ WHSE. ☐ _____		
PURCHASED BY			TOTAL	DEP.	
Mrs. Myrlie B. Evers			4 31	BAL.	

APR 8 - 1963

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CREDIT BILLING COPY

Sears 348719

SEARS, ROEBUCK AND CO.

SRC	CLC	EAA	MCA	CASH	SELLING STORE NO.
✓					
DIV.	SALES NO.	DATE	APPROVAL		
9	238	4/2			
NAME					NO. OR NAME OF STORE CARRYING ACCOUNT
ADDRESS					
CITY					2226
QUAN.	STOCK NO.	DESCRIPTION	PRICE	AM'T SALE	
1	8676	Grass Cutter		1 98	
				88	
				2 06	
This purchase is made under my Sears Revolving Charge Agreement for the credit sales price consisting of the above cash price plus the credit service charge.			☐ FLOOR ☐ DOCK ☐ WHSE. ☐ _____		
PURCHASED BY			TOTAL	DEP.	
Mrs. Myrlie B. Evers				BAL.	

APR 2 - 1963

F 1999 REV. 1-62 SPECIAL PRINTED IN U.S.A.

Sears, Roebuck & Company Receipt Showing Purchase of Roses, Bulbs, and Pots Signed by Mrs. Myrlie B. Evers, April 2, 1963.(Receipt in Box 3, Financial Receipts Folder, Evers Family Papers at the Mississippi Dept of Archives and History)

CHRIST THE KING SCHOOL
JACKSON, MISSISSIPPI

1962-1963
Pupil's Name Darrell Evers

Registration Fee \$4.00
Audio-Visual Aid Fee \$1.00

Supply Bill \$4.50
Book and Library Fee \$1.00

Tuition	S.	1.00	S.	1.00	S.	1.00	S.	1.00	O.	1.00	O.	1.00	O.	1.00	O.	1.00	O.	1.00
Lunch	3	1.25	10	1.25	17	1.25	24	1.25	1	1.25	8	1.25	15	1.25	22	1.25	29	1.25
Tuition	N.	1.00	N.	1.00	N.	1.00	N.	1.00	D.	1.00	D.	1.00	D.	1.00	J.	1.00	J.	1.00
Lunch	5	1.25	12	1.25	19	1.25	26	1.25	3	1.25	10	1.25	17	1.25	2	1.25	7	1.25
Tuition	J.	1.00	J.	1.00	F.	1.00	F.	1.00	F.	1.00	F.	1.00	M.	1.00	M.	1.00	M.	1.00
Lunch	21	1.25	28	1.25	4	1.25	11	1.25	18	1.25	25	1.25	4	1.25	11	1.25	18	1.25
Tuition	M.	1.00	A.	1.00	A.	1.00	A.	1.00	A.	1.00	A.	1.00	M.	1.00	M.	1.00	M.	1.00
Lunch	25	1.25	1	1.25	8	1.25	15	1.25	22	1.25	29	1.25	6	1.25	13	1.25	20	1.25

Receipt Showing Fees for Darrell Evers at Christ the King School, 1962-1963 School Year (Receipt in Box 3, Financial Receipts Folder, Evers Family Papers at the Mississippi Dept of Archives and History)

WELLS FURNITURE COMPANY, INC.
409 N. Farish Street Phone FL 5-7843

Jackson, Miss., 8-6- 1963

Sold to Mr. Medgar Evers
Address Bayview St
Delivery Date 8-6-63

1 B.C. Bed 3/4 E. Ammer	34	95
1 Chair " "	31	95
1 Chair " "	12	95
1 #470 B.C. Bed E. Ammer	24	95
1 Box Spring	34	95
1 Matt	34	95
TOTAL	180	70
Sales Tax	7	24
SUB-TOTAL	187	94
DOWN PAYMENT		
Less Down Payment		
Carrying Charges		
TOTAL		
Old balance		
Unpaid time balance		

Date Payments Start 19

I acknowledge delivery to me and acceptance by me of the above described articles for which I agree to pay to the **WELLS FURNITURE COMPANY, INC.**, its successors or assigns the sum of \$ _____ as follows: \$ _____ cash in hand and payable \$ _____ each and every _____ from date hereof. The final payment shall be the amount of the balance then due.

L. Wells Salesman
187.94
77.25

Signature of Purchaser _____
Signature of Purchaser _____

O.K. By 259.19 / Date _____, 19 _____

Receipt for a New Mattress and Bed Equipment for Reena After Medgar's Assassination, Wells Furniture Company, August 6, 1963 (Receipt in Box 3, Financial Receipts Folder, Evers Family Papers at the Mississippi Dept of Archives and History)

Appendix G:
Mississippi Department of Archives and History, Guide to
Medgar Wiley and Myrlie Beasley Papers, 1900-1994





























W. L. G. 1900
W. L. G. 1900
W. L. G. 1900

