

HITSVILLE USA

FRONT PORCH GUARDRAIL



MCINTOSH

PORIS ASSOCIATES 10.12.22

DETROIT HISTORIC DISTRICT COMMISSION

BACKGROUND

THE MOTOWN MUSEUM COMPRISES A SERIES OF HISTORICALLY SIGNIFICANT STRUCTURES AT 2648 WEST GRAND BOULEVARD, LOCATED WITHIN THE WEST GRAND BOULEVARD AFRICAN AMERICAN ARTS AND BUSINESS HISTORIC DISTRICT. THE MOTOWN MUSEUM COMPRISES TWO, TWO-STORY FORMERLY DETACHED RESIDENTIAL STRUCTURES CONSTRUCTED IN THE 1910S. THE HOUSES ARE LOCATED AT THE PARCELS ADDRESSED 2648 AND 2650 WEST GRAND BOULEVARD. BOTH BUILDINGS ARE OF A BRICK MASONRY LOAD BEARING STRUCTURE, AND THE EAST BUILDING IS CLAD IN A PAINTED PARGE COAT. THE HOUSES FEATURE HIPPED ROOFS WITH DORMER WINDOWS. THE STRUCTURES WERE CONNECTED VIA AN ENCLOSED BREEZEWAY AND EXPANDED TOWARD THE REAR IN CONCRETE MASONRY UNIT AND STEEL CONSTRUCTION AS PART OF A RENOVATION AND EXPANSION IN THE 1990S.

EXISTING CONDITION

THE SPECIFIC PROJECT SCOPE BEING BROUGHT TO THE HISTORIC DISTRICT COMMISSION IS THE REPLACEMENT OF GUARDRAIL ON THE FRONT PORCH OF THE HITSVILLE USA HOUSE AT 2650 WEST GRAND BOULEVARD. THE EXISTING GUARDRAIL IS METAL, PAINTED BLACK WITH BENT METAL DECORATIVE SCROLLS, AND IS ANCHORED AND EMBEDDED INTO THE EXISTING CONCRETE SLAB. THE EXISTING GUARDRAIL EXHIBITS MODERATE DETERIORATION, INCLUDING CHIPPING AND FADING PAINT, AND DETERIORATION / CORROSION AT THE BASE CONNECTIONS ON THE PORCH SLAB. THE PORCH SLAB HAS ALSO SHOWN SIGNIFICANT DETERIORATION AT POST CONNECTION POINTS, A CRACK ALONG THE FRONT EDGE, A LARGE SPAWL AT THE NORTHWEST CORNER, AND UPON FURTHER INVESTIGATION THE SOIL BENEATH IT HAS SETTLED 5”-8” FROM THE UNDERSIDE OF THE SLAB AND WASH OUT AREAS ARE SIGNIFICANT. THE SLAB MUST BE REPLACED AND THE RAILING SHALL BE REPLACED / REPLICATED SO THE COMBINED ELEMENTS ARE INSTALLED FOR A LONG DURATION RATHER THAN TEMPORARY REPAIRS BE MADE. AT JUST 26 INCHES IN HEIGHT, THE EXISTING GUARDRAIL ALSO POSES A SAFETY RISK TO ANYONE WHO MIGHT OCCUPY THE PORCH, WHICH IS A FEATURE OF THE MUSEUM AND SEES NEARLY ONE HUNDRED THOUSAND VISITORS EACH YEAR.

DESCRIPTION OF WORK

IT IS OUR PROPOSAL TO REMOVE AND REPLACE THE EXISTING GUARDRAIL WITH A REPRODUCTION THAT COMPLIES WITH THE MICHIGAN REHABILITATION CODE. THE NEW GUARDRAIL WILL BE MADE OF METAL PAINTED BLACK WITH BENT METAL DECORATIVE SCROLLS TO MATCH ORIGINAL GUARDRAIL IN MATERIAL AND DESIGN. THE NEW GUARDRAIL WILL BE 34” IN HEIGHT. THE CURRENT SPACING BETWEEN VERTICAL PICKETS, AND BETWEEN THE LOWER HORIZONTAL RAIL AND THE SLAB WILL BE MAINTAINED.

WE BELIEVE THE REVISED RAILING DESIGN AS ILLUSTRATED MEETS THE INTENT OF ITEMS 2 AND 6 OF THE SOI STANDARDS WHILE BALANCING THE SAFETY OF THE PUBLIC WHO HAVE ACCESS TO THIS PORCH AREA OF THE MUSEUM AS AN AMENITY 24/7; IT IS NOT REGULATED BY HOURS OF OPERATION. THIS WORK WILL BE CONDUCTED AS PART OF THE GENERAL REPAIR OF THE MASONRY PORCH, CONCRETE SLAB AND STEPS THAT HAS ALREADY BEEN STAFF REVIEWED AND APPROVED.

THE DRAWING AND PHOTOGRAPHS INCLUDED IN THIS SUBMISSION ARE:

1. HISTORIC PHOTO CIRCA 1960 WITH HISTORIC RAIL
2. CURRENT PHOTO 8/2022 WITH REPLICATED RAIL - TEMPORARILY ATTACHED
3. AERIAL PHOTO SHOWING LOCATION OF HITSVILLE USA PORCH
4. EXISTING PORCH AND RAIL CONDITION PHOTOGRAPHS
5. EXISTING PORCH AND RAIL CONDITION PHOTOGRAPHS
6. EXISTING PORCH AND RAIL CONDITION PHOTOGRAPHS
7. HISTORIC IMAGE
8. EXISTING AND PROPOSED PORCH ELEVATIONS

NOTICE TO PROCEED

IT IS OUR RECOMMENDATION TO HDC TO ALLOW THIS REPLICATION AND CODE MINIMUM RAILING TO PROCEED PER SECTION 21-2-75 (1) “THE RESOURCE CONSTITUTES A HAZARD TO THE SAFETY OF THE PUBLIC OR THE OCCUPANTS.” THE DESIGN OF THE REPLACEMENT GUARDRAIL WILL MAINTAIN THE LEVEL OF PROTECTION PROVIDED BY THE EXISTING GUARDRAIL PER MRCEB 2015, SECTION 604.1 AND 605.1.

HANDRAILS WILL NOT BE PROVIDED WITH GUARDRAIL REPLACEMENT AS ALLOWED BY MRCEB 2015, SECTION 1203.9 THE DESIGN OF THE REPLACEMENT GUARDRAIL WILL MATCH IN MATERIAL AND DESIGN. OPENINGS GREATER THAN 4” WILL BE MAINTAINED AS ALLOWED BY MRCEB 2015, SECTION 1203.10.2.



CIRCA 1960



AUGUST 2022

TEMPORARY STEPS, CONCRETE SLAB
AND PORCH FASCIA SHOWN





INTERMEDIATE RAILING PEG RUSTED THROUGH AND IS NOT PROVIDING ANY ATTACHMENT

CORNER POST ANCHOR EXPOSED - REPLACEMENT REQUIRED

BOTTOM SLAB SPAWLING AND RE-BAR EXPOSED

CEMENTITIOUS PARGE COAT SPAWLING DUE TO SEVERE WATER INFILTRATION AND SLAB WASHOUT BEHIND

>70% OF MORTAR IS NON-EXISTENT AT ALL EXPOSED PORCH MASONRY



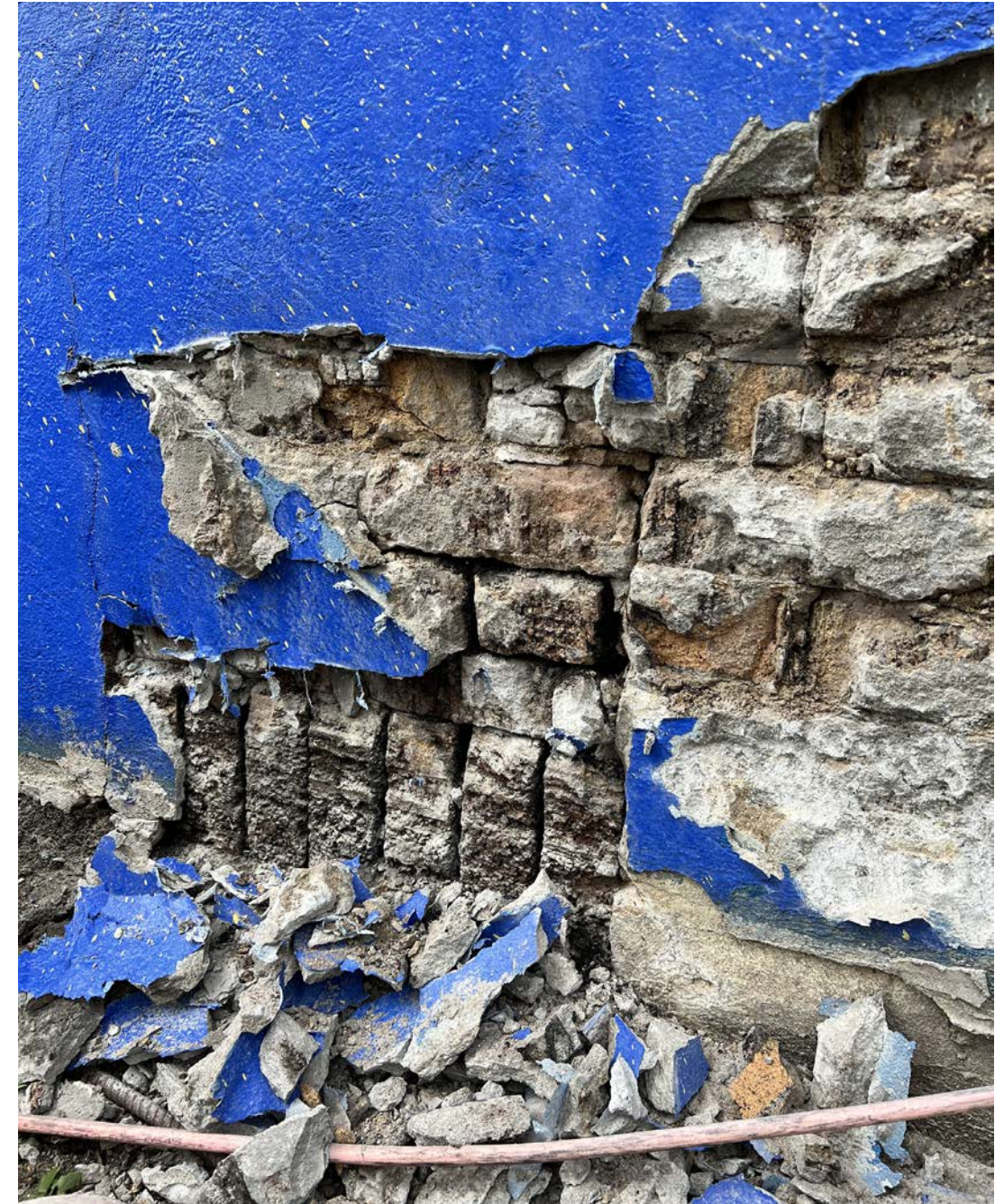
CRACKING AND HOLES AT OF TOP OF EXISTING CONCRETE PORCH SLAB



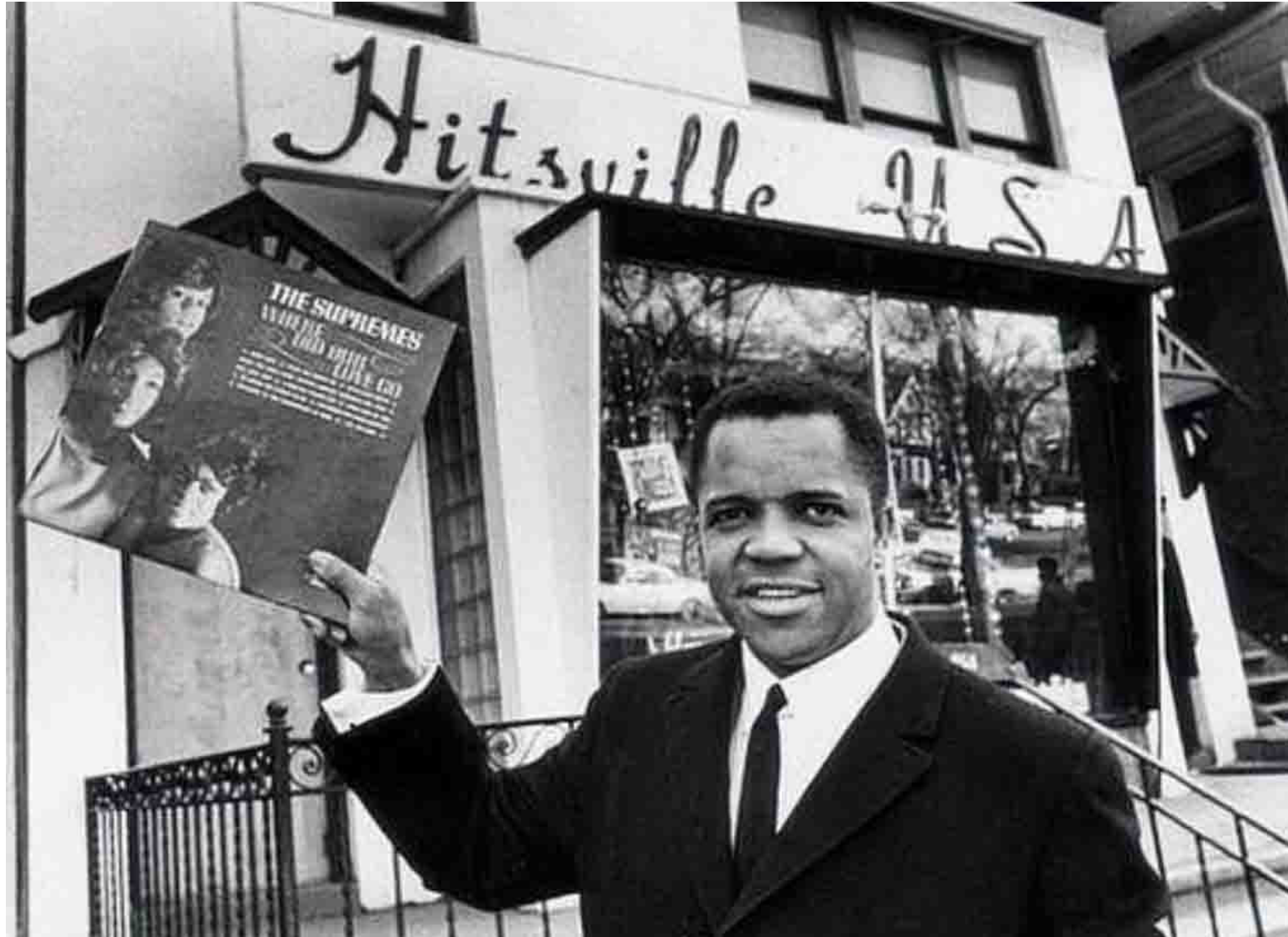
CRACKING AT EDGE OF EXISTING CONCRETE PORCH SLAB, EXPOSING CONER POST OF EXISTING GUARDRAIL



EXISTING MASONRY PORCH WALL EXHIBITING SEVERELY DETERIORATED MORTAR JOINTS, SETTLED FILL BELOW PORCH SLAB.



EXISTING MASONRY PORCH WALL EXHIBITING SEVERELY DETERIORATED MORTAR JOINTS, SPALLING BRICK AND PARGE COAT.



HISTORIC IMAGE, CIRCA 1960S, WITH GUARDRAIL IN BACKGROUND



DETAIL OF LEFT IMAGE



EXISTING GUARDRAIL



PREVIOUSLY PROPOSED
WITHDRAWN BY HDC



NEW 34" HEIGHT
> 4" PICKETT SPACING



EXISTING GUARDRAIL



ENLARGED NW CORNER OF PORCH

PROPOSED GUARDRAIL