D-6

HISTORIC STRUCTURES REPORT

PART II (PORTION)

ARCHITECTURAL DATA SECTION

ON

SAGAMORE HILL

Restoration of Porch, Stabilization of Staircase, Masonry Pointing and Painting

Sagamore Hill National Historic Site

See memo H-30-4 dtd 8-7-64 to NERO

Prepared by
Norman M. Souder
Architect
August 1964

United States Department of the Interior, National Park Service,
Eastern Office, Design and Construction
Division of Architecture

HISTORIC STRUCTURES REPORT

PART II (PORTION)

ARCHITECTURAL DATA SECTION

ON

SAGAMORE HILL

Restoration of Porch, Stabilization of Staircase, Masonry Pointing and Painting

Sagamore Hill National Historic Site

A P P R O V A L S H E E T

RECOMMENDED

_____ Date_____
Superintendent

Robert H Hall Date 8-7-64
Chief, EODC

_____ Date 4-28-65
Regional Director, Northeast Region

APPROVED

_____ Date_____
Director

TABLE OF CONTENTS

I. FOREWORD

The proposed work is not a restoration of the entire house. Hence, this Architectural Data Section, Part II of the Historic Structures Report deals only with those portions of the structure which require immediate repairs or replacement.

The west porch which figured so largely in the historic events in the career of Theodore Roosevelt will require extensive replacements.

The work must be undertaken with care in order to preserve as much of the original fabric as possible while making it structurally sound for heavy visitation traffic. A large portion of the trim and ornamentation will have to be reproduced and restored.

This report also covers the repair and repointing of the masonry, the stabilization of the main staircase and the analysis of paint in the areas where restoration of the paint colors of the period are planned in the near future.

This report and the recommendations contained herein cover repairs and restoration for which funds are not currently provided and are therefore presented in the order of their importance.

Norman M. Souder
Architect
August 1964

II. BRIEF PHYSICAL HISTORY

The existing conditions of the exterior and interior of "Sagamore Hill" was briefly described in the Architectural Data Section, Part I of the Historic Structures Report.

The house presently illustrates the full span of the occupancy by the Roosevelt family from its erection in 1884 until the death of Mrs. Roosevelt in 1948. Until the trophy room, designed by Grant LaFarge, was added in 1901 the house as designed by Rich and Lamb was not changed.

The late Victorian mansion was built with one bath, but several other baths and a lavatory were added at a later date. Two of the baths, one on the north side and one in the south library wing, were installed by the addition of cantilevered bays to the second floor level of the exterior.

Minor repairs and changes were obviously made in the normal course of occupancy but are not recorded.

After "Sagamore Hill" was purchased by the Theodore Roosevelt Association, a number of repairs and alterations were required to provide tour circulation for the public, and to provide protection to the house and its contents. The alterations and repairs made by the Association were done under the direction of Chapman, Evans & Dalahanty, Architects, of New York City.

Excerpts were taken from the files of the Association and are included as a part of this report. The following major alterations and changes are a part of the physical history of the building.

The existing asbestos shingle roof was applied when the old wood shingle roof had deteriorated. At that time the concealed lightning protection system was installed.

The area over the ceiling of the trophy room together with the wall against the main house were insulated.

Portions of the exterior walls and ceilings of several rooms in the attic were replastered and the electrical wiring in these areas renewed.

A fire detection and protection system together with a 100,000 gallon underground storage reservoir was installed.

Staff toilets were installed in the basement, and the Ice House immediately behind the house was altered to accommodate public toilet rooms.

The rear stairs were enlarged to provide safe visitor circulation. An additional stairway was built from the second to the third floor to provide tour access to the third floor rooms. The space was taken out of closets and the schoolroom and bedroom on the third floor.

The kitchen service porch was enclosed to provide a modern kitchen for the use of the present staff.

The old servants' living-dining room was adapted for use as an office for the Curator.

An electric-eye burglar alarm system was installed.

The old dumbwaiter in the main stairhall was removed when the second attic stair was added.

The old hot air furnaces were modernized and provided with oil burners and a hot water system was added to augment the hot air systems.

III. FRONT PORCH

A. Existing Conditions

1. Extent and Plan

The front porch, or "piazza" as it was termed by Theodore Roosevelt, is constructed entirely of wood except for the brick pier supports. The 8'-4" wide porch extends from the south front entrance, where it is covered by the ceiling of the porte-cochere, and by the building projection above, to a point 12'-4" beyond the southwest corner of the house. There is no roof over the area between that covered by the porte-cochere roof and the roofed area of the west porch.

The roofed area starting at the southwest corner is 12'-4" wide and extends approximately eight feet across the west front of the house. At this point it widens at a 45° angle to form a large bay, or semi-octagon. The dimension at the widest point being 18'-6" from the west house wall. The porch bay returns to a straight portion parallel to the north wall of the drawing room wing, ending at the west entrance to the hall.

In 1904 when the trophy room wing was built the porch was extended from the west entrance to the hall, across the west wall of the wing, to the south side of the projecting bay of the trophy room. The area between the original porch and the projecting bay of the trophy room is covered with a pergola top

instead of the extension of the porch roof. The rafters of the pergola are rotted and the pedestals of the open railing are also badly decayed.

2. Floor Framing and Lattices

The beams and plates of the porch are 3" x 8" with smaller joists between framing members.

The framing has apparently weakened in the past, especially in the greatest span of the large half-octagonal section. Posts and braces have been inserted under the porch framing at close spacing to provide rigidity to the floor.

The open spaces between the brick piers and below the barge board are filled in with latticed panels which are painted the color of the trim. The panels are top hinged to provide access to the area below the porch and are secured against the piers with turn buckles.

3. Flooring

The flooring of the entire area of the porch is of inch thick, three inch wide tongue and groove boards. The flooring shows considerable patching and repairs. There are many tin patches covering holes. The flooring has loosened in many places due to warping and decay. The flooring, painted a light gray floor enamel, has many areas where it is in good condition and may be original. As much of such areas as it is possible should be salvaged and saved for reuse.

4. Steps

There are three flights of steps from the porch to grade. Each flight is four risers high. The main entrance at the porte-cochere has a flight with one wood-paneled cheek platform to serve as a carriage step. This is on the side of the steps nearest the library bay window. The opposite side of this flight has rounded treads on the two bottom risers.

The second flight on the southwest angle of the broad porch bay apparently became a removable flight. A number of photographs with the President addressing crowds on the lawn show those steps missing. The fact that a lattice is placed behind the steps would indicate that the steps were removable in order that the porch could serve as a stage or speaker's platform. It is known that many of the events connected with Theodore Roosevelt's political and public life took place on this porch.

The third flight of steps is placed on the west face of the porch, extended in 1904 to serve the west entrance to the hall.

All of these flights of stairs are of simple wood construction with rounded nosings and are painted with the same gray enamel as the porch floor.

5. Balustrade

The balustrade is placed on all areas except those bays occupied by the steps. The spindles are straight on three sides, shaped in an elongated ogee curve on the exterior and set close together. The railing portion of the balustrade is very wide with a flat surface and two sloping surfaces on the top. The sides are decorated with a series of mouldings producing a heavy cornice-like effect. The bottom rail is plain.

6. Porch Columns and Pedestal

The balustrade is interrupted at regularly spaced intervals by square decorated pedestals. At the four columns of the bay the pedestals become polygonal. The sides of the pedestals are decorated by three turned bosses graduating in size and turning with the largest boss near the top. The corners are decorated with a beaded chamfer. The top is a broadened-out version of, and trimmed with, the same cornice-like mouldings as the railing. The base is plain with a typical Victorian moulding at the top edge.

Columns are set on the pedestals where the porch roofs occur. At other locations the cap of the pedestal is slightly hipped to shed water. The pedestal at the southwest corner of the open porch is capped with metal and upon which is set a bronze sun dial.

The porch columns are turned and exhibit a very marked entasis, widening markedly in the mid-section and tapering sharply at the top. They are a very free adaptation of the Doric order.

Most of the pedestals show evidence of various steps of decay. The result of the decay has shifted the base of some of the columns far out of plumb.

The column entablature is plain except for a quarter-round edge on the two exposed bottom edges.

7. Cornice and Gutters

The porch cornice follows the standard classic cornice except that instead of the usual ogee or crown mouldings, a series of built-up mouldings reflecting the late Victorian period is used.

The gutter is a built-in type, metal covered.

8. Roof

The present roofing material is asbestos shingle, broken in many places. The original roof was wood shingle matching the shingle siding. The west porch roof is hipped providing a horizontal cornice on all exposed sides.

The roof has dropped in the corner above the west entrance to the hall. At this point the 1904 addition was placed against the original porch. Next to this is located a small open gallery, opening off Theodore Roosevelt's second floor bath. The

slope toward the house wall above the hall ceiling has resulted due to snow and rain being collected in this corner. The drop in the roof, together with several holes in the flashing adjoining the second floor gallery, has resulted in leaks in the entrance hall below, causing damage to the plaster and wood paneling.

9. Second Floor Porch

The second floor porch which opens off President Roosevelt's bedroom is centered above the semi-octagonal bay of the front porch. It is small, rectangular, sided with wood shingles. The hipped roof extension is supported on the west by large shingled brackets matching the bracket of the projecting third floor gable at the southwest corner of the facade. The west opening of the porch is arched, the north and south openings are square. A series of square openings pierce the wall just under the cornice. The floor of the porch is metal covered and further covered with painted canvas. A drain at the floor line or openings in the metal flashing has caused leaks in the board ceiling of the porch below as evidenced by the peeling paint.

10. Porte-Cochere

The southern end of the porte-cochere is resting on a stone wall, upon which are placed two columns matching those of the porch. A low wood railing with elaborately turned spindles is placed between the column piers. A vertical crack through the

center of the stone wall has caused the railing to rise at one end. A number of the turnings are broken and most of them are loose and easily removed from the railing. In 1950 ten inch steel beams were installed in the porte-cochere to replace deteriorated wood beams. The roof structure of the porte seems sound, although some stabilization of the stone wall and columns is indicated.

11. East Service Porch

The east servant's or service porch is constructed with brick arches at the ends which are a continuation of the house wall. The east face has a wood railing and wood steps. The wood flooring is in very poor condition and will require replacement. At the time the wood floor is removed the joists must be examined for failure and decay, and replaced as required.

12. North Service Porch

This porch dates from the conversion of the original north porch to a staff kitchen. The flooring and joists are sagging and the pergola top shows much deterioration. The west and north sides of the porch are latticed. This porch should be repaired at the time the other porches are done. In the case of all porches, the replacements must match the parts which they replace.

IV. MASONRY POINTING

A. Walls

The stone walls of the foundation, the brick walls of the first floor and the brick chimneys show much deterioration of the mortar joints. The brick areas immediately surrounding the basement windows in the stone portion, together with sizeable holes in the stone joints, the area immediately over the bulkhead to the basement in the northeast corner and the wall and window sills of the library bay window are in need of immediate repointing. There is evidence of past attempts at pointing on all exterior foundation walls. In these patches no effort was made to match the original mortar in texture, color or style. The old mortar is of a reddish sandy texture with small lumps of lime imbedded. The pointing between is of the ribbon type. Where the patching is obvious, a modern cement mix was used and a single line made by the point of the trowel.

The condition of the pointing in the stone areas under the porches is not known at the present time due to their inaccessibility. The separation of the porch and house wall at the southwest corner of the porch shows wearing of the mortar in the beam pocket which is visible at that point.

The brick walls have been painted red. Investigation of the wall beneath the paint shows the brick joints to have been grey-white. The mortar is of a definite sandy texture.

The pointing of the vertical joints in the cut stone water table of the trophy room wing has leached out.

At the juncture of the brick wall and the shingled gable of the trophy room the composition eagle and wreath decoration has deteriorated to an extent that there are large holes in the wings. Evidence shows that the eagle was once gilded.

The brick and stone above the lintel of the bulkhead door in the northeast corner has sagged and has been roughly spot-patched.

The library bay window stonework has separated causing the cut stone window sills to drop inward. The sills throughout the first floor were set originally with little or any slope to drain water away from the wood sills. In areas where the pointing is poor, such as in the library bay, the drainage of water has become directed into, instead of away from, the window frame.

B. Chimneys

The three large brick chimneys on the main house are decorated with elaborate checkered brick panels, achieved by recessing alternate bricks of a header-laid pattern, and each has lancet-like slots set below the raised and corbelled band course.

The trophy room chimney having the same scale and mass of the main house chimney is without the decorative treatment.

All of the chimneys show cracks in the mortar. The east (kitchen) chimney has loose bricks near the top. Vertical cracks appear in the central chimney of the main house and horizontal cracking in the trophy room chimney.

V. MAIN STAIR CASE

The main stair in the hall extends from the first to the second floor only. The straight run of eighteen risers is broken by a 35-1/4" landing located eight risers above the first floor.

The entire staircase is constructed of oak and stained. The stair area is paneled in the same small raised panel pattern as the walls in the main hall. The wall side of the stair above the landing has the paneling run at handrail height, and at the landing level the paneling is carried in a horizontal line to meet the three quarter height paneled wainscot throughout the main hall.

The spindles of the stair are turned in the Victorian manner and are set on the treads in an open string fashion. The step ends are decorated with circular turned bosses.

The handrail is heavily moulded and is carried from around the open well above to the landing below, where it is ramped and ends in a volute into the heavy newel on the first floor.

The newel is massively turned with swelled reeding on the shaft. The finial is an elongated onion shape, swirled and reeded above a series of turnings.

The constant stream of visitors using the stairway has caused the treads of the lower section to sag and loosen. Investigation into the stair construction revealed that the stairway has only two, one inch thick oak carriages as support for its forty five inch width. When the shelving in the closet under the stair was removed to inspect the stair construction, it was found that the landing was being supported on a makeshift 2" x 4" shelf support. When the frail condition of the stair was found, temporary shoring was immediately erected underneath to support the first run, and a series of props placed to support the landing.

In the interest of both public safety and preservation of the stairway, the entire stair will have to be strengthened and stabilized.

VI. PAINTING

A. Exterior

In order to determine the original colors of the shingled siding, trim color samples were made by the architect and analyzed.

The analysis made by Architect Penelope Hartshorne reveals that the colors varied at different periods. This fact would probably validate the conflicting colors remembered by the relatives and others who have suggested original paint colors.

In order to break down the list of 12 layers of paint found on the shingles and the fourteen layers on the sample of the trim color taken from the porch railing, the period from 1884 to 1964 was divided into equal approximate periods. This would create a coverage of nine years between painting applications. The additional coats found on the trim can be accounted for by the fact that the porch trim, window sill and shutters, required painting more frequently.

The paint accumulation appears clearer and heavier in the earlier years suggesting that the painting may have been done at more frequent intervals.

The bluish gray, and the next application of dark gray on the shingles, appear to have had a sprinkling of fine black granules applied to the surface of the paint.

A chart showing the pairing of the paint colors, together with the paint analysis is included in the appendix of the report.

It should be noted that the dating shown on the chart is conjectural and not based on records.

B. Interior

The interior finish of the house is typical of the period. Most of the interior woodwork is stained or varnished and most of the walls are covered with wallpaper of the general period. The exception to the above decorative treatment are the first floor drawing room with painted walls and woodwork; the second floor bedrooms of Theodore and Mrs. Roosevelt and the south bedroom have painted trim and mantels; the kitchen, pantry and curator's office on the first floor and the baths on the second floor have painted walls, varnished woodwork and trim; the gun room, Mrs. Roosevelt's exhibit room and hall on the third floor have painted plaster walls.

In the areas such as the halls and exhibit rooms used by visitors, the wall paint and the varnished woodwork have become soiled and damaged. The areas requiring immediate renewal are the plaster walls in the halls, the baseboards and trim on the second and third floors which have become badly scuffed and damaged.

A number of the wood thresholds on the second floor are broken and splintered by heavy public visitation.

The wood paneling in the main hall extension on the first floor adjacent to the Trophy Room is stained by the leaking porch roof.

VII. MISCELLANEOUS AREAS REQUIRING REPAIRS

In addition to the items already noted in this report, additional repairs and replacements appear to be necessary. Several of these are minor and could be done by the Park as maintenance projects.

The flooring on the third floor is badly worn and has been patched with tin and in many places covered with hardboard and rubber matting. Traffic, especially in the hallways, has worn the soft pine flooring thin and has damaged the edges. The flooring in the exhibit rooms is also becoming worn and some holes have developed.

The later period service porch off the staff's kitchen extends to the north of the former proch. This porch, erected by the Theodore Roosevelt Association, is enclosed on two sides with lattices. Instead of the usual porch roof there are pergola type rafters over the porch. A number of the rafters are decayed on the upper edges. The sloping wood floor suggests a failure of the floor joists.

The Chippendale-type railings on the small decks off Theodore Roosevelt's bath and off the single guest room have sections which have become loose and in some cases are separated from the railing proper. The small decks date to the building of

the 1901 trophy room addition, the decks created in the joining of the wing addition to the main house.

The cornices on the main house and on the rear porch are in good condition. However, several areas have been found to have loosened. Repairs to these areas can be done relatively easy at this time.

VIII. RECOMMENDATIONS

A. Porch

Due to the poor condition of the existing porch, it is recommended that the porch be removed and completely rebuilt. The utilization of all original salvagable parts shall be used in the reconstruction. The following itemized list is to be a part of the restoration of the porch.

1. The replacement or reinforcing of the floor framing as required.
2. The replacement of damaged and previously patched areas of wood flooring to match original.
3. The repair and/or replacement of the wood column pedestals and newels as required.
4. The reproduction and replacement of damaged trim, mouldings, bosses, and railings to match the originals.
5. The realignment of columns and pedestals after the floor structure has been completed.
6. The repair and resetting of balustrade sections.
7. The stabilization of the roof structure as required and the reframing of the roof area in the northwest inside corner to direct water away from the house walls.
8. The repair and replacement of flashings as required.

9. Removal of the damaged asbestos shingles and the restoration of the wood shingle roof.

10. Replacement of the pergola rafters on the porch at the north wing.

11. Replacement of missing parts in the latticed panels around the foundation.

12. Replacement of flooring and damaged parts of east and north porches.

B. Masonry Repairs

1. The cleaning of the cavities and loose areas in the mortar of the texture and color and pointing pattern of the original.

2. Resetting of stone, brick and sills at areas such as the library bay window and over the bulkhead cellar entrance.

3. Removal of late patching and replacement to match original.

4. Repointing of foundation under west porch while porch floor is being replaced.

5. Removal of existing red paint on exterior brick walls and the repointing of brickwork as necessary. The coating of the cleaned brick with a waterproof silicone solution.

C. Main Staircase

Removal of temporary supports under the staircase and

addition of new stair carriages to the underside. The operation is to include the stabilization of the stair to the second floor. This will involve the removal of the plaster soffit in the hall and lavatory and the subsequent replastering of the soffit following the stabilization of the stair structure.

D. Painting - Exterior

The choice of paint colors within the historic period should be made and based on the analysis of the colors which is a part of this report.

E. Painting - Interior

1. The halls on all floors require repainting. An analysis of the colors to date, is a part of this report and included as a convenience in the selection of the colors.

It is recommended that the wainscot-high fabric remaining on the lower part of the wall in the rear second floor hall only, be restored throughout the second floor hallways. The slight variation in paint color found between the wall and fabric would then be reproduced.

2. Repairs to damaged woodwork in the halls, including baseboards, door trim, etc.

3. Cleaning and revarnishing second floor stair railing, doors, trim, and baseboards.

4. Refinishing of first floor hall paneling.

F. Miscellaneous Repairs

1. Repair of third floor pine flooring with boards matching the original.

2. Repair of kitchen service porch supports, lattices and pergola rafters.

3. Repairs to cornices and soffits as required.

IX. COST ESTIMATE OF PROPOSED PROJECTS

REHABILITATION OF PORCHES

Labor	$41,000.00
Material	9,000.00
Total	$50,000.00

STABILIZATION OF MAIN STAIRCASE

Labor	$ 2,000.00
Material	600.00
Total	$ 2,600.00

MASONRY REPOINTING

Labor	$ 6,500.00
Material	1,500.00
Total	$ 8,000.00

PAINTING - EXTERIOR

Labor	$11,000.00
Material	1,000.00
Total	$12,000.00

PAINTING - INTERIOR

Labor	$ 3,000.00
Material	400.00
Total	$ 3,400.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Eastern Office, Design and Construction
Philadelphia, Pa. 19106

IN REPLY REFER TO:
H30-H

July 13, 1964

Memorandum

To: Architect Norman Souder

From: Architect Hartshorne

Subject: Paint colors used originally at Theodore Roosevelt's house, Sagamore Hill, built in 1884.

The following are the layers of paint from bottom up found on wood chips. The layers have been matched to the Munsell Color Company chart for numerical color reference. Samples of these colors may be obtained from the Munsell Color Company, 2441 North Calvert Street, Baltimore 18, Maryland.

Exterior Shingling, 2nd and 3rd floor - sample taken at west wall

Layering: wood
salmon 5 YR 6/4
deep yellow ochre 2.5 Y 5/6
light brown 2.5 YR 4/4 - 2.5 YR 3/4
bluish grey 10 B 5/1
black surface coating
dark grey N 6/
black surface coating
very light grey N 8/
yellow 5 Y 8/6
bright salmon 5 YR 6/6
salmon 5 YR 6/4
light salmon 5 YR 7/4

i.e. the salmon 5 YR 6/4 was put on when the shingles were first painted.

Exterior Trim, from a porch railing, south side?

Layering: wood
salmon (very small islands left after erosion) 5 YR 6/2
red brown thin coat 2.5 YR 3/4
dark greenish brown 10 Y 2/2
emerald green (dark) 7.5 G 3/4

greenish brown 10 Y 2/2
grey N 6/
very thin tannish grey ? if not dirt
2 layers grey N 6/
white
2 layers grey N 6/
2 layers light grey N 7/
white
dark green 10 GY 2/4
lighter green of same hue, more chroma 7.5 GY 4/4
lighter green, ~~has~~ less chroma 10 GY 3/2

i.e. the first coat of paint on the trim represented by a microscopic island of paint left on the sample - was salmon. Although the color reads of less chroma on this sample, the fragment is so small that I would defer to the salmon notation on the shingle sample - 5 YR 6/4.

Penelope Hartshorne

Penelope Hartshorne
Architect

CHART
OF EXTERIOR PAINT COLORS
BASED ON PAINT ANALYSIS

TENTATIVE DATING	LAYER	SHINGLE COLOR	TRIM COLOR
1884	1	SALMON	SALMON RED BROWN
1893	2	DEEP YELLOW OCHRE	DARK GREENISH BROWN
1902	3	LIGHT BROWN	EMERALD GREEN (DARK) GREENISH BROWN (FINAL COAT)
1911	4	BLUISH GRAY- BLACK SURFACE COATING	GRAY 2 LAYERS OF GRAY
1920	5	DARK GRAY- BLACK SURFACE COATING	WHITE
1929	6	VERY LIGHT GRAY	2 LAYERS OF GRAY
1938	7	YELLOW	WHITE
1947	8	BRIGHT SALMON SALMON	DARK GREEN LIGHTER GREEN
1956	9	LIGHT SALMON	LIGHTER GREEN

THE GROUPING OF COLORS AT SEVERAL PERIODS IS BASED ON THE LAYERING OF PAINT. SOME OF THE TRIM COLORS SHOWN MAY HAVE BEEN APPLIED BETWEEN THE PERIODS OF SHINGLE PAINTING AS REQUIRED BY GREATER WEAR ON AREAS SUCH AS RAILINGS AND BLINDS.

INTERIOR PAINT ANALYSES

SECOND FLOOR BACK HALL - (Adjacent to Alice's & Boy's Rooms)
ABOVE FABRIC

1.	Yellow paint	10 YR 8/6
2.	Cream	2.5 Y 8/2
	Buff (Pinkish)	10 YR 7/4
3.	Cream	10 YR 8/2
	White crumbly layer	
4.	Yellow	10 YR 8/6

SECOND FLOOR BACK HALL - (Adjacent to Alice's & Boy's Room)
ON FABRIC

1.	Yellow paint	10 YR 7/6
	Fabric	
2.	Buff	10 YR 7/4 (cream & pinkish undercoats)
3.	Yellow	10 YR 7/6
4.	Buff	10 YR 8/6

SECOND FLOOR FRONT HALL - (Arch to Dressing Room) 7'-0" above floor

	Sizing	
	Cream	7.5 YR 8/4
1.	Yellow	10 YR 8/6
	Whitish cream	
2.	Cream (peach)	7.5 YR 8/4
3.	Reddish Buff - Translucent	5 YR 6/4
4.	Cream	2.5 YR 8/2
5.	Yellow	10 YR 8/6

THIRD FLOOR HALL (Hall to Gun Room - North Wall)

1.	Buff with brush marks	10 YR 8/4
2.	Buff, thin, dirty, repainting	10 YR 8/4
3.	Yellow	10 YR 8/6
	White - seems to be an undercoat	
4.	Yellow	10 YR 8/6

THIRD FLOOR GUN ROOM

	Cream undercoat	
1.	Light Buff	10 YR 8/2

White layer, partially dissolved in muriatic acid, does not appear on every sample of this room.

THIRD FLOOR - Mrs. Roosevelt's Exhibit Room (North Side)

Cream undercoat
1. Pink finish coat between colors 5 YR 8/2 and 5 YR 8/4

NOTE

The paint layer given numbers on the above listing appear to be finish coats. The unnumbered layers are probably undercoats.

Babylon, N.Y.
March 28, 1949

Mr. Howard C. Smith
Cove Neck Road
Oyster Bay, L. I. N.Y.

Re: Sagamore Hill

Dear Mr. Smith:

We have inspected Sagamore Hill in the company of men particularly qualified to report on the roofing, painting and electrical work, and have the following recommendations to submit. As you realize, the house has deteriorated rather badly so considerable work will be required to bring the building back to the point where maintenance expense can be kept to a minimum.

The wood shingle roof is in bad condition, with many shingles missing, and a large percentage of them curled and cracked. We note in walking through the house evidence of many leaks, both old and new, and it appears that a new roof is of prime importance. The sheetmetal work has stood up over the many years of the house's history probably better than any material now on the market, but has finally reached the point where major attention is required.

We recommend that all pitched roof areas of the house be covered with Johns Manville No. 607 Asbestos Shingles, applied over the existing wood shingles with aluminum edging at the rakes and new copper valleys throughout. The box gutters would be lined with asphalt saturated fabric and plastic, with aluminum edging at the outside edge. All leaders should be replaced with new copper leaders with new sleeves into the box gutters. This work would cost approximately $7,000.00, including the Ice House, and would eliminate all concern over roofing and sheetmetal problems, except for the chimneys. These could be reflashed only by taking down the chimneys to the flashing line, but in view of their size this would be a major undertaking and we are hopeful that the new roofing and the painting of the chimneys covered under a later recommendation, would eliminate leaks from this source.

C
O
P
Y

C
O
P
Y

E. W. HOWELL CO.
Builders

305 Deer Park Avenue
Babylon, N. Y.
Babylon 400

101 Park Avenue
New York 17, N.Y.
Lexington 2-4924

Babylon, N.Y.
September 14, 1951

Chapman, Evans & Delehanty
50 Broadway
New York 4, N. Y.

Att: Mr. Delehanty

Re: Sagamore Hill, Oyster Bay

Gentlemen:

Agreeable with our telephone conversation we have proceeded with covering up the floors throughout the house and have started to tear out the ceiling plaster. I personally inspected all of the spaces again and find that the sloping ceilings in the attic, for example, will have to be removed down to the knee walls because they are in a much more delicate condition than appeared. The plaster is evidently the old fashioned lime mortar all the way through with very little hair in it so that it is now what they term dead.

I made up a brief specification for taking bids on electric wiring and have a figure of $1700.00 from Edmond J. Foley of Syosset and from Charles Yandik an estimate of $1899.00 for the same work. This in each case includes the rewiring of all of the existing fixtures, rewiring of all outlets exactly as they were, wiring for three oil burners, two circulating fans and two circulators for the heating systems, 31 additional base receptacles in order to provide a minimum of two receptacles in each of the main bedrooms and a minimum of one base receptacle in the small servants' rooms.

The electric service is figured three No. 4 wires with 100 amp. switch. This cost only $30.00 more than three No. 8's with 60 amp. switch which Mr. Cucci would want as a minimum.

Two kliegl spot lamps are included for the trophy room and we can obtain frosnal lens lights for the same price if additional light intensity is thought necessary.

I forgot to speak to you about bell wiring. It might be that you should have an entrance door bell and it may be thought

desirable to have other bell buttons for the guides to use for signalling some central point. While we have the plaster ceilings off it would be a simple matter to provide this bell wiring if it is thought desirable. If there will not be anything except possibly a front or back door button it can be postponed until later on.

In view of the fact that Foley is comparatively local and lower priced I have authorized him to take down the electric fixtures and store them until such time as they are rewired but I will not authorize his proceeding with the contract until further word is received from you.

Sincerely yours,

E. W. HOWELL CO.

(signed- Ralph D. Howell)

Ralph D. Howell

RDH:mg

October 1st, 1951

E. W. HOWELL CO.'S BUDGET

For

SAGAMORE HILL

Water Storage	$ 20,000.00
C. W. Lauman & Co. Pumps & Hydrants	9,480.00
Braun Bros. Plumbing & Hot Water Heating	24,519.00
Martone - Hot Air Heat (old risers)	4,238.00
Electric Wiring	2,200.00
Plastering	6,500.00
Roof Insulation including Souvenir Room	1,100.00
Sewage Disposal	650.00
Shelters for Hose Lines	480.00
Protect Floors, Miscellaneous Repairs	3,500.00
Painting Interior	5,000.00
Re-install Furniture	1,000.00
X Enclose Rear Porch for Sales Room	1,500.00
X Public Toilets	3,500.00
Rear Stairs & Toilet Room	2,000.00
Toilets in Basement	1,000.00
Alarm System	5,000.00
Sprinkler System (extra in basement)	2,000.00
Pumphouse Roof	1,000.00
Porch Rail	400.00
25 gpm Pump with extra large Motor	1,961.00
	$ 96,948.00
Builder's Fee 10%	9,695.00
	$106,643.00

Approved. let 2 5-7
except as to items
marked w a X.

Trust 95

HENRY OTIS CHAPMAN RANDOLPH EVANS
WILLIAM E. DELEHANTY
ARCHITECTS

50 Broadway
New York 4, N.Y.
Digby 4-1910

Mr. Hermann Hagedorn
28 East 20th Street
New York 3, N. Y.

Reference: Sagamore Hill Alterations

Dear Mr. Hagedorn:

We recommend the selection of the following subcontractors, based on bids obtained by E.W.Howell Co.:

Roofing - L Martone & Sons	$ 9,874.00
Painting - Davis Williams	4,575.00
Plus sanding porch floor, approx.	275.00
Lightning Protection-Geo.C.Willard Jr.	932.00
Insulation of Ceiling over Trophy Room - Nassau Insulating Co.	275.00

(Insulating the partitions between main house and TrophyRoom will cost a small additional amount).

Attached hereto, for your files, are copies of above bids, except that of Nassau Insulating Co.

Yours very truly,

CHAPMAN, EVANS & DELEHANTY

JACK W. LIGNELL

CHAPMAN, EVANS & DELEHANTY
ARCHITECTS
50 Broadway, New York, N.Y.

To: Mr. Ralph Howell
E. M. Howell Co.

Date: November 15, 1951

From: Robert I. Powell

Subj: Sagamore Hill

Job Report & Instructions to Contractor
Visit of November 9th, 1951

(1) Confirming telephonic instructions of November 13th, you are authorized to re-plaster the walls in chambers 5 and 6, south wall in chamber 4 and the west wall in chamber 7. It is obvious that the poor state of the plaster in these locations requires the above work. You are to send us an estimate as to the approximate cost of this work which we believe will be in the neighborhood of $400.00.

(2) Ceilings in the basement to be rocklath, unperforated, butt jointed. These ceilings have been checked with Mr. Hager of the Great American Insurance Company and are satisfactory.

(3) Ceiling in the boiler room to be plaster on wire lath, as are the ceilings immediately over the additional boilers, as instructed on the job.

(4) Treatment of newels in the new back stairs as instructed on the job.

(5) Please conduct experiments on portions of the stone work and brick work to attempt to bleach the stone joints to the original color, and to bring back the brick work, including the joints, to the original color. The original color of brick work and mortar joints to be determined by that portion of the basement wall in the northwest corner of the basement under the parlor. These experiments should be conducted using paint remover, muriatic acid, wire brush on the brick work, etc., to determine whether it will be possible to reach the original coloring of the brick and stone work without re-pointing.

E. W. HOWELL CO.
Est. 1891
BUILDERS

Babylon, N. Y.
August 21, 1952

Mr. Howard C. Smith
149 Broadway
New York 6, N. Y.

Re: Sagamore Hill

Dear Mr. Smith:

I have never had much faith in the colors printed on post cards because they were not based on colored photographs but on word descriptions and I have seen many of them that were inaccurate. However, from the places that we scraped and sandpapered on the sidewall shingled surfaces I felt certain that the original treatment had been dry yellow ochre diluted in turpentine or linseed oil and applied as a stain rather than as a paint. It is impossible to duplicate the effect of a flat finish stain in glossy paint, which is the reason that I was one of those who urged the bright yellow as being a present day interpretation of what was originally sought. It would not be possible to obtain the fireproof paint without a high gloss finish. There are several spots that have peeled which would probably have to be touched up before the place could be opened to the public next spring but I believe this could be done at very little expense and the change in color postponed until after public reaction if you wanted to.

Sincerely yours,

E. W. Howell Co.

Ralph D. Howell

ILLUSTRATION NO. 1

This photograph shows the south side of the house shortly after it was built in 1884 without the trees and foliage surrounding it. Photographs just after the turn of the century show many vines and trees. The basic house remains virtually unchanged. Note the brickwork pattern on the chimneys.

Photographer unknown
Copy Neg. No. EODC 4846

ILLUSTRATION NO. 2

Photograph of the north side of the house taken about 1902 or 1903, before the erection of the Trophy Room wing.

Note the oval window on the second floor, at the right of the photograph, which was removed at a later date for the addition of a projecting bay to house an additional bath room. In this photograph the third floor shutters are shown in place.

The slight projection on the gable at the attic level has been removed and replaced by a metal louver.

Photographer unknown
Copy Neg. No. EODC 4848

ILLUSTRATION NO. 3

The north side of the house prior to the addition of the Trophy Room. In this photograph the arch on the right of the porch can be seen. When the Trophy Room was added the arch became the entrance to the room and a portion of the porch was added to the main hall.

The windmill at the left of the photograph is no longer in existence.

Photo: Frank P. Jewett
Copy Neg. No. EODC 4858

ILLUSTRATION NO. 4

View of the house from the southwest, taken in 1905 after the addition of the Trophy Room wing. At this time an extension was added to the southwest corner of the porch, extending the greatest width of the semi-octagonal portion to the corner. Note that there is no railing on this portion. At this time the house was painted a dark color. Compare this illustration with illustration no. 5 showing lighter paint on the walls, shutters and trim.

Photo: J. Horace McFarland Co., 1905

Copy Neg. No. EODC 4849

ILLUSTRATION NO. 5

This photograph was taken some years after 1905 (see Illustration No. 4) according to the growth of the trees and vines. At this period the house was painted a light color. The porch extension shown here must have been in place for some years. Consideration should be given to the restoration of the extension when the porch is reconstructed, since it was in place during Roosevelt's second term as president.

Photographer unknown

Copy Neg. No. EODC 4847

SAGAMORE HILL. All the Colonel's Political Conferences in Summer Are Held on the Cool Veranda on the Right.

ILLUSTRATION NO. 6

The southwest corner of the porch showing the extension to this portion. See Illustration Nos. 4 and 5 showing the extension from the northwest. The extension is no longer in place. The existing porch is as it was originally built.

Photo: J. Horace McFarland Co., 1905

Copy Neg. No. EODC 4859

ILLUSTRATION NO. 7

Interior of the large west porch taken in 1905 when Roosevelt was president. The skin on the floor is a mountain lion. This portion of the porch remains the same as when the photograph was taken except for deterioration.

Photo: J. Horace McFarland Co., 1905

Copy Neg. No. EODC 4860

ILLUSTRATION NO. 8

The porte-cochere as it looked in 1905. The paneled projection at the right of the porch steps is in place and served as a platform to board carriages. With the exception of the third floor shutters this view of the house is the same as it was when this photograph was taken.

Photo: J. Horace McFarland Co., 1905

Copy Neg. No. EODC 4861

ILLUSTRATION NO. 9

The failure of the porch can be seen on this photograph. The decayed pedestals, weakened sills and piers have caused several of the columns to shift out of alignment. The peeling paint on the porch ceiling above the drawing room door was caused by leakage in the small porch on the second floor opening off Mr. Roosevelt's bedroom.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4845

ILLUSTRATION NO. 10

The corner of the porch on the north side of the house where the Trophy Room was added. The pergola rafters are decayed and will require replacement. Note the heaving of the porch floor in the foreground.

The composition of the mouldings on the porch railing and the design of the pedestals are well illustrated in this photograph.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4844

ILLUSTRATION NO. 11

The northwest corner of the porch, showing the partially collapsed pedestal next to the Trophy Room bay on the left. The railing on the roof, near the center of the photograph is the deck opening from Mr. Roosevelt's bath room. To the right of this point, the porch roof is sloping in toward the house wall, causing water damage to the interior. At the right of the second floor railing there are large holes in the metal flashing.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4837

ILLUSTRATION NO. 12

View of the library bay window on the south side of the house. The stone mortar joints in the wall, under the stone window sills at the left, require pointing. The sills in the bay are tilted toward the window. Extensive repointing is required.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4841

ILLUSTRATION NO. 13

Detail of the condition of the masonry at the library bay window.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4843

ILLUSTRATION NO. 14

Photograph showing the condition of the stone and brick joints on the south side of the house, near the library chimney.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4840

ILLUSTRATION NO. 15

Detail photograph of the south porch and the drawing room window to the west of the porte-cochere. Photograph shows the wave-edged shingles on the lower portion of the second floor, the terra cotta panels in the brick wall and the design of the porch railing and pedestals.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4842

ILLUSTRATION NO. 16

The stair hall from the entrance hall. The stairs have become weakened from constant use. Temporary shoring has been placed under the run from the floor to the landing. It was found that the stair was constructed with only one, one inch thick oak carriage at either side. The entire stairway will require reinforcing to permit continued visitor traffic.

Photo by: National Park Service, EODC
Boucher, February 26, 1964

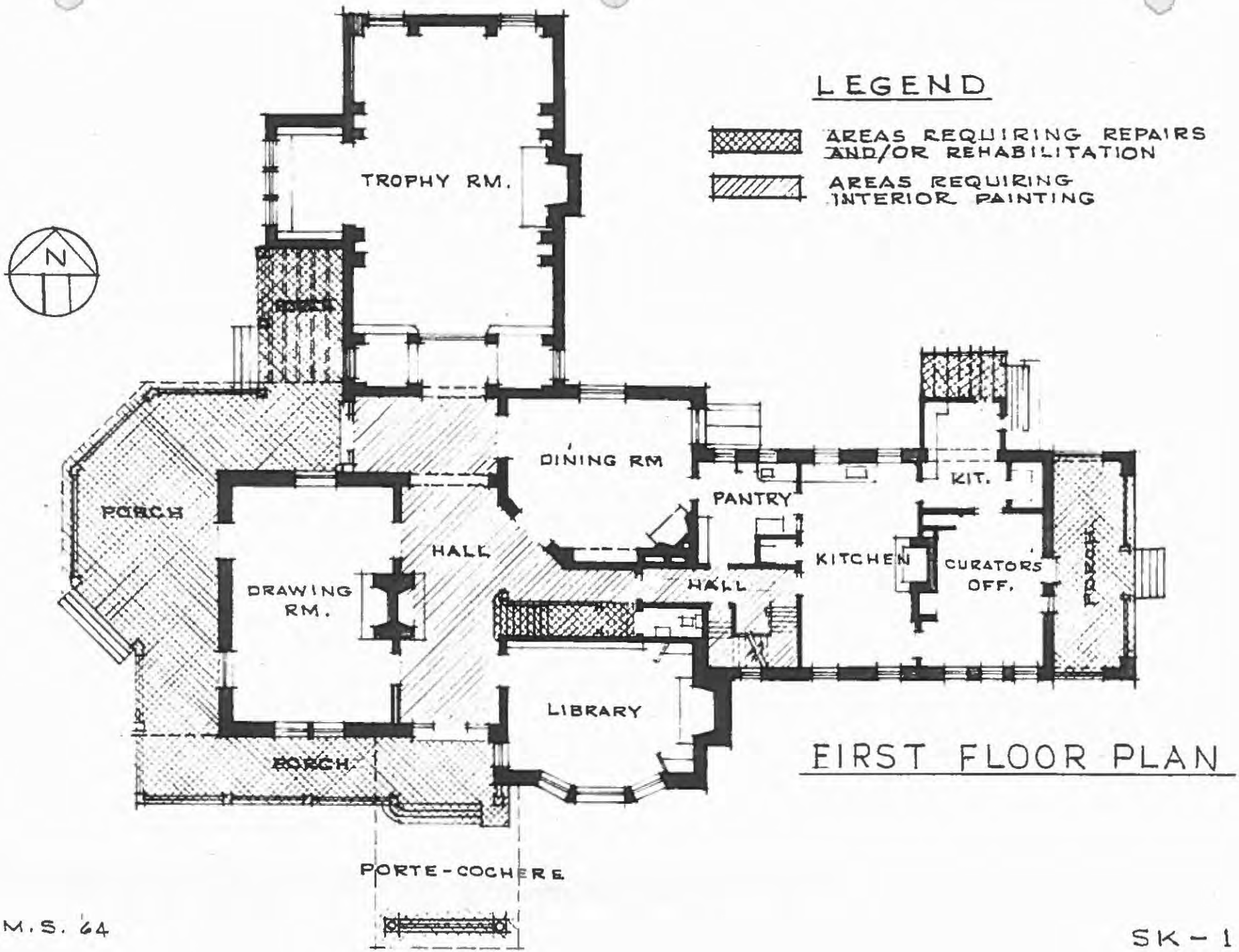
EODC Neg. No. 4838

ILLUSTRATION NO. 17

Detail photograph of the newel on the main staircase. Note the wear on the lower tread and broken nose mould on the second riser.

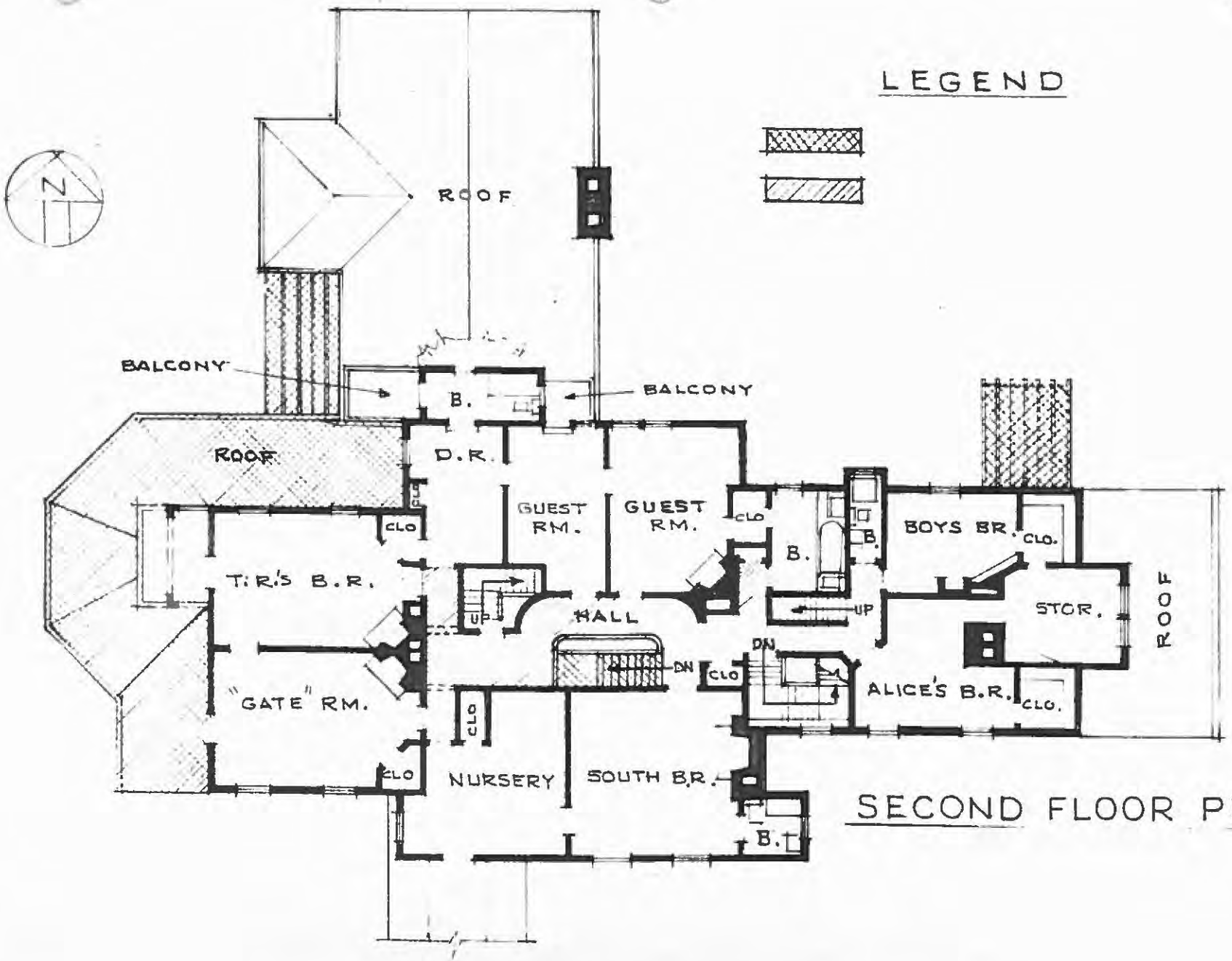
Photo by: National Park Service, EODC
Boucher, February 26, 1964

EODC Neg. No. 4839


LEGEND
AREAS REQUIRING REPAIRS AND/OR REHABILITATION
AREAS REQUIRING INTERIOR PAINTING
N
TROPHY RM.
PORCH
DINING RM
PANTRY
KIT.
PORCH
HALL
DRAWING RM.
HALL
KITCHEN
CURATORS OFF.
PORCH
LIBRARY
PORCH
PORTE-COCHERE
FIRST FLOOR PLAN

N.M.S. 64

SK-1

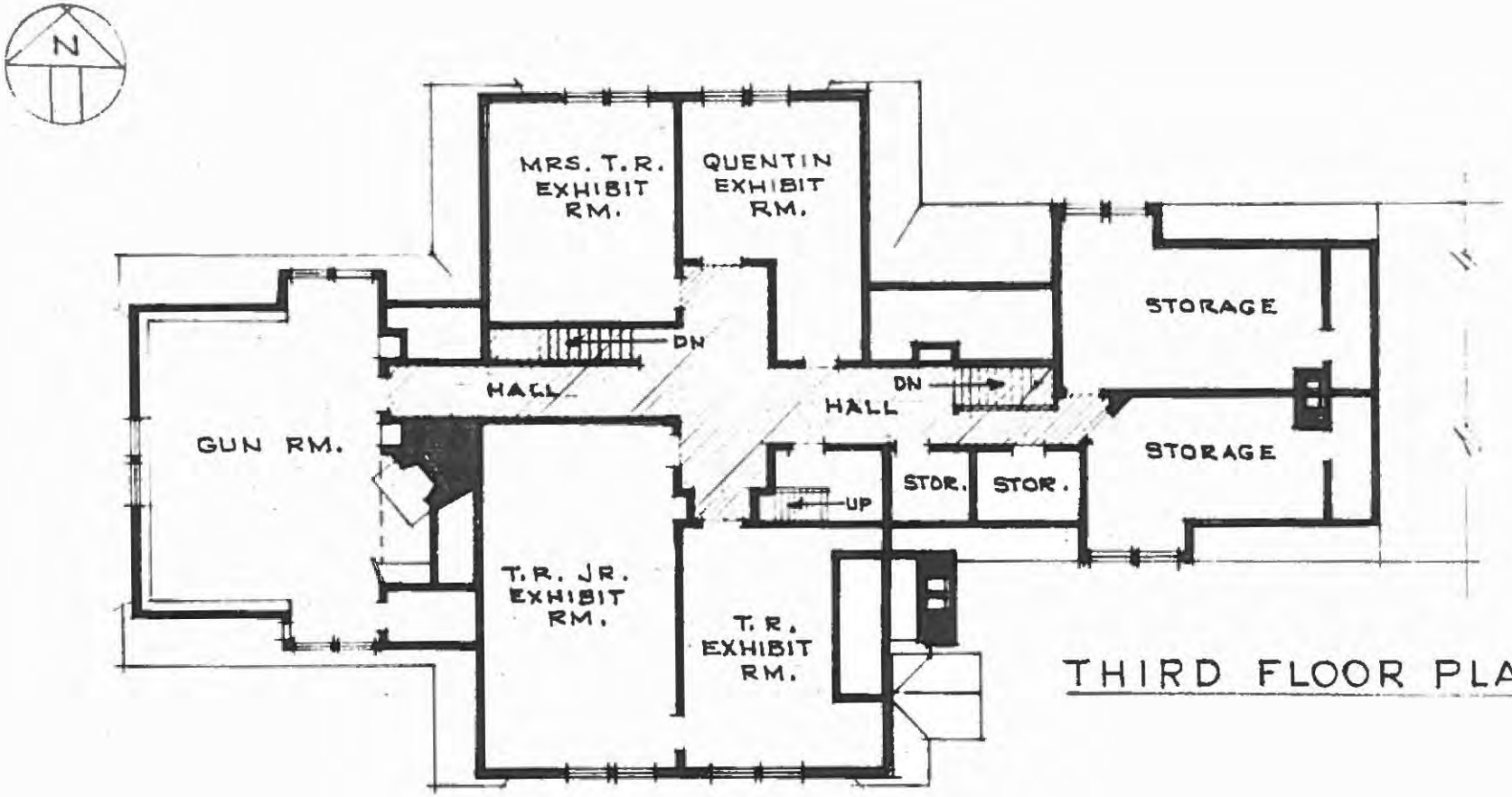


SECOND FLOOR PLAN

N.M.S - '64

SK-2

LEGEND



THIRD FLOOR PLAN

NMS - '64

SK - 3