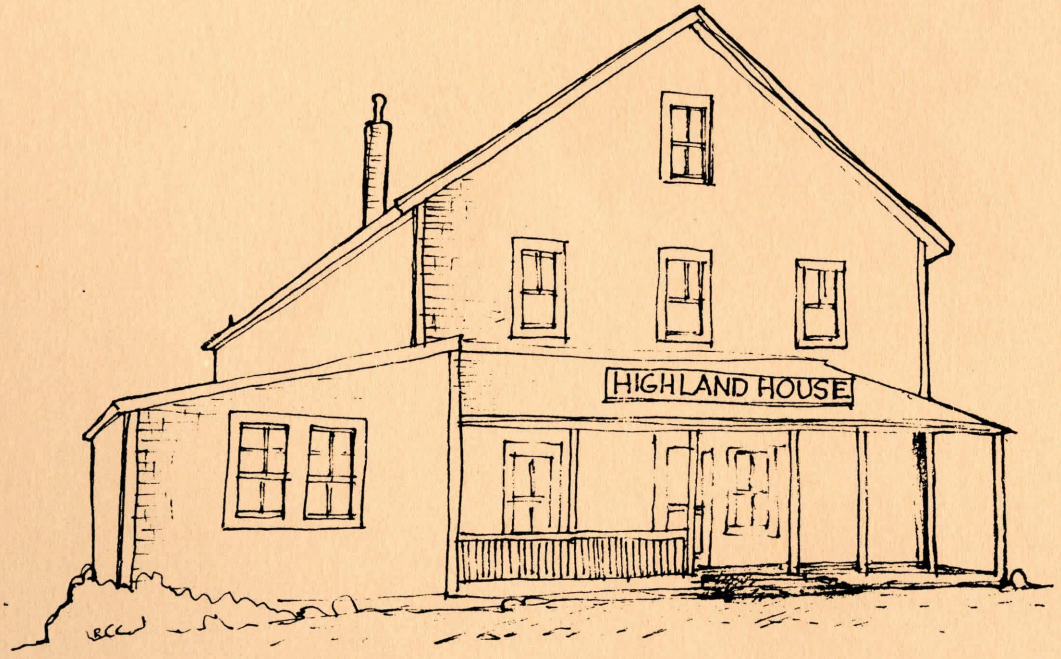
HIGHLAND HOUSE

Cape Cod
National Seashore



Historic Structure Report

HIGHLAND HOUSE

HISTORIC STRUCTURE REPORT

Cape Cod National Seashore
North Truro, Massachusetts

By
Regina Binder

Historical Background and Context
by
Larry Lowenthal

May 1994

CONTENTS

LIST OF ILLUSTRATIONS AND CREDITS xii

FOREWORD xviii

ACKNOWLEDGEMENTS xix

I. INTRODUCTION 1

STATEMENT OF SIGNIFICANCE 3

Illustration 4

ADMINISTRATIVE DATA 5

Location of Structure 5

List of Classified Structures Information 5

Present and Proposed Uses of Building 5

Pertinent Planning Documents 6

Justification of Proposed Treatments 7

II. HISTORICAL BACKGROUND AND CONTEXT 9

EARLY AGRICULTURAL AND MARITIME ACTIVITIES 11

THE BIRTH OF TOURISM 12

ARRIVAL OF THE RAILROAD 14

Real-Estate Speculation 14

Effect on Tourism 15

EARLY YEARS OF THE HIGHLAND RESORT 16

Creation of the Highland Lodge 16

Expansion of the Facilities 17

Other Area Resorts 18

Early Advertisements for the Highland Resort 19

PERIOD WHEN THE HIGHLAND HOUSE WAS BUILT 22

Construction of the Highland House 22

Further Expansion of the Resort 24

Life at the Highland Resort 26

LATER EVOLUTION OF THE HIGHLAND RESORT 29

Effect of the Automobile 29

End of the Small Family's Ownership 30

PURCHASE BY THE NATIONAL PARK SERVICE 33

III. ARCHITECTURAL EVOLUTION 35

APPEARANCE UPON CONSTRUCTION 37

Exterior Elements 37

Interior Elements 40

Illustrations 41

APPEARANCE AFTER LATER ALTERATIONS 44

During the Resort Era 44

Exterior Elements 44
Interior Elements 45

During the Truro Historical Society Era 46

Exterior Elements 46
Interior Elements 47

Illustrations 48

IV. ARCHITECTURAL DESCRIPTION 53

OVERVIEW 55

Illustrations 56

EXTERIOR ELEMENTS 61

Foundations 61

Drainage 61

Walls 62

West Porch 62

Doorways 64

Windows 65

Roofs 67

Chimneys 68

Illustrations 69

INTERIOR ELEMENTS 77

Basement Story 77

Plan 77
Basement/Garage 77
Crawl Space 78

First Story 79

Plan 79
Common Elements 79
Entry and Stairwell (Room 101) 80
Offices 82
Main Exhibition/Former Dining Room (Room 104) 84
North-Addition West Room (Room 102) 86
North-Addition East Room (Room 103) 87
North-Addition Rest Rooms 88
Storage Room/Former Kitchen (Room 105) 89
Northeast-Corner Rest Rooms 91

Second Story 92

Plan 92
Common Elements 93
Main Hallway (Room 201) 94
Southwest Hall 94
Central Corridor 95
Southeast Hall 95

Guest Rooms (Rooms 202–210 and 213–218) 96
Room 202 96
Room 203 97
Room 204 97
Room 205 98
Room 206 98
Room 207 98
Room 208 99
Room 209 99
Room 210 99
Room 213 100
Room 214 100
Room 215 100
Room 216 101
Room 217 101
Room 218 101

Rest Rooms (Rooms 211–212) 102
Room 211 102
Room 212 102

Attic Story 104

Illustrations 106

V. EXISTING CONDITIONS 125

SUMMARY OF EXISTING CONDITIONS 127

Main Building 127

North Addition 128

North-Addition Shed 128

EXTERIOR ELEMENTS 129

Foundations 129

Drainage 130

Walls 131

West Porch 134

Doorways 135

Windows 136

Roofs 138

Chimneys 139

Illustrations 140

INTERIOR ELEMENTS 144

Basement Story 144

Basement/Garage 144
Crawl Space 145

First Story 146

Entry and Stairwell (Room 101) 146
Offices 148
Main Exhibition/Former Dining Room (Room 104) 149
North-Addition West Room (Room 102) 150
North-Addition East Room (Room 103) 151
North-Addition Rest Rooms 152
Storage Room/Former Kitchen (Room 105) 152
Northeast-Corner Rest Rooms 153

Second Story 154

Main Hallway (Room 201) 154
Southwest Hall 154
Central Corridor 155
Southeast Hall 156
Guest Rooms (Rooms 202–210 and 213–218) 157
Common Conditions 157
Room 202 158
Room 203 159
Room 204 159
Room 205 160
Room 206 160
Room 207 161
Room 208 161
Room 209 162
Room 210 162
Room 213 163
Room 214 163
Room 215 164
Room 216 164
Room 217 165
Room 218 165
Rest Rooms (Rooms 211–212) 165
Room 211 165
Room 212 166

Attic Story 167

Walls 167
Trusses 167
Roof Framing and Sheathing 167
Chimneys 167

Illustrations 168

VI. RECOMMENDATIONS 187

EXTERIOR STABILIZATION/PRESERVATION 189

Foundation 189

Drainage 189

Walls 190

West Porch 190

Windows 190

Roofs 190

Chimneys 191

Finishes 191

Pest Management 191

INTERIOR STABILIZATION/PRESERVATION 192

Demolition and Cleaning 192

Floors 192

Walls 192

Ceilings 193

Doorways 194

Windows 194

Stairways 194

Finishes 195

Electrical System 195

Protection Systems 195

LIFE-SAFETY CODE COMPLIANCE 196

VII. **APPENDICES** 197

APPENDIX A. Original Locations of Structures Associated with the Highland Resort 199

APPENDIX B. National Register Nomination and Entry Forms (June 1975) 203

APPENDIX C. Memorandum Concerning Visit by North Atlantic Region Staff to Cape Cod National Seashore (April 8, 1980) 213

APPENDIX D. Letter Responding to the Proposed Rehabilitation of Second-Story Rooms by the Truro Historical Society (April 17, 1980) 217

APPENDIX E. Memorandum Concerning Use of and Repair to the Highland House (September 4, 1980) 221

APPENDIX F. Memorandum Seeking Section 106 Approval for Removing Southeast Ell and South Porch of Highland House (August 14, 1981) 225

APPENDIX G. Memorandum Concerning State Historic Preservation Officer's Concurrence with Removal of Southeast Ell and South Porch (December 2, 1981) 229

APPENDIX H. Memorandum Approving Proposed Repairs to the Interior of the Second Story (September 8, 1983) 235

APPENDIX I. Memorandum Approving Proposed Repairs to Roofs, Drain, and Foundation (December 11, 1990) 243

APPENDIX J. Trip Reports Describing 1991 Storm Damage to Highland House and Proposed Repair Procedures (August 1991–January 1992) 255

APPENDIX K. Section-106 Compliance Form Requesting Permission to Remove Portions of Wall Plaster in Main Exhibition Room (Approved April 6, 1992) 267

APPENDIX L. Trip Report Describing 1992 Storm Damage to Highland House and Proposed Repair Procedures (December 16, 1992) 273

VIII. BIBLIOGRAPHY 281

LIST OF ILLUSTRATIONS AND CREDITS

1. Locus Map of Highland House. NPS drawing by Jana Gross, 1989 4

2. Northwest View of Highland House, circa 1908. Reprinted from an advertising brochure for the Highland House and Cottages, 1908–09. Reproduced courtesy Mr. and Mrs. Hersey Taylor 41

3. Northwest View of Highland House, n.d. Postcard reproduced courtesy the Truro Historical Society 41

4. Northeast View of Highland House and Millstone Cottage, before 1922. Reprinted from Small, *Just A Little about the Lower Cape, Personal and Otherwise* 42

5. Southeast View of Highland House and the Millstone, Rock, and Beacon Cottages, circa 1908. Reprinted from an advertising brochure for the Highland House and Cottages, 1908–09. Reproduced courtesy Mr. and Mrs. Hersey Taylor 42

6. Southwest View of Highland House, before 1941. Postcard reproduced courtesy the Truro Historical Society 43

7. Northeast and Southeast Corners of Entry. Reprinted from an advertising brochure for the Highland House and Cottages, 1908–09. Reproduced courtesy Mr. and Mrs. Hersey Taylor 43

8. Northwest View of Highland House, 1966. NPS photograph by Lohr and Pearce, Cape Cod NS 48

9. West View of Highland House and Millstone House, 1966. NPS photograph by Lohr and Pearce, Cape Cod NS 49

10. Northeast View of Highland House, 1973. NPS photograph by Swan, Cape Cod NS 49

11. Southeast View of Highland House, 1973. NPS photograph by Swan, Cape Cod NS 50

12. Northwest View of Highland House, 1973. NPS photograph by Swan, Cape Cod NS 50

13. Southwest View of Highland House, 1973. NPS photograph by Swan, Cape Cod NS 51

14. South Side of Highland House and West Side of Its Southeast Ell, 1973. NPS photograph by Swan, Cape Cod NS 51

15. Demolition of Highland House's Southeast Ell, July 1982. Photograph reproduced courtesy the Truro Historical Society 52

16. West and East Elevations of Highland House. NPS measured drawing by Jana Gross and Stephen Pisani, 1989 and 1993 56

17. South Elevation of Highland House. NPS measured drawing by Jana Gross and Stephen Pisani, 1989 and 1993 57

18. North Elevation of Highland House. NPS measured drawing by Jana Gross and Stephen Pisani, 1989 and 1993 58

19. First-Floor Plan of Highland House. NPS measured drawing by Jana Gross and Stephen Pisani, 1989 and 1993 59

20. Second-Floor Plan of Highland House. NPS measured drawing by Jana Gross and Stephen Pisani, 1989 and 1993 60

21. Main Building, South Foundation Wall: Window and Corbeled Brackets at East End. NPS photograph by Regina Binder, 1989 69

22. North-Addition Shed: North and East Sides. NPS photograph by Regina Binder, 1989 70

23. North-Addition Shed: Foundation Piers and Plank. NPS photograph by Regina Binder, 1989 70

24. Main Building, South Wall: Decorative Shingled Belt Course. NPS photograph by Regina Binder, 1989 71

25. West Porch: Plywood Deck. NPS photograph by Regina Binder, 1989 72

26. West Porch: Original Turned Posts at South End. NPS photograph by Frank Ackerman, 1989 73

27. West Porch: Boards Applied to Post Bases. NPS photograph by Regina Binder, 1989 74

28. West Porch: Original Bracket at Northwest Corner and Fascia Board Supporting Gutter. NPS photograph by Regina Binder, 1989 75

29. West Porch: Original Bracket at Southeast Corner. NPS photograph by Regina Binder, 1989 75

30. Main Building, East Wall: Windows. NPS photograph by Regina Binder, 1989 76

31. Main Building: West End of Roof. NPS photograph by Regina Binder, 1989 76

32. Basement/Garage: North Alcove. NPS photograph by Frank Ackerman, 1989 106

33. Double-Beaded and Single-Beaded Wainscot. NPS photograph by Frank Ackerman, 1989 107

34. Typical Doorway and Window Casing. NPS photograph by Frank Ackerman, 1989 108

35. Entry (Room 101): Picture Molding at Cornice Level. NPS photograph by Frank Ackerman, 1989 109

36. Southwest Stairwell: West and South Walls at Landing. NPS photograph by Frank Ackerman, 1989 110

37. Southwest Stairwell: Newels and Balustrade at Second-Story Level. NPS photograph by Frank Ackerman, 1989 111

38. Offices: Diagram of Physical Evidence. NPS schematic drawing by Stephen Pisani, 1993 112

39. Main Exhibition/Former Dining Room (Room 104), South Wall: Pressed-Metal Ceiling and Cornice, and Wood Picture Molding. NPS photograph by Frank Ackerman, 1989 113

40. Main Exhibition/Former Dining Room (Room 104), Southwest Corner: Pressed-Metal Cornice Absent from West Wall. NPS photograph by Frank Ackerman, 1989 114

41. Main Exhibition/Former Dining Room (Room 104): East North-Wall Doorway to Room 103. NPS photograph by Frank Ackerman, 1989 115

42. Storage Room/Former Kitchen (Room 105): Wooden Floorboards and Brick Pad. NPS photograph by Frank Ackerman, 1989 116

43. Storage Room/Former Kitchen (Room 105): South and East Walls. NPS photograph by Frank Ackerman, 1989 117

44. Storage Room/Former Kitchen (Room 105): Ceiling at Southeast Corner. NPS photograph by Frank Ackerman, 1989 118

45. Typical Scar in Plaster Wall Left by Removal of Shelf Bracket. NPS photograph by Frank Ackerman, 1989 119

46. Typical Original Transom Window Above Second-Story Corridor Doorways. NPS photograph by Frank Ackerman, 1989 120

47. Typical Original Four-Paneled Door. NPS photograph by Frank Ackerman, 1989 121

48. Typical Corner Closet in Second-Story Guest Rooms. NPS photograph by Frank Ackerman, 1989 122

49. Room 209, Southwest Corner: Doorway Casing Partially Covered by Wall Plaster. NPS photograph by Frank Ackerman, 1989 123

50. Attic: Typical Truss Supporting Second Floor. NPS photograph by Frank Ackerman, 1989 124

51. Northeast Corner of Foundation: Cracked Bricks and Missing Mortar. NPS photograph by Regina Binder, 1989 140

52. West Wall, South End: Shingles Marred by Holes, Abrasion, and Cracks. NPS photograph by Regina Binder, 1989 140

53. West Porch: North-End Balustrade Plagued by Splitting, Cracking, Corroded Nails, and Deteriorated Paint. NPS photograph by Regina Binder, 1989 141

54. South Roof Slope, Southwest Corner: Bird and Insect Damage, Excessive Moisture, Failed Cornice Miter Joint, and Rafter Checking. NPS photograph by Regina Binder, 1989 141

55. North Roof Slope, East End: Peeling Asphalt Shingles and Failed Cornice Miter Joint. NPS photograph by Regina Binder, 1989 142

56. Junction of West-Porch Roof and South Wall of Main Building. NPS photograph by Regina Binder, 1989 142

57. North Addition: West End of Roof. NPS photograph by Regina Binder, 1989 143

58. East Chimney. NPS photograph by Regina Binder, 1989 143

59. Southwest Stairwell: Cracked Paint on Riser. NPS photograph by Frank Ackerman, 1989 168

60. Main Exhibition/Former Dining Room (Room 104), South Wall: Cracked Plaster, Peeling Wallpaper, Failing Paint, and Rusting Pressed-Metal Cornice. NPS photograph by Frank Ackerman, 1989 169

61. Main Exhibition/Former Dining Room (Room 104), East End: Large Pits in Central Panel of Pressed-Metal Ceiling. NPS photograph by Frank Ackerman, 1989 170

62. Main Exhibition/Former Dining Room (Room 104), North Side: Severe Rusting of Pressed-Metal Cornice. NPS photograph by Frank Ackerman, 1989 171

63. Main Exhibition/Former Dining Room (Room 104), South Wall: Typical Deterioration of Window Casing and Jamb Elements. NPS photograph by Frank Ackerman, 1989 172

64. Storage Room/Former Kitchen (Room 105), West Wall: Horizontal Wainscot Panel with Shelf-Bracket Marks. NPS photograph by Frank Ackerman, 1989 173

65. Second-Story Southeast Hall, East Wall, North End: Window Casing and Chimney Enclosure. NPS photograph by Frank Ackerman, 1989 174

66. Second-Story Southeast Hall, East Wall, South End: Severely Cracked Plaster. NPS photograph by Frank Ackerman, 1989 175

67. Second-Story Southeast Hall: East-Wall Attic Stairway Weakened by Insect Infestation. NPS photograph by Frank Ackerman, 1989 176

68. Typical Diagonal Cracks in Wall Plaster of Second-Story Guest Rooms. NPS photograph by Frank Ackerman, 1989 177

69. Typical Plaster Cracks Emanating from Lower Corners of Window Openings, and Related Wallpaper Peeling, in Second-Story Guest Rooms. NPS photograph by Frank Ackerman, 1989 178

70. Typical Plaster Cracks and Incipient Sagging in Ceilings of Second-Story Guest Rooms. NPS photograph by Frank Ackerman, 1989 179

71. Typical Deterioration and Desiccation of Window Casings, Jambs, Stools, and Sashes in Second-Story Guest Rooms. NPS photograph by Frank Ackerman, 1989 180

72. Guest Room 204, North Wall: Plaster Deterioration on Chimney Enclosure. NPS photograph by Frank Ackerman, 1989 181

73. Guest Room 210, Floor at Southeast Corner: Water Damage, Including Buckled Floorboards and Fungal Growth. NPS photograph by Frank Ackerman, 1989 182

74. Guest Room 210, East Wall: Complete Plaster Failure Below Window. NPS photograph by Frank Ackerman, 1989. 183

75. Guest Room 210, Northeast Corner: Complete Failure of Wall Plaster and Ceiling Plasterboard. NPS photograph by Frank Ackerman, 1989 184

76. Attic, East Wall: Waterlogged, Rotted Wall Studs Below Window. NPS photograph by Frank Ackerman, 1989 185

77. Attic, Northeast Corner: Deteriorated Roof Sheathing. NPS photograph by Frank Ackerman, 1989 186

FOREWORD

Regina Binder, Master's-degree candidate in Historic Preservation at Columbia University, wrote the first draft of this report as part of Columbia University's work-study program. She was supervised by Frank Ackerman, Chief of Interpretation and Cultural Resources Management at Cape Cod National Seashore (NS). The report was commissioned by Superintendent Herbert Olsen of Cape Cod NS. Jana Gross, an architectural draftsman with the Cultural Resources Center (CRC), North Atlantic Region (NAR), National Park Service (NPS), drew draft plans and elevations of the building. Jeff Jelneker, a civil engineer with the Denver Service Center of the National Park Service, assisted Ms. Binder in her examination of construction methods and load factors. W. Lewis Barlow, IV, currently the Regional Historical Architect for the North Atlantic Region, aided Ms. Binder in her analysis of the architectural evolution and physical deterioration of the building.

Subsequently, additional information about both the history and the evolution of the structure was obtained by other Park Service professionals and incorporated into the report. Larry Lowenthal, then historian at Springfield Armory National Historic Site, was detailed to Cape Cod NS to conduct supplementary historical research for this report. Further architectural analysis was provided by two members of the Cultural Resources Center—Lawrence Sorli, a historical architect with the Building Conservation Branch (BCB) of the Center, and Sharon Ofenstein, the Center's technical editor. The draft plans and elevations were refined by BCB architectural technician Stephen Pisani. The final report was edited by technical editor Ofenstein.

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The preparation of this report would not have been possible without the goodwill and cooperation of many persons. Special thanks are due to the officers and members of the Truro Historical Society—particularly Gordon Russell, president, and B.J. Allen, historian. They made the Highland House accessible to the authors of this report, and provided both personal and documentary information about the building. Richard Haskell of the Truro Historical Commission opened the files of that agency. Additional records were provided by Linda Maloney, of the Truro Assessors' Office, and Charlotte Price, librarian at Cape Cod Community College.

Invaluable information in the form of personal remembrances was provided by Joseph Colliano and Bill Hastings, former managers of the Highland resort complex; by Irving Horton, who has been familiar with the Highland House since 1921; by Robert Horton, who grew up in the vicinity; and by Ruth Thomas, a longtime resident of the area.

Other persons kindly shared their own personal research and expertise with the authors of this report. Clive Driver provided information about Thoreau's connection with the Highland resort; Norman Dunnell contributed his knowledge about the Provincetown *Advocate*; Bill Quinn called attention to an early Barnstable *Patriot* newspaper article concerning the Highland resort; and Lurana Cook unraveled the intricacies of the Small family's genealogy. A particularly useful document was an early advertising brochure for the Highland resort, which was kindly loaned by Mr. and Mrs. Hersey Taylor of Orleans. Provincetown resident Vincent Guadazno volunteered his services in the reproduction of photographic illustrations for the report.

Funds for the publication of this report were provided by the William F. Petitt Memorial. William F. Petitt was a volunteer at Cape Cod National Seashore who helped to organize, care for, and preserve museum collections from June 1988 until his death on December 12, 1989. Petitt made an enormous contribution during his short time working for the park. Many of the projects in which he participated occurred simultaneously and could not have been completed on schedule without his efforts. The most important of these were the preparation of museum objects for inclusion in the new Salt Pond Visitors Center exhibits, the registration of the George and Katherine Higgins collection at the Atwood-Higgins complex, the installation of the bedroom exhibit at the Captain Edward Penniman House, and the organization of the Cape Cod National Seashore's administrative history archives.

Upon Petitt's death, Mrs. Petitt and her children asked the National Park Service to use donations given in his memory to support cultural resources management at the park. The nonprofit Friends of Cape Cod National Seashore, Inc., agreed to accept future donations to the William L. Petitt Memorial, and to manage those funds to accomplish the purposes sought by the Petitt family and the National Park Service.

I. INTRODUCTION

STATEMENT OF SIGNIFICANCE

The Highland House is located in North Truro, Massachusetts (fig. 1). Situated near the Highland Light on a bluff overlooking the Atlantic Ocean, it rises prominently above an austere and windswept landscape. The overwhelming impression to a modern visitor is one of desolation. Yet for many years this area was the site of the bustling Highland resort complex. The complex included not only the present Highland House, built in 1907, but also several cottages of varying size, a bowling alley, and a golf course. The development and decline of the resort offers a clear picture of the characteristic progression of tourism on Cape Cod.

Tourism has been the dominant economic activity on the Cape throughout the 20th century, but the subject has received little serious, scholarly attention. This may be due to the perception of tourism as a frivolous, derivative means of earning a living. One of the most insightful treatments of the subject is contained in the Massachusetts Historical Commission's *Historic and Archeological Resources of Cape Cod and the Islands* (1987). In an approach that is both perceptive and constructive, the authors divide the history of tourism on the Cape and Islands into three distinct periods:

> Prior to 1870, the railroad had made relatively little impact on resort development, which was characterized chiefly by individual purchase of second homes and the adaptive use of large homes and inns for seasonal guests. Between 1870 and 1920, the popularity of railroad travel encouraged the construction of large resort hotels, frequently oriented toward railroad customers. After 1920, the tremendous increase in automobile usage permitted seasonal visitors to build anywhere they chose, as well as reoriented the hotels and other service facilities toward the rapidly expanding highway network.[1]

An early building at the resort—the original Highland House, later renamed the Highland Lodge—typified the earliest of the three periods. The construction of the present Highland House in 1907 was strongly representative of the second, railroad-based period of tourism, with its inherent tendencies toward centralization and collective activity. (Although automobiles were increasingly evident, tourism was still structured around the railroad.) The resort's subsequent history reflects the developments of the third, automotive period. Therefore, the Highland House is less significant as a historic structure than as an example of an early resort hotel; it is distinguished more for its original function than for its form.

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[1] Page 307.

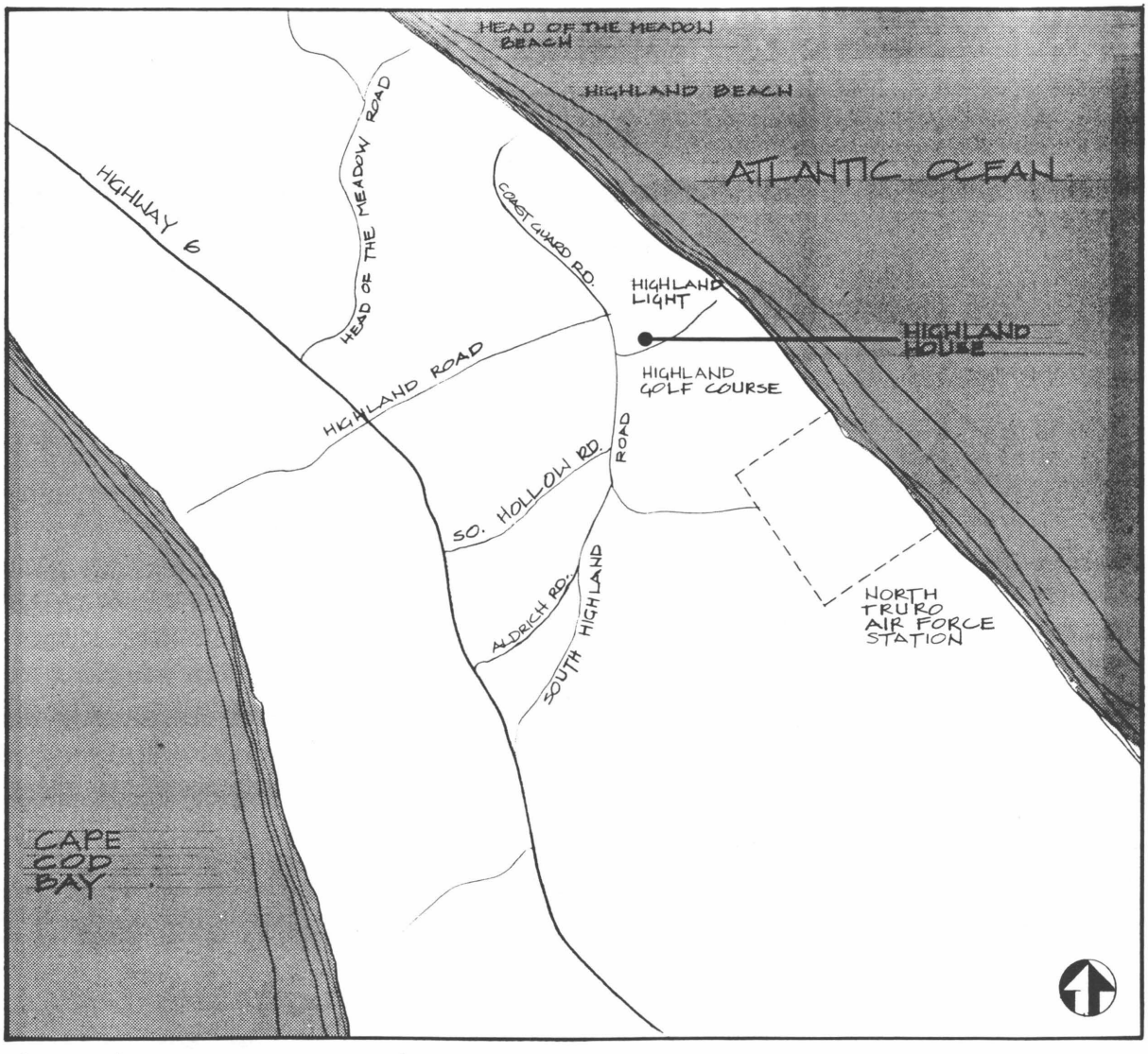


Figure 1. Locus Map of Highland House (1989).

ADMINISTRATIVE DATA

Location of Structure

The Highland House is located at the northeast corner of the intersection of Highland Road and South Highland Road in North Truro, Barnstable County, Massachusetts. Bordering its east and north edges is the Highland Golf Links. The latitude and longitude coordinates defining the center point of the property approximate 42 degrees 02 minutes 25 seconds latitude and 70 degrees 03 minutes 56 seconds longitude. According to the 1945 land survey prepared by John R. Dyer for Lillian M. Small, the Highland House sits in the center of the west portion of what was referred to in the drawing as "parcel B: 15.8 acres." An additional source, the Historic Structure Inventory, describes the location of the Highland House as "Tract 16-2500 — Bldg. T-153, East of Coast Guard Road, Truro, Massachusetts."

List of Classified Structures Information

The List of Classified Structures number for the building is 07499. The building was entered in the National Register of Historic Places on June 5, 1975 (see Appendix B).

Present and Potential Uses of Building

The Highland House has functioned as the home of the Truro Historical Society and Museum since 1970, under a Special Use Permit from the National Park Service. The first permit ran for 5 years, from January 1, 1970, to December 31, 1974. The second permit began January 1, 1975, and will expire December 31, 1995.

No new Special Use Permit can be granted when the historical society's current permit expires. The authority under which the Park Service could give such permits was superseded in 1978 by new legislation that provides instead for cooperative agreements. These agreements are limited to 5 years. Historic-property leasing and concession contracting provide other potential frameworks for administering the use and preservation of the building. Clearly it will be necessary to reevaluate the significance and needs of the Highland House, to consider how it will be used and by whom.

Currently the entire first story is used as museum exhibit space, as are some of the former guest rooms on the second story. The Historical Society uses other former guest rooms for office and storage space. The Park Service foresees improving the condition of the former guest rooms so that all of them will be available for use.

At least three facts about the building impose limits on the options for its future use. First, it is unheated and not insulated, and can be used only during the warmest months of the year. Second, it does not comply with modern life-safety codes for overnight occupancy, particularly with

respect to means of emergency egress. Third, because the Highland House was originally designed to operate in relation to other buildings at the resort, its dining-room seating capacity greatly exceeds its sleeping capacity.

The Highland House could continue to be used as a museum, or it could be used to meet other needs that are expected of the Cape Cod National Seashore. Among these are the housing of Park Service summer employees, facilities for public or private special events (e.g., art exhibits, wedding receptions), a youth hostel, and offices for Park Service or other personnel. No one of these purposes would utilize the entire building, and any of them would require extensive rehabilitation rather than continued preservation maintenance.

Regardless of the use and the occupancy of the building, the National Park Service will continue to own the property, and will be responsible for maintaining its structural, aesthetic, and historical integrity. Cyclic maintenance needs may continue to be met through project funds allocated to Cape Cod National Seashore, or may—like routine upkeep—become the responsibility of the building tenant. Emergency repairs following major storms may be funded by the Park Service or the tenant, either directly or through insurance.

Pertinent Planning Documents

The master plan for Cape Cod National Seashore was approved in October 1970. A resource management plan has been updated annually. Neither a visitor use plan nor a general development plan has been started. However, a development concept plan was completed in 1970. An interpretive prospectus was completed in 1965. The historic resource study for Cape Cod National Seashore was approved in February 1979. An area survey was completed for the Massachusetts Historical Commission in September 1980 by Jack Clarke of the Cape Cod Planning and Economic Development Commission.

One document that does not yet exist, but which should be prepared as soon as possible, is a cultural landscape report for the Highlands area. This type of information is especially needed for this site, for two reasons. First, the natural setting was the entire reason for the Highland resort's creation and successful operation. Second, the Highland House itself was built and operated as part of a large ensemble of resort structures and landscape features. One of these, the golf course, could be considered a designed historic landscape.

The development concept plan of 1970 stipulated eight planned actions. One has been entirely accomplished, two others have been partly accomplished, and one more remains possible. Erosion and changing visitor-use patterns have made the others obsolete. The preparation of a new, updated development concept plan has begun.

Justification of Proposed Treatments

Extant planning documents do not specify any particular management treatment for the Highland House. In the absence of recommendations to the contrary, treatment has consisted of preservation. Given the condition of the building, some stabilization of building fabric must be done to get the structure to the point where it can be preserved. Of particular concern is the problem of water penetration, as discussed in Chapter V.

Strict preservation of the Highland House in its present configuration, however, will not serve to recreate the character and feeling of the building at the turn of the century, or to recapture its original relationship to the ocean. In order to interpret the Highland House as an example of early resort life on the Cape, some exterior restoration would be needed. The single most important action would be the removal of the current north addition, and the reconstruction of the original open porch on this side of the building. The restoration of the contiguous west porch would also be helpful. It would be infeasible to reconstruct the Highland House's two missing historic appendages—the original southeast ell and the early north extension. However, some method could be used to indicate their former existence and functions. It is important to note that additional, primarily physical research beyond the scope of this report would be needed to achieve an accurate exterior restoration.

It is also likely that the reuse ultimately selected for the Highland House will require some rehabilitation work, particularly on the interior. The nature and extent of this work will be determined by the chosen reuse.

The question of treatment must be addressed in the development concept plan now being prepared. The plan should either officially affirm the current treatment of preservation, or else specify a change to some other treatment level, such as restoration or rehabilitation.

II. ARCHITECTURAL HISTORY

EARLY AGRICULTURAL AND MARITIME ACTIVITIES

Much of the history of the Highland resort—and of the Highlands in general—centers on the Small family, who were among the early proprietors of Truro. Isaac Small (1754–1816) lived in a house on the west side of present-day South Highland Road. It was later known as "Tashmuit," after the Indian name of the area. According to an unpublished brochure issued by the Truro Historical Society, "A liberal translation of the word Tashmuit is 'place of many springs,' and it is true that the underlying layer of clay in this region traps ground water and provided many watering places for cattle and other livestock."

Small was a prosperous farmer and miller, taking advantage of a zone of relatively rich soil known as the Clay Pounds. Henry David Thoreau on his visit to the area around 1850 "perceived at once a difference in the soil, for there was an interruption of the desert, and a slight appearance of sod at our feet."[1] Truro historian Shebnah Rich describes Small's property as "uniformly the best land in town, perhaps originally, in the county," with "dwellings of good dimensions and long corn houses, and ample barns for hay and stock."[2] Small also operated a windmill for the grinding of corn, located on a little knoll just in front of the entrance to the present-day Highland House.[3] Small's land extended east to the ocean, and included a 10-acre tract sold to the U.S. government in 1796 to accommodate the construction of the Highland Light (see Appendix A).

The death of Small in 1816 caused his farm to be divided between his two oldest sons, with Joshua (1792–1850) taking the house and land on the west side of South Highland Road, and James (1787–1874) receiving land east of the road. Thereafter, the two segments passed down through separate lines of descent and were never reunited. In 1835 James built a commodious farmhouse on the northeast corner of the intersection of South Highland Road and the road to the lighthouse (see Appendix A).

Thoreau found that many Truro men were "fisherman-farmers and understand better ploughing the sea than the land."[4] The Small family's occupation of its distinctively fertile clay deposits, however, enabled it to succeed primarily through the use of land-based resources. There were two exceptions to this. One was a brief venture into salt-making. The other was the involvement of the family in occupations centered around the adjacent lighthouse. Isaac and James Small, as well as other members of the family, served extended periods as keeper of the light. Later, the family's best-known member was associated with maritime pursuits in a unique and highly individual situation. This occurred when James' son by his second wife, Isaac Morton ("Mort")

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[1] Henry David Thoreau, *Cape Cod*, p. 131.

[2] Shebnah Rich, *Truro, Cape Cod*, p. 208.

[3] Unpublished Truro Historical Society brochure.

[4] Thoreau, *Cape Cod*, p. 136.

Small (1845–1934), took charge of the marine telegraph station at Highland Light in 1863.[5] He was then 18, and was to spend 70 years observing the ever-varying panorama of ships passing the Outer Cape.

The marine telegraph line running down the Cape to Provincetown, which had been completed in 1855, represented a major extension of the Boston maritime community's reach.[6] Prior to the construction of the Cape Cod Canal, ships bound for Boston from the south had to pass around the arm of the Cape. Active and influential Boston shipowners had always sought advance warning of merchant ships approaching the harbor. A visual telegraph system was established as early as 1799. In 1801, a carefully planned series of signal stations extended all the way to Martha's Vineyard. The name "Telegraph Hill," found in both Hull and Dorchester, recalls this early period. Later refinements made it possible to transmit detailed identification of incoming ships. One "database" consisted of 112 flags, each representing a different shipowner. This illustrates the abundance and variety that once characterized Boston's seaborne commerce.[7] The telegraph line greatly improved the timeliness of information available to Boston commercial interests. At the same time, it reinforced the Lower Cape's identity as a satellite of Boston.

The advent of the telegraph line opened new vistas for Isaac Small at an opportune moment in his life. In one respect, his responsibilities tied him to his telegraph key. In another sense, however, the telegraph gave him access to wider contacts and knowledge. It seems reasonable to conclude that as a result of this activity, Isaac Small developed more connections with the outside world, and was less dependent on agriculture, than had been customary in his family. The telegraph thus facilitated his rise to leadership in the community.

THE BIRTH OF TOURISM

The development of tourism at the Highlands can be attributed largely to Isaac M. Small, but he was not responsible for its mostly accidental beginnings. Henry David Thoreau, one of the earliest and perhaps the best-known of the multitude of outsiders who got Cape Cod sand in their

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[5] This presents an example of the confusion about dates one finds in Isaac M. Small's writings. In his 1922 booklet, *Just a Little about the Lower Cape, Personal and Otherwise*, he states that "in March of 1861 I took charge of the Marine Telegraph Station at Highland Light." However, in the same paragraph he says that when he was 16 (1861), he went away to school in Bernardston, MA, an inland town. In *True Stories of Cape Cod*, published posthumously in 1934, he asserts that "In 1863 I was placed in charge of the telegraph office." This would seem logical in terms of his schooling, but two sentences later he states that "In 1863 I took full charge of the telegraph office," implying that it was a separate event.

[6] The actual date of completing the telegraph line to Provincetown, which does not appear in Isaac Small's publications, is from Charles F. Swift, *Cape Cod* (Yarmouth, MA: Register Publishing, 1897), p. 288.

[7] Carl Seaburg, *Boston Observed* (Boston: Beacon Press, 1971), pp. 52-53; Moses Sweetser, *King's Handbook of Boston Harbor* (Cambridge, MA: Moses King, 1882), p. 38. The visual telegraph system is also mentioned in Samuel Eliot Morrison, *The Maritime History of Massachusetts, 1783-1860* (Boston: Houghton Mifflin, 1921), p. 163.

shoes, may have inadvertently contributed to the growth of tourist facilities. He made four sojourns to the Cape (1849, 1850, 1855, and 1857), each time tarrying at the Highlands—an area he obviously found fascinating. During the first three visits, if not all four, he stayed in the light keeper's cottage. James Small was the keeper then and lived in the cottage with his family.[8] (In this respect he was "ploughing the sea" with his eyes and his powerful whale oil beacon.)

Thoreau was by no means the impractical dreamer he is sometimes simplistically portrayed. His shrewd perceptive abilities extended to business prospects, although he did not personally exploit them. He recognized early the potential of tourism on the Lower Cape. Writing from the light keeper's cottage, he predicted that "The time must come when this coast will be a place of resort for those New-Englanders who really wish to visit the seaside."[9] Furthermore, he specifically noted the attractiveness of the Truro Highlands, observing that "there is a more uninterrupted view of the Ocean and the Bay, and in the summer there is always some air stirring on the edge of the bank there, so that the inhabitants know not what hot weather is."[10] Thoreau may have confided these speculations to the Smalls around their table.

Thoreau also observed that James Small "has another larger and very good house within a quarter of a mile, unoccupied, where he says he can accommodate several more."[11] Thus, whether or not the naturalist personally stayed there, it appears that James Small's farmhouse was available for lodging. The farmhouse was used to accommodate guests especially during the periods when James was occupying the light keeper's cottage. This supposition is confirmed in later reminiscences of Isaac M. Small who, although sometimes mistaken as to detail, was generally reliable in substance. In *Just A Little about the Lower Cape: Personal and Otherwise*, he recalled that "My father and mother were taking boarders at the beginning and during the Civil War."[12]

Even at that early date a scarcity of accommodations relative to a growing demand was becoming evident, as described in a revealing newspaper report:

> HIGHLAND LIGHT, NORTH TRURO
> September 3, 1863
>
> DEAR MAJOR: The "season" has been a successful one here, and greatly enjoyed by the crowds that have visited this delightful summer retreat. 'Squire Small [James] has been crowded to an overflow, and many have departed with a sigh that there was no room for them.
>
> In this age of enterprise it seems strange that there are not increased accommodations for the increasing numbers who desire to breathe the healthful and invigorating air of Provincetown and Truro. Many who have

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[8] Telephone interview conducted by Larry Lowenthal with Clive Driver, June 9, 1992. Mr. Driver, who has researched the matter in depth, considers it doubtful that Thoreau ever stayed in the Small farmhouse.

[9] Thoreau, *Cape Cod*, p. 237.

[10] Thoreau, *Cape Cod*, p. 237.

[11] Thoreau, *Cape Cod*, p. 166.

[12] Isaac M. Small, *Just a Little about the Lower Cape, Personal and Otherwise.*

> come down in the steamer have been obliged to return the next day because there was no room for them; and many more have not come at all because they knew there was no room for them....
>
> Large and small parties from Provincetown and Wellfleet come here every day, and enliven the place by their great diversity of character. To provide for them and her house full of boarders, without any market to go to, tries the ingenuity of Mrs. Small, who can accomplish as much as any other woman.[13]

ARRIVAL OF THE RAILROAD

Thoreau ventured down the Cape just ahead of the railroad, although he does not explicitly make that observation. On his first visit he was already able to ride "the cars" to Sandwich. By the time of his third visit in 1855, the tracks had reached Hyannis, and the intention of continuing all the way down the Cape was accepted.[14] Observations made closer to home acquainted Thoreau with the impact the railroad would have on the relative isolation and distinctiveness of the Cape. In his day, travel on the Cape's sandy roads was arduous, and long overland journeys were rare. Provincetown, and to a lesser extent Truro, had some of the characteristics of an island, more closely connected to Boston by water than to towns on the Upper Cape. Under these conditions, the resort activity that flourished at the Highlands, including its elements of unplanned and surprising growth, was representative of the first period of Cape Cod tourism.

War and various local and national economic difficulties delayed the ambitious plans of the Cape Cod railroad, so that it took fully 25 years to extend the tracks the length of the Cape from Sandwich to Provincetown. Completion of the final extension from Wellfleet through Truro to Provincetown in July 1873 marked an important historical dividing line.

Real-Estate Speculation

Popular folklore depicted Cape Codders as being so hopelessly old-fashioned as to be charming, yet it is astonishing how quickly concepts of land value changed with the coming of the railroad. Since the earliest days of settlement, land on the ocean side (or "back") of the Cape had been considered utterly worthless except for salvage. The land was so barren that shelters had been set up so that shipwrecked sailors could survive a night before trekking off in search of human habitation. The first shrill blast of the locomotive whistle, even if still several miles away in Wellfleet, dramatically changed that perception.

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[13] Barnstable *Patriot*, September 8, 1863. Thanks to Bill Quinn for bringing this to light.

[14] Robert H. Farson, *Cape Cod Railroads*.

The rapidity of response was startling. In 1873 an entity called the Cape Cod Land Company filed a plan to develop ocean-front land apparently just north of the Highland Light. Not lacking in boldness, this proposal envisioned the creation of 204 lots, generally 70 by 105 feet, connected by a comprehensive grid of streets.[15] This plan was never implemented, presumably because it coincided with the severe economic downturn of 1873, but it established a trend.

Isaac M. Small himself became involved in a land-development scheme, apparently in anticipation of the coming of the railroad. On September 20, 1872, he and a distant cousin, Edward E. Small, purchased from James Small approximately 17 acres of choice recreational land on the cliffs immediately south of Highland Light and the lighthouse road. James Small was then nearly 85 years old, so the purchase might be considered to have been made in anticipation of his death. However, the relatively distant relationship of Isaac and Edward suggests that financial, rather than family, considerations were paramount. (Edward, born in 1843, was close to Isaac in age but not in genealogy.)[16] These purchases in Truro were almost exactly contemporary with the first efforts at substantial land development for tourism at areas of the Cape and Islands that were generally more advanced, such as Falmouth Heights and Hyannisport.

Nothing was done immediately with this 17 acres of cliff-edge land, presumably because of the depression that began in the following year and, later, Isaac M. Small's absorption with running the enlarged Highland House. However, on February 24, 1894, Isaac M. and Edward E. Small filed plans for a major subdivision of the tract, described as "Delightfully located upon a bluff, 125 feet above and overlooking the Atlantic Ocean and its passing sails."[17] The plan divided the land into 174 lots, most of which measured 60 by 80 feet, arranged on a street grid of 22 blocks. One of the paper streets, Atlantic Avenue, now lies beneath the body of water for which it was named.

Effect on Tourism

Prior to the coming of the railroad, tourism to Truro and the entire Lower Cape was limited by the isolated nature of the area and the bad roads leading to it. The improved access provided by the railroad removed these limitations. Initially, the population of Truro would swell by only a few hundred in the summer months, but this number increased steadily. Anthony L. Marshall gives a concise account of tourism on the Lower Cape in the first two decades of the 20th century:

> Even in those days, there was a sizable number of summer homes in all three sections of town which were owned and occupied for the entire summer by their out of town owners.... There were a number of home owners in the town who took in...vacationers, they were called summer boarders, since they were just that, because they would both room and board at a particular home.

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[15] Barnstable County Plan Book 1, p. 57.

[16] Much of the substance and verification of genealogical information has been provided by Lurana Cook of Truro, who has generously shared her enormous files on the subject.

[17] Barnstable County Plan Book 106, p. 45.

> The typical "summer boarder" of the time was an unmarried young man or woman.... Married couples would sometimes be able to rent a section of an occupied home, or a cottage, or an unoccupied home.
>
> Among the people who came to town to vacation or to spend the entire summer, a variety of national origins were represented. There were a number of Irish families, some people of English origin, some of Canadian-French, and many of course were American born and a few other national origins.[18]

In the 1922 booklet *Population and Resources of Cape Cod*, records from 1890 and even earlier indicate that the population of towns on the Cape in general would more than double in the summer months. The author goes on to state that:

> One of the industries of the Cape which is rapidly gaining in importance is that to which one citizen of the Cape towns has applied the term 'the entertainment of summer visitors'. With the influx of an increasingly large summer population, opportunity has been afforded to the 'year-round' residents of the Cape to dispose of the produce of their farms and market gardens, and in other ways to profit through catering to the many who sojourn there for a time.[19]

The New York, New Haven & Hartford Railroad annually published a substantial illustrated booklet detailing and extolling the recreational attractions of Cape Cod.

EARLY YEARS OF THE HIGHLAND RESORT

Creation of the Highland Lodge

The conjunction of the coming of the railroad and the death of James Small in February 1874 created a new opportunity for Isaac M. Small. An added incentive presumably had been provided by his marriage in 1871. Isaac had obtained possession of James Small's farmhouse after James' death. The farmhouse was already being used as a hotel, known as the Small Farm or the Highland Farm. In 1876, Isaac contracted with his second cousin, Abram C. Small, to add to the farmhouse a two-story wing that was actually larger than the original structure.[20] This hotel was known as the Highland House from at least the time of its enlargement until the present Highland House was built in 1906–07. After that time, it became known as the Highland Lodge. (The name "Highland

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[18] Anthony Marshall, *Truro, Cape Cod, As I Knew It*, p. 95.

[19] Commonwealth of Massachusetts, Department of Labor and Industry, *Population and Resources of Cape Cod*, p. 28.

[20] Small, *Just a Little*.

Lodge" will be used hereafter in the report, to distinguish the earlier building from the present-day structure.) This addition was a significant step, representing the first structure in the Highlands (and probably anywhere in Truro) built exclusively for tourist use.

Even after the railroad arrived, transportation to areas away from the rail line remained difficult. Travelers thus tended to choose lodgings that were close to the railroad, being the most convenient and accessible. The Highland resort was somewhat of an exception. The railroad's route through Truro clung to the bay shore, while the Highland resort was situated on the ocean side. However, the resort's existing hotel facilities and its natural attractions apparently outweighed its distance from the railroad. Anthony Marshall recalls that, "In the earlier days, before the coming of the automobile, guests for the Highland House would arrive by train. There they would be met by a driver with horse and carriage and would be driven forthwith to the Highland House."[21] This is confirmed by the town assessors' reports, which show that in 1901 Isaac M. Small owned a large covered wagon, two buggies (one classified as a trap), a truck wagon, and an express wagon.[22]

In another decision that must have been made at least partly with tourism in mind, Isaac M. Small built what became known as the Cliff House in 1880 (see Appendix A).[23] Located just beyond the northern boundary of the lighthouse lot, it served Small both as a residence and a headquarters for his marine-observation activities. It is unlikely that he lived in the Highland Lodge after that time, leaving it free for use solely as a hotel.

Expansion of the Facilities

Despite active marketing efforts, relatively few Highland lots were sold after the subdivision in 1894—not nearly enough to create a resort community. Isaac M. Small, accustomed to watching the maneuvers of sailing ships, decided upon a new tack. Rather than attempting to sell individual lots for private cottages, he sought to cash in on the expanding tourist trade by enlarging his own facilities. In 1898 he constructed a large cottage on the site of his father's windmill, about 250 feet east of the Highland Lodge (see Appendix A). Since the venerable millstones were used as front steps, the cottage was called Millstone.

The following year Isaac bought Edward E. Small's share of their joint property, with its optimistic profusion of lots, but which the town assessors more prosaically listed as "pasture."[24] Using a portion of this land, he built two identical six-room cottages—the Rock and the Beacon—along the south side of the road to the lighthouse (see Appendix A). These cottages were completed in 1902. Various real-estate transfers within the family shortly thereafter suggest that Isaac was trying to involve his immediate family more directly in the management and income from the growing resort business. This is understandable. Isaac had indisputably followed his father as

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[21] Marshall, *Truro, Cape Cod*, p. 103.

[22] This category of personal property is not listed in the assessors' reports after 1901.

[23] Small, *Just a Little.*

[24] Barnstable County Deed Book 242, p. 379.

the leading man of the vicinity. In addition to his work managing the Highland resort and related farm, he had his duties as marine observer. He also almost constantly held town offices, and he served two terms in the State Legislature.

Willard M. Small had taken over the general operation of the resort on his return from college in 1892 or 1893.[25] He was interested in sports, and under his management the recreational facilities at the Highland resort were expanded steadily. The Highland Lodge contained a pool table, and assessors' records show that a skating rink—product of a craze that flourished in the 1870's and 1880's—stood on the grounds until 1898. A nine-hole golf course was laid out in August 1898, after the tourist season had recovered from the fear of depredations by the Spanish Navy during the Spanish-American War. The golf course occupied some of the land that had been divided into lots. Located on seaside terrain only minimally modified, it recalled the ancestral courses of the other Highlands across the ocean. A combined indoor bowling alley and pool room was erected in 1903, and numerous less-formal sports were available. The variety of lodgings available within the resort complex made it ideal for families as well as single adults.

Other Area Resorts

Isaac M. Small had taken a leadership position when he constructed the addition to the Highland Lodge in 1876, since this was probably the first structure intended exclusively for tourist use in Truro. However, other persons soon began to develop resorts and cottage colonies, even in the small and remote town of Truro. By the time Small began expanding his facility in the late 1890's and early 1900's, he was no longer a trend-setter.

The major innovator during this period of tourist development in Truro seems to have been Sheldon W. Ball of New York City. Fascinated by the charms of the area on first viewing it around 1890, he purchased some 250 acres of ocean-front land about 3 miles south of Highland Light. Beginning in 1891, he built a colony originally called Ballston Heights by the Sea and later Ballston Beach, containing seven cottages and a "Club House."[26] This spa included some of the features later visible at the Highland resort, including a bowling alley and quaint names for the cottages.

On the bay side, a colony of several cottages was developed at Corn Hill during the period 1898–1902—exactly contemporary with the enlargement at the Highland resort.[27] Unlike the others, this cluster was situated along the railroad and had a small shelter from which trains could be flagged down. The colony was the creation of Lorenzo Dow Baker, Wellfleet's most prominent citizen. Captain Baker had made a fortune by beginning in 1870 the importation of bananas from Central America to the United States. This activity led eventually to the formation of the United Fruit Company. Although he was a Wellfleet sailor of the old school, Baker recognized that the future of the Lower Cape lay with tourism, and he was instrumental in the transition. A decade before he

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[25] Provincetown *Advocate*, August 3, 1911 (Willard M. Small obituary); Marshall, *Truro, Cape Cod*, p. 103.

[26] Barnstable *Patriot*, June 21, 1892; Marshall, *Truro, Cape Cod*, p. 96.

[27] Marshall, *Truro, Cape Cod*, p. 100.

began the Corn Hill complex, he converted the old buildings on Wellfleet's Mercantile Wharf into the Chequessett Inn, and he added several outlying cottages. The colony at Corn Hill was a satellite of this hotel.[28] The Corn Hill cottages were physically built by Charles W. Snow, who would later work on the well of the Highland House in 1908.

Early Advertisements for the Highland Resort

Each of these resorts was different enough that they competed only in a general way. During the brief season there was usually enough business to support all of them. Corn Hill highlighted the advantages of the quieter waters of the bay, while Ballston Beach advertised in the New York newspapers and emphasized its direct access to a beach which was usually protected by sandbars.

Meanwhile, the Smalls boasted of their "elevated ground, pure sea air, surf bathing, excellent table, [and] perfect drainage," which combined to make the Highland House "just the place for health and rest."[29] In one of the early advertising brochures for the resort—one dating from 1908-09—the Smalls describe their establishment as follows:

> People seeking a quiet, health-giving spot, on the sea-coast of New England, where the demands of fashion are not exacting and where the ocean air with its invigorating properties is undefiled by any malarial conditions, will find the Highlands of Cape Cod particularly adapted to their wants. As a Mecca of rest for the tired pilgrim from the noisy city it has no superior along the Atlantic seaboard. The long bended arm of the Cape stretches seaward into the ocean nearly a hundred miles from the mainland, producing every desirable condition that could be found on an island in the sea, without the isolation of the latter. Three trains daily bring Boston within a four hours' ride. From the high bluffs near the hotel one of the most magnificent marine panoramas in the world is before the visitor. The sea air in all its purity blows constantly across the peninsular....
>
> SURF BATHING is excellent, the average temperature of the water being about 65 degrees. THE BEACH is a smooth, clean, white sand, and the clear waters of the ocean invigorate and strengthen. BATHING SUITS and booths may be hired by the day or month at very trifling cost, or guests can bring their own suits.
>
> DRAINAGE is perfect, there are no annoying odors permeating the air nor contaminating the drinking water; the latter is always pure, fresh and cool.
>
> MILLSTONE COTTAGE, an annex of the hotel, is a pretty, nine room house, finished in hard woods and modernly furnished. Broad piazzas encircle the house and the views of the sea and surrounding country are fine...
>
> Two six room cottages, "THE ROCK" and "THE BEACON" have been added. They will be let by the season or used as an annex of the hotel

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[28] Judy Stetson, *Wellfleet, A Pictorial History* (Wellfleet Historical Society, 1963), pp. 58-59. This book also documents how Wellfleet evolved into a tourist town (pp. 76-79).

[29] Isaac M. Small, "Highland Light" pamphlet, 1891 edition.

as occasion may require. Enquiries in relation to other cottages in this vicinity will be promptly answered.

In 1907 a new hotel was erected just east of Millstone and named Highland House. The old hotel has been improved and changed and named Highland Lodge and used for lodging only, except that the dining room has been converted into a ball room and a piano installed.

In the new house the first floor is devoted to a waiting room, dining room and kitchen. On the second floor are fifteen good sized sleeping rooms and a ladies' toilet. This is called "Highland House."

The Cape at this point is exactly two miles wide and it stretches in a long, slender, gradually narrowing curve to the northwest until it ends at Cape Race in wind swept and sea washed sand dunes. Along this coast is the great ocean thoroughfare of the sea going commerce of New England. You have missed one good thing in your life if you do not make a pilgrimage to this unique and attractive spot.

THE GOLF LINKS here, which have been greatly improved and enlarged, are equal to any in the state in natural attractiveness and are the only links on the ocean side of Cape Cod. From the rolling country on which these grounds are located the great sea is ever in view, with its fleet of passing ships. This part of the country is not a barren waste of desolate sea sand, as people sometimes fall into error of supposing. Gentle rolling moors and green pastures make walking charming and easy.

GAMES AND SPORTS of various kinds are available, consisting of Golf, Tennis, Croquet, Bolo, etc., Up-to-date Bowling Alleys and Pool Table. The golf links and all out of door games are for the use of the guests of the house free of charge. If you play tennis bring your racquets.

THE CUISINE is most excellent, as any former guest of the town [resort?] can testify. With the best of meats from the city markets, fowl of first quality, fish in great variety and taken from the sea daily, vegetables in abundance, growing upon the connecting farm. Everything is nicely cooked and perfectly served, in fact our table is the pride of our house.

OUR TERMS in a general way are from $1.50 to $2.50 per day, according to the time and amount of room required. Owing to the continued very high price of all commodities, our rates for 1909 will be practically the same as in 1908....

The following time service of train and boat was in vogue during the summer of 1908. We expect that the same will prevail this season....

Perhaps since summer vacation was a relatively new concept (outside of the upper class) in the early part of the 20th century, the proprietors felt it necessary to provide some basic guidelines in a slightly later advertising brochure dating to 1912–1915.

DON'T wear heavy clothing or fashionable silks at the sea-shore. Wear comfortable clothes and you will be correspondingly happy.

DON'T try to beat the hotel keeper and don't think he is trying to beat you; he is just as anxious to have your vacation a pleasant one as you are to enjoy it.

DON'T go to a mountain or seashore resort on a hot midsummer day, dusty, weary and hungry and immediately rush out over the country in an effort to see how miserable you can make yourself. Rest, dine and spend at least a day in taking in the situation.

DON'T blame the heat and the cold and every evil under the sun on the hotel keeper.

DON'T be selfish, there are other people in the world besides ourselves.

DON'T engage rooms at a summer hotel and at the last moment write that you cannot come, hotel managers are only human.

DON'T in departing leave any of your things.

DON'T expect free rides to and from the station to meet friends or to see them off.

DON'T be exclusive.

DON'T fuss.

DON'T arrive at a strange hotel after dark if you can avoid it.

DON'T go to a summer hotel in mid August for a week's stay and expect to find the best rooms in the house awaiting you.

PERIOD WHEN THE HIGHLAND HOUSE WAS BUILT

Construction of the Highland House

By 1906 the Smalls were able to provide up to 40 rooms to meet the needs of the brief but intense vacation season.[30] Still, with tourism on the Cape continuing its remarkable expansion, this number seemed inadequate. Isaac M. Small thus embarked on his most ambitious venture to date: the construction of a large new hotel on elevated land just east of Millstone cottage (see Appendix A).

Work laying the foundation of what was initially called the Highland House Annex began in May 1906, and construction of the building itself began on August 20.[31] S.D. Nickerson of Provincetown, who had also built the Rock and Beacon cottages, was the prime contractor. He was assisted by others, such as C.A. Fuller concerning the foundation and the interior plastering, and a Mr. Cook, who installed the stoves and heaters. It is exceedingly unlikely that a professional architect was involved, judging by the results. The hulking new structure represented the essence of the term "vernacular." It was strictly utilitarian, and any plans must have consisted only of rough working drawings.

The new building was erected with great rapidity, further testifying to its simplicity of design and construction. By September 20, 1906, it was reported that the roof was shingled and that windows and inside studding were being installed.[32] Plastering took place in the following month. Finishing work was stopped for the winter and resumed in March 1907. On April 11 it was reported that, "So far as carpenters and masons are concerned the new Highland House is completed."[33]

Isaac M. Small, among his abundance of activities, was a correspondent for newspapers on Cape Cod and for the Boston *Globe*. His occasional notes in the Provincetown *Advocate* provide much of the sketchy construction history of the new Highland House. In his column of April 18, 1907, he wrote in a tone of amused exasperation that "We are glad to see our friends at the new house, but just at present we are deep in the work of painting and varnishing the interior and if the visits of friends can be deferred for a few weeks, we will then be pleased to show them the house."

On May 30, in time for the 1907 season, the new hotel was considered to be complete. Almost immediately it assumed the name Highland House, a source of lasting confusion with the

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[30] Six rooms each in Rock and Beacon, nine in Millstone, and 19 in the Highland House (figures from Marshall). Some rooms might have been needed for help, but most of the summer employees were probably family members or local residents.

[31] Provincetown *Advocate*, Aug. 30, 1906.

[32] Provincetown *Advocate*, Sept. 20, 1906.

[33] Provincetown *Advocate*, Apr. 11, 1907.

original Highland House, only 100 yards away. Soon the earlier building became known as the Highland Lodge, the name it bore during the remainder of its time as a tourist facility.[34]

Early photographs of the Highland House show a large ell appended to the east end of the south wall of the main house. Available evidence indicates that the ell was part of the original construction of the Highland House. First, remaining construction details indicate that the ell was integral to the main house. Second, the ell appears in the earliest photographs of the Highland House (e.g., figs. 4–5). Third, personal remembrances recall that the ell existed prior to 1921.[35] Fourth, assessors' records do not show any increase in value during those early years commensurate with the size of the ell. Except for a general revaluation in 1914, the only increases were from $3000 to $3100 in 1909 and to $3200 in 1910.

Indeed, there is strong circumstantial evidence to suggest that the ell predated the main house, and that it was obtained from an unknown location and appended to the main house when the latter was built. Evidence for this includes: the three-step difference between the second stories of the two sections; differences in roof lines, interior construction materials, and exterior color (based on an early photograph); and the fact that the ell deteriorated much more rapidly than the main house, leading to its eventual demolition.[36]

The construction of the Highland House, with its large dining room, allowed all of the resort's dining facilities to be concentrated in one building. Laundry facilities for the resort also were concentrated in the new building at an early date. These facilities appear to have been housed in an extension that was built on the east end of the main house. The extension does not appear in the earliest photographs of the Highland House, and so was not original. However, it was probably added around 1909. An item in the Provincetown *Advocate* of May 20, 1909, noted that "Mr. Cook has been doing some plumbing work at the Highland House the past week, connecting up the laundry stoves and boilers and the kitchen sink in the extension." The addition of the extension could have caused the slight increase in the assessed value of the building that took place at about this time.

Irving Horton recalls that the extension was extant and being used for dish-washing when he became acquainted with the resort in 1921.[37] He also remembers a chute in one corner into which trash was dumped; it fell into a horse-drawn cart and was hauled off and dumped in the gully south of the road to the lighthouse. Laundry-washing facilities also were in place in the extension; laundry pressing and storage took place on the second story of the southeast ell.[38]

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[34] Truro assessors' reports show that the revised names were applied as early as 1909.

[35] Telephone interview conducted by Larry Lowenthal with Irving Horton, June 9, 1992. Horton's father Walter was the manager of the Highland Farm (adjacent to the Highland resort) for Hayes Small in the 1920's. Irving Horton recalls that the southeast ell of the Highland House was extant in 1921.

[36] Appraiser's Report in Land File 16-2500, Cape Cod NS. Also, telephone interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, September 1, 1993; Colliano and Hastings worked at the Highland resort 1952-64 and managed it 1964-69.

[37] Telephone interview conducted by Larry Lowenthal with Irving Horton, Nov. 6, 1992.

[38] Telephone interviews conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, Nov. 6, 1992, and September 9, 1993.

The resort had insufficient water for the new building when it opened. Isaac M. Small writes that "The lack of a sufficient water supply delayed the building of the Highland House. When that problem was overcome by sinking two wells to sea level, a depth of 125 feet, the plant was enlarged, as the ever increasing demand for summer accommodations had outgrown the old hotel."[39] Once again, Small's assessment of the significance of events is accurate, although his recollection of their sequence is faulty. A newspaper report of May 14, 1908—when the Highland House had been completed and occupied for a year—states that "C.W. Snow and workmen are completing the deep well at the Highland House, which they started last fall, driving 100 feet, when they were obliged to stop on account of cold weather."[40]

Despite a water supply that was not fully adequate, the Highland House was used to capacity in its first year. Occupancy (at the entire resort complex) peaked at 104 guests on Sunday, August 18, 1907. The construction of the Highland House made this possible. Not only did it provide additional guest rooms on its second story, but it also freed up former dining space in the old Highland Lodge for conversion to guest rooms. It is uncertain exactly how many new rooms were created in that building.

Further Expansion of the Resort

The Highland complex remained largely a family enterprise, interrupted by the shockingly unexpected death of Willard M. Small at the age of 38 on July 29, 1911. Noted as an "enthusiastic worker in athletics," he suffered an apparent heart attack during a baseball game at the Highland resort.[41] He was succeeded in the management of the resort by E. Hayes Small (1876-1939), a younger brother of Isaac's second wife. Even before his tragic loss, Isaac—busy with his marine activities, civic duties, and farming—was probably no longer very involved in the operation of the resort. His wife, conversely, did not have much interest in maritime matters, but was deeply involved with the hotel. Isaac described her affectionately as having "a smile that will not wear off"a vital attribute amid the clamor of a busy resort.

Other buildings were added to the complex, though not on the scale of the Highland House (see Appendix A). In 1915 the "Haven" cottage was built between the Rock and the Beacon. An unexpected addition was made in the following year when three coal barges ran aground near the lighthouse. E. Hayes Small laboriously hauled the deck house of one up the cliff and converted it to a five-room cottage. Officially it still carried the barge's nameplate *Coleraine*, but in common usage it was often called simply "the Ship." In 1917 Hayes Small's children received an inheritance, and part of it was used to build a cottage named Margaret Adams, after the benefactor.[42]

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[39] Small, *Just a Little.*

[40] Provincetown *Advocate.*

[41] Provincetown *Advocate*, Aug. 3, 1911.

[42] The name is cited as "Margaret Adams" in Isaac M. Small's 1922 booklet, *Just a Little about the Lower Cape*, and in the Massachusetts Historical Commission's inventory form, prepared by the Truro Historical Society. The name in the Truro assessors' reports is "Martha Adams."

A slight break in the "cottage-a-year" program ensued until 1920. In that year Isaac's wife, Lillian J. Small, moved a building she had inherited in North Truro to the north side of the road leading to the lighthouse. This building, formerly a general store and post office, was converted into a five-room cottage known as the "Pilgrim." The Mayflower, a substantial cottage constructed in 1928, represented the final addition to the resort. The layout of the Mayflower, in sharp contrast to that of the Highland House, consisted of nine apartments and eight baths. This suggests that the Highland House, although constructed only 20 years earlier, followed an old-fashioned concept of plumbing requirements and thus became obsolete at a relatively early date.

The family nature of the business was evident in the ownership pattern, for Isaac M. Small did not personally own all of the cottages. For example, his wife Lillian J. Small retained ownership of the Pilgrim cottage, which had come down in her family prior to its move from North Truro to the Highlands area. His daughter Lillian M. Small acquired Willard's share in the Beacon cottage after his death, giving her full ownership. Hayes Small retained ownership of the Coleraine cottage, since he had done the work of salvaging it; he also controlled the Adams cottage as trustee for his children and, after 1933, directly. Hayes Small's family seems to have used Adams as their residence during most of its history, making it unlikely that it saw much use as a summer rental property.

Another cluster of cottages appeared in the vicinity of the lighthouse. Around 1920, Isaac M. Small belatedly and under much different circumstances succeeded in selling some of the lots he had carved out so prolifically in the 1890's. The purchasers were Henry M. (Harry) and May D. Aldrich of Lexington, MA. The Aldriches also acquired adjacent lots that Isaac Small had sold to other individuals in the early part of the century. Henry is better known for adding the "Jenny Lind tower" to the otherwise innocuous landscape. By 1932, the Aldriches owned 25 lots and had built or acquired five cottages, two as large as the Rock and Beacon, the others smaller.[43]

Certain of the lots sold by Isaac M. Small to the Aldriches in the early 1920's contain the restriction that "No structure of any kind shall be erected . . . that shall interfere with play upon Highland House Golf Links as they are laid out at the time this deed is given, so long as the present eastern holes of said links shall be kept as a part of said golf links."

Some of the Aldriches' cottages survived in a derelict condition into the early 1950's. Around 1958, Samuel Aldrich, son of Henry and May, built a four-room cottage on the tract. He died soon thereafter, however, and in 1965 his widow sold the family landholdings—more than 91 acres—o the National Park Service.[44]

The Smalls also continued farming. This was partly because the land was still productive. More importantly, the produce enhanced the quality of food offered to the resort's guests: a "good table" was one of the chief attractions of summer hostelries. Photographs show large gardens near the Highland House, and a few cows and horses were always kept.

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[43] Truro assessors' reports; telephone interview conducted by Larry Lowenthal with Irving Horton, June 9, 1992; interview conducted by Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992.

[44] Cape Cod NS Land Files 16-2503, 16-2534; interviews by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992, Sept. 1, 1993 (concerning the remains of cottages surviving into the 1950's).

Hayes Small carried on the family traditions of farming and serving in the State Legislature. (In his youth, he had continued still another family tradition by serving as a lighthouse keeper at Duxbury, MA.) He was a progressive farmer: recognizing that general agriculture had a dim future on the Cape, he turned to more modern and specialized pursuits. In 1912 he replaced the Highland House cattle with purebred Holsteins purchased on Nantucket.[45] The number of cows, usually not more than half a dozen, increased dramatically to more than 20 in the early 1930's. Hayes Small also became much more heavily involved in raising swine and fowl in the 1920's, with the number of fowl reaching 2,600 at its peak in 1933.[46] The main barns were not located on Highland resort property, but a variety of ephemeral farm structures (hen houses, corn crib, slaughter house, "smoking room," etc.) stood on land connected with the resort at different points in its history. The Adams cottage, though a quarter of a mile away, was considered to be the farmhouse for the Highland Farm. Thus, when Hayes Small sold the farm to Sumner Horton in 1935, ownership of the cottage was included.[47] Although the Hortons used Adams primarily as their residence, they also rented rooms in it on occasion.[48]

Life at the Highland Resort

Most of the guests at the Highland House and Cottages—as the complex was usually called—were couples or families, with few if any single people. Their length of stay varied from a few days or a week to an entire summer. Hotel keepers like the Smalls tried to create a warm personal atmosphere and took pride in the fact that a guest returned year after year.

Guests were inevitably drawn into a distinctive and tightly woven lifestyle regardless of how long they stayed. During the railroad-based period of tourism, the railroads exerted an influence that was much more pervasive than merely a means of moving people from one place to another. The railroad, with its relatively rigid physical constraints and efficiencies, was a determining factor on architecture and society (these being, as always, interrelated). The fundamental characteristics of the railroad demanded concentration rather than dispersal, both in time and place. This occurred first at stations of departure, then at the North Truro depot, and finally at the Highland House, where the absence of independent transportation meant that buildings and functions had to be clustered. In this respect the Highland House was only a relatively insignificant example of those enormous frame hotels that floated over the rolling terrain of the Cape and Islands like ocean liners during the era of railroad dominance, and which one by one ran aground and were abandoned in the unsympathetic times that followed.

The collective nature of resort life in the 1870–1920 period was, of necessity, especially visible at mealtimes. Marshall somewhat humorously describes how, since "all of the roomers ate at the 'Main House' [Highland House] it has been said that the roomers would sit on their front

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[45] Provincetown *Advocate*, Mar. 14, 1912.

[46] Truro assessors' reports.

[47] Telephone interview conducted by Larry Lowenthal with Irving Horton, June 9, 1992.

[48] Interview conducted by Larry Lowenthal with Robert Horton (son of Sumner), Sept. 9, 1993.

porches at meal times and when the hand dinner bell rang from the piazza of the 'Main House,' the roomers would make a dash for the dining room."[49] In those years before the isolating, encapsulating effects of automobiles and television took hold, people not only participated in group activities but were accustomed to creating their own entertainment. Fleeting newspaper items, light as the summer breeze, tell how vacationers took advantage of the ever-changing mix of talent at the Highland House. When there was a temporary aggregation of baseball players, they would challenge teams of "year-rounders" and even travel to Wellfleet to play. The baseball field for the Highland complex was located south of the road to the lighthouse, south and east of Beacon cottage, on land now occupied by the golf course. This suggests that in the first decades of the 20th century, when baseball was flourishing, either the golf course was much smaller, or else the two uses overlapped. In 1907 the guests organized a masquerade ball, which was held in the ballroom on the first floor of the Lodge.[50]

One of the most dynamic and innovative guests was J. Henry McKinley of New York City, who apparently spent many summers at the Highland House and eventually purchased some land on the nearby cliffs. He was, not surprisingly, an active sportsman. On more than one occasion he improved the golf course, presumably to bring it more in line with the increasing standardization that succeeded the sometimes bizarre individuality of course design in golfing's exuberant youth.[51] In another inspiration, McKinley organized a clambake on the beach.[52]

McKinley's most notable achievement, however, was to serve as president of the association that organized a pageant to observe the Pilgrim Tercentenary. The committee, consisting of both residents and guests, was organized at a meeting in the parlor of the Highland House on August 20, 1919. Its work culminated in a pageant one year later at which some 3000 people were present.[53] This event, while scarcely of national significance, was probably the most memorable departure from the customary tranquility in the history of the Highland House.

Mort Small was probably no longer intimately involved in the routine operation of the resort, but by the time the Highland House was completed he had himself become one of its main attractions. As he attained the status of local legend, guests delighted in gathering on Saturday evenings to hear his romantic tales of Cape Cod lore, some of which he published in his various booklets.[54] While his childhood recollections might not be literally accurate, he was one of the last

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[49] Marshall, *Truro, Cape Cod*, p. 104.

[50] Provincetown *Advocate*, August 15, 1907.

[51] The Provincetown *Advocate*, August 4, 1910, notes that "Mr. McKinley, a guest at the Highland House, has recently much improved the golf links by some changes." In his *Just a Little about the Lower Cape, Personal and Otherwise*, Isaac M. Small writes that the course was "relaid by me in 1913 from plans by Mr. J.H. McKinley.... Additions were made in 1921 also at the suggestion of Mr. McKinley." Whether the 1913 alteration was distinct from that of 1910 or due to a confusion of dates is uncertain. For trends in the history of golf, see Herbert Warren Wind, *The Story of American Golf*, 3rd ed., New York: Alfred A. Knopf, 1975.

[52] Provincetown *Advocate*, September 1, 1910.

[53] Small, *Just a Little.*

[54] Marshall, *Truro, Cape Cod*, p. 103.

individuals who could claim a personal acquaintance with Thoreau. He had researched and developed his own theory about the location of the Pilgrim Spring. Best of all, as the long summer twilight dimmed, he regaled his listeners with tales of the countless shipwrecks he had observed. While the nearby lighthouse provided ghostly illumination and the foghorn added spectral accompaniment, he spun lurid accounts of finding the human and other wreckage of the Portland washing up on the beach after the terrible storm of November 1898.

Like Mort Small, the Highland Light was a fixture of the local landscape. The resort did not necessarily develop because of its proximity to the lighthouse. Rather, both were situated to take advantage of the same natural assets of the location, i.e., high ground overlooking the water. Indeed, the bright, constantly revolving light may have been perceived as a nuisance by patrons of the resort. This is suggested by the orientation of the Highland House, which minimized its exposure to the lighthouse. As indicated by the location of the porch, the best views were considered to be north and northwest, over the dunes to Provincetown.

Gradually the light developed its own clientele of visitors who drove out to enjoy a scene that to many captured the essence of the Cape. Isaac M. Small, already deeply interested in the lighthouse for a variety of reasons, capitalized on the situation. As early as 1891 his brochure advertised that "At the Marine Signal Station [his home, the Cliff House] near the lighthouse, may be found a full assortment of photographs, confections, cigars, etc." Later he featured his own booklet recounting the history of the lighthouse.

The other main attraction of the Highland resort, the Atlantic Ocean, was more accessible during the peak period of the Highland House. For a number of years a rough staircase descended the cliffs. Even after that was washed away, a path was kept open so that access, though arduous, was possible. Conditions for bathing varied greatly from season to season, depending literally on the shifting sands. In 1903, for example, it was reported that "The bathing at Highland Light...is fine this season as the sand bars are so formed as to give either a still water or surf bath, and visitors of all ages and sizes are enjoying it."[55]

[55] Barnstable *Patriot*, July 20, 1903.

LATER EVOLUTION OF THE HIGHLAND RESORT

Effect of the Automobile

The first automobile on the road to the lighthouse made its appearance in September 1903.[56] Gradually their number increased, but without fundamentally altering the existing order. Usually they were seen as curiosities whose future was uncertain. Isaac M. Small may have welcomed them for bringing more customers to his souvenir shop. On August 30, 1906, in the very same column that reported the beginning of work on the Highland House, it was observed that "Three or four autos a day are not uncommon in the Highlands now. Horses in the vicinity are becoming more accustomed to them."[57] Thus the new hotel and the instrument of its eventual decline were brought into an unintentional but portentous conjunction.

The automobile ultimately doomed resorts on the style of the Highland House, because of the insulation and independence it provided. Nevertheless, the result was slow in coming. Customs and attitudes seemed to change more slowly than the technology. Many people who had formed their habits in the horse-and-buggy age clung to their old-fashioned vacation practices even while adopting the newer means of transportation. By the late 1920's, when the majority of its guests were probably arriving by auto, the physical layout and the pattern of life at the Highland House and Cottages remained largely intact. The only significant changes were those directly related to the means of travel. A substantial garage was completed in 1925, and the stable—a feature of the complex since its early days—disappears from the assessors' records after 1927.

Isaac M. Small must have assumed that his second wife would outlive him, since she was 15 years younger than he. That was not to be. She died in March 1933, and he survived nearly another year, following her on February 5, 1934, when he was almost 89. He had clung to his familiar routine, gazing out through his telescope into the final weeks of his life, and his last little book was in the hands of the printer when he died. After a period of sorting out family real estate, Isaac's only surviving child, Lillian M. Small, emerged with most of the Highland resort property. Since she lived in Buzzards Bay, the resort was apparently managed by Willard M. Small's two daughters, Evelyn Morton Stevens and Hazel D. Shorey, with the latter predominant.[58] Probate administration records indicate that income and routine maintenance continued even while the nation was still sunk in the Depression, although no major construction or renovation took place.[59]

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[56] Barnstable *Patriot*, September 14, 1903.

[57] Provincetown *Advocate*.

[58] Telephone interview conducted by Larry Lowenthal with Irving Horton, June 9, 1992.

[59] Barnstable County Probate Case No. 24542 (estate of Isaac M. Small).

End of the Small Family's Ownership

World War II forced decisions that had been deferred for several years. With Nazi submarines lurking off the coast and normal travel patterns disrupted, the Highland resort did not open for the 1942 season. By then Lillian M. Small was in her mid-sixties; with no children and living elsewhere, it was time for her to reconsider the status of the family resort. A formal survey of the property in 1945 signaled her intentions, but she died in March of the following year before she could act on them. Fred C. Small, her husband and executor, proceeded to sell the Highlands property to Harold J. Conklin of Paterson, NJ, on June 25, 1947.[60] This transaction comprised nearly 88 acres, consisting—with one notable exception—of all the land in the area that had been passed down in the Isaac Small family. With that stroke of the pen, the association of the Smalls with the Highland Light neighborhood—a relationship that extended back to the earliest days of settlement—suddenly ended.

The notable exception was the Cliff House. Under a 1937 deed from Lillian M. Small, Olive M. Williams—Isaac M. Small's longtime assistant—was given life tenancy in the house.[61] This carried out a provision of Isaac M. Small's will. Olive survived Lillian and was still living at the time of the transfer to Conklin in 1947; she died in September 1948. In 1952, Fred M. Small completed the disposal of the Highlands resort property by selling the Cliff House and its surrounding lots to William B. Spink of Boston.[62] Spink created a small resort separate from Conklin's, around the nucleus of the Cliff House, that was known as the Cliff House Colony. It was probably during this period that the Cliff House was divided into apartments.

In 1950, only three years after acquiring the property, Conklin sold the Highland Lodge (minus its large wing, which was gone by that time), to a couple from Provincetown.[63] To protect his interests, Conklin added a restrictive clause that "the said premises shall not be used for any commercial purpose of any kind, nature or description." After passing through the hands of an intermediate owner, the Lodge was moved by its owners Stanley and Esther Chamberlain to a new location on Old County Road, South Truro, in 1962. It remains at that site.

Hal Conklin was representative of a type frequently associated with the declining stages of obsolescent institutions. These operators characteristically have the instincts and ambitions of the entrepreneur, but not the capital and often not the managerial ability. Whether from nostalgia, lack of imagination, or lack of resources to pursue grander schemes, they tend to be drawn to fading or outdated enterprises. They seem to combine the small businessman's craving for independence with the amateur's sincere affection for some interest or entity—a combination that is often charming but seldom conducive to business success. Conklin's first love was the golf course. He was an avid

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[60] Barnstable County Registry of Deeds, Book 673, p. 242.

[61] Barnstable County Registry of Deeds, Book 525, p. 198.

[62] Barnstable County Registry of Deeds, Book 825, pp. 5-6.

[63] Barnstable County Registry of Deeds, Book 768, p. 507.

player, and in 1955 he modernized and virtually rebuilt the course. However, this emphasis worked to the detriment of the rest of the complex.[64]

When Hal Conklin and his wife Estelle reopened the Highland House resort in 1947, the complex still retained an appearance characteristic of the second period of tourism. Except for the removal of the bowling alley, the main structures of the complex had remained unchanged since the 1920's, if not earlier. It soon became evident, however, that changing social patterns would make it impossible for the resort to operate successfully on the old basis. The resort had reached a point where it would have to be adapted to new conditions if it were to survive. Carrying a heavy mortgage, the Conklins sought to respond to this challenge while lacking the resources to undertake major alterations.

One example of this was the modifications made to the Highland House due to the demolition of the Coleraine cottage. The Coleraine had previously housed the bar; there had never been a bar in the Highland House itself. When the Coleraine developed a severe roof leak, Hal Conklin attempted to repair it in his usual hasty, low-cost style by pouring a thick, solid concrete roof. The structure was unable to bear the weight and began to sag. It had to be demolished in the mid-1950's. The Conklins therefore created a new bar facility in the Highland House: they replaced the north-facing section of the wraparound porch, which had offered the most striking views, with a shed-roofed addition to house the bar.

By the mid-1950's, there was a clear change in clientele and operation of the resort. Most of the earlier recreational, service, and agricultural structures were gone. Little remained of the group-generated good times that characterized the second period of tourism. Only the golf course survived among the multitude of organized recreational facilities once offered by the Smalls. It endured because of Hal Conklin's personal devotion, and because it was open to the public and did not rely on guests. The bar became increasingly popular with local residents, but the large dining room had to be closed.

With more and more casual sightseers driving up to the lighthouse, concession emphasis shifted to offering souvenirs and snacks. To serve and expand this emerging market, Conklin moved the Pilgrim cottage to the south side of the road near the edge of the lighthouse lot, where it was used as a hot dog stand. It was not especially successful in this manifestation, and in 1957 two of Conklin's employees, Joe Colliano and Bill Hastings, purchased it, moved it back to the north side of the road, and converted it to apartments.[65] Colliano and Hastings also purchased the hot dog stand/souvenir shop that had stood near the lighthouse and moved it to the north side of the road, as well. There it formed a compact cluster with the Pilgrim cottage and the Jobi craft shop (which they built) on a lot of slightly less than one acre.

Further fragmentation of the former Highland resort occurred in the early 1960's, perhaps in anticipation of the establishment of the Cape Cod National Seashore. Legislation to create the Seashore had been introduced by that time, but the outcome was by no means certain, nor could the

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[64] Interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992. Appraisals in Cape Cod National Seashore Land File 16-2500 also describe work done on the golf course.

[65] Interviews conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992, and Sept. 1, 1993.

extent or manner of land taking be predicted.[66] In 1960 the Conklins subdivided the cottage cluster on the south side of Highland Road into five tiny lots (Parcels A through E), all but one of which included a building. Four of the lots contained 9,375 square feet, and one had 6,785 square feet; collectively, they totaled slightly more than one acre. All were soon sold to persons from urban areas of the Northeast, as follows:

Parcel A (Beacon cottage) to Tom and Pauline Slade of West Peabody, MA, February 15, 1960 [deed reference 1070:522]

Parcel B to Jean Bennett of Yonkers, NY, October 29, 1960 [deed reference 1096:233]. This was the smallest parcel and did not include a building. Soon after, Bennett moved a small structure that had been part of a gas station to the site to serve as a cottage[67]

Parcel C (Haven cottage) to Eugene and Aldo Travaglini of New Haven, CT, and their wives, February 15, 1960 [deed reference 1071:392]

Parcel D to Muriel A. Benoy and Frances E. Whitney of Pompton Lakes, NJ, February 15, 1960 [deed reference 10170:524]. This parcel contained a small cottage called "Driftwood" that had been moved to the site

Parcel E (Rock cottage) to Joseph, Jr., and Gertrude G. Newbold of Franklin Lakes, NJ, February 15, 1960 [deed reference 1070:520]

[66] Francis P. Burling, *The Birth of the Cape Cod National Seashore* (Plymouth, MA: Leyden Press, 1977).

[67] Interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, September 1, 1993.

PURCHASE BY THE NATIONAL PARK SERVICE

The question of whether the increasingly anachronistic Highland House operation could have continued was made moot by the creation of the Cape Cod National Seashore. On July 30, 1964, the Conklins sold their remaining holdings to the National Park Service. These included the Highland House, the Millstone and Mayflower cottages, the former Sumner Horton farmhouse (former Adams cottage, which the Conklins had purchased in 1955 as their residence), and the golf course. With the same romantic impracticality that brought them to the Highlands, the Conklins used the proceeds to purchase a similar summer resort in Laconia, NH.

The arrival of the National Park Service did not bring an immediate end to the Highland House's resort role. The Conklins had reserved a right to continue to operate the Highland resort for 3 more years, with a right to renew for 2 years beyond that. The Conklins transferred these rights to Colliano and Hastings. The two men exercised both options, operating the property as a resort through 1969. This twilight period was known as the "Jobi" era (from Joe and Bill).

Many of the characteristics of the resort in its palmier days persisted during these years. The Highland House and the remaining cottages continued to be used largely for their original purposes. Colliano and Hastings even resumed operation of the dining room.[68] They divided the large first-story room by means of a plywood partition to create a separate lounge/breakfast nook in the section nearest the lobby.

There was a distinct hierarchy of renting during this period, based on the availability of bath facilities, with the second floor of the Highland House last on the list. Normally it was used by the help or by young people who could not afford the better rooms, and was rented to ordinary guests only as a last resort. This reversal of priorities due to the relative accessibility of indoor plumbing is reflected in the room rates. In the Jobi period (1964–69), rooms in the Highland House were rented to young persons at $10 per week, while the rate in the cottages was $12 a night, double occupancy, including maid service.[69] In contrast, Marshall reports that in 1919 the $6-a-week rate at the Highland House was equal to the Adams, Haven, and Millstone cottages, while the old Highland Lodge was at the lower end of the scale at $2.50.[70]

The names of some important executives were found in the guest register during the final years of operation, according to Colliano and Hastings. Another distinct category of visitor was old women who had been chambermaids at the hotel in their youth. What these women felt can only be surmised: the Highland House's general appearance seemed remarkably unchanged, yet differences in details, and in the behavior and expectations of the guests, were undeniable. Other than those who were motivated by sentiment, visitors to the Highland resort presumably were attracted by the exceptional scenery, relatively low rates, and the lingering essence of a more carefree age.

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[68] Interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992.

[69] Interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992.

[70] Marshall, *Truro, Cape Cod*, p. 105.

With the trend of events unmistakably clear, Colliano and Hastings took an action that would have far-reaching effects. They gave the Truro Historical Society space in the Millstone cottage's relatively primitive rear wing, in an effort to increase the chances of the cottage's survival. This established the Historical Society's presence at the resort, which would enable the society to ask the National Park Service in the early 1970's for the use of the Highland House as a museum.

Those years were precarious ones for the structures at the former resort. The National Park Service was at that time primarily interested in acquiring open land for the national seashore. It therefore pursued a policy of auctioning off the buildings on the properties that it purchased, with the stipulation that the new owners move the buildings elsewhere. This was the case with the Millstone and Mayflower cottages in 1971. Millstone cottage went to Pond Road, while Mayflower became an office and additional rooms for a motor inn on Route 6, both in North Truro.

The Park Service also bought two other of the resort's properties that had not been acquired in 1964—Pilgrim cottage and the Cliff House. Joe Colliano and Bill Hastings sold the land beneath the Pilgrim cottage and the Jobi shop to the Park Service in 1972, but retained ownership of the buildings themselves. The next year, they relocated the cottage (and the Jobi shop) yet again to another location on South Highland Road, where it remains today.[71] This otherwise unexceptional building, true to its name, has thus been moved at least five times during its life.

The Cliff House was purchased by the Park Service from William Spink on February 1, 1974.[72] Spink reserved the right to move the building by May 31, 1974. He failed to do so by the deadline, and the Park Service assumed control. The house then stood vacant for almost a decade until a Board of Survey process was initiated in 1983. By then the structure was only 20 feet from the edge of the eroding cliff. An auction of the building took place on April 29, 1983, and on May 12, the bid of Daniel Del Gizzi was accepted. The house was moved between August 3 and August 16, 1983, traveling about 1 1/4 miles to a new location on Alden Road.[73] There it remains, although it has been extensively altered.

The loss of so many structures left conspicuous gaps in the historical continuity and integrity of the resort. The Highland House was not exempt from this trend. Its early east extension, which had become badly deteriorated, was torn down in 1974. The original southeast ell met the same fate in 1982. In retrospect, it seems likely that the Truro Historical Society's interest in the Highland House helped prevent the removal of the main structure until it was nominated to the National Register of Historic Places in 1975.

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[71] Interviews conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992, and Sept. 1, 1993.

[72] Barnstable County Registry of Deeds, Book 2002, p. 344.

[73] File no. S7417, Cape Cod NS. The lot where the Cliff House now sits is part of a tract of land purchased by Joe Colliano and Bill Hastings with the proceeds they received from selling their Highland-resort properties to the National Park Service. They subdivided the tract into lots, and brought in the Pilgrim cottage and the Jobi shop from Highland Road in 1973. They also sold off lots to others, including Daniel Del Gizzi, who brought in the Cliff House some 10 years later. The three buildings today form a small "refugee" colony from the old Highland resort.

III. ARCHITECTURAL EVOLUTION

APPEARANCE UPON CONSTRUCTION

Exterior Elements

Historic photographs and postcards from the years following the construction of the Highland House help to provide an idea of what the exterior looked like originally. Figures 2 and 5 are photographs that appeared in one of the early advertising brochures for the Highland resort, one that has been dated to 1908–09. Figure 3, a postcard of unknown date, appears to be of about the same date as figure 2. Figure 4 was published in a 1922 book by Isaac Morton Small, while figure 6 is a pre-1941 postcard. The photographic evidence has been supplemented by the results of physical investigation.

Configuration

The Highland House apparently originally consisted of a two-story gable-roofed main block oriented east-west, and a two-story gable-roofed ell at the east end of the south side (see figure 5).

Foundations

The main building of the Highland House sat on a brick foundation approximately 6 feet high. The southeast ell sat on brick piers, with the crawl space beneath it being screened by latticework.

Walls

The Highland House was of wood-frame construction. All of the walls consisted of sheathing boards to which wooden shingles were nailed. A belt course of decorative shingles ran around the main building at the level of the second floor.

Porch

Main Building

A one-story porch ran across the entire front (west) wall of the main building. It wrapped around the northwest corner of the structure and continued along the north wall for a distance of approximately 40 feet (see figures 2–4). The outer edge of the porch deck was supported on short posts. Diagonal latticework may have screened the area below the porch; such latticework is seen in the ca.-1940 postcard (fig. 6). The outer edge of the porch roof was carried on ornately turned posts topped by sawn brackets. Apparently the original design did not include a balustrade between most of the posts of the porch. However, there was a balustrade linking the four eastern posts of the north section of porch (see figures 2–4). This seems to have been a safety measure: since the Highland House's site slopes from west to east, the east end of the north porch was some distance from the ground. The photographs indicate that the balustrade resembled the balustrade now on the north side of the west porch.

Doorways

Main Building

The main entrance to the Highland House was located on the west gable end of the main building, being protected by the west section of porch. The photographs indicate that there were no doorways in the north wall of the main building leading to the porch. Figure 4 seems to show two cellar doorways in the east foundation wall, one at either end of the wall.

Southeast Ell

The southeast ell had its own entrance in its south wall. A small deck protruded from this wall to serve the doorway.

Windows

Main Building

Window openings tended to be asymmetrically placed, due to the location of interior features. The windows on the west side of the main building contained two-over-one double-hung sashes; most of the window openings elsewhere probably held two-over-two double-hung sashes. It is likely that metal flashing was used above the windows, judging by the remains of such flashing on the building today. The ca.-1940 postcard (fig. 6) shows a flagpole affixed to the frame of the attic window of the main building.

Southeast Ell

The window openings of the ell were more symmetrically located than those of the main building. The west wall of the ell contained six windows; the south wall had four; and the east wall had four.

Roofs

The roofs of the main building, the wraparound porch, and the southeast ell were covered with wooden shingles and had wide eaves. The eaves of the main building were supported along the south and north sides by exposed rafter ends, and at the west and east sides by rake outriggers. The ends of the rafters and outriggers were covered with a cornice made up of a fascia board topped by a cyma-recta crown molding. A sign reading "HIGHLAND HOUSE," painted with large white block letters, sat on the roof of the west section of porch. There were no gutters anywhere.

Chimneys

Two chimneys were present on the main building: one on the east wall, just south of the roof ridge, and one on the north wall, about a fifth of the way back from the west end of the building. The ell had its own chimney.

Finishes

Judging by the old photographs, the wall shingles were probably not painted originally. The trim, including the elements of the wraparound porch, were painted white.

Interior Elements

Few historic interior photographs of the Highland House have been found to date. Knowledge of the house's original interior features has been obtained primarily through physical investigation.

The interior of the main building consisted of two stories, a full attic, and a partial basement at the east end of the structure. A crawl space existed under the west end of the house. The first floor contained three rooms. At the west end was the "waiting room,"[60] with a fireplace in the northwest corner and an office area in the southeast corner (see figure 7), and a stairway to the second story in the southwest corner. The middle of the first story contained a large dining room. A kitchen occupied the east end of the first story. The second story had a main hallway flanked by 15 guest rooms, most with a closet. There was also a "ladies' toilet" at that level,[61] probably at the east end.

Several sources state that the construction of the second floor was similar to that of a covered bridge. Presumably this refers to the fact that the second-floor structure is supported by steel rods (concealed within the second-story walls) suspended from the wooden trusses in the attic. No plans or other construction documents are available on this matter.

Interior finishes in the main house included narrow maple floorboards and lath-and-plaster walls and ceilings. All of the first-story rooms, and some areas on the second story, had matched-board wainscot. Some rooms may have had a wooden picture molding in cornice position. Doorway and window casings were molded and ornamented with bull's-eye corner blocks. The doorways of the guest rooms had transom windows above them. Most doors were four-paneled, with the two upper panels being longer than the two lower panels. The window sashes were outfitted with sash weights.

The scope of this report did not include the laboratory analysis needed to determine precisely which plaster walls were originally painted or wallpapered. Figure 7 indicates that at least the entry was wallpapered at a very early date. Many woodwork elements were left natural or stained and given a clear finish, probably varnish. This is based on the large number of woodwork elements still displaying this treatment today. Figure 7, however, shows that the wainscot of the entry was painted a light color, with the wainscot cap a darker color.

The original interior plan and finishes of the southeast ell are not known.

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[60] Highland House and Cottages advertising brochure, 1908–09.

[61] Highland House brochure, 1908–09.



Figure 2. Northwest View of Highland House (circa 1908).



Figure 3. Northwest View of Highland House (n.d.).



Figure 4. Northeast View of Highland House and Millstone Cottage (before 1922).

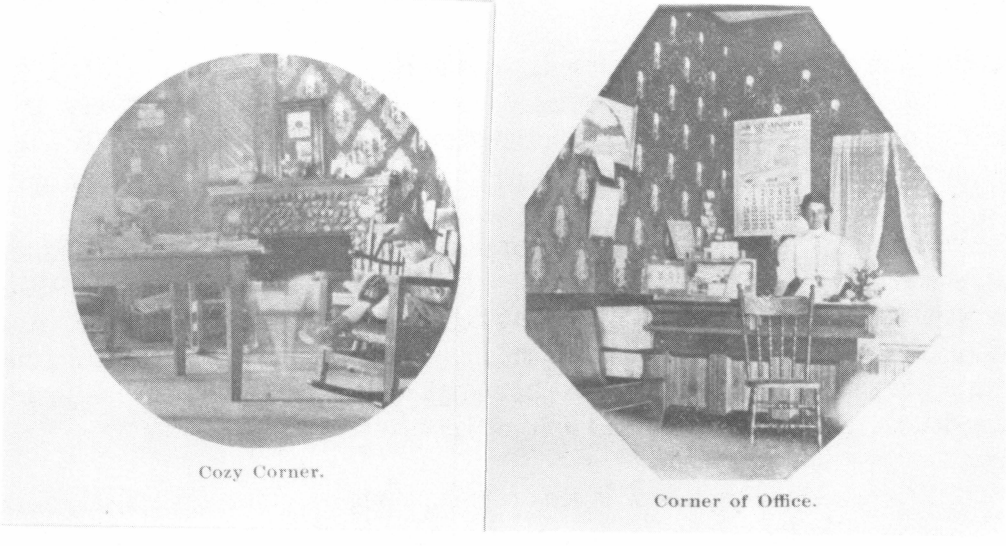


Figure 5. Southeast View of Highland House and Millstone, Rock, Haven, and Beacon Cottages (circa 1908).



The Highland House, North Truro, Cape Cod, Massachusetts
Where it is always cool in the summer.

Figure 6. Southwest View of Highland House (before 1941).



Cozy Corner.

Corner of Office.

Figure 7. Northeast and Southeast Corners of Entry (circa 1908).

APPEARANCE AFTER LATER ALTERATIONS

During the Resort Era

Recent investigations into the documentary record and architectural fabric of the Highland House suggests that several major improvements were made to the building soon after its construction. These include the construction of an east extension (now gone), the front office, and the two rest rooms at the east end of the second story. The physical evidence suggests that all of these improvements were made about the same time. Personal remembrances indicate that they occurred prior to 1921. The assessors' records suggest that they took place in 1909–10. These alterations will be discussed generally in this chapter, but the specific evidence pertaining to them will be presented in Chapter IV.

Exterior Elements

Photographic evidence provides some information about alterations and additions made to the exterior of the Highland House during its years of use as a hotel. The most important documents are two sets of photographs, one set from 1966 (figs. 8–9) and the other set from 1973 (figs. 10–14).

Main Building

Walls. Aluminum siding was applied to the west wall above the roof of the porch prior to 1966, according to figures 8–9. It remained in place through 1973, judging by figures 10–14, but has since been removed. Also prior to 1966, the sign on the west wall was raised from its original position, directly above the porch roof, to the space between the second- and third-story windows.

Porch. Sometime after the construction of the Highland House but before 1941, the north end of the west section of porch was screened in. The screening is not seen in the earliest photographs (figures 2 and 4), but it does appear in the ca.-1940 view (fig. 6). The screening was removed sometime before 1966 (see figures 8–9).

The section of porch on the north side of the main building was removed and replaced with a one-story shed-roofed enclosure (see figure 8). This work occurred in the mid-1950's, when the resort's bar facilities were moved from the Coleraine cottage to the Highland House. At some point, the enclosure received an irregularly shaped shed-type structure appended to its northeast corner. This structure housed two rest rooms. The photographic documentation does not indicate whether it was created at the same time as the addition, or later.

In the 1966 photographs, a deck is seen running along most of the north side of the addition; it extended to the shed at the northeast corner of the addition. This deck may have been built at the same time as the addition.

Windows. Shutters were added before 1966 around the second- and third-story windows of the west side of the main building.

Additions. A one-story shed-roofed extension was built onto the east wall of the main building prior to 1921, and perhaps as early as 1909–10.[62] The area underneath it was left open. The extension's south wall was supported by a concrete retaining wall aligned with the south wall of the main building. The extension's east wall rested on a central post, preserving access to the basement beneath. The northeast corner of the extension rested on some type of large pier (see figure 10). There were four windows in the extension: one in the south wall, two in the east wall, and one in the north wall. The south wall also contained a doorway reached by three steps (see figure 11). At the east end of the south wall was a tiny shed. As stated in Chapter II, the east extension housed the laundry-washing facilities for the resort, with pressing and storage being done in the second story of the southeast ell. The east extension also contained dish-washing and garbage-disposal facilities for the restaurant.[63] The garbage disposal facility consisted of a chute in one corner. Garbage was dropped through the chute into a cart parked underneath the extension. The cart was pulled by a horse to the gully south of the road to the lighthouse, where it was dumped.

Prior to circa 1955, the golf "pro shop" was in a small building located across Highland Road (see Appendix A). Around that time, Hal Conklin relocated that function to the south end of the first story of the Highland House's southeast ell. He then began to park the course's golf carts under the east extension.

A deck was added to the south side of the main house sometime between circa 1940 and 1973 (compare figures 6 and 14). The photographs from 1966 do not show that area, and so are of no help in narrowing down the date of the deck.

Southeast Ell

Windows. The second-story window at the south end of the east wall of the ell was apparently closed up, based on a comparison of figures 4 and 11.

Interior Elements

Main Building

Front Office. The southwest corner of the original dining room was partitioned off at some time to form a small office for the innkeeper. As will be explained in Chapter IV, this was probably done soon after the construction of the building. The office was connected to the entry by a doorway. There was no doorway to the dining room, but there was an opening through which

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[62] Telephone interview conducted by Larry Lowenthal with Irving Horton, Nov. 6, 1992; Truro assessors' records; Provincetown *Advocate*, May 20, 1909.

[63] Telephone interview conducted by Larry Lowenthal with Irving Horton, Nov. 6, 1992.

persons in the office could observe the dining room.[64] The physical evidence suggests that this opening may have served as a counter of some type. Irving Horton recalls that cases of oranges were sometimes stored in the office to keep the guests and help from taking them.[65]

Dining Room. This room is now one large open space, as it was originally. In 1964, Joe Colliano and Bill Hastings built a plywood partition across the room to create a separate lounge/breakfast room adjacent to the lobby. The partition was removed after 1969 when the Highland House ceased to operate as a restaurant.

Second-Story Rest Rooms. Soon after the construction of the building, perhaps in 1909–10, two rest rooms and a shower stall were introduced at the east end of the second story. It is thought that these two rest rooms and the present southeast hall were created out of an original guest room in the southeast corner of the building. The shower stall, located in the northeast corner of the back hall, may have been created out of the original ladies' toilet.

Architectural Systems. Gas lighting was apparently introduced at the Highland House sometime before 1915. This information comes from one of the early advertising brochures for the Highland resort, one that has been dated as being no earlier than 1912 but no later than 1915. The same brochure states that long-distance telephone service was available at the resort.

Southeast Ell

As stated previously, by 1955 the south end of the first story of the Highland House's southeast ell contained the golf course's pro shop, while the second story of the ell housed laundry facilities. The pro shop was later moved again, to the Sumner Horton house (see Appendix A). This occurred after 1964, when the house ceased to be used by the Conklins as their residence, but before 1972, based on correspondence in park files.

During the Truro Historical Society Era

Exterior Elements

Main House

Drainage. The french drain along the south side of the main house was rebuilt in 1990–91 (see Appendix I).

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[64] Telephone interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, Nov. 6, 1992.

[65] Telephone interview conducted by Larry Lowenthal with Irving Horton, Nov. 6, 1992.

Walls. Sometime after the 1973 photographs were taken, the sign on the west wall was returned to its original location, directly over the porch roof. Lump-sum construction funds were used in 1982 to repair the west, south, and east walls. In 1991, the winds of Hurricane Bob damaged the east wall of the main house, and repairs were funded by the Truro Historical Society (see Appendix J).

Windows. The shutters added earlier to the second- and attic-story windows were removed. Wire mesh was installed over all of the windows on the north wall, to protect them from damage by golf balls from the adjacent golf course. Based on the 1973 photographs, both actions occurred after that year.

Additions. The one-story extension on the east wall of the main building had become dilapidated by 1974. It was removed in that year, along with its small shed.[66] The southeast ell, also in poor condition, was demolished in July 1982 (see figure 15 and Appendices G and H). The deck along the north side of the north addition was likewise removed in 1982.

Roofs and Chimneys. Prior to 1966, the chimney on the north side of the main building was shortened. This caused the loss of the original brick chimney cap; it was replaced with a metal spark arrestor. In 1990–91, a deteriorated section of the north roof slope measuring approximately 15 by 20 feet was replaced (see Appendix I). A leak where the roof of the north addition intersected the main house was also repaired at that time. A storm in December 1992 damaged the east end of the south roof slope and the east chimney. The emergency repairs made at that time were intended to be temporary (see Appendix L). However, the durability of the repairs prompted park officials to shelve plans to redo them with more historically appropriate materials.

Interior Elements

The Truro Historical Society apparently made some changes early in its residency in the Highland House. Two rest rooms were built at the north end of the original kitchen. Also, the walls of the front office were extended to the ceiling, and a second small office was created behind the front office by partitioning off yet another portion of the main exhibition/former dining room. The dates of this work are unknown.

By 1980, the continued deterioration of the Highland House was noted by the staff of the North Atlantic Region (see Appendix C). Soon thereafter, the Truro Historical Society sought but did not receive approval from the Regional Office to make improvements to the building (see Appendix D). The Park Service continued to explore the idea, however (see Appendix E), and in 1983 it did approve a subsequent request from the Historical Society (see Appendix H). The ceilings of the main hallway and many rooms were replaced with plasterboard at that time, and walls were painted and wallpapered. The drainage work of 1990–91 included the installation of concrete

[66] The Truro Historical Society had to obtain approval for the extension's removal from the National Park Service. However, since the Historical Society was a quasi-public entity, the town of Truro performed the actual demolition of the extension. This work was done under the auspices of the Truro Board of Selectmen, acting as the town's Golf Commission, because the extension was then being used as a storage area by the Highland golf course.

footings and steel lally columns in the basement (see Appendix I). In 1992, the Historical Society obtained permission to cover some wall areas in the main exhibition room with plasterboard (see Appendix K).

* * *



Figure 8. Northwest View of Highland House (1966).

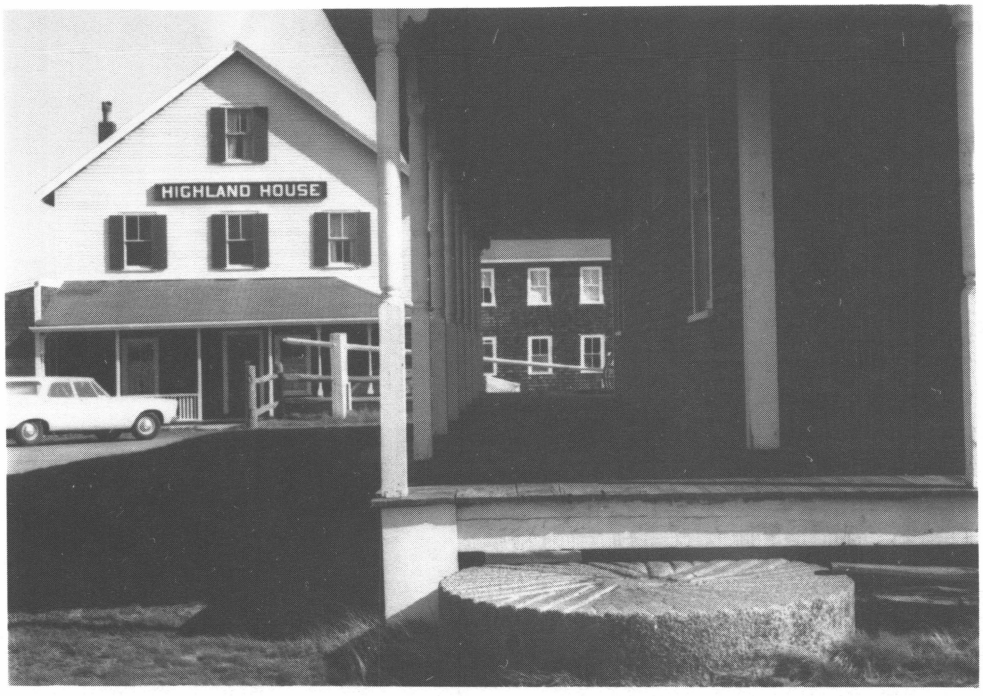


Figure 9. West View of Highland House and Millstone House (1966).



Figure 10. Northeast View of Highland House (1973).



Figure 11. Southeast View of Highland House (1973).



Figure 12. Northwest View of Highland House (1973).



Figure 13. Southwest View of Highland House (1973).



Figure 14. South Side of Highland House and West Side of Its Southeast Ell (1973).



Figure 15. Demolition of Highland House's Southeast Ell, July 1982.

IV. ARCHITECTURAL DESCRIPTION

OVERVIEW

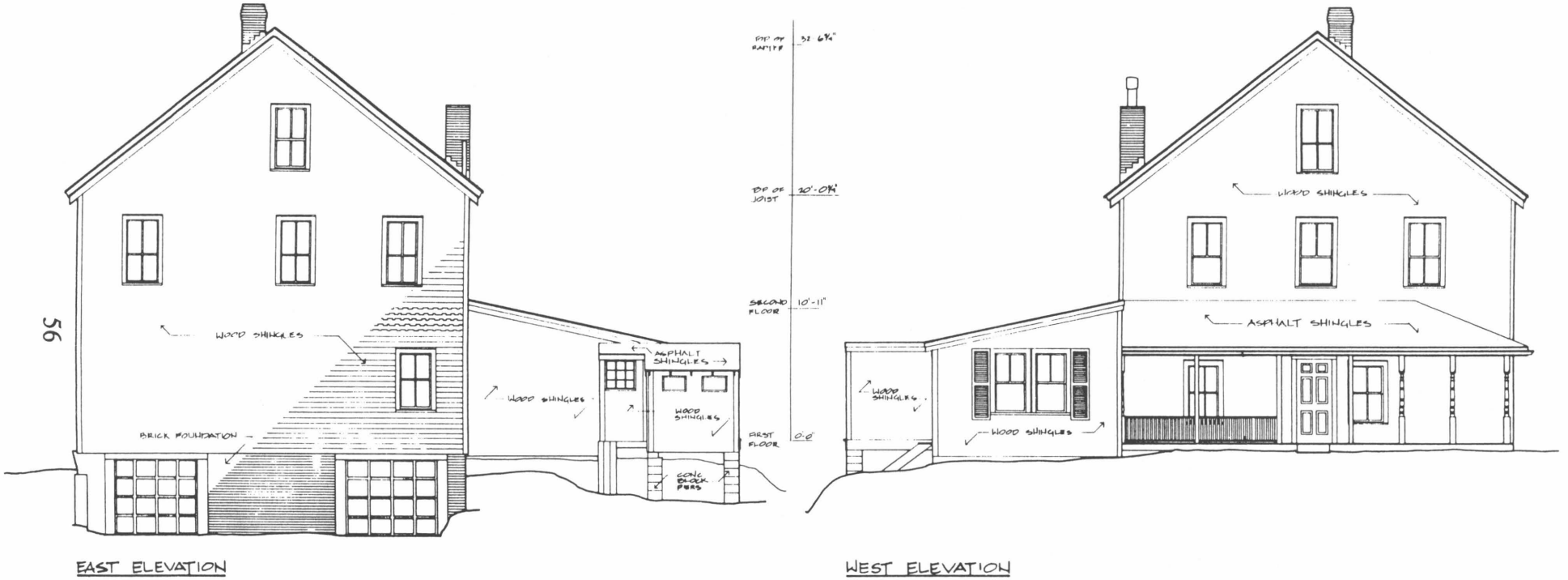
[Editor's note: The following architectural description is based upon observations completed by Regina Binder during the summer of 1989, and so represents the building's appearance at that time. Since that time, four repair efforts have been undertaken at the Highland House. These are described in Chapter III, "Appearance After Later Alterations: During the Truro Historical Society Era."]

The hotel survives in one of the most rugged and severe climates in the Northeast, if not in the country. The environment imposes many stresses upon wood, including frequent freeze/thaw cycles, fall and winter northeasterly gales ("nor'easters"), salt air, and spring fog. Set on the cliffs, the Highland House provides one of the most spectacular views of the terrain and sea over which it presides.

Figures 16–18 are measured drawings that depict the exterior elevations of the Highland House; figures 19–20 show the interior plan of the first and second stories. The main part of the Highland House is 2 1/2 stories high with a gable roof. It measures 92 feet 7 inches long by 32 feet 4 inches wide, and contains a full attic and a partial basement. A one-story open porch extends across the full width of the front, west wall (see figure 16). This shelters the primary entrance.

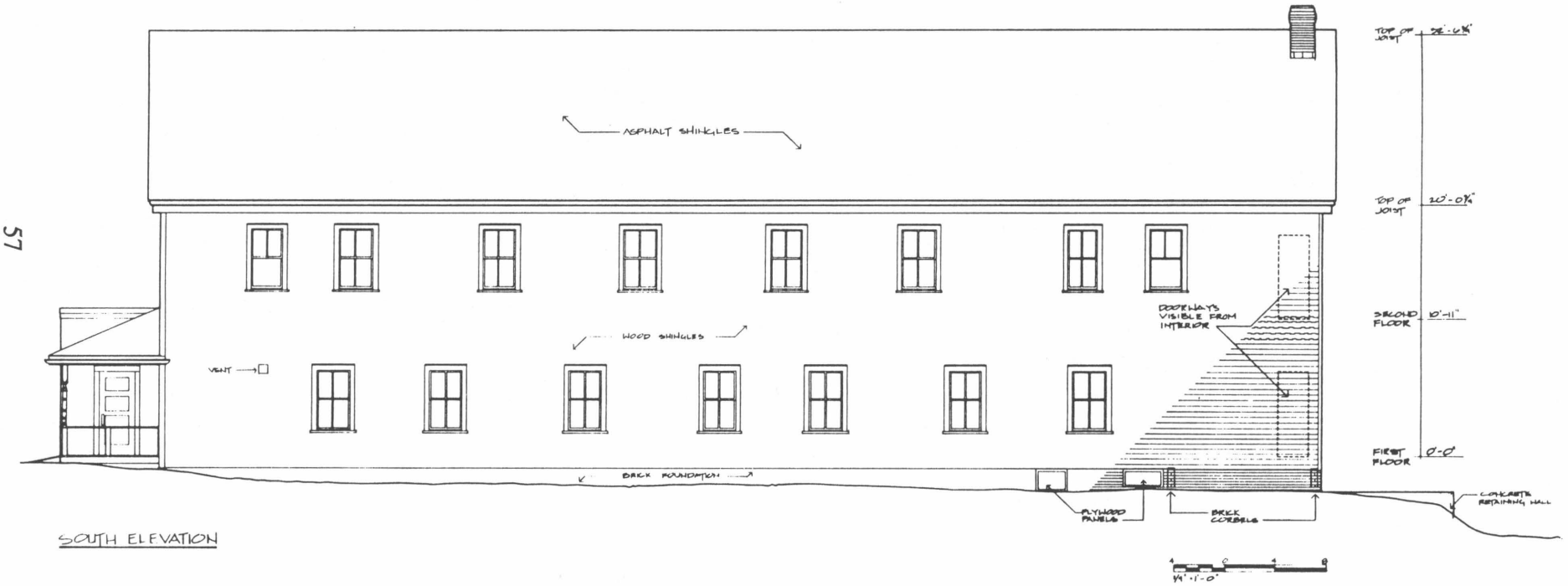
A one-story addition with shed roof runs along the west half of the main building's north wall, and juts past the west wall of the main building (see figure 19). It measures 48 feet 4 1/2 inches long by 15 feet 4 1/2 inches wide. The addition sits about where the west porch originally wrapped around onto the north wall for a distance of some 40 feet. The physical evidence indicates that the addition was not created by enclosing this section of porch, but rather by tearing down the porch and building anew. The evidence includes the width of the addition, which is greater than the width of the porch, and the foundation of the addition.

Appended to the northeast corner of the addition is an L-shaped shed. The larger portion of the shed houses now-unused rest rooms; the smaller portion connects the larger portion to the north addition. The shed's overall dimensions are 11 feet 5 inches by 8 feet 4 inches.



UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE CULTURAL RESOURCES CENTER BUILDING CONSERVATION BRANCH	DESIGNED DRAWN: J. CROSS TECH REVIEW: R. CRISMON DATE: 12/89	TITLE OF DRAWING HIGHLAND HOUSE T-1954 LOCATION WITHIN PARK TRURO, MA NAME OF PARK CAPE COD NATIONAL SEA SHORE REGION: NORTH ATLANTIC; COUNTY: BARNSTABLE; STATE: MA	DRAWING NO 609 B0003 PKG NO SHEET 4 OF 16

Figure 16. West and East Elevations of Highland House.



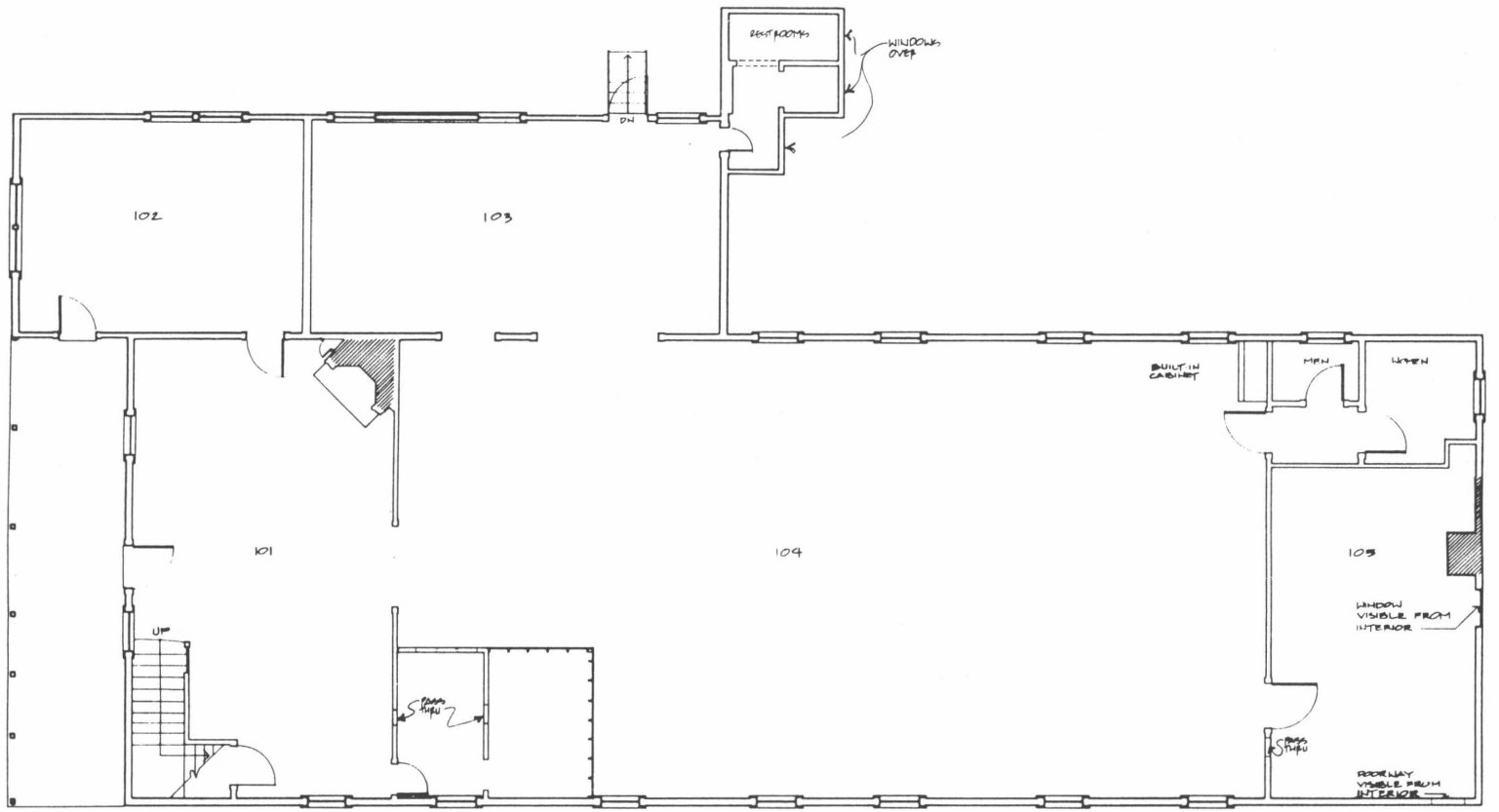
UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE CULTURAL RESOURCES CENTER BUILDING CONSERVATION BRANCH	DESIGNED: DRAWN: J.GROSS TECH. REVIEW: R.CRISSON DATE: 12/89	TITLE OF DRAWING HIGHLAND HOUSE T-1594 LOCATION WITHIN PARK TRURO, MA NAME OF PARK CAPE COD NATIONAL SEASHORE REGION NORTH ATLANTIC COUNTY BARNSTABLE STATE MA	DRAWING NO. 629 80003 PKG. NO. SHEET 6 OF 6a

Figure 17. South Elevation of Highland House.



58

Figure 18. North Elevation of Highland House.



FIRST FLOOR PLAN

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE CULTURAL RESOURCES CENTER BUILDING CONSERVATION BRANCH	DESIGNED DRAWN: J. GROSS TECH REVIEW: R. CRISSON DATE: 12/89	TITLE OF DRAWING HIGHLAND HOUSE T1594 LOCATION WITHIN PARK TRURO MA NAME OF PARK CAPE COD NATIONAL SEASHORE REGION: NORTH ATLANTIC / COUNTY: BARNSTABLE / STATE: MA	DRAWING NO.: 1609 8003 PKG. NO. SHEET: 2 OF 6

Figure 19. First-Floor Plan of Highland House.

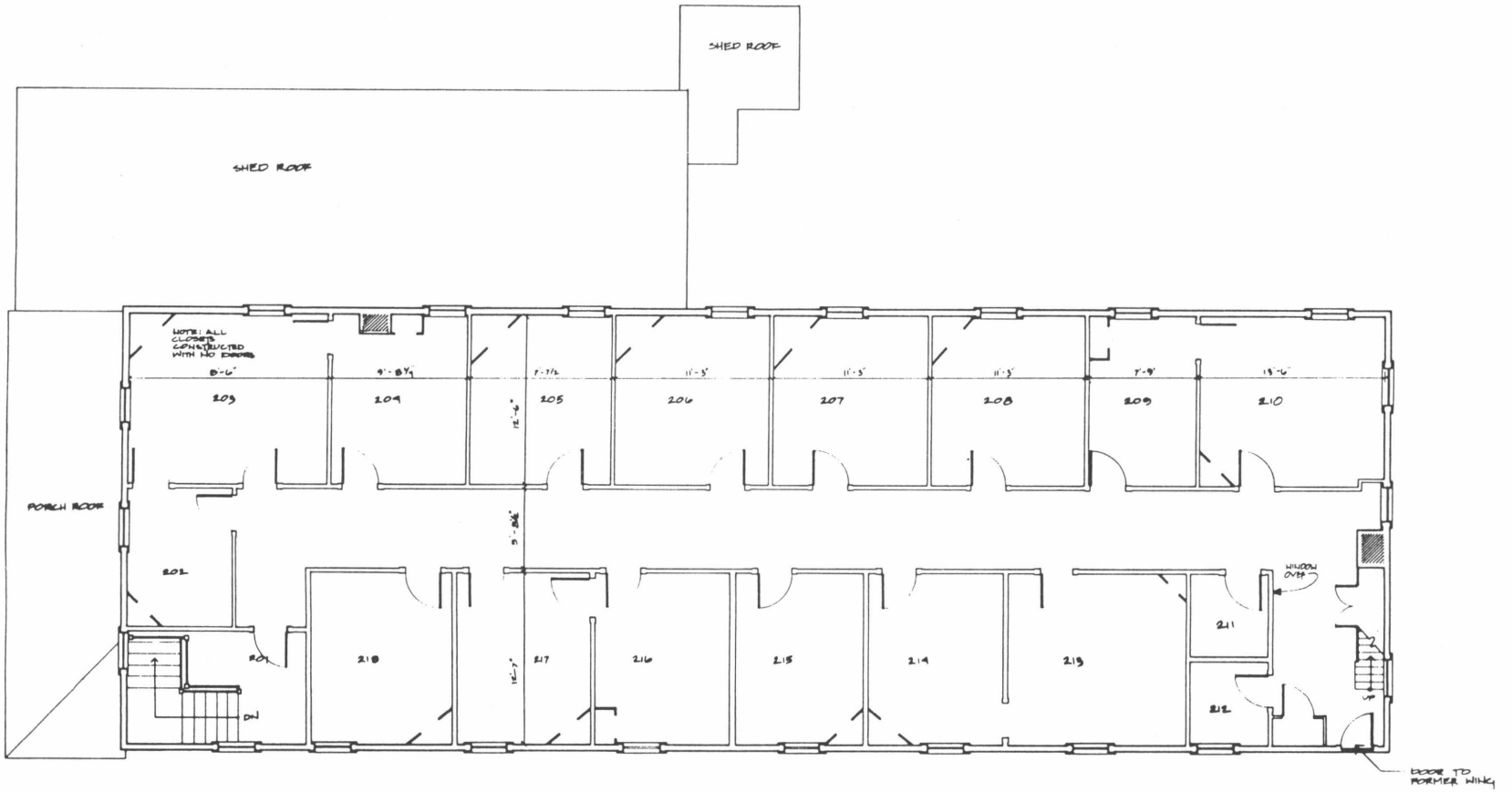


Figure 20. Second-Floor Plan of the Highland House.

EXTERIOR ELEMENTS

Foundations

Main Building

The original brick foundation is visible on the east, north, and south sides of the building. It is on the east side that the brick foundation is most easily seen (see figure 16). It is approximately 6 feet high, measuring to the top of the two garage doorways at basement level. (More than 10 courses of the brick foundation are visible at the northeast and southeast corners of the building.) At the east end of the south wall, two corbeled brick brackets jut from the wall (fig. 21). These appear to have been installed as part of the original foundation to support the southeast ell, which is one reason why the southeast ell is thought to have been original.

North Addition

The north addition is supported by concrete-block piers.

North-Addition Shed

The larger portion of the shed rests upon makeshift piers of concrete blocks and bricks (see figure 22). A PVC pipe penetrates the floor of the shed but leads nowhere. The smaller portion of the shed sits on a vertical wooden plank that is embedded in the ground (see figure 23).

Drainage

At some point, a French drain was installed in the ground along the south side of the Highland House. No record of the installation of this drain was found in Park Service files. The design of the drain is faulty, as will be explained in Chapter V, "EXTERIOR ELEMENTS, Drainage."

Walls

Main Building

The exterior walls of the Highland House are sided with wooden replacement shingles that have been nailed to sheathing. Only a destructive analysis would yield the precise information concerning wall construction. The original five-row belt course of decorative shingles seen in the early photographs on all four walls of the building has been replicated on the north, east, and south walls (see figure 24). The shingles vary considerably in their width, but they are a relatively consistent 6 inches in height. There are traces of a deep red paint or stain on the wall shingles inside the west porch. This was applied by Joe Colliano and Bill Hastings.[1]

North Addition

The exterior walls of the north addition are covered with the same type of wooden shingles as used on the main building. The lower portions of the walls display traces of the same deep red paint or stain found on the lower part of the west wall of the main building.

North-Addition Shed

The exterior walls of the shed are sheathed with wooden shingles. The larger portion of the shed has two sections of shingles on its north wall (see figure 22). Above the joint between the two sections is a cut in the eaves fascia board. This may indicate that some type of alteration occurred here.

West Porch

General Information

Of the original porch wrapping around the west and north sides of the main part of the Highland House, only the west-wall section remains today (see figure 1). The dimensions of this porch are 32 feet long by 7 feet 10 inches. The height of the ceiling is approximately 7 feet 7 inches.

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[1] Interview conducted by Larry Lowenthal with Joe Colliano and Bill Hastings, June 4, 1992.

Deck

The deck of the porch is pitched away from the west wall of the building. It consists of plywood (see figure 25) laid on top of the original 3-inch boards, which are oriented east-to-west. Examination of the area beneath the porch reveals that, while the south side of the porch deck rests on the ground, the north side has been raised 7 1/2 inches off the ground. This compensation was needed to make the porch level.

Ceiling

The ceiling consists of plywood. The plywood probably covers the original ceiling material, which is presumed to be beaded boards, based on common practice at the time.

Posts and Balustrades

West Side

Seven posts support the west edge of the porch (see figure 1). The spacing of the three posts south of the entrance differs from that of the four posts flanking and north of the entrance. The three south posts are ornately turned and clearly original (fig. 26). However, their bases have been covered with boards (fig. 27), and their brackets have disappeared.

Another turned post with bracket (see figure 28) remains at the north end of the west side of the porch. However, the two posts flanking the entrance and the one post north of the entrance are plain, square posts that have had their edges rounded off along the middle portion of their length. Presumably these square posts replaced original turned posts. The two sections of balustrade at the north end of the porch may be original, reused material moved here from the now-demolished north section of porch. This is based upon the fact that: (a) the old photographs show no balustrade here originally; (b) the same photographs show a similar balustrade at the east end of the north section of porch; and (c) one of the sections of the present balustrade is pieced together.

South Side

The south edge of the porch does not include a post where the porch intersects the west wall of the building. However, there is an original sawn bracket here (fig. 29). The section of balustrade along this side is not original.

North Side

The north side of the porch is formed by the portion of north addition that juts past the west wall of the main building.

Doorways

Main Building

West Side

The main entrance to the Highland House is, and always has been, located in the west wall of the building (see figures 1 and 16). The age of the six-panel door and its screen door is unknown. Both are painted white.

South and North Sides

There are no doorways in the south or north walls of the main building.

East Side

Because the ground falls away from the west to the east side of the Highland House, the east wall of the basement story is at ground level. Two garage doorways were installed here fairly recently in order to allow the original basement below the east end to be used as a garage (see figure 16).

North Addition

West Side

There are no doorways in the west walls of the north addition or shed.

South Side

As previously stated, the north addition juts past the west wall of the main building. It thus has a section of south exterior wall, which forms the north side of the west porch. There is one doorway centered on this wall (see figure 17). It is probably contemporaneous with the addition itself; the three-panel wooden door may be equally old.

North Side

The north wall of the north addition has one doorway at its east end, adjacent to the shed-type appendage (see figure 18). It contains a modern six-panel door and a screen door.

East Side

There are no doorways in the east wall of the north addition.

North-Addition Shed

There are no doorways in any of the walls of the shed.

Windows

Main Building

Common Elements

All window openings in the main building are trimmed with their original casings, which measure 4 5/8 inches wide. Each window has a narrow sill that is pitched slightly to allow for water run-off. All of the casings are painted white.

There appears to have been three periods of window-sash replacement at the Highland House. These were:

period 1: the introduction of two-light sashes similar to the original ones but having wider muntins;
period 2: the introduction of two-light sashes having aluminum sash tracks;[1]
period 3: the introduction of one-light sashes having no aluminum sash tracks.

West Side

The west wall (fig. 16) retains all five of its original window openings—two at first-story level, three at second-story level, and one at attic level. The first-story windows are asymmetrically placed because of the location of the interior stairway. The other windows are aligned with each other and with the peak of the gable end. The middle and north second-story windows contain original two-over-one sashes; the other west-wall windows contain period-2 replacement sashes. No weep holes were evident. Nail heads remain on the top members of the casings of the two first-story windows, indicating that flashing had at one time been installed here.

South Side

This wall (fig. 17) retains all of its original window openings. These include two basement windows near the east end (see figure 21), a row of seven windows at first-story level, and a row of eight windows at second-story level. The basement windows are now boarded up. Most of the other windows contain period-2 replacement sashes. The westernmost and easternmost windows at second-story level have period-1 upper sashes and period-3 lower sashes.

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[1] Judging by the different amounts of discoloration on the aluminum sash tracks, some of these replacement sashes may have been introduced later than the others.

North Side

Originally this wall had one basement window at the east end, seven windows at first-story level, and eight windows at second-story level. Figure 18 depicts the windows today. The basement window remains, but it has been boarded up. The two westernmost first-story windows were lost when the north addition was built. All eight second-story windows remain intact. All of the window openings except the one in the basement contain period-2 replacement sashes.

All of the north-wall windows have wire screening fastened over them, probably to keep the glass from being broken by golf balls.

East Side

None of the windows in the east wall are aligned with any other window on that wall. This is primarily due to the location of the chimney on the interior of that wall. One window is located at first-story level at the north end of the wall. Judging by figure 4, this is an original window; a comparable original window at the south end of the wall was removed, probably when the east extension was built. There are three original window openings at second-story level, but none of them line up with the first-story window. The attic story has a single original window opening, which is not aligned with either the second-story windows or the peak of the gable roof (see figure 30). All of the window openings hold replacement sashes.

North Addition

West Side

The west wall of the addition contains a wide window opening holding a pair of windows with double-hung, two-over-one sashes. The age of these windows is not known. The window opening is flanked by shutters.

South Side

There are no windows in the south wall of the north addition.

North Side

There are a number of windows in the north wall of the north addition, none of which appear to be of any historical significance. The west end of the wall displays a pair of single-light round-arched windows. The center of the wall contains two double-hung, nine-over-one windows. These are the remnants of a picture window that formerly sat here; the large, center window was removed (to provide better interior display conditions), and its former location was closed up and shingled. The extreme east end of the wall has a double-hung, one-over-one window next to the doorway.

East Side

There are no windows in the east wall of the north addition.

North-Addition Shed

West, South, and North Sides

None of these walls contains any windows.

East Side

The east wall of the shed contains three windows (see figure 22). Two small windows are located in the larger portion; these have single-light casement sashes. One larger window sits in the smaller, connector portion; it holds a nine-light casement sash.

Roofs

Main Building

The gable roof of the main building has an open soffit that overhangs approximately 1 foot to 18 inches. The overhang at the west and east ends of the roof is supported by rake outriggers. The overhang of the south and north sides of the roof is carried on the exposed ends of the roof rafters. Wooden closure boards set at an angle to the plane of the wall are located between the rafter ends. Wooden closure pieces set flush with the plane of the wall are located between the rake outriggers. The ends of the outriggers and rafters are finished with a cornice composed of a fascia topped by a cyma-recta crown molding (see figure 31). The roof covering is currently asphalt shingles.

It is important to note that there never was a proper drainage system for the building. No gutters, downspouts, drain pipes, or cisterns were installed originally. It apparently was believed that the ground was sufficiently porous to absorb all rain and storm water. Later, one gutter and a downspout were added to the west porch, and a French drain was installed recently along the south side of the main building. The latter will be discussed in more detail in Chapter V.

West Porch

The hipped roof of the west porch has an overhang of 18 inches. Its exposed rafter ends are covered with a simple fascia board. A wooden gutter is hung on the face of this board. The gutter is pitched south to north to encourage water drainage. At the north end of the gutter, a metal leader protrudes from the bottom of the gutter, but the downspout into which it fed is missing. The roof covering is currently asphalt shingles.

North Addition

The shed roof of the north addition has a pitch different than that of either the main building or the west porch. Its outer edge is trimmed with a cornice that consists of two fascia boards, with no crown molding.

North-Addition Shed

The shed-type roof on both sections of the shed is pitched toward the east, where it overhangs. A fascia board edges the roof, except where the lower ends of the roof rafters are exposed. The roof covering is currently asphalt shingles; there is metal flashing where the west edge of the roof abuts the east wall of the north addition.

Chimneys

There are two chimneys on the Highland House. One is located on the east wall, just south of the roof ridge. The other sits on the north wall of the main building, somewhat east of the northwest corner. Both are original. However, the north-wall chimney was shortened prior to 1966, and the painted metal spark arrester atop it was added at that time.



Figure 21. Main Building, South Foundation Wall: Window and Corbeled Brackets at East End.

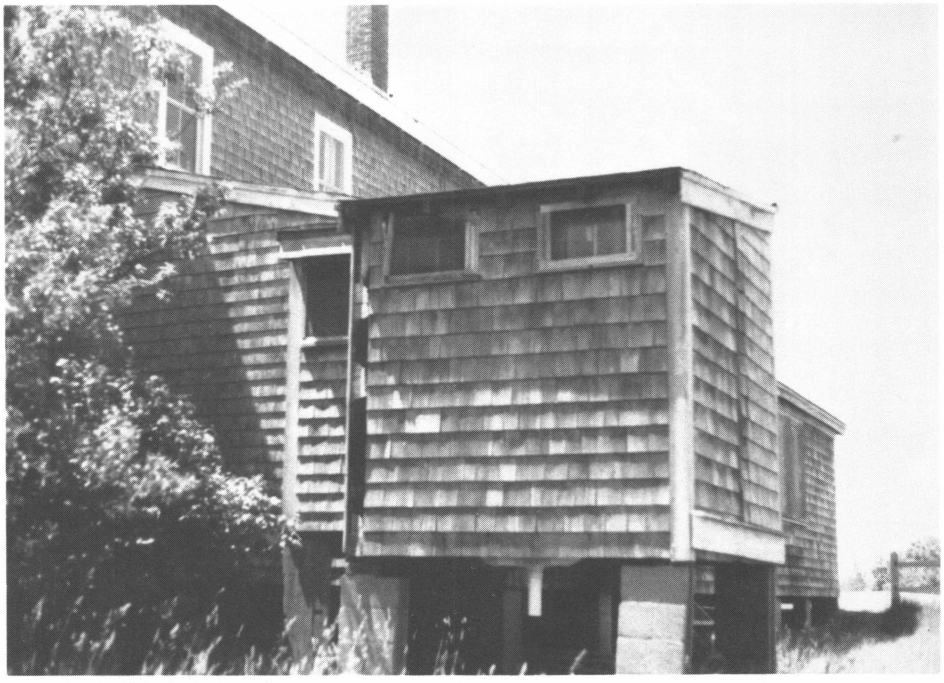


Figure 22. North-Addition Shed: North and East Sides.



Figure 23. North-Addition Shed: Foundation Piers and Plank.



Figure 24. Main Building, South Wall: Decorative Shingled Belt Course.



Figure 25. West Porch: Plywood Deck.



Figure 26. West Porch: Original Turned Posts at South End.



Figure 27. West Porch: Boards Applied to Post Bases.



Figure 28. West Porch: Original Bracket at Northwest Corner and Fascia Board Supporting Gutter.



Figure 29. West Porch: Original Bracket at Southeast Corner.



Figure 30. Main Building, East Wall: Windows.



Figure 31. Main Building: West End of Roof.

INTERIOR ELEMENTS

Basement Story

Plan

The main part of the Highland House has a small but full-height basement under its east end and a crawl space under its west end. The basement was most recently used as a garage.

Basement/Garage

Configuration

The basement consists of a rectangular space just east of the crawl space. There are two alcoves in the west wall that divides the basement from the crawl space. One alcove is located just south of the center of the wall. It is shallow but wide. The function of this south alcove is unknown, but its nicely finished brick corners suggest that it was an original feature. The other alcove appears to have been formed by knocking out a portion of the original west wall (see figure 32). It is located directly opposite the north garage doorway, and so was probably created to provide enough depth for an automobile to park in the basement.

Floor

The basement area has a dirt floor.

Walls

All of the walls in the main basement area are brick. The north, east, and south walls are the exterior foundation walls. The west wall divides the basement from the crawl space to its east. Looking at where part of the north side of this wall was demolished, the wall appears to be two wythes thick.

The walls of the south alcove are of well-finished brick. The walls of the north alcove are haphazardly built. The north wall is the exterior north foundation wall. At a height of about 3 feet above the floor, it steps back 2 feet to create a brick ledge. The west wall consists of a vertical-plank partition covered by plasterboard and bisected by a horizontal beam. Most of the south wall of the north alcove is of the same plank and plasterboard construction with horizontal beam. However, the east end of the south wall is brick, being the back of the south alcove.

All of the brick walls have been painted white.

Ceiling

The ceiling of the basement has been covered with plasterboard.

Doorways

The two garage doorways in the east wall have been described in connection with the exterior. A small, presumably original opening at the south end of the west wall provides access to the crawl space. The opening is located about four feet above floor level, and measures about 2 1/2 feet wide by 2 feet high. It has a door made of vertical beaded boards.

Windows

The south wall has two windows near the east end, while the north wall has one. All three have been boarded.

Chimney

The brick chimney stack rises along the east wall between the garage doorways. It has a capped hole from a former stovepipe about halfway between the floor and the ceiling.

Crawl Space

Due to the slope of the site, the crawl space is about 1 foot high at the west end and 3 feet high at the east end. Two rows of posts resting on footings run east-west and support the lap-jointed wood girders. The rows are 9 feet 2 inches apart. The posts, which are alternately brick and wood, are spaced unevenly.

The remains of three concrete-block posts stand approximately 16 inches from the south wall. These appear to relate to the fact that sections of the south wall's sill have been replaced. Gravel is also apparent along this wall, having washed into the crawl space from the dysfunctional French drain (see Chapter V).

The brick piers were undoubtedly installed when the foundation was built. The wooden posts also appear to be original, being added to strengthen the structure. However, these were too small to perform as expected. It would appear that the building was constructed in a very short period of time, with barely standard materials, by unskilled laborers. Evidence for this includes the lap joints in the girders, which do not have posts below them to support them. Also, grass is growing in the crawl space, which indicates that the foundation of the building was not dug deep enough.

First Story

Plan

The main part of the Highland House contains five rooms: an entry at the west end (room 101); two small offices, created by partitioning off the southwest corner of the main exhibition/former dining room; the main exhibition/former dining room itself (room 104); and the former kitchen area at the east end (room 105). The former kitchen is now a storage room, and its north end has been converted to two rest rooms. The addition along the north side of the building contains two rooms (rooms 102 and 103), and has an irregularly shaped shed-like structure appended to its northeast corner that contains two unused rest rooms.

Common Elements

The same construction details are found in many of the Highland House's first-story rooms. Unless otherwise specified in the descriptions of the individual rooms, the following elements are present in all first-story spaces.

Floors

Most of the floors consist of the original 2-inch-wide maple floorboards laid in a north-south direction. The boards were probably unpainted originally, although they may have been treated with stain.

Walls and Ceilings

The walls and ceilings of most of the rooms are finished with sawn lath boards 2 feet long and two-coat plasterwork. The scratch coat contains hair—probably cow hair—while the finish coat does not. The lower sections of the walls are covered with wainscot with baseboard and cap molding (see figure 33). Most of this wainscot is double-beaded, but some of it is single-beaded. Judging by the locations where both types are found, it seems that the double-beaded wainscot is original. The single-beaded wainscot appears to have been installed as part of alterations made shortly after the original construction date.

Doorways and Windows

Original doorway and window casings remain throughout the first story. These are 4 5/8 inches wide and molded (see figure 34); they have bull's-eye corner blocks at their upper corners. The original wooden doors are four-paneled, with the top two panels being much longer than the bottom two.

Entry and Stairwell (Room 101)

Configuration

The entry occupies the entire west end of the main building. The stairway to the second story is located in its southwest corner. The stairway is L-shaped, with an open stringer. A run of 10 steps ascends along the west wall to a landing in the southwest corner. From the landing, seven more steps ascend the south wall to the level of the second floor.

Entry

Walls. All four walls feature original double-beaded wainscot 3 feet high. Above the wainscot, the west and north walls retain their original plaster. The south and east walls have simulated wood paneling above their wainscot. Presumably, the original plaster walls remain behind this paneling. The same type of paneling has been applied to the diagonal chimney breast of the northeast-corner fireplace. A piece of plywood has been affixed to the south wall just west of the window in this wall (figure 33, top). Below this plywood is a section of single-beaded wainscot (figure 33, center) that appears to be a patch in the original wainscot (figure 33, right). This is evidence that the single-beaded wainscot is not original. The patch remains from the closure of a former exterior doorway (see figure 13).

Ceiling. The ceiling of the entry consists of the original plaster. It is rimmed with a picture molding in cornice position (see figure 35).

Doorways. There are several doorways in the entry. The original main entrance sits in the center of the west wall. It retains its original casing; its single, six-panel door has already been described.

A wide original doorway in the center of the east wall leads to the main exhibition/former dining room. It initially held two doors; only the north door remains in place today, but it does retain its original hardware. The other door is stored in the main exhibition room.

A single doorway is located in the center of the north wall. Today it leads to the west room in the north addition (room 102). Its casings are original; its door consists of two narrow French doors hinged together, to make a single bi-fold door. It is possible that this doorway is an original opening that led to the porch formerly along the north side of the main building. The age of the French bi-fold door is not known.

A single doorway at the south end of the east wall leads into the front office. The doorway casing is unmolded, which suggests that it is not original. However, it does have original-type corner blocks. The fact that some effort was expended to make the casing resemble the original casings suggests that the doorway, and therefore the office, was created at a fairly early date. The unpainted four-panel door in the doorway appears to be original; it may have been moved here from another location.

There is also a very small doorway in the diagonal fireplace wall, just to the left of the fireplace. This doorway is about 6 inches wide and 3 feet high. It presumably leads to a small

storage area. The doorway has an unmolded casing with original-type corner blocks, and so is thought to be original. It has a plain door.

Windows. The entry has two original window openings in its west wall and one in its south wall. The sashes in these openings are period-2 replacements.

Fireplace. The northeast corner features a large original fireplace made of cobblestones with a wood mantel shelf. One oval bas-relief plaque resembling green-and-white Wedgewood ware is embedded in the stonework at each upper corner. The scene depicts the Highland Light, and is so labeled.

Finishes. The floor is painted brown. The plaster on the north and west walls of the entry is wallpapered. All of the woodwork has been painted white.

Electrical Fixtures. Three hanging lamps dangle from wooden wire mold that runs both north-south and east-west on the ceiling.

Stairwell

Walls. The upper portions of the stairwell's west and south walls consist of wallpapered plaster, while the lower portions are covered with wainscot (see figure 36). This wainscot differs from other wainscot in the building, but still appears to be original. It consists of double-beaded recessed panels framed by stiles and topped by a cap molding. The wainscot is 3 feet high along the two runs of steps, but only 2 feet 9 inches high at the landing.

Ceiling. The ceiling consists of original plaster rimmed by a wood picture molding in cornice position.

Windows. There is one window in the west wall of the stairwell at second-story level. Its two-light top sash is original; its two-light lower sash is a period-1 replacement. The sashes are separated by a parting beaded and outfitted with sash weights.

Treads, Risers, and Balustrades. Each tread is 3 feet 10 inches long and 9 and 3/4 inches deep. Risers are the same length and 8 inches high. (The measurements of the treads and risers are close to the traditional and standard ration of $r+t=17$.) Each tread has a nosing that protrudes approximately a quarter of an inch. The landing measures 3 feet 10 inches square.

The stairway features a balustrade of five sections. There is one section along each run of steps, and one along each of the three edges of the stairwell at second-story level (see figure 37). The balustrade has turned balusters and a molded handrail with flattened top. The sections of balustrade are supported by six newels—one at first-story level, one on the landing, and four at second-story level. The first-story newel is different than the other newels. It is ornately carved, featuring a flower motif and a cap-like finial; they are turned, with ball finials. The first-story newel thus appears to be a replacement, although further investigation should be undertaken before any action is taken.

Closet. There is a closet located under the stairway to the second story. It appears to be an original feature, especially considering the original casing around its doorway. (The plain door is later.)

Finishes. As stated previously, wallpaper covers the areas of plaster on the west and south walls above the wainscot. The first-story newel of the stairway is painted, while the other newels and the balustrades are not. The treads are painted brown. The risers formerly were painted brown, but are now white.

Protection Systems. The ceiling of the stairwell has a smoke alarm attached to it above the landing.

Offices

Configuration

The southwest corner of the main exhibition room is partitioned off to form two small rectangular offices. Neither office communicates with the exhibition room; the front west room connects with the entry, while the rear east one connects with the front office.

Personal remembrances indicate that the front office was extant before 1921, while the rear one was added by the Truro Historical Society.[2] The physical evidence, which is shown in figure 38, suggests that the front office:

- was probably created soon after the original construction period;
- initially had walls that did not extend all the way to the ceiling;
- included a counter-type opening in the north wall; and
- had its walls extended to the ceiling, and its north-wall opening closed up, by the Truro Historical Society.

Front Office

Floor. The original floorboards have a distinct wear mark on them at the east end of the north wall. This is the primary reason that the north wall is thought to have contained a counter-type opening for many years.

Walls. Differences in the construction of the office's walls are the main clues that the office was not original. The west and south walls consist of original double-beaded wainscot topped by plaster. The wainscot measures 2 feet 11 1/4 inches high. It matches the wainscot used in the original dining room, confirming that these walls were originally part of the dining room.

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[2] Telephone interviews conducted by Larry Lowenthal with Irving Horton, and with Joe Colliano and Bill Hastings, Nov. 6, 1992.

The east wall consists of three different materials. The lower portion is covered with single-beaded wainscot. The middle portion consists of vertical planks to a height of about 7 feet, while the upper part is of plywood. (The area just north of the doorway to the rear office is covered with double-beaded wainscot. This is assumed to be original reused material, but its origin is unclear.) The single-beaded wainscot is found associated with early but not original features elsewhere in the house. Its presence on the east wall of the office is the primary reason the office is thought to be early but not original. The age of the vertical boards is less certain. They may date to the construction of the office, or from a subsequent remodeling. The plywood clearly was added during the Truro Historical Society period.

The north wall is somewhat similar to the east wall. The lower portion consists of unfinished horizontal planks. Their unfinished condition, and a gap in the adjacent west wall, suggests that these planks were initially faced with wainscot (probably single-beaded) that has since been removed. The portions of north wall above the horizontal planks match those of the east wall; i.e., vertical planks to a height of about 7 feet, and plywood from there to the ceiling.

The west wall contains a small pass-through, as well as a shelf mounted on metal brackets. Such shelves were originally present in all of the second-story guest rooms, but these have since been removed. The north and east walls are largely covered with bookshelves. A baseboard 7 1/2 inches high encircles the room.

Ceiling. The pressed-metal ceiling in the front office is identical to the original ceiling in the main exhibition/former dining room (see figure 39). The west and south walls feature the pressed-metal cornice that accompanies the ceiling in the main room, while the east and north walls do not. This situation is interesting, but it does not reveal the age of the front office, because the office's walls did not initially extend to the ceiling. A gap between the cornice and the wallpaper on the south wall may indicate that there was a picture molding here until recently.

Doorways. The only doorway of the front office sits at the south end of the west wall. It leads to the entry. Its casing is plain, with plain corner blocks. As indicated previously in "Entry," the use of corner blocks similar but not identical to original ones suggests that the office is an early but unoriginal feature. The doorway's door has been described in connection with the entry.

Windows. There is one original window opening in the south wall. It contains period-2 replacement sashes.

Electrical Elements. A new fluorescent ceiling fixture has been installed here. An electrical box has been installed on the west wall, just below the pressed-metal cornice.

Finishes. All of the woodwork, including the wooden portions of the walls and the book shelves, are painted white. The plaster wall areas above the wainscot are wallpapered. The metal ceiling is also painted white.

Rear Office

Since this space was created by the Truro Historical Society, little physical investigation was performed here. Worth noting was the composition of the west wall, which is the east wall of the front office. This wall faced the dining room during most of the resort era (from the time the front

office was constructed until the time that the rear office was built). Most of its lower portion consists of single-beaded wainscot, as would be expected. The area nearest the doorway to the front office consists of double-beaded wainscot. (It backs up to the section of double-beaded wainscot on the east wall of the front office.) As with that section, the double-beaded wainscot is assumed to be original reused material of unclear origin.

Main Exhibition/Former Dining Room (Room 104)

Configuration

The exhibition room is basically rectangular, except that its southwest corner was partitioned off to form small front and rear offices that connect to the entry.

Walls

Most of the walls of room 104 are original. They consist of double-beaded wainscot 3 feet high topped by plaster. The partitions in the southwest corner forming the two small offices consist mostly of vertical planks topped by plywood, as discussed previously in connection with the offices. A plywood panel has been fastened to the south wall between the first and second windows from the west end, so that paintings could be hung there.

Ceiling

The ceiling in the exhibition room is divided by longitudinal beams into three sections. The two outer sections are of equal width while the middle section is narrower. The beams, which are cased in pressed metal, support the second story without the aid of columns. (As stated previously, these are suspended by metal rods from the trusses in the attic.) It is likely that these beams consist of cast iron. This is based upon the fact that these beams span a very long distance, that they are strong enough to hold up the second story, and that such construction was commonly used for mills and other large spaces at the time the Highland House was built. The removal of a piece of the pressed-metal casing would be needed to prove this thought.

The entire ceiling, including the longitudinal beams, is covered with pressed-metal panels painted white (see figure 39). It is rimmed with a related pressed-metal cornice, also painted white. This cornice is absent from the walls of the front and rear offices (see figure 40), which are not original.

A wooden picture molding runs around the room below the cornice (see figure 39). It does continue onto the walls in the southwest corner, which suggests that it was installed after the office was created.

Doorways

The wide doorway in the west wall, leading to the entry, displays its original casing. Its one remaining door has been described in connection with the entry.

The west end of the north wall contains two doorways. Both of these lead to the north addition's east room (Room 103). The west north-wall doorway is somewhat wider than a standard doorway. It has a molded casing with bull's-eye corner blocks (see figure 41). The top member of the casing displays the same profile as original casings elsewhere, and is pieced. This member and the corner blocks appear to be original reused material. The side members of the casing are molded, but they do not match the original casings; they thus are probably replacement material. There is no door here now, but there is a stop, as well as three hinge mortises in the west jamb. It is possible that this doorway was created by widening an original doorway that led to the porch formerly along the north side of the main building.

The east north-wall doorway is very wide. It has an unmolded casing with no corner blocks, doors, stops, or hinge mortises. It thus seems to be a completely modern alteration.

The east wall of the main room also contains two doorways. The doorway at the north end leads to the new rest rooms that were partitioned off from the original kitchen. The doorway toward the south end leads to the remainder of the former kitchen, now a storage room (room 105). Both of these doorways have original-type casings, and so are thought to be original doorways from the dining room to the kitchen. Both doors now have plain plywood doors.

Windows

There are three original window openings in the north wall and five in the south wall. Presumably there were originally five windows in the north wall, with two of them having been lost when the north addition was built. All windows contain period-2 sashes.

China Closet

There is a built-in wooden china closet at the north end of the east wall that may be original. It probably held dishes and glassware when the room functioned as a dining facility. This feature was most likely unpainted.

Lighting Elements

Wooden wire mold has been installed all along the north and south walls approximately halfway up the wainscot, to supply evenly spaced electrical receptacles. Fluorescent-light ceiling fixtures running east-west have been installed on the two outer sections of the ceiling.

Finishes

The plaster walls are wallpapered. All of the woodwork has been painted white, except for the picture molding, which has been painted gray to match the wallpaper. Original elements such as the west-wall doorway and door and the china closet would have had a natural finish originally.

North-Addition West Room (Room 102)

Floor

The floor in this room is covered with 12-inch-square vinyl tiles.

Walls

The west wall is plastered. The south wall has a "wainscot" of simulated-wood paneling 3 feet 5 inches in height, including the baseboard and cap molding. Above the wainscot is plaster. The north wall is completely paneled with the same material. The east wall is also covered with simulated-wood paneling. However, since this wall was built after the north addition was constructed, it has a slightly different appearance. (The grooves between the panels are wider and darker on the east wall.) Baseboards are 3 7/8 inches high. Large display cases cover the west end of the north wall.

Ceiling

The ceiling is covered with new plasterboard. A narrow strip of wood encircles the room in cornice position.

Doorways

There is only one doorway, at the east end of the south wall. It leads to the entry. It has an unmolded casing; its French door has been described in connection with the entry.

Windows

The pair of windows centered in the west wall, and the pair of round-headed windows in the north wall, have unmolded casings. Their sashes have been discussed as exterior elements.

Finishes

The south-wall plaster is wallpapered. The woodwork, excluding the paneling, is painted white.

North-Addition East Room (Room 103)

Floor

The floor is covered with sheets of plywood measuring 8 by 4 feet.

Walls

As in room 102, the south wall has a wainscot of simulated wood paneling 3 feet 5 inches high and topped by plaster. The north and east walls are completely covered with the same paneling. The west wall has similar but later paneling of a slightly different appearance.

Ceiling

The ceiling has been covered with plasterboard.

Doorways

The south wall contains two doorways, both of which lead to the main exhibition/dining room. The west doorway has an unmolded casing displaying a horizontal butt joint at its upper corners. The unmolded casing of the east doorway has mitered upper corners.

An exterior doorway is located at the east end of the north wall. It has an unmolded casing and a modern six-panel door. The north end of the east wall features another doorway, which leads to the old rest rooms in the north addition's shed. This doorway also has an unmolded casing. Its six-paneled door is different from other Highland House doors. Its panels are arranged, from top to bottom, as follows: a medium-size horizontal panel, a large vertical glazed panel, two small panels side by side, a medium-size horizontal panel, and another medium-size horizontal panel.

Windows

The west half of the north wall contains two double-hung windows. They are the remnants of a picture window that formerly sat here; the large, center window was removed to provide additional wall-display area. The continuous lintel of the picture window was removed, but the continuous sill remains. The two windows have unmolded casings. At the extreme east end of this wall is another double-hung window with unmolded casing. It appears to be a fairly recent addition.

Electrical Elements

Three fluorescent-light fixtures with double tubes have been installed on the ceiling.

Finishes

The floor has been finished with stain. The plaster portion of the south wall (above the wainscot) is covered with a layer of wallpaper.

North-Addition Rest Rooms

Configuration

The shed appended to the northeast corner of the north addition, which contains two old rest rooms, is L-shaped. As explained in the exterior description, a small connector section links the doorway from the addition with a larger section containing two toilet stalls.

Floor

The floors of both sections consist of painted boards approximately 3–6 inches wide.

Walls

The south and east walls of the connector section are of painted plywood. The west and north walls of the rest-room section are plaster covered with wallpaper. The partition between the toilet stalls is painted plywood. The other walls of the stalls consist of what appears to be plaster below and painted simulated-wood paneling above.

Ceiling

The ceilings of both portions consist of painted boards approximately 3–6 inches wide.

Doorways

The doorway to room 103 has a plain casing. The elaborate six-panel door here has raised panels on this side. The doorways to the two toilet stalls also have plain casings. There are no doors here now, although one four-panel door is stored here. The two stalls probably had the type of partial doors usually employed for toilet stalls, judging by the locations of hinge mortises on the doorway jambs.

Windows

The three windows in the east wall—one in the connector and one each in the toilet stalls—have been described as exterior elements.

Fixtures

Both toilets and the sink have disappeared.

Storage Room/Former Kitchen (Room 105)

Floor

The floor in the storage room consists of the original wooden floorboards. A section of brick flooring exists along the east wall, just north of the chimney (see figure 42). The section measures approximately 3 square feet. It probably was the base for the kitchen stove.

Walls

Extensive alterations have caused the loss of much early wall fabric in this area. However, enough remains to give some idea of the kitchen's early appearance. Single-beaded matchboard wainscot topped by plaster exists on the west wall, and on the chimney stack on the east wall. As stated previously, this type of wainscot is found elsewhere in the house associated with very early alterations. This suggests that the kitchen also was altered at that time, perhaps in conjunction with the addition of the east extension. Alternatively, it is possible that the single-beaded wainscot was an original feature in Highland House service areas such as the kitchen.

The west wall has, embedded in the plaster above its wainscot, a large section of single-bead matchboarding oriented so that the boards run horizontally. Numerous marks of shelf brackets on the horizontal matchboarding indicate that its function was to support multiple shelves. This matchboarding is embedded in the wall plaster, so it is either original or early material. There is also a small pass-through, now blocked up, at the south end of the west wall.

Most of the original sawn lath and plaster has been removed from the south wall. The exposed original wall studs display the horizontal stripes characteristic of sawn lath and plaster (see figure 43). This striping is most prevalent at the west side of the wall. Plywood has been installed to an approximate height of 6 feet at the east end of this wall. As described below in "Doorways," this covers a former doorway to the southeast ell.

The north wall of the room consists of a new partition constructed of 2 by 4 studs and covered on the far side with plywood sheathing. The construction of this partition divided the former kitchen area in two, creating a northern rest-room area and a southern storage area. At its east end, the partition jogs northward, to avoid impacting a window in the east wall.

The chimney on the east wall has influenced the treatment of the wall area around it. Brickwork covers an area of the wall just north of the chimney to a height of approximately 4 feet 2 inches. It no doubt was installed to protect the wall from the heat of the stove located here.

Ceiling

The ceiling consists of plasterboard. It covers the lath of the original plaster ceiling, which can be seen through holes in the plasterboard (see figure 44).

Doorways

The west wall contains the doorway leading from the main room. It has an original-type casing and a plain plywood door. As stated in connection with that room, this doorway is thought to be an original doorway between the dining room and the kitchen. A closed-up doorway sits at the east end of the south wall. This doorway led to the former southeast ell, which was demolished in July 1982.

Windows

Two small boarded-up windows are located in the east wall: one just south of the chimney, the other at the north end of the wall, in the jog described above in "Walls." The date of these windows is unclear. They have original-type casings, and so would seem to be original. However, the earliest photographs (e.g., figure 4) do not show either of these windows. Two original windows are seen in this wall, but they sit at the extreme north and south ends of the wall. (The north window remains in the adjacent rest room; the south window has disappeared completely.) The two small windows may have been created when the east extension was built, to provide a way of passing dirty dishes over the kitchen counters to the dish-washing area in the extension. More research would be helpful in understanding these windows.

Chimney

An original chimney stack protrudes from the north half of the east wall. It appears that the three sides of the stack were at some point finished like the walls, i.e., with single-beaded wainscot topped by lath and plaster. This is based upon wainscot and plaster that remain on the west and south walls of the chimney. Later, the wainscot area on the north side of the chimney was covered with brickwork, along with the adjacent east wall. The plaster areas on the west and north sides of the chimney also appear to have been replaced by thin plasterboard. The south side of the chimney appears to retains its original plaster.

Plumbing and Electrical Elements

Many pipes and wires are extant in the storage room.

Northeast-Corner Rest Rooms

General Information

These rest rooms were created by the construction of the partition wall across the north end of the former kitchen. The rest rooms were installed recently by the Truro Historical Society in conformity with regulations pertaining to public buildings.

Configuration

The doorway from the main exhibition/former dining room opens into a small vestibule. The smaller, men's room is situated north of the vestibule; the larger, ladies' room is located east of the vestibule.

Floors

The floors consist of sheet vinyl.

Walls

The north walls of both the men's room and the ladies' room, and the east wall of the ladies' room, were originally part of the kitchen. The portions of these walls above the suspended ceiling consist of lath and plaster. Below the suspended ceiling, the upper portions of all of the walls are plywood that has been painted white. The lower portions of the walls are covered with sheets of composition material laminated with a plastic, waterproof coating.

Ceilings

The ceilings are suspended ceilings that hold acoustical panels.

Doorways

The doorway from the vestibule to the main exhibition/former dining room has an original molded casing and a plain modern plywood door. As stated previously, this doorway is thought to be an original doorway between that room and the kitchen. The modern doorways to the two rest rooms have plain casings. The door to the men's room is a reused four-panel door; the one to the ladies' room is a plain modern door.

Windows

The north wall of the men's room contains an original window opening with original casing and period-2 replacement sashes.

Fixtures

Each rest room contains a modern sink and toilet.

Second Story

Plan

Access to all second-story rooms is provided by a main hallway (room 201) that runs the length of the second story. It consists of three distinct sections: a central, east-west corridor that links an L-shaped hall in the southwest corner and a straight, short hall in the southeast corner. The southwest hall abuts the stairway to the first story. The central corridor provides access to all of the guest rooms and one of the second-story rest rooms. The southeast hall serves the other second-story rest room, the stairway to the attic, and a linen closet. It formerly also provided access to the southeast ell, now demolished.

The reason that the southwest hall is L-shaped, is that it has to circumnavigate a small guest room (room 202) centered along the west wall of the building. Eight more guest rooms are located along the north side of the central corridor, while six guest rooms and a rest room are situated along the south side. The guest rooms vary in length, but most are 12 feet 6 inches deep. (The west-end room is shallower.) Several rooms communicate with one another via doorways inside the rooms.

During the hotel years, the guest rooms were identified by means of metal numbers on the corridor doors. Most of these remain, so it is possible to discern the numbering sequence. The small, west guest room was number 1; the eight rooms along the north side were numbers 2–9. A southwest corner room, now cut up into two rest rooms and the southeast hall, was number 10. The six rooms remaining along the south side were numbers 11–17. (Due to trixidicaphobia, there was no room 13.)

There has been some thought that room 202 was a later alteration, created by partitioning off part of an originally larger area at the west end of the corridor. (This larger area—located at the top of the stairway—could have been a gallery or sitting area for guests.) The evidence for this is the fact that the south wall of room 202 runs right next to, but is completely independent from, the stairway balustrade (see figure 37). If the wall had been original, it is logical that the balustrade would have been connected to it.

However, room 202 is included in the early room-numbering system, and it contains original-type woodwork elements. An alternative explanation for the freestanding balustrade might be this: that, during the construction of the Highland House, all of the guest rooms were partitioned off after the second story was outfitted with woodwork items such as the stairway balustrade. There are at least two other places where it appears that original room partitions were erected after window casings had been installed.

It is virtually certain that the southeast hall and the two rest rooms are not original. The physical evidence suggests that they were created early in the life of the building by dividing up original guest room 10. The evidence includes the fact that room 10, which should be located in the southeast corner of the building, is now missing from the numbering sequence. Also, the southeast hall and the rest rooms contain early, but not original, woodwork. It is not known how access was

maintained to the attic stairway on the east wall of the hall, and to the south-ell doorway at the east end of the hall's south wall.

Common Elements

As on the first story, identical construction details are found in most of the Highland House's second-story rooms. Unless otherwise specified in the descriptions of the individual spaces, the following elements are present in all second-story areas.

Floors

The finish floors consist of original 2 1/2-inch wide maple boards in various lengths, laid in a north-south direction. Based upon observation of the underside of the floors (see figure 44), no subflooring was used on the second story.

Walls

Most second-story areas do not have wainscot on the lower portions of their walls. The walls are entirely of plaster, constructed in the same manner as those at first-story level: sawn lath covered with two coats of plaster, the first one containing hair. The lath boards are 1 inch wide and 2 feet long. The walls are trimmed with baseboards. Those in the main hallway are 7 inches high; those in the guest rooms are 8 inches high. Each guest room also had one wooden wall shelf mounted on metal brackets, similar to the one remaining in the front office. These all have since disappeared, but the outlines of their brackets remain (see figure 45).

Ceilings

Originally, all of the rooms at second-story level had plaster ceilings. These remain in some of the rooms.

Doorways

Most of the doorways exhibit original casings with bull's-eye corner blocks, like those on the first story. The doorways between the corridor and the guest rooms have original transom windows above them, for ventilation (see figure 46). These transom windows retain their original operating mechanisms. Most of the doors in the doorways are also original, displaying two long upper panels and two lower shorter panels (see figure 47). The original hardware still exists on most doors, including their early room numbers.

Windows

All of the window openings are original. They measure 5 feet 2 inches high by 3 feet 10 inches wide. All of the casings are original; these are 4 7/8 inches wide, with the same bull's-eye corner blocks as the doorway casings. Nearly all of the sashes are period-2 replacements, which use aluminum sash tracks instead of counterweights. Unless otherwise specified in the individual room descriptions, these are present in all second-story windows.

Closets

All of the guest rooms contain a closet. Most of these closets are triangular corner closets (see figure 48); two are rectangular. All of the closets are approximately 7 feet high. Their walls are sheathed with 2-inch-wide beaded boards, most of them unpainted. The closet doorways have no doors, but only curtains hanging in the openings. Many of the closets retain an original wooden board with original hooks (see figure 48). These hooks have two prongs and a raised heart decoration in their center.

Finishes

The floorboards were unpainted originally, but probably finished with a dark stain, as they are today. The plaster walls are covered with wallpaper. The paper in the guest rooms has been painted over; the color of the paint is different in each room. The ceilings—whether original plaster or later plasterboard—also are painted. Most of the woodwork retains its original type of treatment: a dark stain with a clear finish, probably varnish.

Electrical Fixtures

Each guest room has one bare-bulb fixture in the center of its ceiling. These are activated by means of a pull string.

Main Hallway (Room 201)

Southwest Hall

Configuration. The portion of the main hallway that extends into the southwest corner of the second story consists of two areas: the stairwell to the first story, and what is here called the southwest hall. The elements of the stairwell have been described in connection with the first-story entry (room 101).

Walls. The southwest hall is bounded on the west by the stairwell and the east wall of room 202; on the north by the central corridor; on the east by the west wall of room 218; and on the south by the south exterior wall of the building. A modern stud-and-plywood partition has been built across the southwest hall, in line with the south wall of room 202. The purpose of this partition, which holds a doorway (see below), is to permit the second story to be closed off from the rest of the building.

Ceiling. The portion of west wall shared with room 202 is missing the current wallpaper from a strip along its top, which indicates that a picture molding was formerly used here.

Doorways. The doorway in the modern partition described above holds an original-type four-panel door that apparently was moved here from elsewhere. It is missing its doorknob.

Windows. One window sits in the south wall of the southwest hall. Its two-light upper sash is a period-1 replacement; its one-light lower sash is a period-3 replacement. The sashes are separated by a parting beaded and outfitted with sash weights.

Finishes. The walls are papered with a scenic wallpaper rendered in shades of brown.

Central Corridor

Floor. The floorboards in the corridor are laid in an east-west direction. A carpet runner that measures 2 feet 3 1/2 inches wide covers the center of the corridor. It has a 3-foot-wide rubber mat beneath it.

Walls. The central corridor is bordered on the west by the southwest hall and on the east by the southeast hall.

Ceiling. A small remnant of picture molding in cornice position survives on the north wall between the doorways to rooms 203 and 204. This is further evidence that a picture molding was formerly used in the main hallway.

Doorways. The north and south walls of the central corridor are lined with doorways to the guest rooms, and to rest room 211.

Electrical Elements. There are electrical outlets just outside rooms 213 and 218.

Southeast Hall

Configuration. As stated previously, it is thought that the southeast corner of the second story was occupied by an original guest room, which was subdivided at an early date into rest rooms 211 and 212 and the southeast hall. Also at some point, a shower stall was installed in the northeast corner of the hall, in the vicinity of the window north of the chimney stack. The extant evidence suggests that the enclosure for the shower was triangular, but its relationship to the surrounding walls and windows is unclear.

Floor. Apparently a carpet once covered the center area, because this portion of the floor never received stain. At one time there was a shower stall located in the northeast corner. Extant evidence for the shower enclosure includes pieces of linoleum floor covering and three holes in the floor—two for supply lines and one for the drain.

Walls. The west wall has plaster above a single-beaded wainscot 3 feet 5 1/2 inches high, including cap molding. Presumably this wall dates to the subdivision of guest room 10; the presence of single-bead wainscot suggests an early date for this work. Although the south wall is an original wall, it displays the same type of woodwork as the west wall, and so probably was redone when the latter was created. The east wall has the single-beaded wainscot covering the entire area below the attic stairway, to form a storage cupboard. Farther north, the chimney stack projects from the east wall; it is plastered. North of the chimney, pieced-together baseboards recall the installation and subsequent removal of a shower stall, and perhaps other alterations, as well.

Ceiling. The ceiling in this portion of the main hallway has been covered with plasterboard.

Doorways. The southeast hall contains three doorways. One, at the east end of the south wall, formerly led to the southeast ell. The doorway appears to be original: it has an original-type casing, and the flooring is continuous under the threshold.[3] This evidence supports the theory that the southeast ell itself was original. The door here is four-paneled, but is a little different from the original four-panel doors. (Its panels are slightly raised.) It thus may have been introduced when former room 10 was subdivided.

The same type of door is seen in the doorway into the linen closet at the west end of the south wall (see "Linen Closet," below), and in the west-wall doorway to rest room 212. Both of these doorways are thought to date to the subdivision of guest room 10. The linen-closet doorway has no casing, while the rest-room doorway has a plain casing.

Two small, beaded-board doors with original-type hardware sit in the beaded-board sheathing enclosing the area below the attic stairway on the east wall. They provide access to the storage cupboard under the stairway.

Windows. The southeast hall has two windows: one at the north end of the east wall, which sits in a recessed area just north of the chimney, and one at the south end of the wall, above the bottom of the attic stairway.

Attic Stairway. The stairway leading to the attic ascends the east wall of the southeast hall. It has 12 steps that are 2 feet long. The risers are 8 1/4 inches high, while the treads measure 7 1/2 inches deep. A board 10 1/2 inches high runs up the wall alongside the stairway; the wall above this is plastered. Along the west side of the stairway, beaded, tongue-and-groove boards of varying width descend to the floor to enclose the area under the stairway. As stated above, a small doorway in this boarding provides access to the area.

Linen Closet. A linen closet with walls of 2-inch tongue-and-groove beaded boards projects from the west end of the south wall of the southeast hall. It does not extend up to the ceiling, and has a crown molding around its upper edge. As stated above, the closet is thought to be early but not original. Its doorway has been described in "Doorways."

Guest Rooms (Rooms 202–210 and 213–218)

Room 202

This is the west-end guest room, called number 1 when the hotel was last operational.

Walls and Closet. Original-type baseboard molding survives on all four walls. The marks of brackets for a wall shelf are visible on the west wall. A triangular closet sits in the southwest corner of the room.

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[3] Research performed by Stephen Spaulding, currently Supervisor of the Building Conservation Branch of the Cultural Resources Center, North Atlantic Region.

Doorways. The doorway to the corridor sits at the north end of the east wall. Another doorway, at the west end of the north wall, leads to room 203. The doorway and window casings are original-type material, and they retain their original unpainted appearance. The door has been removed from the doorway to the central corridor.

Windows. The west-wall window in this room retains its original two-light upper sash and original one-light lower sash. These are painted red.

Room 203

This large corner room was known as room 2.

Walls and Closet. The marks of brackets for a wall shelf are visible on the north wall. A triangular closet sits in the northwest corner of the room.

Ceiling. The ceiling has been covered with plasterboard.

Doorways. This corner room has three doorways. The doorway to the corridor is centered on the south wall. A doorway to room 202 sits at the west end of the same wall. Another doorway is located at the north end of the east wall; it leads to room 204. It lacks its doorknob, but the rest of its hardware is intact (see figure 47).

Windows. The west-wall window in this room retains its original two-light upper sash and original one-light lower sash. The north-wall window has period-2 replacement sashes.

Finishes. There are two layers of wallpaper on the plaster walls.

Room 204

This small room was formerly known as room 3.

Walls and Closet. The north exterior wall features a chimney stack that has been finished like the walls. A circular plate on the north face of the chimney recalls the former presence of a flue thimble for a stove. The marks of brackets for a wall shelf are visible on the west wall. A rectangular closet is located on the north wall, just south of the chimney.

The east wall covers over the east side of the casing of the north-wall window. This type of situation would normally indicate that the wall was a later addition. However, the closet on the opposite side of the wall, in room 205, appears to be original and intact. It appears instead that the room-dividing partitions were built after the window casings were in place.

Ceiling. The ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor sits at the west end of the south wall. Another doorway, to room 203, is located at the north end of the west wall.

Windows. There is one window, at the extreme east end of the north wall.

Finishes. The baseboard and doorway and window casings have been painted.

Room 205

This room was formerly known as room 4.

Walls and Closet. There are no visible marks left by brackets for a wall shelf. A triangular closet sits in the northwest corner of the room.

Ceiling. The ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor is located in the east half of the south wall. The transom of this doorway is missing its glass, and its operating mechanism has become detached.

Windows. One window sits at the extreme east end of the north wall.

Finishes. The wall color of the bottom half of the east wall is lighter than that of the top half. This might be attributable to a piece of furniture having sat there long enough to keep the paint and paper from darkening with age.

Room 206

This room was formerly known as room 5.

Walls and Closet. The marks of brackets for a wall shelf are visible on the west wall. A triangular closet sits in the northwest corner of the room.

Doorways. The doorway to the corridor sits in the east half of the south wall.

Windows. A window is located at the east end of the north wall.

Room 207

This room was formerly known as room 6.

Walls and Closet. The remains of brackets for a wall shelf are clearly visible on the west wall. A triangular closet sits in the northwest corner of the room.

Ceiling. The ceiling has been painted recently.

Doorways. The doorway to the corridor is situated in the west half of the south wall. The door here retains its original hardware.

Windows. A window is centered in the north wall.

Room 208

This room was formerly known as room 7.

Walls and Closet. The west wall retains marks of brackets that formerly held a wall shelf. A triangular closet sits in the northwest corner of the room.

Ceiling. The ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor is located just west of center in the south wall.

Windows. A window sits just west of center in the north wall.

Room 209

This is the second-smallest guest room in the building. It was formerly known as room 8.

Walls and Closet. Where the west wall meets the south wall, it partially covers the casing of the south-wall doorway to the corridor (see figure 49). This seems attributable to the fact that this wall is unusually thick—about 8 inches. The west wall also retains marks of brackets that formerly held a wall shelf. A rectangular closet is located at the north end of the east wall.

Ceiling. The ceiling has been covered with plasterboard.

Doorways. As stated above, the doorway to the corridor sits at the extreme west end of the south wall. Another doorway at the north end of the east wall communicates with room 210. The door in the doorway to the corridor is missing its number, but the outline of it remains.

Windows. A window sits just west of the center of the north wall.

Room 210

Room 210 is the large northeast corner room. It was formerly known as room 9.

Walls and Closet. The east end of the south wall jogs slightly inward. The reason for this appears to have been to avoid obstructing the east-wall window in the central corridor. The west wall retains marks of brackets that formerly held a wall shelf. A triangular closet is located in the southwest corner of the room.

Ceiling. The original plaster ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor is located in the west half of the south wall. A doorway to the adjacent room 209 sits at the north end of the west wall.

Windows. There are two windows in the room—one in the east end of the north wall, and one roughly centered in the east wall.

Room 213

This guest room is almost as large as the northwest and northeast corner rooms. It was formerly known as room 11.

Walls and Closet. The north wall retains marks of brackets that formerly held a wall shelf. A triangular closet is located in the northeast corner of the room.

Ceiling. The original plaster ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor sits in the west half of the north wall. Another doorway, in the south end of the west wall, communicates with room 214. Its door is missing its doorknob and locking mechanism.

Windows. A window is roughly centered on the south wall.

Plumbing Fixtures. This room has a porcelain sink in its southeast corner.

Room 214

This room was formerly known as room 12.

Walls and Closet. The west wall retains marks of brackets that formerly held a wall shelf. A triangular closet sits in the southwest corner of the room.

Doorways. The doorway to the corridor sits at the west end of the north wall. The door is missing its doorknob. Another doorway, at the south end of the east wall, communicates with room 213.

Windows. A window is centered on the south wall.

Room 215

This room was formerly known as room 14.

Walls and Closet. The south wall retains marks of brackets that formerly held a wall shelf. A triangular closet is located in the southeast corner of the room.

Doorways. The doorway to the corridor sits in the west half of the north wall.

Windows. A window is centered in the south wall.

Finishes. The floor in this room has been painted gray. All of the woodwork has been painted white.

Room 216

This room was formerly known as room 15.

Walls and Closet. The west wall shows evidence of metal brackets that once supported a shelf. A rectangular closet is located at the south end of the west wall, next to the window.

Ceiling. The original plaster ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor sits in the west end of the north wall. Its door has no number plate, nor any outline of one. Another doorway, in the north end of the west wall, leads to room 217.

Windows. A window is located in the west half of the south wall.

Room 217

This room was formerly known as room 16.

Walls and Closet. The east wall shows evidence of metal brackets that once supported a shelf. A triangular closet is located in the southeast corner of the room.

Ceiling. The original plaster ceiling has been covered with plasterboard.

Doorways. The doorway to the corridor sits in the west end of the north wall. Another doorway, in the north end of the east wall, leads to room 216. The door here no longer retains any of its hardware.

Windows. A window is situated at the west end of the south wall.

Room 218

This room was formerly known as room 17.

Walls and Closet. The west wall covers over part of the west side of the south-wall window casing. Again, this is thought to be the result of the room-dividing partitions having been erected after the window casings were installed. The south wall shows evidence of metal brackets that once supported a shelf. A triangular closet is located in the southeast corner of the room.

Doorways. The doorway to the corridor is located at the east end of the north wall.

Windows. A window is situated at the extreme west end of the south wall.

Finishes. The ceiling has been repainted.

Rest Rooms (Rooms 211-212)

Room 211

This very small room is the most easterly on the south side of the corridor. It is one of the two second-story rest rooms that were created, probably out of an original southeast corner guest room, shortly after the construction of the building. This is based on physical evidence cited subsequently.

Floor. The floor is covered with sheet linoleum.

Walls. The upper portions of the walls are plastered. The lower portions are sheathed with the single-beaded wainscot that has been found elsewhere in the building associated with very early alterations (e.g., the front office). This wainscot is 4 feet 1 inches high and has a cap molding.

Doorways. The doorway to the central corridor is located in the east half of the north wall. The casings on both sides of this doorway are original, as is the door here. This suggests that the doorway served the original southeast-corner guest room.

Windows. This room has no outside walls, but there is an interior window in the east wall that opens to the southeast hall. It measures 4 feet wide by 2 feet 10 inches high and contains a single eight-light sash. The casing of the window is molded; it may be reused original material, installed to match the doorway casing.

Finishes. The plaster and wainscot of the walls have been painted white. The same is true of the doorway and window casings and sashes.

Fixtures. The toilet and sink are extant but not operational.

Room 212

This room sits immediately south of rest room 211, and is about the same size. It is the other second-story rest room installed early in the life of the structure.

Floor. The floor is covered with the same type of sheet linoleum as used in rest room 211.

Walls. As in rest room 211, the upper portions of the walls are plastered. The lower portions are sheathed with the early single-beaded wainscot to a height of 4 feet 1 inches high, topped by a cap molding.

Doorways and Windows. A doorway in the north end of the east wall leads to the southeast hall. It has an unmolded casing and a four-panel door that differs slightly from the original four-panel doors.

Windows. There is one window in the west half of the exterior south wall. It has an original, molded casing. Its upper sash is a two-light period-1 replacement, while its lower sash is a one-light period-3 replacement.

Finishes. The plaster and wainscot of the walls have been painted white. The same is true of the doorway and window casings and the window sashes.

Fixtures. The rest-room sink and toilet are extant but not operational.

Attic Story

Floor

The attic floor consists of the second-story ceiling. Ceiling joists are located every 2 feet on center. Boards have been laid over the joists at the west and east ends, and in a walkway down the center of the attic, to permit walking.

Walls

The west and east walls consist of the exposed framing members (studs and sheathing boards) of the west and east exterior gable ends. The north and south walls consist of the exposed framing members of the roof (see "Ceiling," below). New horizontal wooden members have been installed on the east wall to catch the trap door at the top of the attic stairway.

Ceiling

The ceiling of the attic consists of the exposed roof framing. This framing includes 24 rafters that measure 2 by 8 inches. They are located every 2 feet on center. Their lower ends are notched into the wall plates. The top ends are butted and mitered; there is no ridge pole. Collar ties are made of boards measuring approximately 1 by 8 inches. They are nailed onto the rafters with square cut nails. The roof sheathing boards are of random widths about 6 inches wide.

Windows

There are two windows in the attic, one each at the west and east gable ends. The one at the west end contains two-over-two sashes that are period-2 replacements. The one at the west end is boarded closed.

Trusses

The attic contains four web-type trusses 12 feet apart, from which the second-story floor is hung on tension rods. The gable end walls also act as trusses. The top chord of each truss is supported at either end by a large diagonal beam that is framed into the end of the chord with a bird's-mouth joint (see figure 50). Two smaller diagonal timbers support the center of the top chord. Two similar timbers angle outward to brace the large diagonal beams. The trusses are spiked with 20-penny nails.

At the east end of the attic is another type of truss. It is made of vertical furring strips on horizontal nailers, and does not appear to be original.

Chimneys

A brick chimney stack runs up along the east wall. Another brick chimney stack passes through the attic along the north side some 12 feet 4 inches east of the northwest corner of the building.

Electrical Fixtures

There is one electrical receptacle at the base of the easternmost truss. Lighting is provided by two porcelain pull-chain fixtures mounted above the center walkway.



Figure 32. Basement/Garage: North Alcove.



Figure 33. Double-Beaded and Single-Beaded Wainscot.

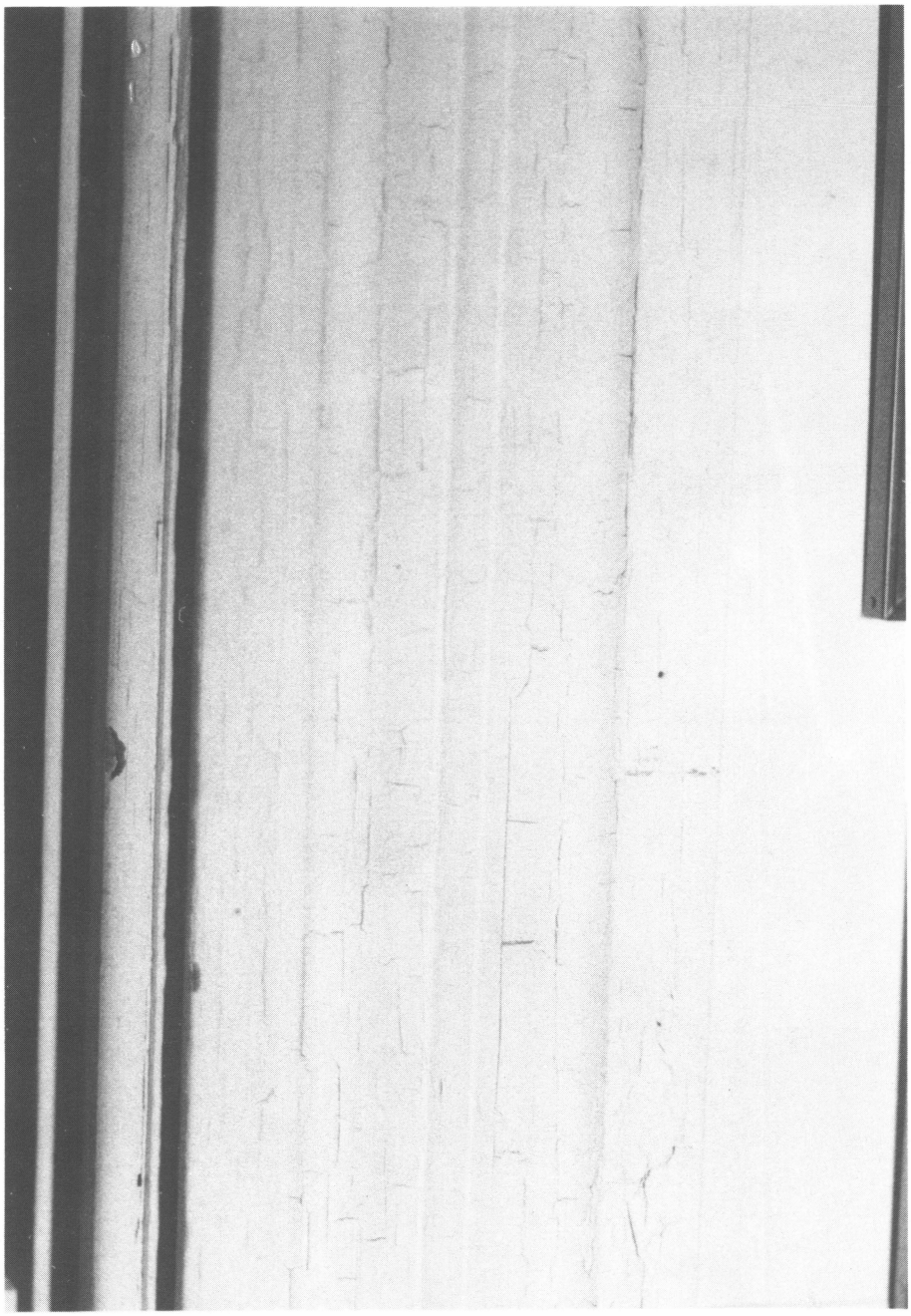


Figure 34. Typical Original Doorway and Window Casing.

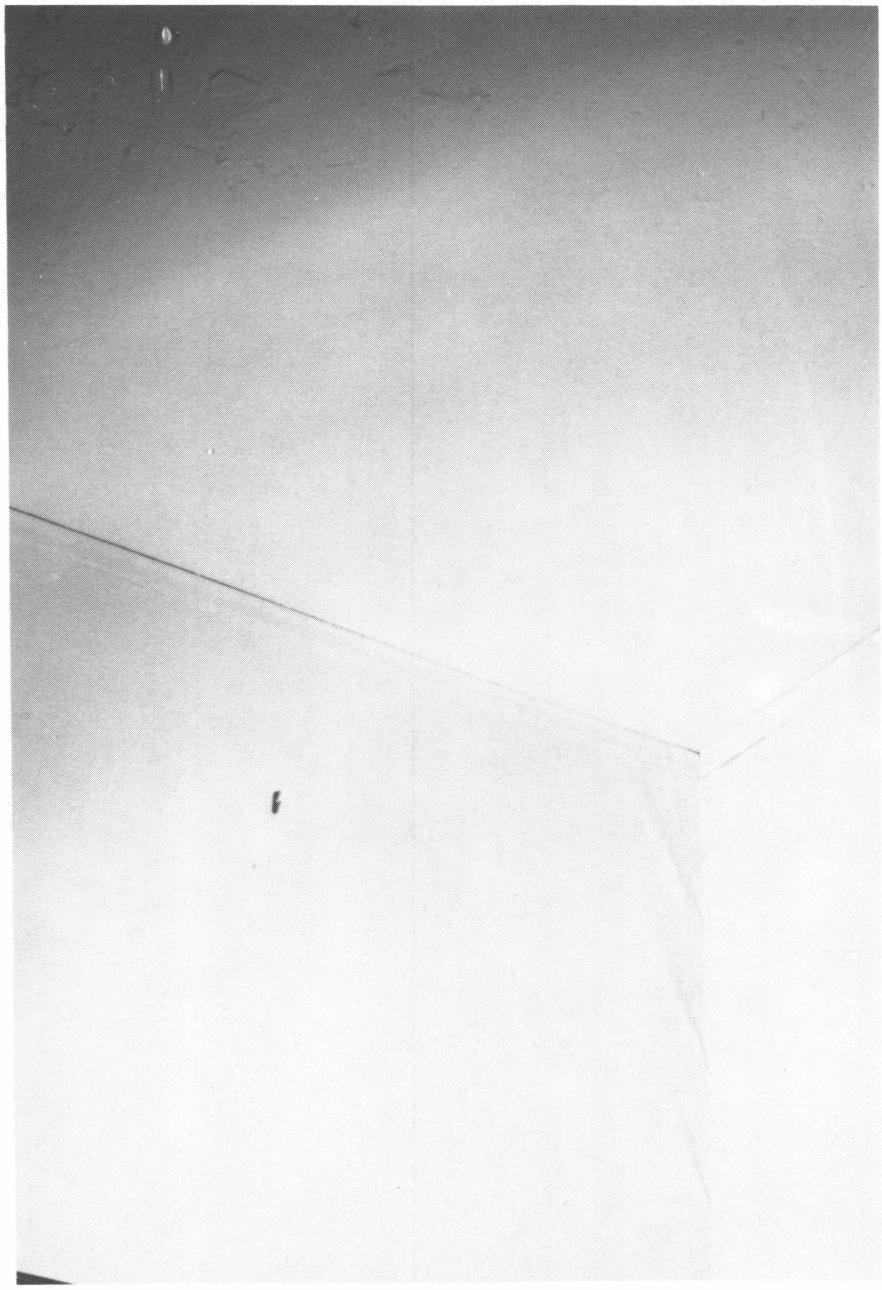


Figure 35. Entry (Room 101): Picture Molding at Cornice Level.



Figure 36. Southwest Stairwell: West and South Walls at Landing.



Figure 37. Southwest Stairwell: Newels and Balustrade at Second-Story Level.

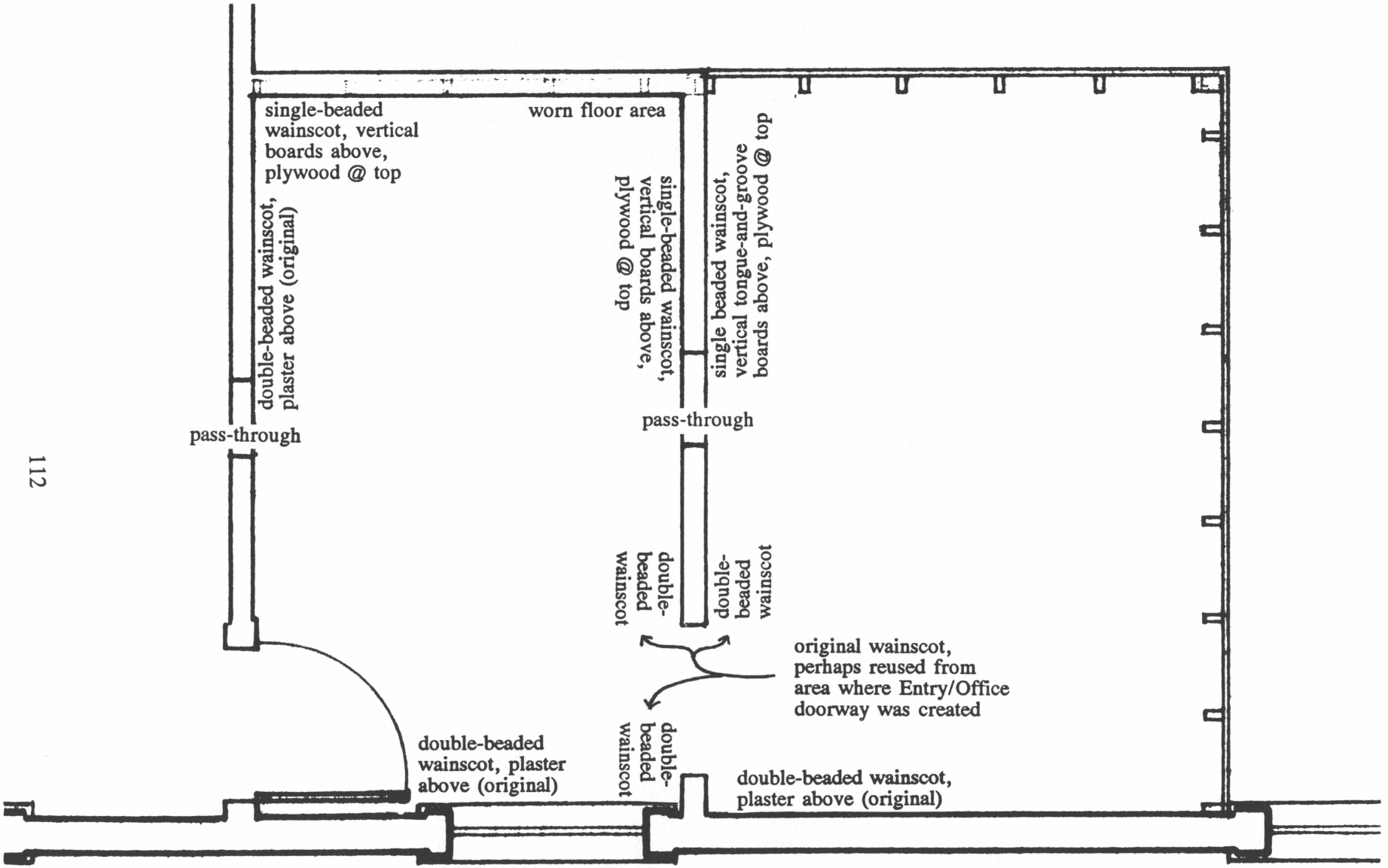


Figure 38. Offices: Diagram of Physical Evidence.



Figure 39. Main Exhibition/Former Dining Room (Room 104), South Wall: Pressed-Metal Ceiling and Cornice, and Wood Picture Molding.

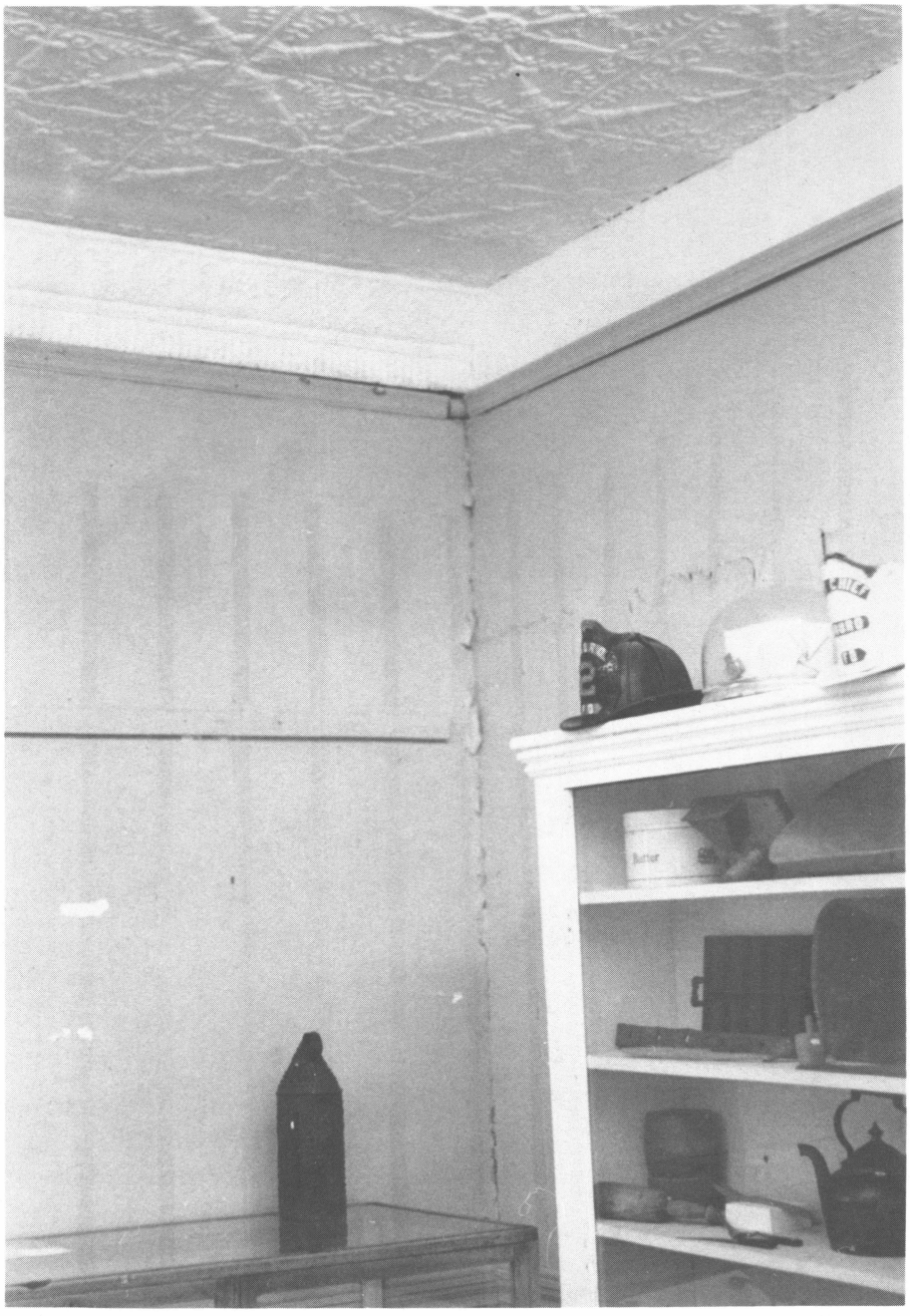


Figure 40. Main Exhibition/Former Dining Room (Room 104), Southwest Corner: Pressed-Metal Cornice Absent from Wall of Rear Office (at right).



Figure 41. Main Exhibition/Former Dining Room (Room 104): Lintel of East North-Wall Doorway to Room 103.



Figure 42. Storage Room/Former Kitchen (Room 105): Wooden Floorboards and Brick Pad.



Figure 43. Storage Room/Former Kitchen (Room 105): South and East Walls.

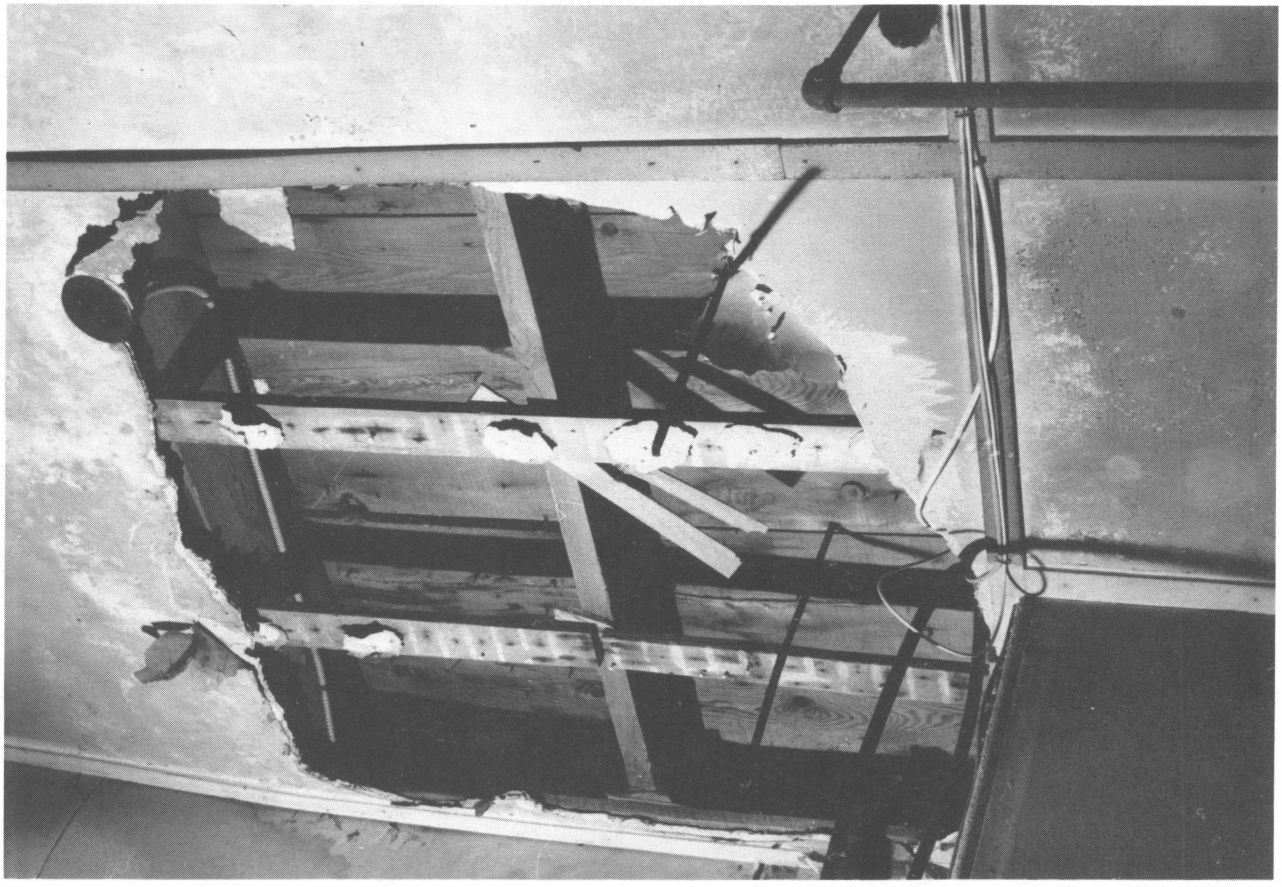


Figure 44. Storage Room/Former Kitchen (Room 105): Ceiling at Southeast Corner.

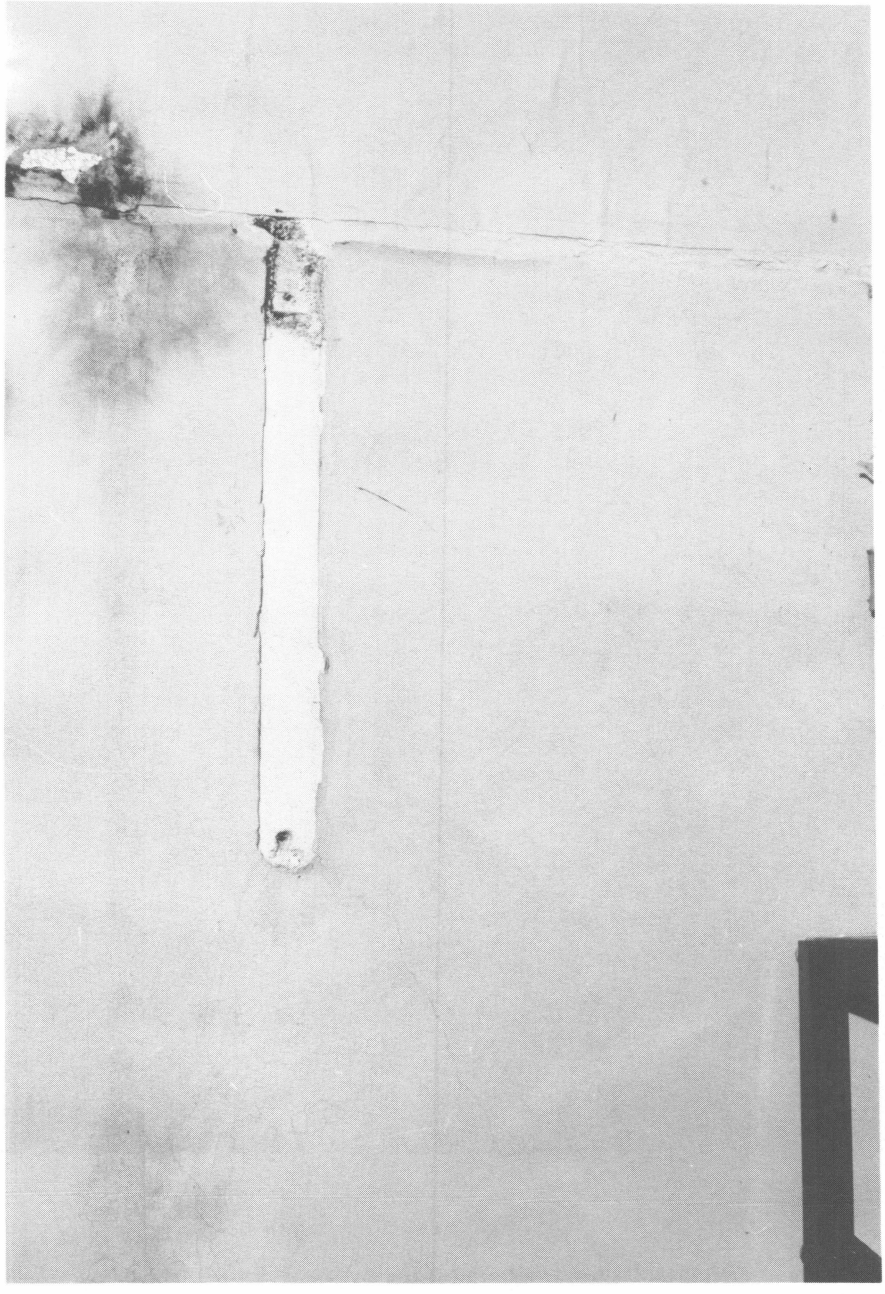


Figure 45. Typical Scar in Plaster Wall Left by Removal of Shelf Bracket.

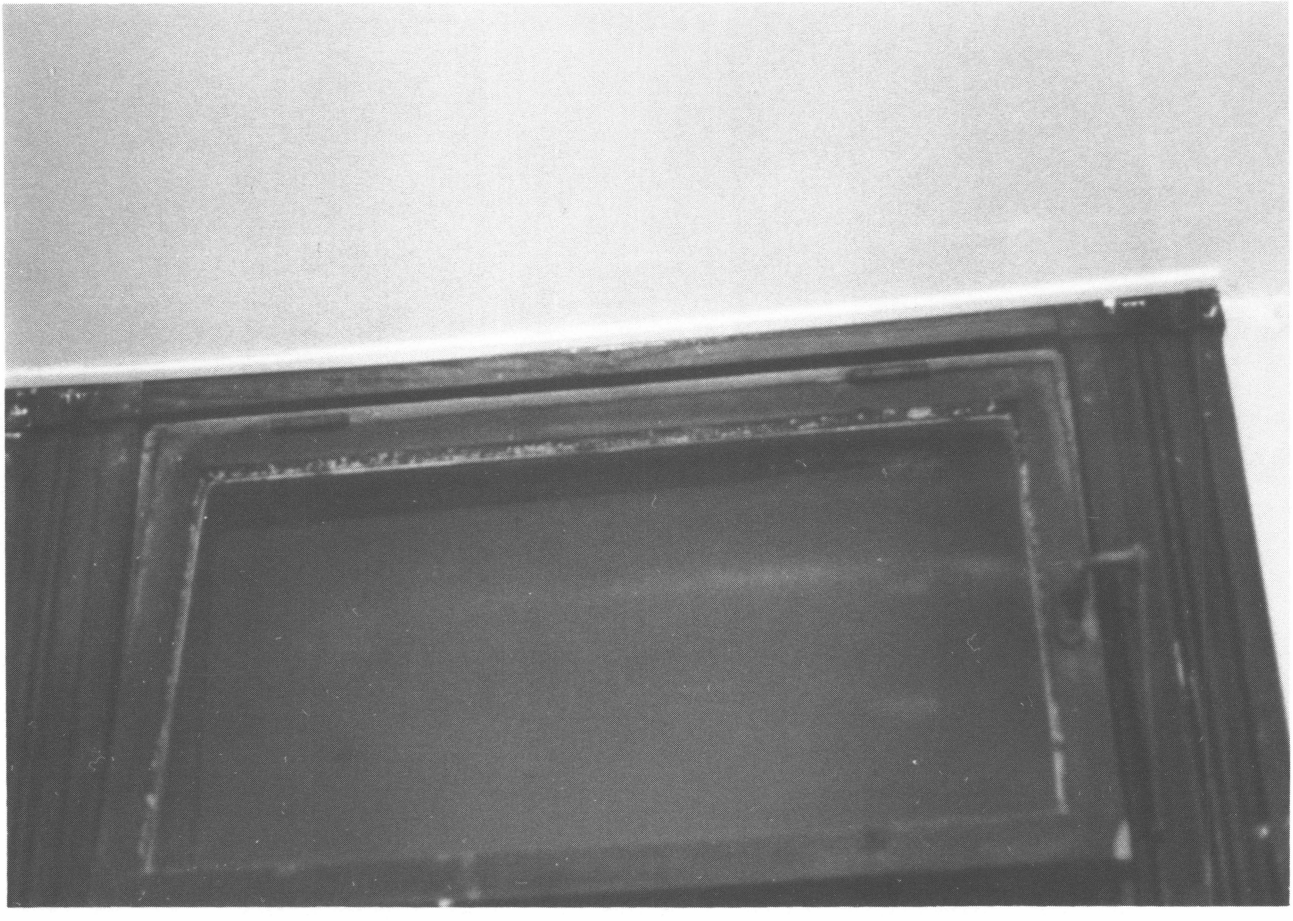


Figure 46. Typical Original Transom Window Above Second-Story Corridor Doorways.



Figure 47. Typical Original Four-Paneled Door.

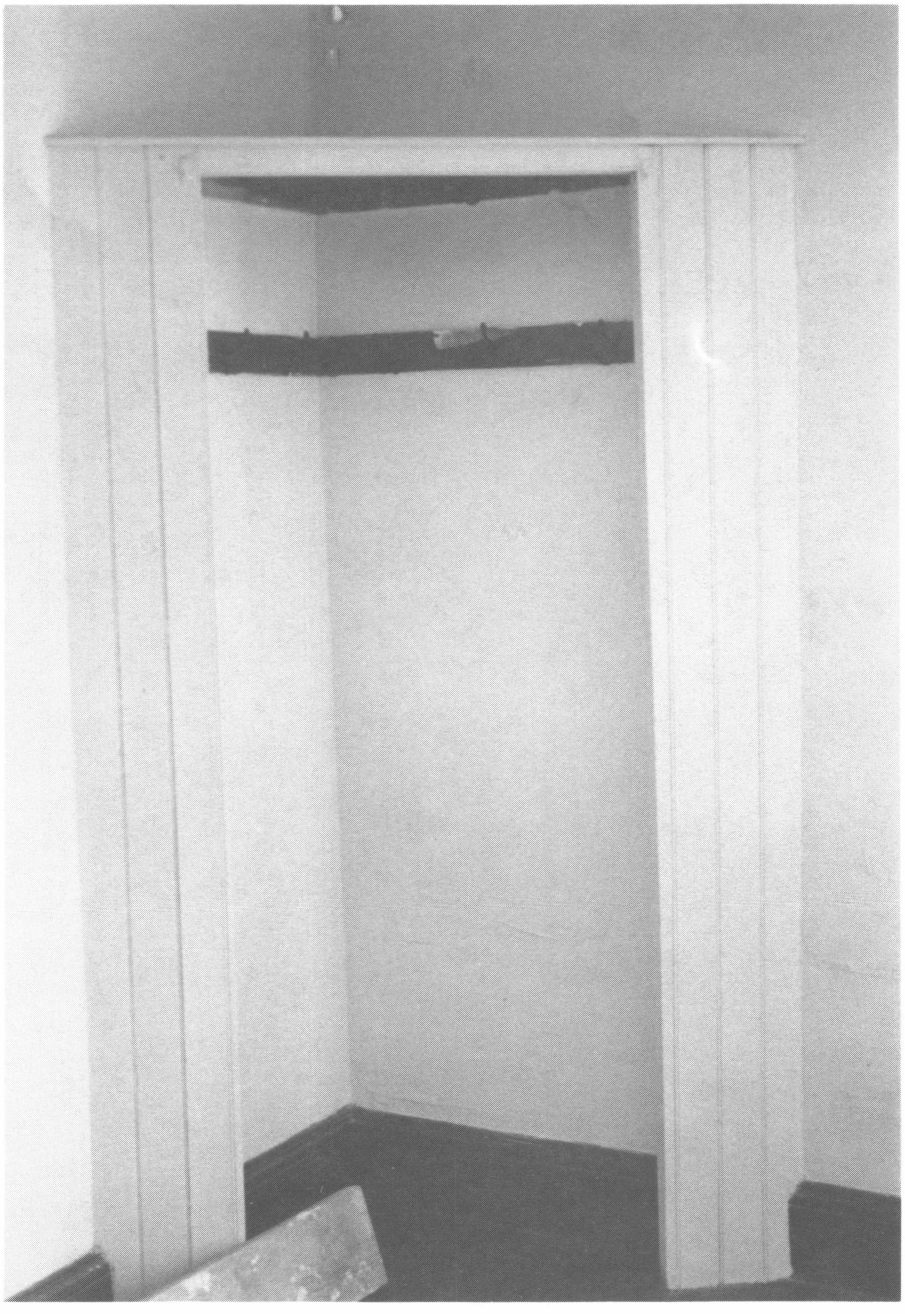


Figure 48. Typical Corner Closet in Second-Story Guest Rooms.



Figure 49. Room 209, Southwest Corner: Doorway Casing Partially Covered by Wall Plaster.

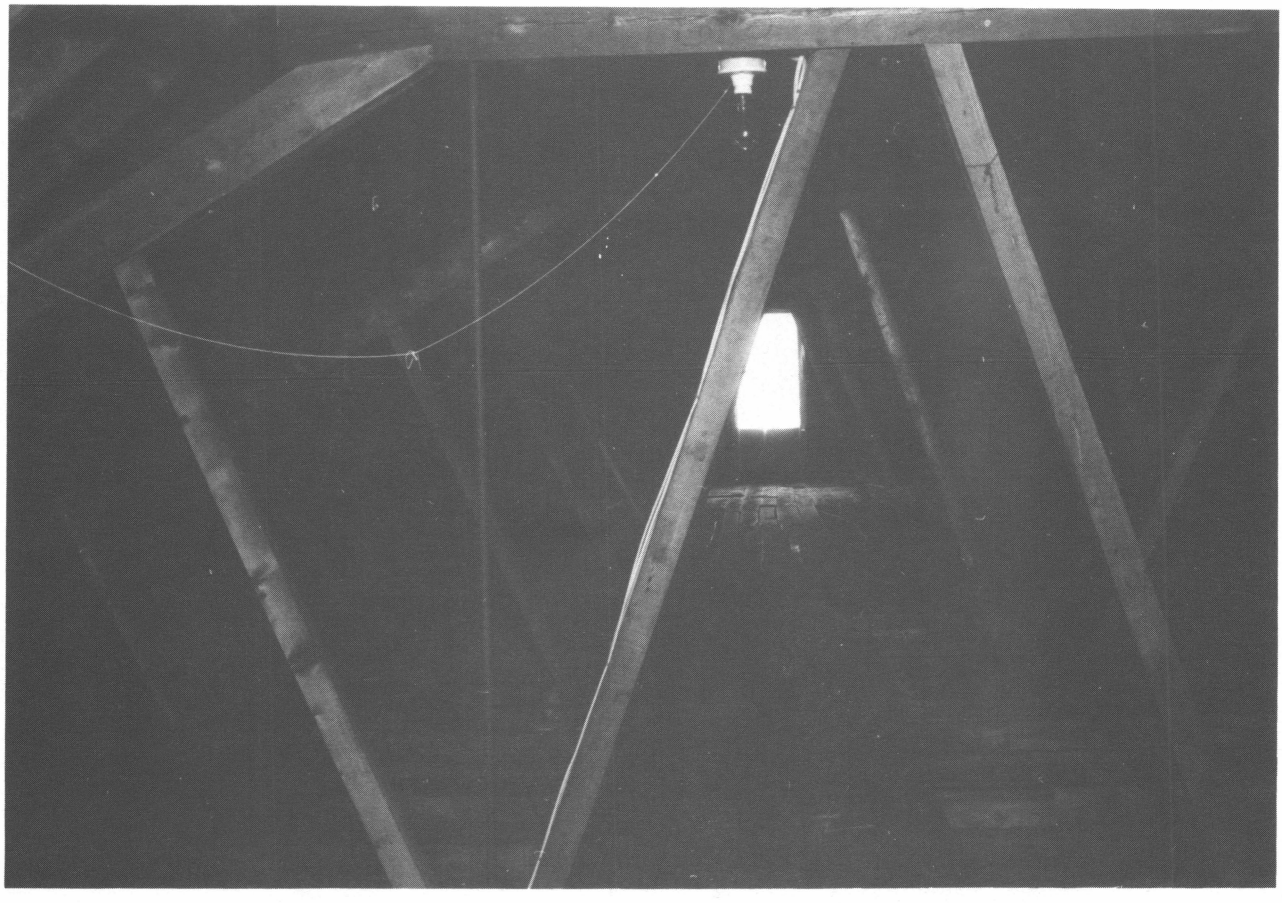


Figure 50. Attic: Typical Truss Supporting Second Floor.

V. EXISTING CONDITIONS

SUMMARY OF EXISTING CONDITIONS

[Editor's note: The following description of conditions is based upon observations completed by Regina Binder during the summer of 1989, and so represents the building's condition at that time. Since that time, four repair efforts have been undertaken at the Highland House. These are described in Chapter III, "Appearance After Later Alterations: During the Truro Historical Society Era." As a consequence, portions of the Highland House are in better condition than the following narrative indicates.]

Main Building

The Highland House manifests many problems, but nearly all stem from the same cause: excessive moisture. Water flowing into the foundation has eroded footings and damaged the brick walls, causing uneven settlement. Water penetrating through the roof, eaves, and windows has promoted bird, fungal, and insect attack. These have rotted structural timbers, causing further settlement as well as the failure of plaster surfaces. Starling activity has damaged both the walls and the eaves at the southwest corner, while fungi and insects have done extensive damage to the east and north sides of the building.

Other factors also have contributed to the deterioration of the Highland House. These include poor initial construction practices and materials (seen chiefly in the basement and crawl space); wind pressure (due to the exposed location of the site); and the construction and removal of various additions to the main building.

Settlement due to structural inadequacy and deterioration can be seen by examining the building from the outside. Looking at the east wall, it appears that the whole building has shifted to the right. The fact that it was reshingled complicates matters, because the shingle courses are straight even though the building is not. Another factor complicating the diagnosis of the shifting is the fact that the windows are not aligned and some have twisted in their casings (see "Windows," below). The roof line gives a better idea of the movement. When looking at the building from a distance, it appears that the left side has sunk about 3 degrees. This may in some way relate to the fact that the middle of the south side seems to be sunk as well. On the interior, the diagonal pattern of many cracks in the wall plaster also indicates uneven settlement of the building over time. Cracks generally emanate from the corners of openings, where there is a concentration of stress.

North Addition

The primary problem with the north addition is its incompatible roof line and its conglomeration of doorway and window styles.

North-Addition Shed

The primary problem with the shed appended to the northeast corner of the north addition is its makeshift nature and extremely poor condition. The shingles on several sides of this structure have dried up, cracked, split, or fallen out entirely. Nails are pulling out everywhere on this structure. It may be weakening the rest of the building.

EXTERIOR ELEMENTS

Foundations

Main Building

West Side

This side of the brick foundation cannot be seen, due to the porch.

South Side

The ground on this side of the building falls away to the east, so that more of the foundation is exposed at the rear end of the building. The brickwork at the east end of the south wall is fairly deteriorated (see figure 21). It exhibits some cracking of bricks, due to shrinkage during the firing process. It also displays missing mortar joints, most likely attributable to rising damp. However, the situation is exacerbated by the fact that a number of bricks used here were insufficiently fired during their manufacture. These are identifiable by their salmon color, and they are particularly prone to moisture attack.

North Side

The brick foundation here is in generally good condition. There is some cracking and missing mortar at the east end (see figure 51 and "East Side," below). However, this does not appear to have weakened the structure.

East Side

The brick foundation is fully exposed on this side, and it appears to be in fair condition. Some of the bricks are cracked, and a number of the mortar joints are cracked or missing, especially at the north end (see figure 51). However, this does not seem to have weakened the structure. The deterioration is most likely due to rising damp, rather than settlement. The missing mortar also suggests that the building has shifted from south (left) to north (right). Some of the cracking may also be due to the use of original or repointing mortar stronger than the brick itself.

North Addition

The concrete-block piers of the north addition appear to be good condition.

North-Addition Shed

The supports of the two portions of the shed are in poor condition. The concrete-block and brick piers of the larger portion are makeshift, and the vertical wooden plank under the smaller portion will not long survive in contact with the ground.

Drainage

As noted previously, storm water tends to run from southwest to northeast under the Highland House. The installation of the French drain along the south side of the Highland House was an appropriate solution for handling this water. However, since the drain was improperly designed, it worsened the already-wet conditions here.

The deficiencies of the drain are numerous.[1] The gravel-filled trench dug for the perforated pipe was not dug deep enough. The pipe was laid at the bottom of the trench, rather than being laid in the center of the bed. The pipe also was laid with its perforations on top, which prevented the excess water from entering the pipe. Finally, no vapor barrier was installed on the exterior of the south wall, to prevent water from penetrating through the wall.

As a result, not only does the drain fail to take away excess water, it actually channels it into the building. A depression in the surface of the gravel-filled trench about 30 feet from the west end indicates where gravel has washed under the foundation wall and into the crawl space. The failure of the drain is probably the cause of many of the water problems noted in the crawl space, basement, and first story.

[1] Investigation conducted by W. Lewis Barlow, IV, now Regional Historical Architect, North Atlantic Region, on August 17, 1989.

Main Building

West Side

The wall is in generally good condition. Only a handful of shingles are cracked or split. The building has been recently reshingled, so no severe signs of deterioration are visible. Some of the shingles are buckling or bowing, due most likely to expansion and contraction. However, these are a small percentage of the surface. Discoloration under the eaves and window frames is most likely caused by water runoff. Other deterioration consists of corroded nail heads, faded and abraded shingle surfaces, and bird and/or insect attack. Conditions are most severe along the south edge of the wall.

All exposed nail heads have corroded, leaving enlarged holes where moisture is able to penetrate. This is likely to create an ideal microclimate on the interior for either insects or fungi or both. In places where the shingle nails are also exposed, such as under the windows, the shingles are becoming discolored. This is probably due to water runoff; it is less evident on the right side of the front door.

The reddish-brown paint on the lower portion of this wall is now faded. Fading has occurred most radically at the south end of the wall. Severe abrasion is also visible here. This seems due to the fact that the south side of the porch is open, so that wind-driven rain and sand can strike the south end of the wall. (The north end of the wall, being protected by the north addition, is not abraded.) A number of flight holes, nicks, and rust spots are seen along the south edge of this wall, as well as paint failure along the corner board here.

On the lower portion of the west wall, a wooden plug is extant at the extreme south end, approximately 12 courses up (see figure 52). This was probably installed to close a large hole made by flying insects or birds. The plug is loose and may be pulled out easily. Also in this vicinity, insect flight holes are evident. The largest hole here measures more than 1/16th of an inch. Five of these were counted, along with nine smaller holes. Due to the exterior location of the holes, any frass that may have been left behind has disappeared, making identification of the specific insect difficult. Looking at the holes through a 10x magnifying lens, it is clear that the holes go all the way through at least the first layer of shingles.

Near the southwest corner is a security-alarm switch. There is an unoriginal light fixture over the main entrance. A wire runs from this fixture across the west wall to the south wall.

South Side

This wall is in fairly good condition. Some of the shingles are buckling, bowing, or cracking, but these are in the minority. No flight holes or other signs of biological deterioration were evident; abrasion is minimal and surface weathering is uniform.

Electrical wires run along the bottom two courses of shingles for the entire length of the south wall, from the west to the east end of the building.

North Side

The portion of north wall belonging to the original structure appears in good condition. Conditions similar to those on the south side, such as failed flashing and corroded nail heads, are present. However, there are no signs of deterioration. Neither insect or fungal attack has occurred on this wall, nor is there any sign of the bird activity spotted on the south side. This side of the building is littered with debris such as old wood fencing and wire mesh.

East Side

A mass of flight holes is easily seen all along the lower central section of this wall. The holes are especially concentrated on the sixth course of shingles. They are approximately 3/32 of an inch in size and elliptical in shape. Given that the building was recently reshingled, this problem is persistent and pervasive. A large hole is located at the north side at about the eighth course of shingles. This was probably created by a bird: starlings are active here. Moisture penetration and fungal growth are undoubtedly being promoted by this deterioration.

Similar signs of paint failure and streaking discoloration are seen on this side. At the southwest corner under the eave, a new wooden member appears to have been patched into the existing wood. A piece of the cornice is missing. The same flashing and paint failure seen elsewhere is evident here (see figure 30). The surface area between the top and middle windows shows some buckling.

Debris from the adjacent golf course has collected at the base of the east wall.

North Addition

West Side

The west wall of the north addition is in fair condition. Several of the shingles have cracked or split. Additionally, the surface has an overall abraded appearance that is worse than that of the other three walls. Several perfectly round flight holes are visible on the course of shingles directly below the window.

South Side

The shingles of the south wall of the addition, being protected by the roof of the west porch, are in good condition.

North Side

The shingles of the north wall of the addition are cupping, and those along the bottom edge are rotting.

East Side

The shingles of the east wall are in generally good condition, except for spots of algae growth on them. This appears to be due to the lack of sunlight received by this wall.

North-Addition Shed

West Side

The sill board at the base of the shed's west wall is cracked and contains a number of flight holes at the corner where the wall meets the north addition. Because no frass was seen, insect identification is difficult. Nail heads have completely rusted and wood is soft when poked.

South Side

The shingles on the south walls of both portions of the shed are in decent condition. Signs of algae are visible on both walls. Again, this seems attributable to the lack of sunlight received by these walls.

North Side

Both of the two sections of wooden shingles on the north wall of the shed are in deteriorated condition (see figure 22).

East Side

The east walls of both portions of the shed are weathered, but are less deteriorated than the north wall. The larger portion of the shed (see figure 22) has large flight holes on the second course of shingles. The east wall of the smaller portion is partially protected by the roof overhang here, and by plant growth. Flight holes also were evident near the corner of this wall.

West Porch

Structure

The overall condition of the west porch appears fair. A preliminary structural investigation by Denver Service Center engineer Jeff Jelnecker suggests that the building has stabilized at its present pitch, and that no further settling is occurring at the west end. The loss of most of the historic brackets that helped to connect the posts to the ceiling of the porch has not appeared to affect the porch structurally.

Deck

The plywood deck of the porch (see figure 25) covers rotted original floorboards. The paint on the plywood is failing probably due in part to foot traffic as well as weathering.

Posts and Balustrades

South End

Posts. The upper parts of the three original posts here are in good condition (see figure 26). The elaborate turned detail here is intact and shows little deterioration. This is probably due to the fact that the roof of the porch has an 18-inch overhang, which provides some protection to the upper parts of the posts.

The pedestals of the posts, by contrast, are in poor condition. The posts south of the entrance show signs of deterioration such as peeling paint and splitting along the entire length of their 2 1/2-foot pedestals. Previous deterioration of the posts' pedestals caused boards to be applied to all four sides of the pedestals (see figure 27). These boards are now separating from the pedestals as the result of water running down over them. Their joints are all separated. South-facing pedestal boards display bare wood, due to wind-driven rain. Exposed nail heads have corroded, each leaving a large rust stain. Where the posts penetrate the plywood floor, the bases appear to be completely water-saturated and rotted.

Balustrade. Practically all of the paint has worn off the balustrade that runs along the south side of the porch. Nails are pulling out at the corners. The interior edge of the handrail along the south end of the west side is deteriorated by what appears to be brown rot.

Middle and North End

General Information. Checking of the paint layer, known as "alligatoring," is common on this section of the porch, although the wood underneath appears sound.

Posts. The two unoriginal posts flanking the entrance to the porch, and the one similar post north of the entrance, are badly abraded and show signs of deterioration.

Balustrades. There is severe cracking at the bases of the balustrades, especially those on the right side. Splitting occurs at every joint between balusters and handrail (see figure 53). The northernmost balusters have completely lost their paint coating and appear to have split vertically several times. Many of the nail heads are rusted or corroded. New nails were recently installed to secure the balustrades to the base rail. Rust discoloration remains from previous nails.

Doorways

Main Building

West Side

The main entrance door, because it is protected by a screen, is in good condition.

East Side

The two garage doorways at basement level are operational, but they no longer serve the purpose for which they were installed.

North Addition

South Side

The doorway in the south wall of the north addition shows severe paint failure. The hinges on the three-panel door here are rusted, and the middle panel shows moderate paint failure. Additionally, the door is askew in its casing. This is probably due to the slope in the porch floor. The degree of this slope is apparent by looking at the bottom of the door, which is approximately 1 inch off the floor of the porch.

North Side

The doorway in the north wall of the north addition serves solely as a fire exit.

Windows

Main Building

Common Conditions

Several of the window casings in all four sides of the building exhibit slight buckling and twisting. This may be due to several factors, including changes in load, settling, lack of compensation for the expansion and contraction of window and wall components, and expansion of corroding flashing.

West Side

The west-wall windows at first-story level are protected by the west porch. Their casings appear to be solid, although some alligatoring of the paint was seen. The top casing member of both windows shows signs of buckling. This may be due to the expansion of window and wall components.

The west-wall windows at second- and attic-story levels all show paint failure (see figure 1). The sills of the second-story windows have been deteriorated by weathering and may be rotted; the sill of the attic window seems to bow slightly. The northernmost second-story window appears to be in the worst condition. The severity of the paint failure on its casing and sashes means that the flashing installed over this window is no longer effective.

South Side

Paint failure exists on all window sills, perhaps from the lack of proper pitch or weep holes. The deterioration of the casings is somewhat inconsistent (indicating replacement or repainting). The casings of the first-story windows are in generally better condition than those of the second-story windows. However, the flashing above the casings is rusted and buckled on all of the windows. This corrosion may be due to water running off of the second-story windows, as well as wind-driven rain. The expansion of the corrosion might be placing undue pressure on the casings. The middle three windows show severe rust stains.

The second-story windows exhibit greater deterioration. The three at the east end of the wall are in the worst condition. This may relate to the southeast ell formerly here. However, the rusting of the flashing is less severe on the second-story windows, perhaps because the roof overhang provides some protection.

North Side

The same type of paint failure and flashing corrosion seen on the south-wall windows is most likely present on the north-wall windows, but the wire-mesh covering over the latter makes it difficult to be sure.

East Side

Five windows in various stages of deterioration are present on this wall. Some of the windows have twisted in their casings. The twisting does not all occur in the same direction. Like the north side of the building, this side has been victimized by the adjacent golf course. Evidence of this is two broken windows and two that have been boarded up as a result of breakage (see figure 30).

North Addition

West Side

The shutters flanking the paired windows in the west wall of the north addition show severe paint failure (see figure 1). The flashing over these windows has completely rusted, as have the nail heads below the windows.

North Side

The haphazard choice of windows on the addition is glaring, since they are inconsistent in type not only with the windows on the building, but also with each other.

North-Addition Shed

East Side

The two small windows of the larger section of shed, and the nine-light window of the smaller section, are in poor condition. They lack paint, and their members are cracked.

Roofs

Common Elements

The roofs are the greatest contributor to damage. The present asphalt shingles were laid over rotted wooden shingles and sheathing, so sections of them have buckled and are peeling. The wooden eaves have open joints and missing members. A closer examination of the roofs is necessary to determine the extent of deterioration.

Main Building

At the west end of the roof, the cornice covering the ends of the west wall's rake outriggers displays joint separation and paint failure (see figure 31). Some slippage appears to have occurred among the outriggers themselves.

The southwest corner of the roof is in poor condition (see figures 24 and 54). The cornice covering the rafter ends of the south roof slope here displays joint separation. A portion of the board underneath the eave is missing, presumably rotted out. Considerable starling activity was spotted just under the eave in this corner. The presence of starlings often indicates poor workmanship, inferior materials, or previous habitation by woodpeckers. Once in residence, the starlings further the deterioration. The back side of the cornice appears to be dark and water-soaked at the location of starling nests.

In addition to this localized damage, the entire roof line of the south side seems to bow slightly at the center. The asphalt shingles are peeling in some areas, and seem to be warped in others.

No bowing of the roof line was evident on the north face. As seen from the Highland Road, a new patch of asphalt shingles was installed at the east end of the north roof slope. Most of the exposed rafter ends seem stable. The west end of the cornice may have been attacked by some kind of mold: discoloration is evident just beneath it. Some joint separation of the members of the cornice was detected, as was some rusting here. Finally, at the northeast corner of the wall, the miter joint has failed and a large gap is present (see figure 55).

West Porch

The asphalt shingles covering the roof of the porch are hiding rotted wood shingles underneath (see figure 56). The fascia board covering the ends of the porch roof rafters, on which the wooden gutter is hung, shows signs of paint failure and deterioration (see figure 28). As stated previously, the downspout is missing but the leader remains. At the north end of the roof, the rafter tail underneath the overhang is completely rotted due to moisture saturation. Some separation

between this member and the roof overhang has occurred, allowing more water to run onto the rails and posts than was originally intended. This is particularly evident at the north end. The rafter ends on the underside of the overhang appear to be in good condition.

North Addition

The roof line of the north addition is incompatible with the roof lines of the main building and west porch (see figure 1). The roof slope is warped and may be rotted (see figure 57). The rafter ends show joint separation and appear to be waterlogged. The cornice covering their ends has nails that are rusted and pulling out. The wooden members that constitute this board are separating and slipping.

North-Addition Shed

The asphalt roof shingles on the shed are in poor condition, being decayed or missing. The metal flashing where the shed roof intersects the east wall of the addition is in fairly good condition.

Chimneys

Both chimneys appear to be in generally good condition, although neither is in use. Some mortar joints are missing, and the flashing around them is failing (see figure 58).



Figure 51. Northeast Corner of Foundation: Cracked Bricks and Missing Mortar.

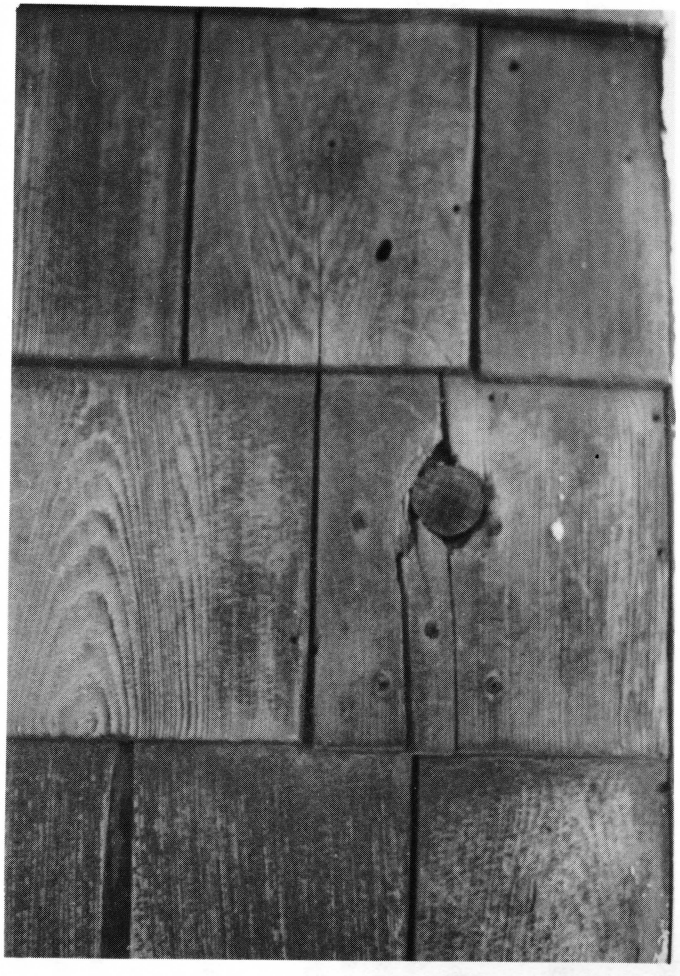


Figure 52. West Wall, South End: Shingles Marred by Holes, Abrasion, and Cracks.

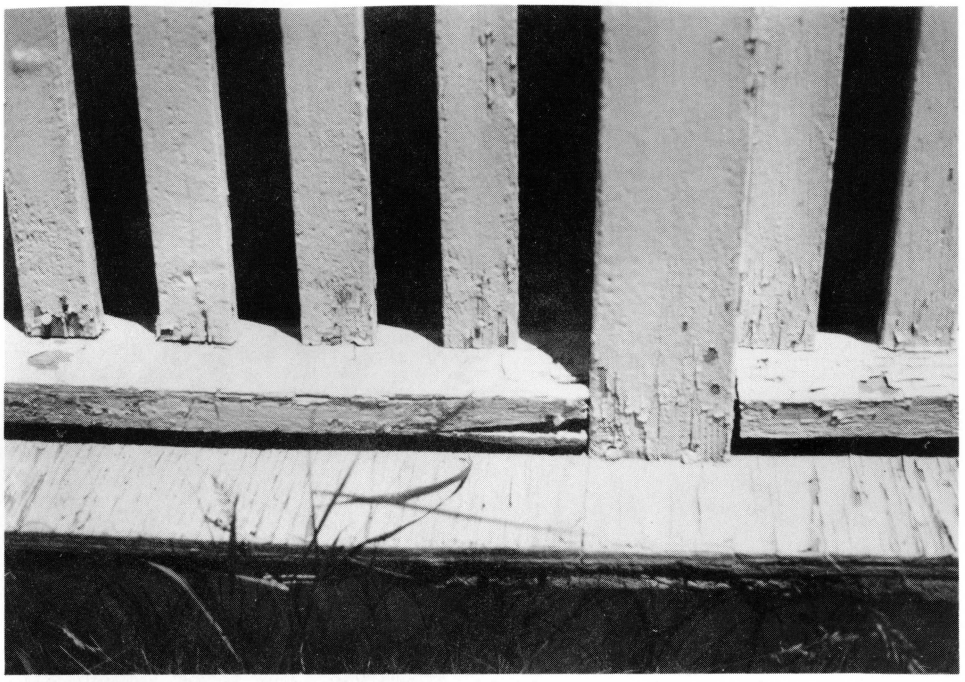


Figure 53. West Porch: North-End Balustrade Plagued by Splitting, Cracking, Corroded Nails, and Deteriorated Paint.



Figure 54. South Roof Slope, Southwest Corner: Bird and Insect Damage, Excessive Moisture, Failed Cornice Miter Joint, and Rafter Checking.



Figure 55. North Roof Slope, East End: Peeling Asphalt Shingles and Failed Cornice Miter Joint.



Figure 56. Junction of West-Porch Roof and South Wall of Main Building.



Figure 57. North Addition: West End of Roof.

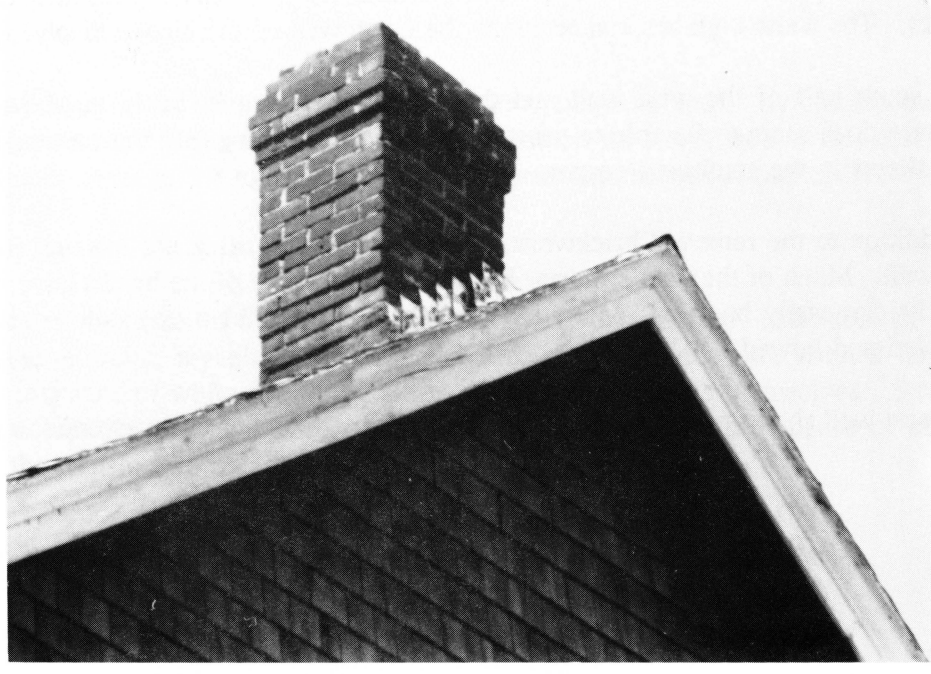


Figure 58. East Chimney.

INTERIOR ELEMENTS

Basement Story

Basement/Garage

Floor

Due to the slope of the Highland House's site from the southwest to the northeast, storm-water runoff flows through the north half of the crawl space (at the west end of the building) into the basement (at the east end of the building). Thus, the dirt floor of the basement is quite wet much of the time, and many insects can be seen. Debris including pipes, signs, and broken plasterboard add to the dilapidated atmosphere of this space.

Walls

All of the brick walls of the basement exhibit efflorescence and orange-brown staining indicative of mold spores. The west wall separating the garage from the crawl space is the most deteriorated, since it bears the brunt of the water penetration from the crawl space. As stated previously, a large section of the north half of the wall was removed (see figure 32) so that the adjacent part of the crawl space could be converted to an alcove for the basement. The vertical-plank partition erected along the south side of the alcove is fairly intact, but the section along the west side has not stopped the flow of water. The plasterboard that has been installed here is peeling off the planks. The waist-high brick shelf along the north wall of the alcove displays brick failure.

The south half of the west wall and the south alcove are in fairly good condition. The brickwork here does seem to be able to prevent water from running into the basement. However, water still collects in the southwest corner.

In addition to the removed brickwork, several courses of brick are missing from the center of the west wall. Much of the wall's mortar has fallen out. Some of the bricks have cracked; large vertical cracks can easily be seen. Many other bricks have crumbled and fallen out. The wall is actually rippled and bowed.

The east wall shows plant growth at either corner between the chimney and the garage doors.

Ceiling

The plasterboard that has been applied to the ceiling of the basement has many black mold spots on it. Much of the plasterboard is collapsing, especially at the northwest corner.

Windows

In the vicinity of the north-wall window, the sound of insect infestation is audible.

Chimney

The base of the chimney has missing mortar joints.

Crawl Space

Floor

Storm water runoff has been entering the foundation and flowing from southwest to northeast through the crawl space. The water has dug channels along both the north and south sides of the crawl space, making these areas extremely wet and vulnerable. Also, the water has formed a deep hole near the doorway in the east wall. The erosion of the clay soil has left the footings of the brick piers and wooden posts exposed and unsupported. As a consequence, the easternmost pier in the south row has fallen over, along with its footing. The easternmost pier in the north row is in danger of toppling for the same reason. Many of the other piers and posts are leaning or shifting, and no longer appear to be serving any structural purpose.

Walls

The foundation walls have suffered from water damage as well. Symptoms include mold growth and efflorescence. Efflorescence is clearly visible on the north, south, and east foundation walls. The brick is moist to the touch and cracked; mortar can be flaked out easily.

Ceiling

The wooden members of the first floor are similarly deteriorated. The sills sit directly on the brick foundation walls; mycelia have formed where the floor joists are framed into the sills, confirming the existence of white rot on the sill as well as on the joists themselves. Straight joints are especially susceptible to fungal attack, and the large white stains are evidence of this. (There is nowhere for the moisture to escape.)

Entry and Stairwell (Room 101)

Entry

Floor. The brown paint on the floor tends to hide any signs of deterioration. Erosion due to heavy foot traffic and the sand particles it brought in is evident. Otherwise, the floor seems to be in sound condition.

Walls. The white paint on the wainscot of all four walls shows signs of paint failure, including chipping and crazing. Paint cracking appears to be worse on the cap molding than on the wainscot itself. This condition is worst on the west and south walls (see figure 33), because these are exterior walls.

The west and north walls still have plaster and wallpaper above their wainscot. The wallpaper is puckering at the corners (see figure 35). The condition of the west-wall plaster is concealed by its wallpaper. However, it is probably not in good condition, despite the partial shelter created by the porch roof. Some of the north wall's plaster is exposed at the east end of the wall, adjacent to the fireplace. It appears to be in good condition.

The south and east walls, and the northwest-corner chimney breast, have simulated-wood paneling on their upper portions. The paneling on the east wall and the chimney breast is in good condition. On the south wall, however, it is buckled and warped, probably due to moisture. The plywood on the south wall west of the window is faintly warped, but appears to be in fair condition. The plaster inside the closet under the stairway to the second story is failing.

Ceiling. The ceiling shows signs of paint failure including cracking, peeling, and chipping. The picture molding is separating from the ceiling. Another area of plaster disintegration is just underneath the stairway in the closet. There the seam has become enlarged; a large crack has developed where the carriage meets the ceiling. The picture molding on the south wall is buckled.

Doorways. The most decayed doorway casing in the entry is that around the west-wall entrance, which exhibits cracking and alligatoring of paint (see figure 34). The casings of the doorways to the main exhibition room and the north addition also shows signs of paint failure, but their wooden members are sound. The casing of the doorway to the front office displays some joint failure between the wood members making up the casing. However, the bull's-eye corner blocks are in good condition. At the doorway to room 102, the bi-fold French door has had metal braces screwed across its center joint, such that it is now a single door.

Windows. The original casing of the double-hung window in the south wall is deteriorated and dry. The sashes and stops have also deteriorated.

Stairwell

Walls. The wall areas above the wainscot along the stairway are covered with multiple layers of wallpaper that are now peeling. Peeling is especially bad on the west wall above the landing. There is a crack in the plaster of the south wall one-eighth of an inch wide; it continues up the southwest corner and up into the ceiling. Digs, dark spots, and small patches of missing paint or plaster surface are prevalent. Dirt spots are very obvious on the walls above the landing. Further problems include large nail holes and many fingerprints.

The failure of the wallpaper has exposed severe cracking in the wall plaster in the southwest corner above the landing (see figure 36). This cracking is bad enough to expose the lath in many places, such that plaster is falling onto the landing. Deterioration is the worst on the south wall. Small and large cracks run from the corner of the second-story window in the south wall down to the wainscot; they continue along the wainscot down the upper run of stairs to the landing.

A large water stain exists in the southwest corner approximately 18 inches above the wainscot. Since the shape of some of the discoloration is regular, it may remain from the pattern of a previous wallpaper that has since been removed. Poor plaster patching is common on the walls of the landing. What appear to be large, careless brush marks are visible on the south wall despite later repainting. These marks may actually be part of the original plaster scratch coat, created to enhance adhesion.

Ceiling. The ceiling above the landing has water stains and shadows all over it. It also displays paint failure, peeling of wallpaper, and cracking of plaster. The depth and thickness of the cracks on the ceiling varies. Cracking and paint failure is the worst in the southwest corner. This is likely the result of the weakness of the roofing material above this area.

Balustrade. The newel at first-story level is in good condition, although its ball finial is worn. The easing and the handrail are in fair condition. The unpainted dark wood of the balustrades displays what appears to be coats of varnish that reacted negatively to temperature and light. Bubbling of the varnish has occurred, leaving the surface rough and discolored. This could have been caused by a breakdown of the UV stabilizer in the varnish, improper maintenance, application of varnish in damp or humid weather, or a combination of all of these.

The sections of balustrade edging the stairwell at second-story level (see figure 37) do not exhibit the bubbled finish displayed by the balustrades further down the stairway. They may have been sanded.

Treads and Risers. The treads of the first run—along the west wall—show pitting and scratching through their coat of brown paint. These signs of wear may be due to foot traffic. Deep cracks are noticed on both sides of the lower set of risers. Risers and treads have been repainted. Joint separation is visible not only between the treads and the wainscot, but also between the treads and risers.

The treads of the second run—along the south wall—have white paint that is alligatoring due to a lack of proper adhesion. This has exposed the brown paint used on the risers prior to the white paint (see figure 59). These risers are smooth to the touch; the treads are worn. The same type of joint separation between treads, risers, and wainscot marring the first run is visible here.

Offices

Only conditions pertaining to the Front Office will be described here, since the Rear Office is a nonhistoric addition. The Front Office is filled with file cabinets and bookshelves, so many conditions cannot be seen.

Floor

The floor is water-spotted and displays many scratches and other stains. At the northwest corner of the room is a patch of desiccated wood.

Walls

Wainscot. Several of the beaded boards of the wainscot are cracked vertically.

Plaster. The primary problems here are plaster cracking and wallpaper failure. On the west wall, cracks emanate from the pass-through north of the doorway, and a diagonal crack originates at the upper right corner of the doorway opening. Cracks are also seen at the southeast end of the room. The wallpaper on the west wall is peeling and puckering, and water stains are prevalent. On the south wall, multiple layers of wallpaper are also peeling.

Ceiling

The pressed-metal ceiling in this room is almost entirely rusted. The rust can be seen through the layer of white paint on the ceiling.

Windows

The casing around the window in the south wall is desiccated, and the sashes and stops are rotted. The stool exhibits water damage.

Main Exhibition/Former Dining Room (Room 104)

Floor

The floor is generally in good condition; it may have been sanded. It shows its age principally from the wear of foot traffic. (It is smooth to the touch.)

Scratches made by moving furniture and exhibit cases are prevalent. Scars remain from the removal of a north-south partition that divided the room during the late 1960's. Some discoloration is visible. Dark spots are also present; these could be burns, or they could be the remains of stain applied and later improperly removed. Around the perimeter of the room the wood is darker. This may be the result of wax buildup. Water stains were seen near the south wall.

The floor slopes down rather dramatically at the south wall. The drop in the floor begins approximately 10 feet north of the south wall. There may be some association between this condition and the failing piers and posts described in the section, "Basement Story—Crawl Space."

Walls

Wainscot. The paint on the wainscot in this room makes it difficult to ascertain its condition. The beaded boards are in generally good condition, although several of the boards are splitting, and there is minor paint failure. The baseboards appear to be in worse condition; they also show nicks and scrapes near the floor.

Plaster. Numerous cracks mar the walls of the exhibition room. Cracks radiate from doorways and window openings, mostly from the upper corners. Several such cracks emanate from the second window from the west on the south side, and the wallpaper above this area is peeling (see figure 60). Floor-to-ceiling cracks are evident in both the southwest and southeast corners of the room. A long horizontal crack is noted just above the east doorway to Room 103 in the north addition. Plaster cracking and wallpaper peeling are extensive in this vicinity. Both horizontal and vertical cracks are also quite prominent in the southwest corner of the room, where the front and rear offices jut into the room (see figure 40).

Ceiling

Approximately 70 percent of the pressed-metal ceiling shows notable rust spots and the consequent peeling of the paint applied to the ceiling. (Small rust spots are evident everywhere.) Rust spots are especially visible at the seams where the beams run east to west. Pitting is seen in the central panel on the east end (see figure 61). The pressed-metal cornice along the north and south exterior walls is also rusting. This rust is causing the picture molding below the metal cornice to push away from cornice (see figure 62). A large crack in the metal ceiling is evident at the northwest corner.

Picture Molding. The picture molding below the pressed-metal cornice is separating from the walls throughout the room. Nails are pulling out in places (see figure 39), and there are signs of paint failure. This deterioration is the worst on the south wall, but is also quite advanced at the west end of the north wall. This condition could stem from any of several factors, or a combination thereof. These include:

- the weight of the pressed-metal ceiling, which sits directly on the picture molding;
- the weight of the ceiling, plus the weight of water that leaks into the building and collects on the upper surface of the metal ceiling;
- rust of the metal ceiling, which is clearly causing the separation of the picture molding from the adjacent cove molding of that ceiling; and
- vibration caused by visitors walking on the second floor.

Doorways

Alligatoring and crazing of paint is prominent on the west-wall doorway's casing and single remaining door. The door retains its original hardware, but both the door and the casing have been painted. A burn mark is seen on the top member of the casing.

On the north wall, the casing of the west doorway is in poor condition, with its east vertical member being split. The casing of the east doorway (see figure 41) is in better condition, but its paint is peeling.

The casing of the north doorway in the east wall is in good condition, but the casing of the south doorway in this wall is marred. The plywood doors in these doorways are in good condition.

Windows

The original casings of the windows are scratched and dented, but appear to be sound. The paint on their casings and stools is failing, and their bull's-eye corner blocks have numerous nail holes (see figure 63). The replacement sashes and stops of the windows are deteriorated.

North-Addition West Room (Room 102)

Walls

Paneling. The plywood panels on the north and east walls are bowed, the nails are rusting, and the seams are separating.

Plaster. No major cracks were seen on the south wall, although large water spots can be seen on the wallpaper behind the paintings. This condition also exists at the point where the west wall of the main building intersects the south wall of the north addition. No signs of cracking are evident on the north and east walls, but no real survey of these walls can be done without removing the paneling. The west wall has a water stain below the double window and a vertical crack originating from the lower right corner of the window casing.

Doorways

Crazing of paint is noted on the casing of the doorway to the entry, and extensive paint failure is noted on the plywood door itself.

Windows

Paint failure and crazing are prominent signs of deterioration on the casing around the double window in the west wall. The window sashes are desiccated and appear rotted. The windows on the north wall are also severely deteriorated. Cracking and peeling of paint as well as stains from crank handles are evident. It is likely that the sashes here are rotted as well.

North-Addition East Room (Room 103)

Floor

The floor slants markedly to the north.

Walls

Paneling. A replacement piece of paneling was installed under the easternmost window in the north wall. It is likely that the original panel underneath the window suffered water damage and rot.

Plaster. Water stains are evident at the west end of the south wall. Less-noticeable stains are seen above the west doorway in this wall.

Ceiling

The plasterboard is bowing and most of the nail holes are rusted. Separation at the seams and some puckering is noted at the west end of the ceiling.

Doorways

The casings of the two south-wall doorways show signs of wear from thumbtacks and nails. Nicks and scratches are seen at the base of these casings, while rusted nail holes are evident in the top members of the casings. The thresholds of both doorways are worn.

The casing of the north-wall exterior door is sound. Mold spots can be seen on the lower right side of the casing. Perhaps water has been allowed to enter the doorway, causing this condition. The casing of the east-wall doorway appears to be largely intact.

Windows

The central picture window in the north wall has been mostly covered by a plywood panel to increase wall space for exhibition purposes. Only 8 inches of the glass at the top is visible. The sashes and stops of the double-hung windows on either side of the central picture window are rotted.

The casing of the double-hung window at the extreme east end of the north wall appears to be intact, although paint failure is noted. Again, the sashes and stops of the window have deteriorated badly.

North-Addition Rest Rooms

The old rest rooms are in poor condition. Their fixtures have been removed, their windows are deteriorated, and their doors are missing.

Storage Room/Former Kitchen (Room 105)

This room contains many large and immovable objects in storage, making investigation difficult. The east wall in particular is concealed in this manner.

Floor

The floorboards are severely deteriorated. The boards at the northeast corner of the room are worn and buckled (see figure 42). Those at the southeast corner have begun to pull away from the subflooring, leaving gaps. A section of the floor is missing entirely in the northwest corner. At one time large pipes ran through this opening; the boards here appear to have been rotted by water.

Walls

Wainscot. Nail holes, pitting, and staining are all apparent on the west-wall wainscot. Streaking is also a problem, particularly below a long horizontal mark of discoloration that reveals the former presence of a shelf. There is no wainscot on the east wall; the south wall has been stripped to the studs; and the north wall is a modern alteration.

Plaster. The plaster on the west wall above the wainscot displays prominent diagonal cracks running north-south. A patch of beaded-board wainscot has been used in a horizontal orientation to cover other large cracks in the plaster (see figure 64). This patch measures more than 3 feet 6 inches high. Large patches of plaster are also missing from the south end of the east wall, exposing the sawn lath (see figure 43). The north end of the same wall displays large water stains. These are attributable to the shower stalls that were located at second-story level directly above this area.

Other Materials. The plywood sheathing at the east end of the south wall is water-stained. The plaster of the east wall south of the chimney is peeling and deteriorated (see figure 43). The brickwork shielding the east wall just north of the chimney is cracked.

Ceiling

The ceiling has been braced with metal runners that run in both an east-west and a north-south direction (see figure 43). There are large holes in the northeast and southeast corners of the room; here, the plasterboard is peeling away in large patches to expose the ceiling lath and second-floor joists (see figure 44). The sound of insects is audible above the northeast corner of the room. Other severe signs of deterioration on the ceiling include scratches and water stains. Holes where pipes were formerly run remain open.

Doorways

The west-wall doorway is in good condition, being contemporaneous with the recent rest rooms.

Chimney

The thin plasterboard or fire-retardant sheeting applied to the chimney here is buckling and peeling away from the wall.

Northeast-Corner Rest Rooms

These recently built facilities are operational and in good condition.

Second Story

Main Hallway (Room 201)

Southwest Hall

Floor. The crazing of the varnish layer on the floor at the head of the stairway is severe. This has been caused either by thermal breakdown of the varnish or by water damage.

Walls. The south wall at the top of the stairway is equally deteriorated. Above the window here is a bow-shaped crack at the junction of wall and ceiling. Plaster is missing and the lath is exposed at the top of the stairway, where the paneled wainscot ascending along the stairway changes from a diagonal to a horizontal orientation. This deterioration may directly relate to the damage done by the starlings to the roof eave at this end of the building. Also visible are holes of varying size that may have been caused by hooks or nails installed to hang pictures. These have never been patched, and as a result have become larger.

In addition, the south wall displays areas where layers of wallpaper have built up, and areas where the wallpaper was painted over, sometimes after sanding, sometimes not. What appear to be water-stained patches are also evident.

The east wall, being an interior wall, does not display the severe cracking of the west and south walls. The scratch coat of plaster is exposed in some areas, and small dents and digs were seen. The only crack noticed in the east wall is located at its junction with the south exterior wall. The wallpaper has apparently been removed from this wall, although traces remain.

The north wall is also an interior wall, and is in relatively good condition. There is a crack where the wall is intersected by the west exterior wall. (It is quite similar to the crack at the junction of the east interior wall and the south exterior wall.) The north wall's wallpaper is afflicted by the same buildup and water staining as observed concerning the south wall's wallpaper.

The west wall of the hall is formed by the east wall of the small west guest room (room 202). It displays severe cracks. Peeling wallpaper is also evident; masking tape has been used in some places to keep the paper from falling down.

Ceiling. At the top of the west wall, a strip of the previous wallpaper is visible along the ceiling. This marks the former location of a picture molding.

Windows. The south-wall window's upper sash—which is period-1 replacement material—is very badly deteriorated from water.

Central Corridor

Floor. Crackling of the finish on the floorboards is seen, primarily at the west end of the corridor. Other than this, the floor appears solid and in good condition.

Walls. The west and east walls of the corridor are discussed as part of the southwest and southeast halls, respectively. This is because their conditions are more closely related to those areas.

The north and south wall of the corridor, being interior walls, show less deterioration than the exterior walls. Long, shallow cracks in the plaster are prevalent throughout the corridor. The cracking can easily be seen despite the elaborate pattern of the wallpaper. Generally, cracks emanate from either the ceiling or the doorways to the guest rooms. Cracks also radiate from water-spotted areas. The orientation of most of the cracking is diagonal; some cracks run horizontally. It is evident that some cracks were covered with wallpaper. (The indentations of the cracks are visible.) The walls feel slightly damp to the touch and the wallpaper has faded. Much of the cracking corresponds to the cracking that is going on inside the guest rooms.

The north wall is severely cracked between the doorways to rooms 204 and 205. These cracks run in a diagonal pattern. Buckling and fading of the wallpaper is also advanced in this section of the hall. The north-wall finish plaster between the doorways to rooms 203 and 204 is crumbling to expose the hair-containing scratch coat and lath underneath. The wall has been patched between the doorways to rooms 208 and 209, and there are water stains and possible mold spots on the north wall between the doorways to rooms 207 and 208.

The south wall's plaster has been patched between the doorways to rooms 213 and 214. Water stains and possible mold spots are present on that wall between the doorways to rooms 215 and 216. Digs and peeling edges are also common.

The 7-inch baseboards in the corridor are in good condition.

Ceiling. The plasterboard ceiling displays extensive cracking in a transverse direction. None of the cracks are particularly deep. The ceiling displays a rippled pattern, indicating that slight buckling due to high moisture content may be occurring. A piece of picture molding in cornice position has survived between the doorways to rooms 203 and 204.

Doorways. The top members of the casings around the guest-room doorways are partially covered by the plasterboard recently applied to the ceiling.

Southeast Hall

Floor. The floor of this section of the main hallway is dry and soft when probed. It has buckled slightly from east to west. Discoloration due to water damage is evident. As stated previously, the center portion of the floor does not have the stain finish found elsewhere on the floor. The floorboards underneath the linoleum that remains from the shower stall are rotted and full of holes.

Walls. The plaster at the north end of the east wall is badly deteriorated. Diagonal cracks emanate from the north side of the window here onto the north wall of the corridor. This area also displays a large crack that extends from the ceiling to the floor. The plaster has failed along the south edge of the window, and the lath is exposed (see figure 65). Crumbling plaster, peeling paint, and large cracks are prominent on the adjacent chimney (see figure 65, extreme right). The plaster underneath the window and its wallpaper also are severely deteriorated. Touching the surface reveals it to be extremely soft and easily moved and shifted; a high moisture content is apparent.

The middle of the east wall is hidden by beaded boarding enclosing the area below the attic stairway. It can be seen by looking inside the closet under the stairway, which has no back. Frass as well as other signs of deterioration, insect infestation, and rot are present.

The south end of the east wall also exhibits severe plaster deterioration (see figure 66). A major north-south crack can be seen. A plaster patch installed underneath the window here has failed; sawn lath is exposed, and plasterboard here is peeling away extensively. Large water spots are also noted.

Deterioration of the south wall is most evident at the doorways, which are described below. The west wall is most deteriorated at its north end, where it intersects the south wall of the corridor. Nails are pulling out of the corner beading, and the wood is soft to the touch. Again, a high moisture content is likely.

Ceiling. The plasterboard sheets at the southeast corner of the hall are failing and falling. Mold spots are also visible. This is the result of the continual presence of moisture in this area. There is also a gap at the ceiling at the northeast corner. Even the new plasterboard has puckered at the seams and begun to peel.

Doorways. The south wall of the hall has two doorways. One, at the extreme east end of the wall, is sheathed with plywood from the outside. The door itself is in poor condition, exhibiting flight holes as well as severe signs of rot. West of this doorway is the linen closet, whose door also has rotted. Frass resembling fine sawdust, indicating insect infestation, is prevalent on all horizontal surfaces in this area; the sound of insects gnawing their way through the wood is clearly audible.

Windows. The window at the north end of the east wall retains its casing, but it is boarded up and its stool is rotted. The window at the south end of the east wall is rotted and its casing members are missing. The sashes and stops are period-2 replacement material, but they also have rotted.

Attic Stairway. The stairway to the attic is located at the south end of the east wall. The stairway has been severely weakened by wood-destroying insects (see figure 67). While the surface remains fairly intact, large and numerous flight holes can easily be seen,and the wood is no longer structurally sound. The sound of the insects can be heard easily. Judging from the massive amounts of frass seen not only at the base of the stairway but also on each tread, there could be several types of insects at work.

Guest Rooms (Rooms 202–210 and 213–218)

Common Conditions

The guest rooms, being constructed of the same materials, exhibit many of the same conditions. Unless otherwise specified in the descriptions of the individual spaces, the following conditions are present in all of the guest rooms.

Floors. While some of the floors along the south side of the building have a slight east-west slope, the majority are level and exhibit only minor pitting and abrasion.

Walls. The plaster walls invariably display the worst damage in each room. The most severe deterioration is found at exterior walls, and at the portions of interior walls that abut exterior walls. The plaster underneath windows is especially bad, displaying cracks, holes, and peeling paint. In some rooms, plywood sheets have been installed to cover the damage.

Diagonal cracks in the plaster are evident in every room. The general pattern of cracking is diagonal in the direction coordinating to the settlement of the building. The cracks in the north-side rooms run from southeast to northwest; in the south-side rooms, they run southwest to northeast (see figure 68). They especially emanate from the corners of doorways and window openings (see figure 69). The cracks vary in depth, length, and width. Horizontal and vertical cracking is also noted in most rooms, as is cracking at corners.

Peeling of the wallpaper on the plaster walls is noticed in every room, especially at the seams. Large patches of exposed finish plaster are seen throughout the 15 rooms. The removal of metal shelf brackets has left gaps in the wallpaper and, in some cases, even the plaster (see figure 45). Digs, holes, and dents in the wall surface are common.

The baseboards are sound and the wood is in fairly good condition. Separation between the baseboard and walls is common, as is fading and general dryness of the wood itself.

Ceilings. About half of the ceilings retain their original plaster. This tends to be extensively cracked (see figure 70). The other half of the ceilings were covered with plasterboard in 1983. While the plasterboard is generally holding up well, separation between ceiling and walls is common. Apparently the ceilings were lowered about 2–3 inches when the plasterboard was installed: the material hides the top half of the bull's-eye corner blocks at the top of the doorway casings (see figure 46).

Doorways. The doorways' original frames and casings are all intact. Some of the panels of the doors have cracked vertically (see figure 47) and are hollow-sounding when tapped. The original hardware on most doors is rusted, as are the operating mechanisms for the transom windows above the doors. All of the woodwork displays the same varnish failure that was seen in the stairway and landing areas.

Windows. The windows' original casings are sound, although their stools are deteriorated. The major cause is water damage. The sun and change in temperature have degraded most of the period-2 replacement window sashes, leaving them dry, cracked, and rotted (see figure 71).

Room 202

Floor. The floor of this room, formerly room 1, is in generally good condition. The floor was smooth to the touch, and some of its stain has faded or worn off. However, no warping or insect flight holes are seen.

Walls. The exterior west wall exhibits the worst damage. Plywood has been used underneath the window here to cover what is assumed to be major cracking and deterioration of the plaster. The several layers of wallpaper on the wall are peeling and buckling where the wall meets the ceiling. This is also the case at the southwest corner inside the closet.

The other three walls, being interior walls, are in better condition. The south wall displays major cracks running diagonally in a southwesterly direction. The wallpaper is buckling horizontally and at each of the corners. The east wall displays only the typical puckering and buckling of the wallpaper seen throughout the rooms. The north wall has two diagonal cracks running through it; one may have been patched. Again, these cracks emanate from openings, in this instance from the doorway.

The baseboard molding on all four walls is in very good condition.

Ceiling. Severe staining and cracking of the plaster was noted, as was peeling paint. Some of the deterioration was recently painted over.

Doorways and Windows. The original casings around the doorways and window openings are in good condition. The doorway to the corridor is missing its door. The original two-over-two sashes and the stool of the west-wall window are dried out and bleached by the sun.

Room 203

Walls. The north wall of this room, formerly room 2, exhibits the greatest damage. This is the exterior wall directly over the north addition; the damage may be due to water runoff, or to inferior materials and workmanship used in the construction of the north addition that weakened the second-story wall. All of the conditions outlined in the general description, such as cracks emanating from doorway and window openings and peeling paint, are evident here. The plaster above the window is particularly cracked. The wallpaper has been painted over and is peeling.

The interior south wall displays cracks, but these are not as deep, wide, or long as those on the north wall. The alligatoring of the paint is faint. A large crack emanates from the corridor doorway. The interior east wall displays more than a half-dozen consecutive diagonal cracks running from north to south. Cracking is particularly evident at the south end of the wall. Beneath the cracks are visible several layers of wallpaper.

The baseboard is intact, with only minor scratching evident. Its lack of fungus and insect damage might be attributable to the fact that the wood is very dry. Even the stain has dried out, leaving the wood finish dull.

Ceiling. The plasterboard on the ceiling of room 203 shows some separation from the walls.

Doorways. Like the baseboard, the original doorway and window casings are intact but very dry.

The door in the doorway to the corridor is worn and somewhat hollow. The door in the doorway to room 202 has a large crack in its upper left panel. As stated earlier, it retains most of its original hardware but lacks its doorknob (see figure 47).

Windows. The original sashes and stops of the window in the west wall are in good condition. The casing of the north-wall window has nail holes in its upper portion, probably from the installation of a curtain rod. Its stool is dried out; the wood is rotted and is soft when probed.

Closet. The northwest corner closet displays long diagonal cracks in the plaster on its north wall, and a severe crack on its west wall.

Room 204

Walls. This room, formerly room 3, exhibits serious deterioration around the chimney on the north wall (see figure 72). It is likely that the roof flashing around the chimney stack has failed, allowing moisture to seep into the brick and trapping it in this enclosure. The east end of the north wall, under the window, is similarly damaged. The plaster here is easily moved, and may even contain some replacement material. As with the area surrounding the chimney, this is likely due to trapped moisture. The lath and studs are either waterlogged or rotted. The finish coat has been removed to expose the hair-containing scratch coat and lath underneath.

The east wall is also badly deteriorated, especially where it intersects the north wall. Diagonal cracks running north-south have exposed plaster and lath. Large separations between wallpaper joints have exposed plaster that is moist. Plaster crumbles easily out these areas, and pieces lay on the floor.

Ceiling. The plasterboard on the ceiling of this room is in good condition, but the state of the original ceiling elements above it are unknown.

Doorways and Windows. The paint on the doorway and window elements in this room make it difficult to ascertain their deterioration. Presumably they are in the same condition as comparable elements in the other guest rooms.

Closet. Major stress cracks are seen in the plaster on the north wall of the closet.

Room 205

Walls. Again, the plaster cracking in former room 4 is worst on the north exterior wall, and on the north end of the east wall. A piece of plywood has been installed to cover the portion of north wall beneath the window. The paint on the wall is alligatored and flaking, especially at the left corner of the window but also above the window.

The west wall shows paint and paper failure. Generally, the cracking occurs in a vertical pattern on this wall. The south wall is the least marred by peeling, cracking, and puckering wallpaper. Peeling and cracking of paint are common on the east wall, again in a diagonal direction running northeast-southwest. Wallpaper is pulling away at the seams.

Although the baseboard appears to be dried out, it is in good condition. Some separation between it and the walls does exist.

Doorways. The transom in this room is missing its glass, and its operating hardware has become detached.

Room 206

Walls. The walls of former room 5 may have been repainted recently; many of the cracks are covered with paint but not repaired.

The north wall is severely deteriorated underneath the window. A major crack runs from the ceiling onto the wall near the closet. Another crack on the north wall runs from the corner of the closet to the corner of the window. The walls feel damp when touched. The plaster underneath the layers of paint and paper is crumbling. The west wall has a faint diagonal crack. Another noticeable crack runs from the corner of the closet to the ceiling.

The baseboard is in good condition.

Ceiling. Severe cracks are noted running in all directions, and separation of the ceiling from the walls is obvious at the northeast corner of the room. Failure of adhesion of the paint layer is evident, as is a great deal of chipping and peeling. The ceiling is stained and discolored. All of these problems are most likely due to the high moisture content inside the ceiling, which is caused by water getting into the roofing members above the room.

Doorways and Windows. The original casings of the doorways and windows are in good condition. The sashes of the north-wall window are period-2 replacement material that is rotted.

Room 207

Walls. The north wall of former room 6 has plaster cracks emanating from the window opening. The west wall is separating from the ceiling, and wallpaper puckering is occurring in a horizontal pattern. Digs and dents are seen where nails and other hardware have been installed and subsequently removed. Sawn lath is exposed where the shelf brackets were removed from the wall. At the south end of the west wall, cracking near the ceiling is noted. The wallpaper in this area is stained and faded. The same is true of, but slightly worse at, the east wall. Puckering of wallpaper occurs in every corner of the room.

Ceiling. The recently repainted ceiling shows severe cracking, peeling, and chipping. Some of the cracks are wide, especially near the window. The ceiling is beginning to fall again due to high moisture content (see figure 70).

Windows. The period-2 replacement sashes of the north-wall window are worn and rotted. The original door hardware is rusted.

Room 208

Floor. The floor in former room 7 is warped at the southeast corner and slopes downward from east to west. The boards are uniformly faded, worn, scratched, and pitted.

Walls. Plaster and paint layers flake easily when touched. The north wall is once again the most deteriorated, especially underneath the window. Vertical cracks running from the ceiling are prevalent in this area, and the wall paint is alligatored.

On the west wall, the removal of shelf brackets damaged the paint and paper layers, revealing the plaster underneath. The plaster thus exposed is dry and crumbling. Again, diagonal crack patterns are evident on this wall. At the south end of the west wall, plaster left over from ceiling work was used near the ceiling, presumably to cover cracks. The wallpaper is separating at its seams.

The south wall exhibits stress cracks emanating from the ceiling. Horizontal cracking is also noted. The east wall displays the same symptoms of diagonal cracking as the west wall, although more faintly.

The clear finish on the baseboard has "bubbled," as seen in the central corridor.

Doorways and Windows. The clear finish on the original doorway and window casings is bubbling like that on the baseboard. The period-2 replacement window sashes are rotted.

Room 209

Floor. The floors in former room 8 are abraded, and they slope from east to west. The cause of this sloping is related to the severe water damage and complete failure of the ceiling in the adjacent room 210.

Walls. Patching as well as painting over rough plaster and chipping paint is noticed throughout the room. The west wall has been replastered; a poor attempt was made to patch damage caused by the removal of shelf brackets at the south end of this wall. Digs and nicks occur everywhere. Horizontal and diagonal cracks are prominent despite resurfacing. No replastering was done above the closet; this area shows remnants of wallpaper that has peeled, revealing aged glue underneath.

On the north wall more patching attempts were made. One, under the window, has failed completely. Large cracks remain all around the window opening. A hole is visible at the base of the wall where the wall has separated from the baseboard. The east wall has horizontal as well as diagonal cracking. More digs and nicks are seen on the south end of this wall, and a large hole exposes the sawn lath behind it. More cracking is seen on the south wall.

Doorways and Windows. The doorway to the corridor is missing its metal room number, but the outline is visible.

Room 210

General Information. Former room 9, located at the northeast corner of the building, has by far the worst damage of all of the rooms. This is due to the extreme degradation of the roofing members at the northeast corner of the house, particularly the failure of the miter joint. This is the most dangerous of many problems present in this section of the structure. The causes of this deterioration will be discussed in greater detail in connection with the attic.

Floor. The failure of the ceiling allows rainwater to stream down onto the floor. (The water is now being caught in washtubs that are emptied periodically.) As a consequence, the floor has buckled severely, especially at the east end of the room. The intensity of the warp as well as the added weight of the water is the cause of problems in the storage room (room 105) below. The floorboards are rotted and separated, and a large fungal fruiting body appears to be growing underneath the plastic sheeting that has been put down to protect the floor from more water (see figure 73). The flooring at the west end of the room is slightly better, but some separation between floorboards is detected. Since water stains are prominent all over, the floor is probably rotted.

Walls. Many cracks radiate from window openings on the north and east walls. On the east wall, much of the plaster has fallen from the lath (see figure 74). The east end of the north wall is almost completely destroyed; major cracking is seen running in all directions (see figure 75). The west end of the north wall is not as bad, but the damage is still grave. The west wall is in fair condition, with some plaster failure in the area of the north shelf bracket. The south wall is more deteriorated. Large cracks run from the corners, where chunks of plaster are protruding and the paper has buckled.

The baseboard is badly water-damaged, especially along the east and north walls. The moisture content of the wood throughout the room is quite high, which creates an ideal microclimate for insects and fungi. The sound of insects was heard clearly emanating from the northeast corner of the room. These insects could be powder-post beetles, death-watch beetles, and/or carpenter ants. Severe separation between the baseboard and the walls is seen: at the southeast corner, the baseboard has pulled away from the floor by more than a quarter of an inch.

Ceiling. The failure of roofing members above room 210 has destroyed the new plasterboard ceiling in the room (see figure 75). It has come down in the northeast corner, and major cracking as well as severe warping has occurred. The area surrounding the light fixture at the center of the ceiling is also failing and could cause an electrical problem.

Doorways and Windows. The same insect and fungal attack plaguing the baseboard is present in the casings and other wooden members of the north- and east-wall windows.

Room 213

Floor. In this room—formerly room 11—the floor is badly bowing at the east end. (It slopes from east to west.) Water stains on the floor are clearly visible, and separation between floorboards is detected.

Walls. Diagonal cracking is seen on all of the walls. As usual, they emanate from the corners of the closet and doorway and window openings. The north wall also displays vertical cracks. Wallpaper is puckering and buckling throughout the room, and water damage and rot are extensive underneath the window.

Doorways and Windows. The north-wall doorway to the corridor exhibits varnish failure on the inner edges of the transom window, where the wood holds the glass. The door of the west-wall doorway to room 214 has two panels (the two on the north side) that are dried out and cracked. As mentioned previously, the doorknob and the locking mechanism have been removed from this door.

Room 214

Floor. The floor in former room 12 is only minimally bowed on its west edge.

Walls. As seen on the north side of the building, the most severe deterioration is noted on exterior walls. For rooms 213 to 218, these are their south walls. The south wall of room 214 is badly degraded underneath the window. Large patches of plaster have fallen out, exposing the lath behind it. Severe cracking and missing plaster is also noted to the east of the window. The pattern of the previous wallpaper in this room can still be seen under the paint on the wall.

The north wall displays cracks that emanate from the north-wall doorway to the corridor, and also a prominent water stain. Damage to the north corner of the room has caused plaster cracking and wallpaper puckering near the ceiling. Plaster and wallpaper damage to the west wall is mostly the result of the removal of shelf brackets.

The varnish coat on the baseboard has bubbled.

Ceiling. The original plaster ceiling in this room displays large cracks running in all directions. The paint on the plaster is peeling severely.

Doorways and Windows. The casings of the two doorways are streaked and desiccated. The window casing shows signs of water damage. Again, the varnish coat on all of the casings has bubbled. The door in the doorway to the corridor is missing its doorknob.

Room 215

Floor. The paint on the floor of former room 14 makes it difficult to determine the condition of the wood underneath. No warping was apparent.

Walls. Plaster cracking is noted throughout the room, despite the fact that the wallpapered walls were recently repainted. Cracking is especially evident below the window and near the southwest corner of the room. More cracks running in an east/west direction emanate from the window opening. Diagonal cracks are seen on the east wall. The inside of the closet is badly deteriorated, with much cracking and peeling.

The baseboard displays minimal separation from the walls.

Ceiling. The original plaster ceiling exhibits cracks of various lengths and widths running in all directions.

Room 216

Floor. The floor slopes from east to west.

Walls. A large crack in the plaster runs the entire height of the west wall. Horizontal cracks are also evident on this wall. The cracks on the south wall are even greater, since this exterior wall experiences the greatest stress and wind-loading problems. A stepped pattern of cracks is noted on the east wall. Peeling of the several paint layers on the wallpaper is common. The wallpaper itself is puckering, and it flakes off easily when touched. Several layers of plaster and paint are present. Holes of varying size are seen in all of the walls.

The portion of baseboard underneath the window displays dents and nicks.

Doorways and Windows. The doorway and window casings are desiccated. The door in the doorway to the corridor is missing its room number, and there is no outline to indicate that one ever existed.

Room 217

Floor. The floor of former room 16 slopes from west to east at the east end of the room. Floorboards have paint splatters on them; obviously, no drop cloths were used when the room was recently repainted.

Walls. The walls were recently repainted, but no scraping or sanding was done in preparation for this work. As a result, areas of chipped paint and peeling wallpaper are easily seen through the new layer. No new cracks have emerged, even under the south-wall window. However, it is doubtful that this new coat of paint has solved the cracking problem.

The baseboard, like the floorboards, is covered with paint spatters.

Doorways and Windows. Like the floorboards and the baseboard, the doorway and window casings in the room have paint spatters all over them. The door in the east-wall doorway to room 216 no longer retains any of its hardware.

Room 218

Walls. Again, the worst cracks exist in the south wall. The plaster is crumbling in the southwest corner of the room. Cracks emanate from the frame of the closet in the southeast corner of the room. Places where layers of wallpaper were peeling have been painted over carelessly. Paint is peeling on the north wall. Signs of water damage and resultant decay are seen on the east wall.

Ceiling. The original plaster ceiling has been repainted. Faint cracking is seen, but in general the condition of this ceiling is fairly good.

Rest Rooms (Rooms 211–212)

Room 211

Floor. The nails used to attach the linoleum floor covering in this rest room have rusted.

Walls. The white paint on the walls shows uniform signs of paint failure. Major cracks are seen in the plaster of the north and east walls, and in the northwest corner. The white paint on the wainscot has also alligatored, probably due to improper bonding.

Ceiling. The original plaster ceiling is failing. Evenly spaced cracks run in an east-west direction.

Doorways and Windows. Small, round insect flight holes are evident in the casing of the interior window in the east wall.

Fixtures. The two fixtures in this room are not operational.

Room 212

Walls. Advanced plaster cracking can be seen throughout the room, as water and stress from movement of the building continue to take their toll. The white paint on the wainscot shows signs of crazing.

Windows. The south-wall window has been attacked by insects, and the stool and interior muntins are rotted.

Ceiling. The original plaster ceiling displays general cracking and peeling of paint.

Fixtures. The two fixtures in this room are not operational.

Attic Story

Walls

The east gable end of the attic displays the most advanced state of disrepair (see figure 76). The wood in this area is rotted, and many pieces—especially around the window—are missing. The studs underneath the east-wall window have completely deteriorated. A great deal of frass from insect damage is present. Flight holes are numerous, and the sound of insects is obvious.

Frass and general deterioration are also evident at the west gable end of the building. However, the wood members at this end appear to be more structurally sound than those at the east end.

Trusses

The nonconforming truss built of vertical furring strips at the east end of the attic seems structurally unsound.

Roof Framing and Sheathing

Many of the problems in the building stem from the ability of water to enter the building through the roof. The condition of the sheathing boards is poor (see figure 77). Many of them are soft or contain holes. Longitudinal checking can be seen on many of the rafters. Gaps are seen between sheathing boards, and around the closure boards at the eaves.

Chimneys

The chimney on the east wall of the main building has many cracks and missing mortar joints. The chimney on the north wall of the main building passes through the attic some 12 feet 4 inches east of the northwest corner of the building. Cracking is seen in its upper southeast corner.

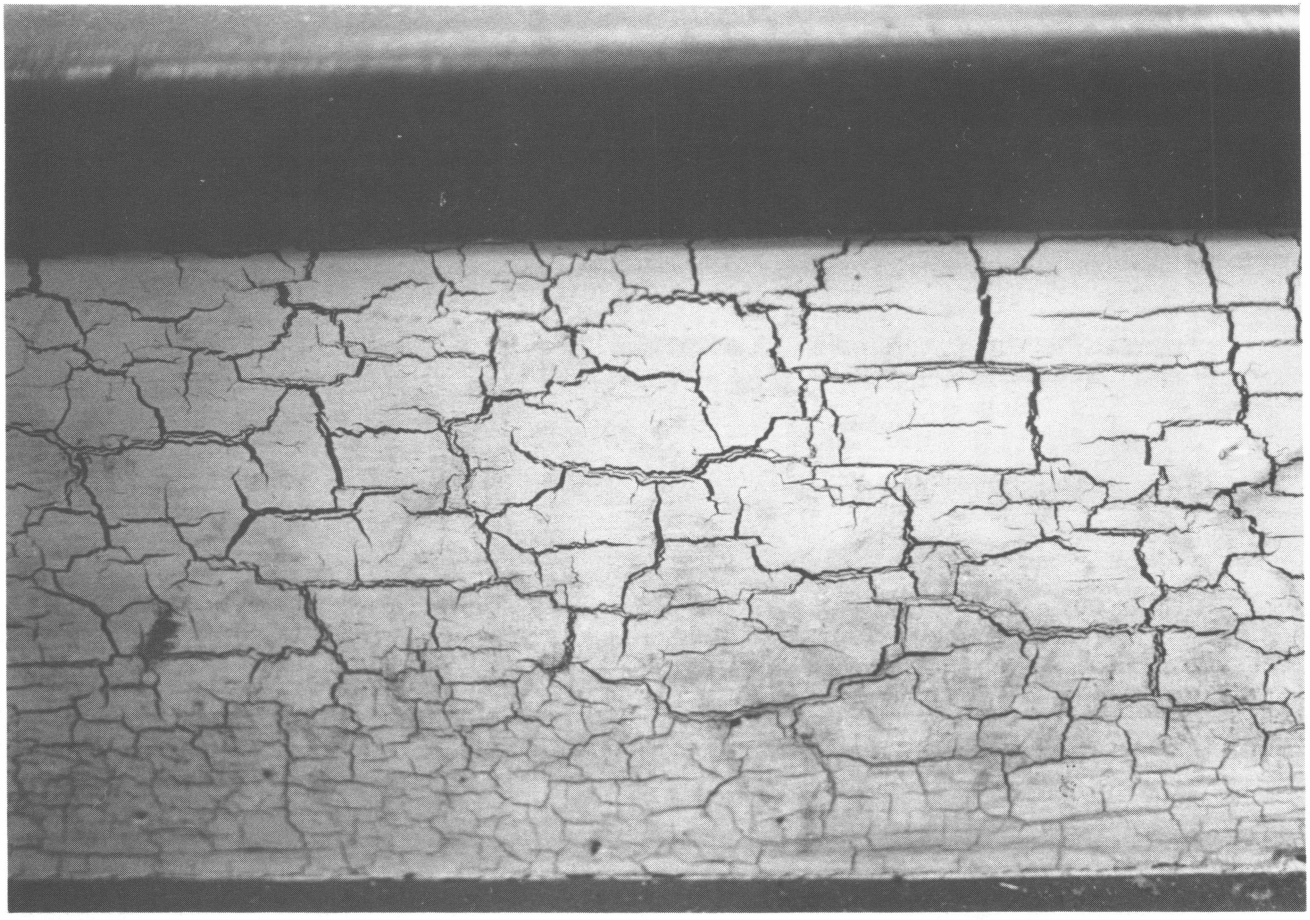


Figure 59. Southwest Stairwell: Cracked Paint on Riser.



Figure 60. Main Exhibition/Former Dining Room (Room 104), South Wall: Cracked Plaster, Peeling Wallpaper, Failing Paint, and Rusting Pressed-Metal Cornice.



Figure 61. Main Exhibition/Former Dining Room (Room 104), East End: Large Pits in Central Panel of Pressed-Metal Ceiling.



Figure 62. Main Exhibition/Former Dining Room (Room 104), North Side: Severe Rusting of Pressed-Metal Cornice.



Figure 63. Main Exhibition/Former Dining Room (Room 104), South Wall: Typical Deterioration of Window Casing and Jamb Elements.



Figure 64. Storage Room/Former Kitchen (Room 105), West Wall: Horizontal Wainscot Panel with Shelf-Bracket Marks.



Figure 65. Second-Story Southeast Hall, East Wall, North End: Window Casing and Chimney Enclosure.



Figure 66. Second-Story Southeast Hall, East Wall, South End: Severely Cracked Plaster.



Figure 67. Second-Story Southeast Hall: East-Wall Attic Stairway Weakened by Insect Infestation.



Figure 68. Typical Diagonal Cracks in Wall Plaster of Second-Story Guest Rooms.

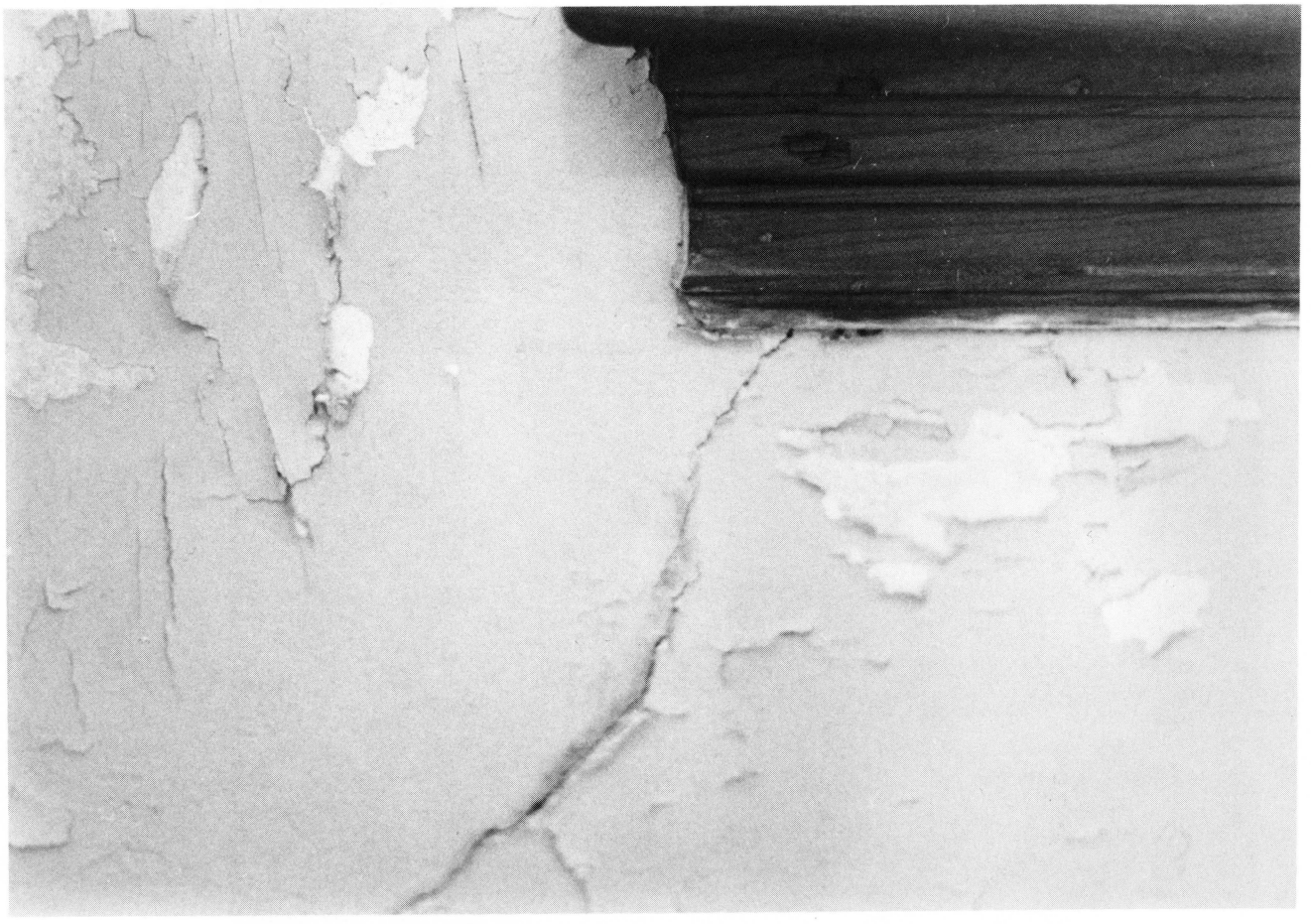


Figure 69. Typical Plaster Cracks Emanating from Lower Corners of Window Openings, and Related Wallpaper Peeling, in Second-Story Guest Rooms.

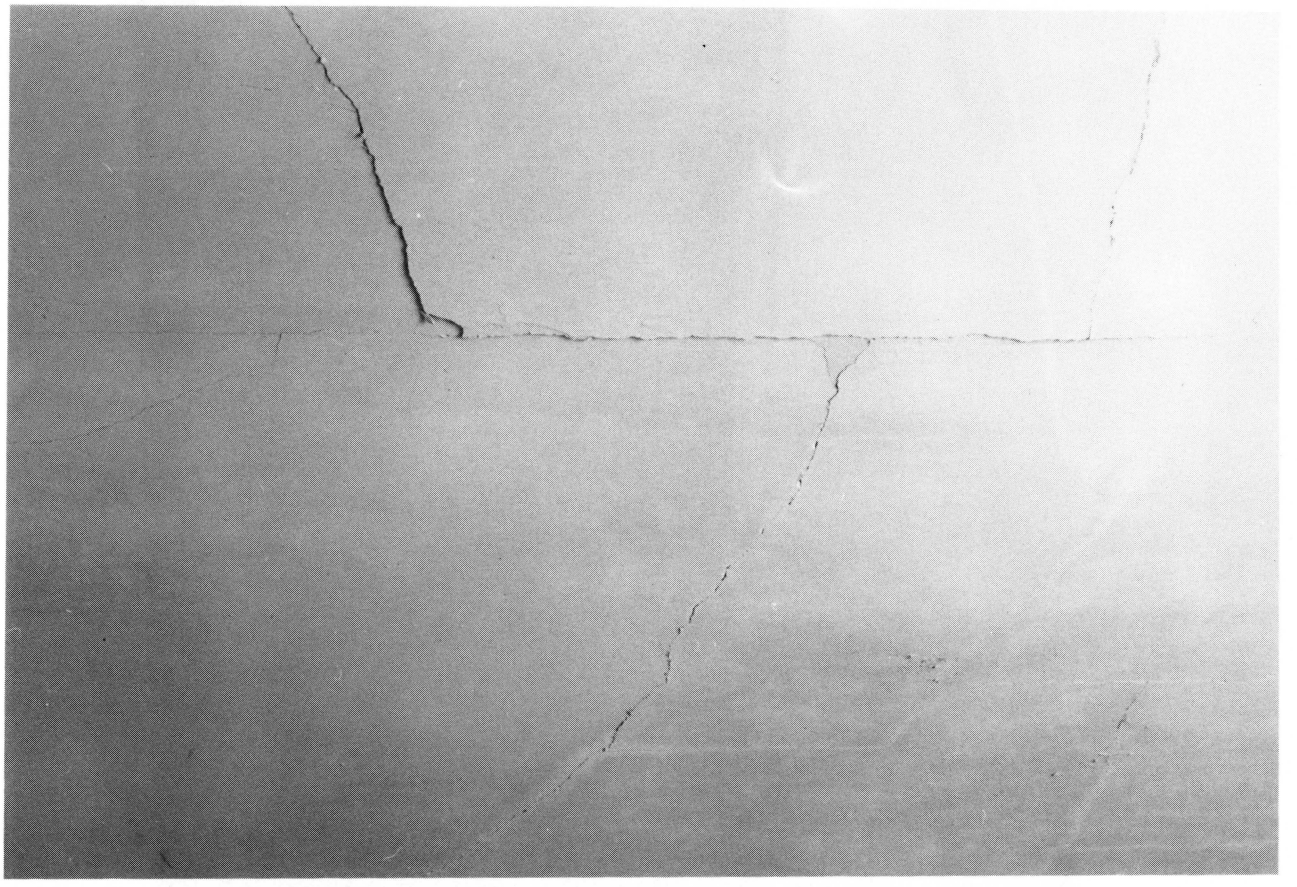


Figure 70. Typical Plaster Cracks and Incipient Sagging in Ceilings of Second-Story Guest Rooms.



Figure 71. Typical Deterioration and Desiccation of Window Casings, Jambs, Stools, and Sashes in Second-Story Guest Rooms.



Figure 72. Guest Room 204, North Wall: Plaster Deterioration on Chimney Enclosure.

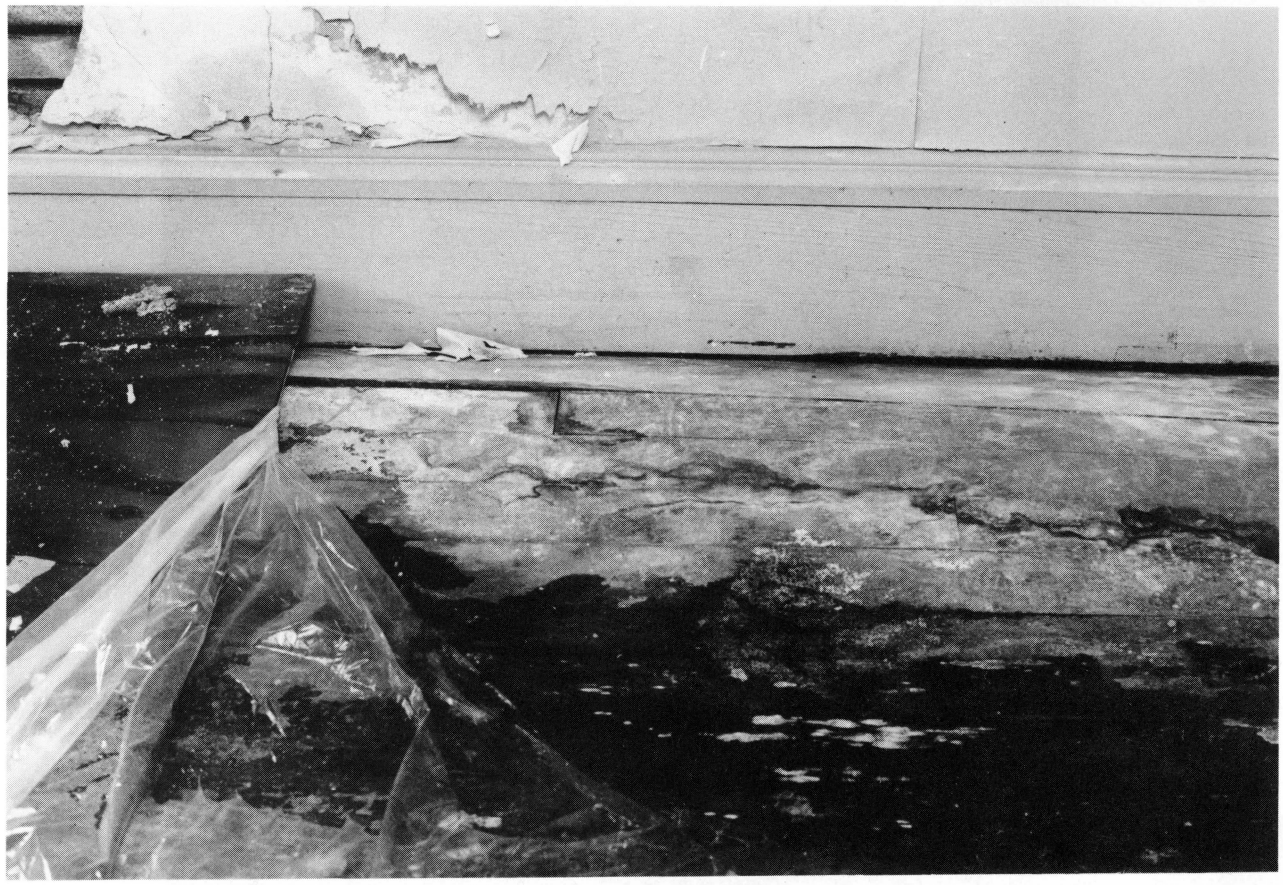


Figure 73. Guest Room 210, Floor at Southeast Corner: Water Damage, Including Buckled Floorboards and Fungal Growth.



Figure 74. Guest Room 210, East Wall: Complete Plaster Failure Below Window.

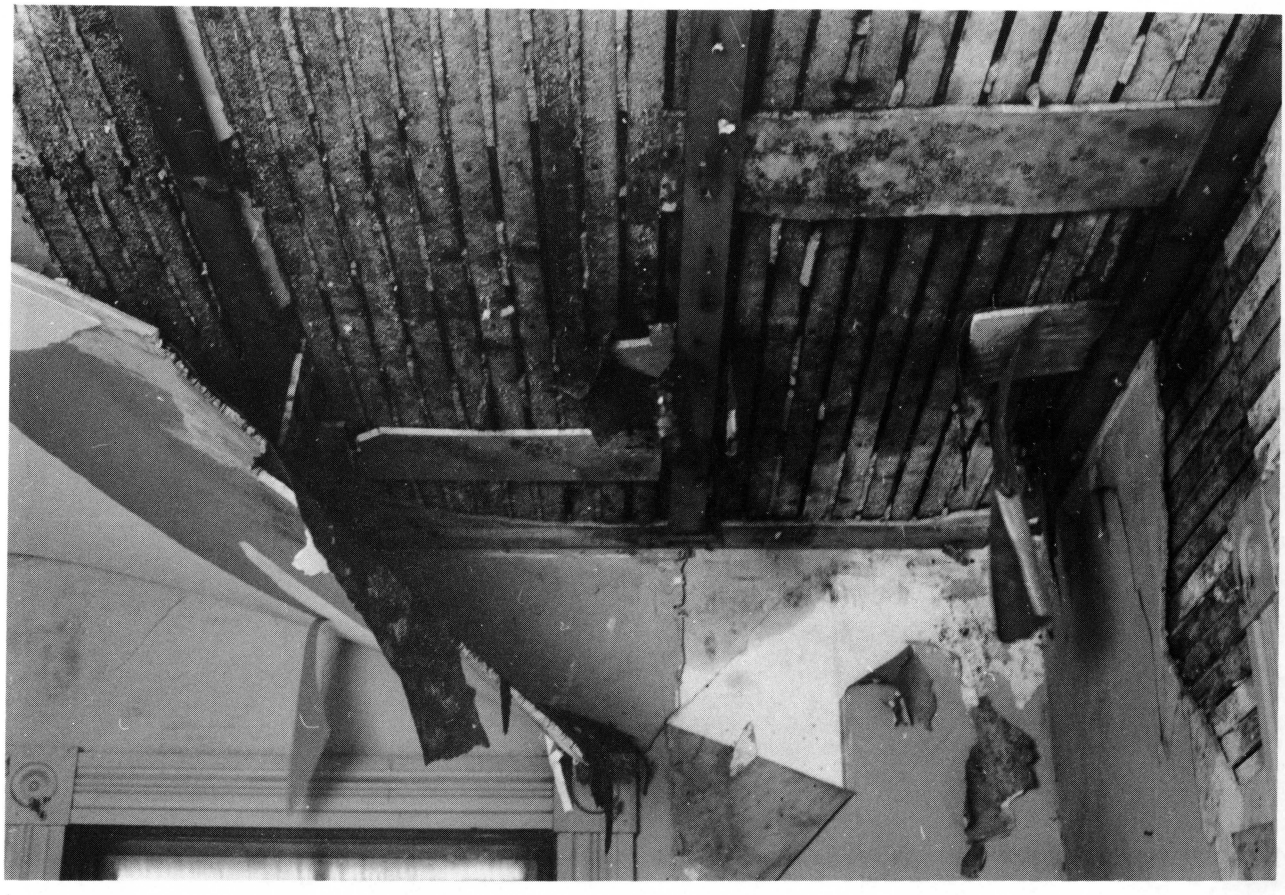


Figure 75. Guest Room 210, Northeast Corner: Complete Failure of Wall Plaster and Ceiling Plasterboard.



Figure 76. Attic, East Wall: Waterlogged, Rotted Wall Studs Below Window.



Figure 77. Attic, Northeast Corner: Deteriorated Roof Sheathing.

VI. RECOMMENDATIONS

EXTERIOR STABILIZATION/PRESERVATION

[Editor's note: As stated in Chapters IV and V, four repair campaigns and additional maintenance efforts have taken place since the information for this report was collected. The work accomplished a number of the recommendations listed here, as indicated in bracketed, italicized type.]

Foundation

The repair of the foundation both outside and inside the building is a high-priority item, second only to roof repairs. The cracked bricks and missing mortar joints of the exterior foundation walls must be repaired. Particular care will be needed at the east end of the south wall, where the southeast ell was formerly attached. Here, the corbeled brick brackets that jut out from the wall should be preserved and repaired, and the areas of "salmon" bricks should be repointed. An analysis of both the bricks and the mortar should be performed so that replacement material can be compatible in appearance and strength.

Additionally, the brick piers and wood posts in the crawl space should be checked for rot, and for damage to their footings. Those that are deteriorated should be repaired or replaced. *[This work was done.]*

Drainage

The French drain along the south side of the main building should be reinstalled properly after the foundation here is repaired. *[This work was done.]* The drainage problems on the north side of the building will require regrading, particularly at the northeast corner, to prevent water from running under and through the foundation. No gutter system was used originally, but a section of wooden gutter was later hung on the west porch. The installation of a complete gutter system may help to keep water out of the building.

Walls

As stated previously, the east side of the building has been heavily damaged by insects. Since insects prefer wood that is moist and under fungal attack, it would be wise to remove sections of interior wall covering in this area to examine the structural members underneath. Many may need to be replaced, and any fruiting fungi bodies must be located and removed. *[This work was done.]*

The east wall of the Highland House must be reshingled. *[This work was done.]* The high number of flight and starling holes in the present shingles are contributing to a high-moisture micro-climate. This condition creates an ideal breeding ground for fungi of varying kinds. When reshingling, the decorative belt course at second-floor level should be recreated. A regular maintenance program for the building would include periodic reshingling of all sides. It should not include the application of any stain or coating, since early photographs suggest that the Highland House's shingles were not painted or stained originally.

West Porch

The porch must be stripped of its plywood deck and the rotted original floorboards beneath the plywood. The same is true of its plywood ceiling and the original rotted matchboarding presumably above it. Reproduction floorboards and ceiling boards should be installed after any structural damage is repaired.

Windows

Window openings on the east wall, now boarded up, should be divested of their boards and reflashed. Replacement of selected window elements will be discussed in "Interior Work," below. A sealant should be applied to the new replacement elements, to mitigate the drying effect of the sun and the rotting effect of rainwater. *[This work was done.]*

Roofs

The replacement of severely deteriorated areas of the roof is the first priority in the preservation of the building. These areas are primarily the east and northeast portions of the roof. All of the current asphalt shingles in these areas, all of the rotted wooden shingles beneath them, and

all of the rotted sheathing boards beneath them must be removed. The connections between rafters and plates at the east end of the building need to be tightened. High-quality asphalt shingles should be used for the reroofing. *[This work was done.]* Alternatively, a return to wood shingles might be undertaken as part of this work.

Approximately 65 percent of the cornice along the outer edges of the roof needs to be replaced. Many areas show signs of joint separation or rot. The rafter ends at all four corners of the building should be strengthened; those at the southwest end of the building must be replaced. (Bird activity has completely destroyed two or more rafter extensions in this vicinity.) The failed miter joints at each of the four corners of the building must be replaced in order to prevent continued water damage. The longitudinal checking of the rafters should be studied to determine if this is having an adverse affect on the structure.

Chimneys

The chimney stacks should be repointed both above and below the roof line, and should be reflashed at the roof line.

Finishes

All exterior trim and detail elements must be repainted white. The wall shingles should be left unpainted.

Pest Management

Starling activity at the walls and roof eaves must be stopped. The same is true of insect attack. A pesticide of low mammalian toxicity that is effective on wood-destroying beetles should be used inside and outside, particularly on the east end of the building. A solution of 1 per cent Lindane in oil or water has been proven effective against a variety of beetles. Other pesticides would also work. To prevent future attack, a preservative containing a pesticide must be applied to wood in this area.

INTERIOR STABILIZATION/PRESERVATION

Demolition and Cleaning

The interior, especially the east portion of the first and second stories, needs to be rid of debris and cleaned. In room 210—the northeast corner room—the plaster on the walls and the plasterboard on the ceiling should be removed. This would allow the structural members here to dry out, and would permit a thorough inspection of the extent of rot and other damage. *[This work was done.]*

Floors

A full investigation of the undersides of ceiling joists and floorboards should be conducted to ensure that no rot or insect attack has occurred. Ceiling joists above room 210 and in the southeast hall on the second story should be examined closely. It is likely that water damage from the roof has rotted or weakened them substantially. Random checks ought to be performed in other areas of the second story, especially where peeling paint and sloping are prevalent. The floor joists of room 210 and the southeast hall are also dangerously weak and should be replaced. Room 209 should be checked carefully for similar problems. In the room directly beneath the southeast hall—room 105—the floor and ceiling joists may also need to be replaced due to water damage.

Walls

Framing

Once the plaster is removed from the east wall of room 210 and the southeast hall, those structural members found to be deteriorated should be replaced. It is likely that many members will need replacement. In the attic, the east wall's structural members will also need to be examined and replaced as necessary. *[This work was done.]*

Plastering

All walls throughout the house must be replastered. Random sampling indicates that the majority of the plaster in the house is separating from its lath. Samples of lath already exposed should be examined for deterioration. Wire lath could be installed where wood lath has failed or rotted. A previous analysis of the plaster indicates that the brown, or scratch, coat consisted of two parts lime, three parts local sand, and hair. The finish coat consisted of thinly applied lime plaster without hair. These formulas should be used to restore the walls to their original appearance. All simulated-wood paneling and plywood used to hide deteriorated plaster should be removed prior to replastering. *[This work was done in the main exhibition room.]*

Woodwork

Picture molding in the second-story main hallway should be installed to match the one piece that still exists. The wainscot in the southeast hall on the second story has been damaged by insects and must be replaced in kind.

Ceilings

Plaster Ceilings

The plasterboard should be removed from the ceilings where it has been applied, and any structural damage repaired. All ceilings should then be replastered in the same manner as the walls (see above). Care should be taken to avoid covering over the top portions of the corridor's doorway casings.

Metal Ceiling

The pressed-metal ceiling on the first floor in the main exhibition room requires the removal of random plates in order to ascertain the condition of the longitudinal beams and other second-floor framing members. Every effort possible should be made to restore the metal ceiling to its original appearance, since it is an important decorative element in the hotel. Hopefully, new sheets could be ordered that would match the originals.

Doorways

The wide doorway at first-story level connecting the entry and the main exhibition/dining room is missing one of its two doors. The missing door, which is stored in the main exhibition room, should be rehung. The bull's-eye corner blocks of the second-story corridor doorways should be cleaned of plasterboard (see "Ceilings," above). All of the transom windows of these doorways should be made functional. Approximately 35 percent of the doors in the second-story doorways are dead-sounding or cracked; these should be repaired. All door hardware should be replaced with period pieces or reproductions wherever possible.

Several early doors have been removed from their doorways and either reused elsewhere or put in storage. These should be returned insofar as possible to their original locations.

Windows

The sashes, stops, jambs, and stools of most windows on the first and second stories suffer from desiccation and rot. All of the windows on the main building should be replaced. Two-over-one sashes should be used on the west wall, while two-over-two sashes should be used everywhere else. Modern aluminum sash tracks should be avoided if possible. A better choice would be to recreate the counterweight system used for the original window sashes. All window hardware should be replaced with period pieces or reproductions wherever possible.

Stairways

The attic stairway, which has been extensively damaged by insects, must be rebuilt. *[This work was done.]*

Finishes

The majority of the woodwork—including baseboards, doorway and window casings, and stairway balustrades—is covered with multiple layers of deteriorated varnish. Reasons for this deterioration could include the breakdown of UV stabilizers in the varnish, the application of varnish in damp or cold weather, or reapplication without prior sanding. All of this woodwork should be refinished. Assuming that the woodwork consists of some species of softwood, overly dry elements could be "moisturized" with a mixture of turpentine and boiled linseed oil before refinishing.

Woodwork on the first story, and in several of the second-story rooms, has been painted. The woodwork in these areas must be stripped and finished to match the other woodwork.

All newly plastered walls and ceilings will have to be painted.

Electrical System

Ideally, the Highland House's electrical system should be upgraded to meet code requirements for the building's ultimate reuse before the replastering is begun. Electrical wiring should be concealed wherever possible during the process of replastering.

Protection Systems

Hygrometers should be installed on each floor of the building to monitor moisture content and detect moisture problems.

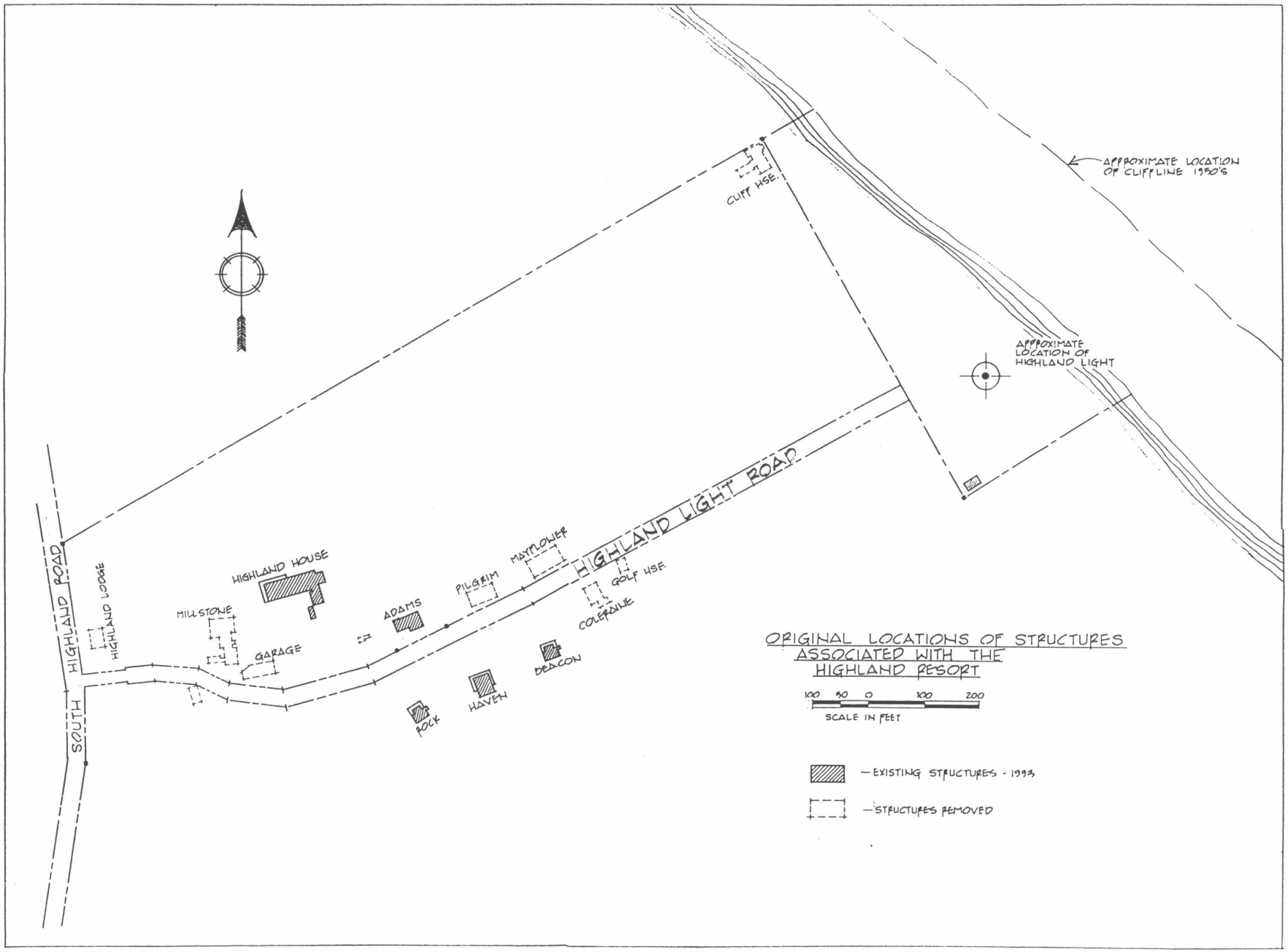
LIFE-SAFETY CODE COMPLIANCE

The Highland House needs to be brought into compliance with all applicable life-safety codes and regulations for its current use as a museum.

VII. APPENDICES

APPENDIX A.

Original Locations of Structures
Associated with the Highland Resort


APPROXIMATE LOCATION OF CLIFFLINE 1950'S
CLIFF HSE.
APPROXIMATE LOCATION OF HIGHLAND LIGHT
HIGHLAND LIGHT ROAD
HIGHLAND ROAD
SOUTH
HIGHLAND LODGE
HIGHLAND HOUSE
MILLSTONE
GARAGE
ADAMS
PILGRIM
MAYFLOWER
GOLF HSE.
COLEDALE
ROCK
HAVEN
BEACON
ORIGINAL LOCATIONS OF STRUCTURES ASSOCIATED WITH THE HIGHLAND RESORT
100 50 0 100 200
SCALE IN FEET
— EXISTING STRUCTURES - 1993
— STRUCTURES REMOVED

APPENDIX B.

National Register Nomination and Entry Forms

June 1975

United States Department of the Interior

NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

IN REPLY REFER TO:
H30PC
H-34

JUN 24 1975

Memorandum

To: Regional Director, North Atlantic Region

From: Assistant Director, Park Historic Preservation

Subject: Entry in the National Register

Enclosed are the official notice and approved copy of the nomination entered in the National Register of Historic Places, effective June 5, 1975, covering Highland House in Cape Cod National Seashore.

Robert M. Utley

Enclosures

NORTH ATLANTIC REGION JUN 30 1975	Initial and Date
Director	
Deputy Director	
Asst. to Reg. Dir.	
Public Affairs	
EEO	
Operations Evaluation	
Asso. Reg. Dir., Admin.	
Personnel	
Programs	
Finance	
Property	
Park Management	
Prof. Services	
Coop. Activities	
Lands	

ENTRIES IN THE NATIONAL REGISTER

STATE MASSACHUSETTS

Date Entered JUN 5 1975

Name	Location
Highland House	Truro Barnstable County

Also Notified

Hon. Edward M. Kennedy
Hon. Edward W. Brooke
Hon. Gerry E. Studds
Mr. Douglas Wheeler
Deputy Assistant Secreta for
Fish and Wildlife and Parks

State Historic Preservation Officer
Mrs. Elizabeth R. Amadon
Executive Director
Massachusetts Historical Commission
40 Beacon Street
Boston, Massachusetts 02108

Form 10-306
(Oct. 1972)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM
FOR FEDERAL PROPERTIES
(Type all entries • complete applicable sections)

STATE: Massachusetts
COUNTY: Barnstable
FOR NPS USE ONLY
ENTRY DATE: OCT 5 1978

1. NAME
COMMON: Highland House #15-94 (Cape Cod NS)
AND/OR HISTORIC: same

2. LOCATION
STREET AND NUMBER: CampeCod Light (Highland Light) area
CITY OR TOWN: Truro
CONGRESSIONAL DISTRICT: Twelth
STATE: Massachusetts — CODE: 25
COUNTY: Barnstable — CODE: 001

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☒ Building	☒ Public	Public Acquisition:	☒ Occupied	Yes:
☐ Site ☐ Structure	☐ Private	☐ In Process	☐ Unoccupied	☒ Restricted
☐ Object	☐ Both	☐ Being Considered	☐ Preservation work in progress	☐ Unrestricted
				☐ No

PRESENT USE (Check One or More as Appropriate)

☐ Agricultural	☐ Government	☐ Park	☐ Transportation	☐ Comments
☐ Commercial	☐ Industrial	☐ Private Residence	☒ Other (Specify)	
☐ Educational	☐ Military	☐ Religious	Used by the Truro Historical Society	
☐ Entertainment	☐ Museum	☒ Scientific	as a museum.	

SEE INSTRUCTIONS

4. AGENCY
REGIONAL HEADQUARTERS: (If applicable) National Park Service (Interior)
STREET AND NUMBER: 150 Causeway Street
CITY OR TOWN: North Atlantic Regional Office
STATE: Massachusetts — CODE: 25

5. LOCATION OF LEGAL DESCRIPTION
COURTHOUSE, REGISTRY OF DEEDS, ETC: Barnstable Registry
STREET AND NUMBER: Route 6A
CITY OR TOWN: Barnstable
STATE: Massachusetts — CODE: 001

6. REPRESENTATION IN EXISTING SURVEYS
TITLE OF SURVEY: Plan of Land, N. Truro, Lillian M. Small by John R. Dyer
DATE OF SURVEY 1945 (Dec.) ☐ Federal ☐ State ☐ County ☒ Local
DEPOSITORY FOR SURVEY RECORDS: Barnstable Registry of Deeds
STREET AND NUMBER:
CITY OR TOWN: Barnstable
STATE: Massachusetts — CODE: 001

STATE: Massachusetts
COUNTY: Barnstable
FOR NPS USE ONLY
ENTRY NUMBER: 78
DATE

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☐ Good	☒ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)		(Check One)			
	☒ Altered	☐ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The present-day Highland House was built by Issac N. Small in 1907. It lies in an area embracing the famous Highland Light (1797); an historically early golf course, and a former summer visitor complex comprising some 86 acres.

Tdday, the building is used as a museum by the Truro Historical Society. It is a two-story clapboard and shingled building, 32 x 92 feet, Highland House was used as a restaurant as late as 1968.

The doors, double-hung windows, door and window casings, metal ceiling, appear to be original; large, first-floor dining room, are as originally installed, and are typical examples of the construction of this period As a whole, the building is structurally sound.

The second floor bedrooms, placed on either side of a central corridor which runs the length of the building, are supported within the corridor walls by steel rods suspended from the wood frame trusses in the attic. These steel rods extend across the building--the trusses are supported by the side walls.

Externally, this building presented a veranda around the West and North sides. Part of the West veranda remains--the North half, facing part of the historic golf course, has been converted to an extra room, leanto. Other changes include a kitchen built on the East end, and an ell added to the South side.

Besides the golf course, there were a half dozen "guest cottages" in the complex; these structures, several of which have been removed, once served an important visitational use in the life of summer visitors to Cape Cod.

Some minor alterations have been made to Highland House by the Truro Historical Society, who uses the facility on Special Use Permit from the National Park Service.

Significance: 3rd Order

Longitude and Latitude: See Section 10

Acreage: Less than one acre

The Highland House is used as the present time as a historical museum by the Truro Historical Society, Inc., under a Special Use Permit. Some amount of restoration/preservation should eventually be done. This could cost from $20,000 to $40,000.

Photograph enclosed.

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

☐ Pre-Columbian	☐ 16th Century	☐ 18th Century	☒ 20th Century
☐ 15th Century	☐ 17th Century	☒ 19th Century	

SPECIFIC DATE(S) (If Applicable and Known) 1907

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

Aboriginal	☐ Education	☐ Political	☐ Urban Planning
☐ Prehistoric	☐ Engineering	☐ Religion/Phi-	☑ Other (Specify)
☐ Historic	☐ Industry	losophy	Early, summer
☐ Agriculture	☐ Invention	☐ Science	visitor accom-
☒ Architecture	☒ ~~XXXXXXX~~	☐ Sculpture	modations.
☐ Art	X Architecture	☒ Social/Human-	
☒ Commerce	☐ Literature	itarian	
☐ Communications	☐ Military	☐ Theater	
☐ Conservation	☐ Music	☐ Transportation	

STATEMENT OF SIGNIFICANCE

SEE INSTRUCTIONS

In 1835, James Small built a two-story, clapboard farmhouse near the present Highland House. Isaac Small, for 50 years a resident of the area, states: "Henry David Thoreau visited our family twice on his journeys down the Cape, the first time at the Lighthouse when my father was Keeper in June of 1850, and again in 1855 when he stopped with us at the Farm." This "Farmhouse", the original Highland House, began accomodating summer visitors as early as 1835. (This old building has unfortunately been moved out of the vicinity). Isaac Small built the present House in 1907. and continued the guest house tradition—he added several guest cottages. and a golf course, one of the two oldest golf courses in the United States (dating 1892), was part of the complex.

While the present Highland House is only 67 years old, it is important as a survivor of a way of life gone forever on Cape Cod--an architectural structure designed for visitor use years before the "summer people" began individual land and house purchases for summer retreats.

Located as it is in the area explored by the Pilgrims in November, 1620, (before going on to Plymouth), utilized as the best farm site in Truro, placed in approximity to the important Life Saving Station (1872) and Highland Lighthouse (1797), and continuously watched over by Marine Weather Station Reporter, Isaac M. Small, the present Highland House, now used as a museum, stands as a monument to a historical past embracing some 350 years.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

1. *Just a Little About the Lower Cape*, booklet, by Isaac H. Small, 1922.

2. *Truro--Cape Cod* by Shebnah Rich: Boston, D. Lothrop and Company, 1883.

3. *Cape Cod* by Henry David Thoreau. University Press: Welch, Bigelow, and Company, Cambridge, 1864.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY

CORNER	LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
NW	°	'	"	°	'	"
NE	°	'	"	°	'	"
SE	°	'	"	°	'	"
SW	°	'	"	°	'	"

OR

LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES

LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
42°	02'	25"	70°	03'	56"

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: Approximate acreage of nominated property: less than 1 acre

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE: Edison Pike Lohr, Park Historian

DATE: 2/25/74

BUSINESS ADDRESS: Cape Cod National Seashore, National Park Service

STREET AND NUMBER:

PHONE:

CITY OR TOWN: South Wellfleet

STATE: Massachusetts

CODE: 25

12. CERTIFICATION OF NOMINATION

State Liaison Officer recommendation:

☐ Yes
☐ No
☒ None

Elizabeth R. Amadon
State Liaison Officer Signature

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Liaison Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The recommended level of significance is ☐ National ☒ State ☐ Local

Federal Representative Signature — *Title*

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

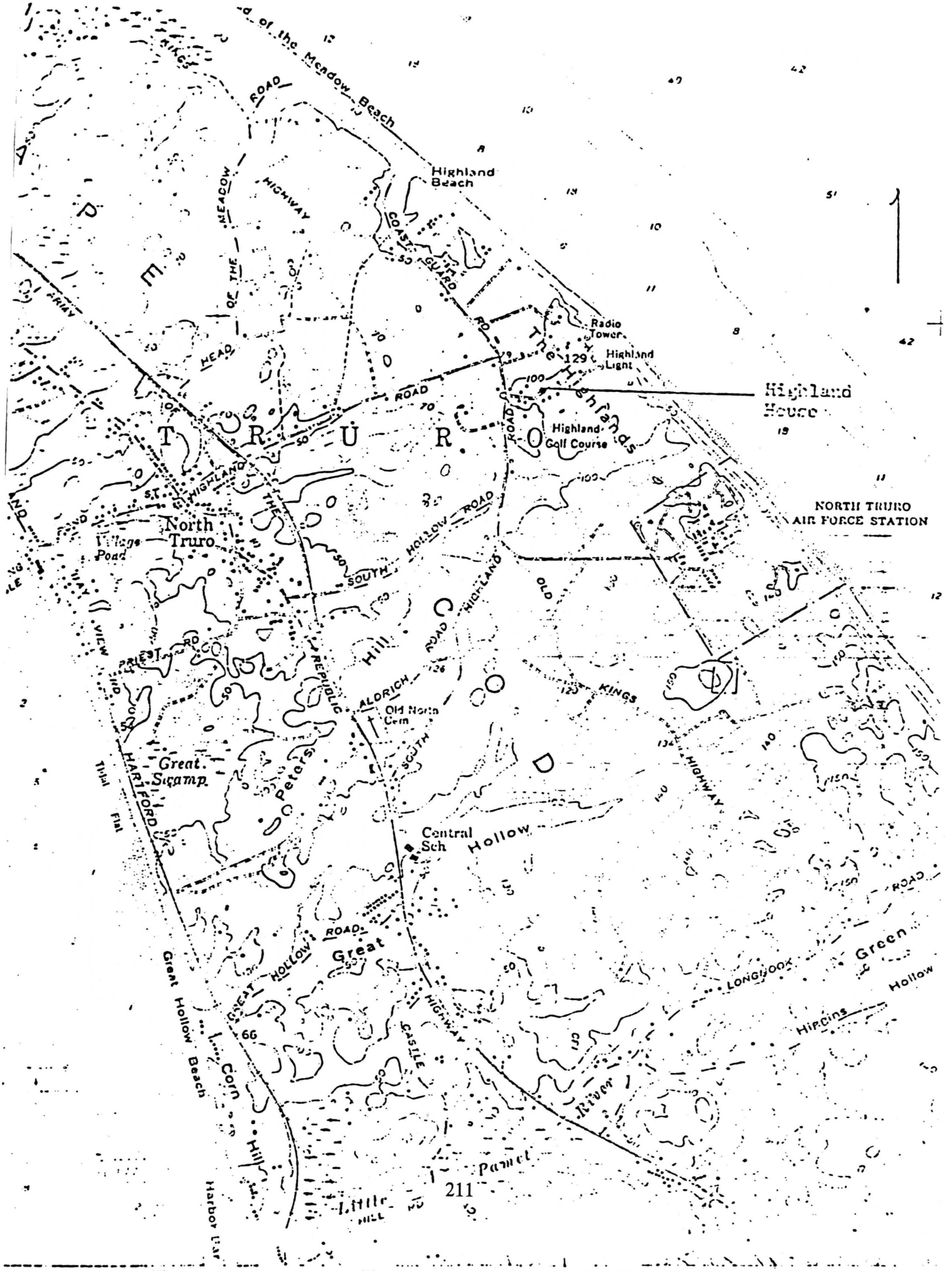
Director, Office of Archeology and Historic Preservation

Date 6/5/75

ATTEST:

Keeper, The National Register

SEE INSTRUCTIONS


Highland Beach
Radio Tower
Highland Light
Highland House
Highland Golf Course
NORTH TRURO AIR FORCE STATION
North Truro
Old North Cem
Central Sch
Great Hollow Beach
Great Hollow
Corn Hill
Pamet River
Little Hill
Pamet
Hollow
Green
Higgins
Peters
Great Sicamp
Tidal Flat
Harbor
KINGS
HIGHWAY
ROAD
HOLLOW
HIGHLAND
SOUTH
CASTLE
LONGNOOK
ALDRICH
REPUBLIC
VIEW
PRIEST
HARTFORD
129
100
150
140
120
110
90
80
70
66
50

Form 10-301
(Dec. 1968)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY MAP FORM

(Type all entries - attach to or enclose with map)

STATE	
Massachusetts	
COUNTY	
Barnstable	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
[illegible]	

SEE INSTRUCTIONS

1. NAME

COMMON: Highland House

AND/OR HISTORIC: Same

2. LOCATION

STREET AND NUMBER:
Cape Cod Light (Highland Light) Area

CITY OR TOWN:
Truro

STATE:	CODE	COUNTY:	CODE
Mass.	25	Barnstable	001

3. MAP REFERENCE

SOURCE: U.S.G.S. North Truro, Quadrangle

SCALE: 1: 24,000

DATE: 1958

4. REQUIREMENTS

TO BE INCLUDED ON ALL MAPS

1. Property boundaries where required.
2. North arrow.
3. Latitude and longitude reference.

APPENDIX C.

Memorandum Concerning Visit by North Atlantic Region Staff to Cape Cod National Seashore

April 8, 1980

United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region
15 State Street
Boston, Massachusetts 02109

April 8, 1980

N REPLY REFER TO:
NAR(P)

"Memo for record purposes. Most of the work required may have been accomplished."

Memorandum

To: The Files

From: Associate Regional Director, Planning and Resource Preservation

Subject: Cultural Resource Concerns as discussed January 3, 1980 at Cape Cod

The future use and preservation of cultural resources at Cape Cod has been a matter of concern for some time. The purpose of the Regional Office Staff visit to Cape Cod was threefold: To familiarize ourselves with the cultural resources and to establish what needs to be done to assure the short and long-range preservation of these resources. The Highland House operated under a Special Use Permit by the Truro Historical Society is the immediate issue. The 20-year Permit issued in 1974 requires the society to maintain the structure. The Society does not have the financial resources to maintain the building. Consequently, the clapboard on the east end of the structure as well as the roof are in poor condition. Water damage is occurring. We agreed that immediate action was necessary to protect exposed portions of the east side of the building. (The Park has already done this work) We also agreed that the Park would take a close look at the condition of the roof during a heavy rain. Long Range action by the park is to re-evaluate the special use permit. It does not appear realistic for us to insist that the Society maintain a structure that was in poor condition when the permit was issued. The permit should probably be renegotiated but this, of course, raises the questions of where the Park Service would find the money. Undertaking preservation or maintenance for the structure would probably cost upwards of $60,000 to bring the building up to maintenance standards.

We looked at a number of other structures including the Ahern, the Jedediah Higgins and the Gray House. These structures are not in as poor condition as the Highland House, but they do point to a general issue of "what to do with them?" The Salt Pond Motel is presently using a very fine historic structure as an office. This structure is in need of a new roof. It is questionable whether replacing the roof is the responsibility of the present concession. Some answers may be found in the lease back-sell back proposals that are being considered by Congress. These badly needed pieces of legislation would allow the money coming from lease or sell-back to be placed into the preservation of the structure rather than returning to the general fund.

Year of the Visitor

We agreed that in order to begin to address the general question of cultural resources at CACO, that an inventory of all known resources would be prepared from various sources such as drawings, the master plan, historic resource studies. This inventory would be the basis for a cultural resource management plan. The first step is for the park to assemble this inventory.

We also agreed that an improved or new alarm system at Atwood Higgins was needed and that the donation money from the family would be a source of funds for this work.

Charlie Clapper

Charles P. Clapper, Jr.

cc: Blaine Cliver
Frank McManamon
Dwight Pitcaithley
Supt., CACO

APPENDIX D.

Letter Responding to the Proposed Rehabilitation of Second-Story Rooms by the Truro Historical Society

April 17, 1980

H3015 April 17, 1980

Mr. Ed Oswalt, President
Truro Historical Society
Snow Field Road
Truro, Massachusetts 02666

Dear Mr. Oswalt:

I have reviewed with our Regional Historical Preservation Laboratory, the projects the Truro Historical Society has proposed for the Highland House. The moving of the electrical service box should be an easy project to have approved. A Mr. Roland Verfaillie, who is currently supervising the painting of the Penniman House in Eastham, will be asked to contact you. He can make an on-site inspection of the Highland House with you and he has the authority to approve a new location for the power service.

The Society's proposal to restore several upstairs rooms is a project of greater complexity. This and any other project of this nature must be reviewed by the staff of the Historic Preservation Laboratory. Detailed proposals should be prepared and submitted through me.

The implication here is that the authenticity of rehabilitation is important - even for structures that are used adaptively. If the Society has doubts about appropriateness of a project, you should discuss the project with Preservation Laboratory specialists prior to submitting a detailed proposal. With sufficient lead time a staff member can make it to Truro to meet with you and your Society representatives.

The use of sheetrock in place of lathe and plaster is inappropriate for the Highland House. So work should not commence on restoring the upstairs rooms. This project calls for a meeting with the preservation staff to clarify your proposal, so a copy of this letter will advise them of this need. When an on-site meeting can be made I will give you a call.

Sincerely yours,

James C. Killian
Acting Superintendent

cc:
Historical Preservation Laboratory, NARO

GFKaye:brf 4/17/80

APPENDIX E.

Memorandum Concerning Use of and Repairs to the Highland House

September 4, 1980

UNITED STATES GOVERNMENT

memorandum

DATE: September 4, 1980

REPLY TO ATTN OF: Chief, Historic Preservation

SUBJECT: Highland House, Cape Cod National Seashore

TO: Associate Regional Director, Planning & Resource Preservation

On July 16, I met with Herb Olsen and Edward A. Oswalt, President of the Truro Historical Society, at the Highland House in Truro on Cape Cod. This historic structure is owned by the National Park Service, but cared for and operated by the Truro Historical Society under an agreement with the government. The purpose of the meeting was to discuss what actions could be taken by the Society to improve the Highland House and what assistance the Park Service could render.

Because of the deterioration of the building and its historical importance to the town, I strongly recommend that we have a meeting this fall to set a direction for use of the building and decide on a period of restoration if needed. Much of what was discussed on the 16th centered around the need to reduce the current costs of maintenance and to present a meaningful interpretation. Obviously, any action taken to demolish deteriorated additions should reflect the historical appearance we wish the building to attain.

The following points were those which were discussed:

1. Upgrading of the current electrical wiring to meet code. This may involve running new wiring to specific lights and recepticals based on present requirements and adding junction boxes where none now exist.

2. Removal of side porch. The porch is near collapse and should be removed for safety reasons. It is of recent origin; however, measured sketches and photographs should be made of it before removal. Possibly exit stairs can be added temporarily in place of this porch.

OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR (41 CFR) 101-11.6
5010-112

3. There are no, nor were there previously, gutters on the south side of the buildings. Water has entered the foundation causing movement of stones. A sub-surface drain along the side should take care of much of this run off.

4. Because of the poor condition of the rear wing, the Society is desirous of its removal. To do this would obviously have an effect on the period of interpretation. However, I agree that this may be the best choice if the wing is not connected with any later significant events since to rebuilt it would be a considerable expense.

5. With a small effort the areas of shingles open to the weather could be closed keeping both water and birds out. The park may be able to do this with their staff. Any rebuilding of porches or reshingling of walls or roof would require a bit more planning and could be done on a project basis.

6. The Society is interested in restoring some of the upstairs rooms to improve the interpretation. This will primarily involve patching plaster and wallpapering. The plaster should be matched using a similar mix to that used for the existing plaster. Our analysis indicates that existing plaster has a brown coat consisting of 2 parts of lime to 3 parts of sand (very similar to the present beach sand). This coat contained hair and was finished on the ceiling with a neat, thin lime plaster. An acrylic emulsion can be added to the water used for mixing the plaster for better bonding. Once the plaster is repaired the whole ceiling should be whitewashed using a simulated coating or a calsomine.

Again, I feel it is importance to set a course for the Highland House, so that all parties can be working toward the same objective. Maybe this can be done through a resource management plan for the building. However, before any work is done, Section 106 approval should be obtained.

Blaine

E. Blaine Cliver

cc:
Superintendent, Cape Cod
E. Oswalt
F. McManamon

APPENDIX F.

Memorandum Seeking Section 106 Approval for Removing
Southeast Ell and South Porch of Highland House

August 14, 1981

H-30 August 14, 1981

Memorandum

To: Acting Regional Director, North Atlantic Region

From: Superintendent, Cape Cod National Seashore

Subject: Highland House Ell and Porch

Enclosed are our comments and justification for 106 approval for removing the ell portion of the Highland House. Both the ell and porch are in an advanced state of deterioration and have been determined not to be of major significance to the original structure.

The present Highland House, which was constructed in 1907 as a guest house for the budding Highland Golf Course complex, was the second of two hotels built in the vicinity. The first Highland House, dating from the mid 1800's was located nearby and was subsequently moved off site in the early 1900's. The 1907 structure is a substantial two story building (see attached survey description by Peiffer).

While various additions were made to the structure since 1907, typical to the evolution of any similar structure dating from that period, the major structure facade of the building centers around its initial 1907 year of construction. At an undetermined date, but estimated at 20 to 30 years later through photographic records and first hand recollection of local residents, a two story ell was added to the south side of the main structure. The ell has since fallen into disrepair and subsequently is endangering the structural and aesthetic integrity of the main building. The porch is of even more recent construction and is in a similar state of disrepair. Considering the advanced state of deterioration of these two additions, and since they are not of primary significance to the original 1907 architectural facade or design, we suggest that they be removed to halt further deterioration or endangerment to the main structure.

Our contention that the ell and porch should be removed is also based on the determination that cost and maintenance requirements necessary for even minimal stabilization outweigh removal costs. Removal thus would be less costly and would not have a negative effect on the integrity of the original structure.

Herbert Olsen

Enclosures
HEW
Hatley:ms 8/13/81
mav

APPENDIX G.

Memorandum Concerning State Historic Preservation Officer's Concurrence with Removal of Southeast Ell and South Porch

December 2, 1981

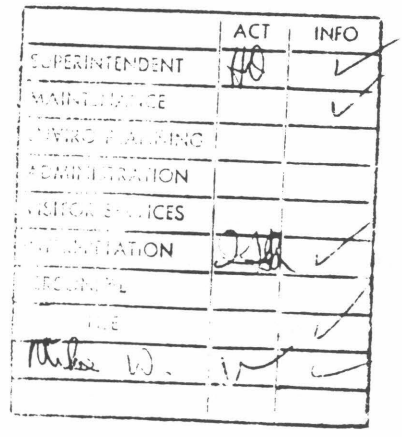
United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region
15 State Street
Boston, Massachusetts 02109

DEC 8 1981

IN REPLY REFER TO:



December 2, 1981

H42(NAR-PC)

Memorandum

To: Superintendent, Cape Cod National Seashore

From: Associate Regional Director, Planning and Resource Preservation, North Atlantic Region

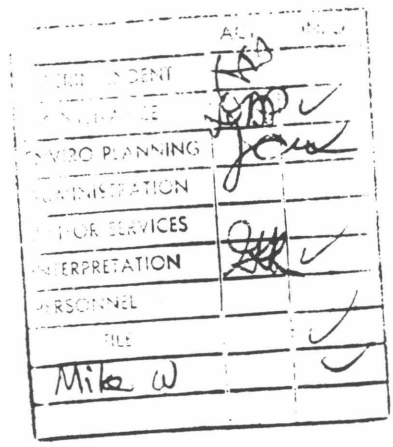
Subject: Section 106 Compliance

We have received concurrence from the State Historic Preservation Officer with our determination that the removal of the ell and the porch of the Highland House will have no effect on the qualities for which the property was listed in the National Register. Enclosed is a copy of the concurrence. The Section 106 review is now complete.

Charles P. Clapper

Enclosure

cc: WASO (560) Asst. Director



H42(NAR-PC)

Ms. Patricia Wealowski
Massachusetts Historical Commission
294 Washington Street
Boston, MA 02108

Dear Ms. Wealowski:

The National Park Service proposes to remove a badly deteriorated ell and side porch from the Highland House, Cape Cod National Seashore. Both of these elements are in poor condition and even stabilization efforts would be prohibitively expensive. Neither the ell nor the porch date from the original construction of the building in 1907 and neither are integral to the building's significance.

Originally nominated to the National Register in 1974, the building was deemed significant not for its architectural importance but for its association with the early tourist industry on Cape Cod. Even in this regard, it was not the original Highland House built for summer visitors, but the second. A recent architectural survey of Cape Cod by Brian Pfeiffer of the Architectural Conservation Trust for Massachusetts determined that the structure was only of "marginal historical significance," and that any significance that the Highland House did possess was associative rather than intrinsic. The structure is presently being used by the Truro Historical Society as a museum. The ell is not used by the Society because of its condition.

In accordance with the procedures of the Advisory Council on Historic Preservation, we have applied the criteria of effect. The removal of the ell and the porch will have no effect on the qualities for which the Highland House was listed in the National Register. The removal will allow the structure to be more effectively and efficiently preserved and will, secondarily, serve to effect an appearance for the building that is closer in time to the events with which it is associated.

We would appreciate your response to this matter as soon as possible. If you concur with the above determination, please sign below and return the letter to this office within 30 days. A copy of this letter is enclosed for your file. Should you have any questions regarding this project please contact Dwight Pitcaithley, Regional Historian, at 617-223-3778.

Sincerely,

Steven H. Lewis
Acting Regional Director

In duplicate

I concur with the above determination of effect regarding the Highland House.

Patricia L. Weslowski
Massachusetts State Historic Preservation Officer

11/24/81
Date

APPENDIX H.

Memorandum Approving Proposed Repairs to the Interior of the Second Story

September 8, 1983

United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region

15 State Street

Boston, Massachusetts 02109

IN REPLY REFER TO

	ACT	INFO
SUPERINTENDENT		
MAINTENANCE		
ENVIRO PLANNING		
ADMINISTRATION		
VISITOR SERVICES		
INTERPRETATION		
PERSONNEL		
FILE		
Whitley		

September 8, 1983

H42(NAR-PC)

Memorandum

To: Superintendent, Cape Cod National Seashore

From: Associate Regional Director, Planning and Resource Preservation, North Atlantic Region

Subject: Section 106 Review

The enclosed XXX form concerning the proposed work on the interior of the Highland House has been reviewed and approved by this office. The Section 106 review is now complete.

Charles P. Clapper

Enclosure

Form XXX

ASSESSMENT OF EFFECT ON CULTURAL RESOURCES

A. Originating Office (Attach additional sheets as necessary.)

1. **Park:** Cape Cod National Seashore

2. **Description of and justification for proposed action:**

Scrape, repair cracks, and paint ceilings in rooms 201, 202, 203, 206, 209, 211, 212, 214, 218, and 219. Install 1x nominal wood or metal strapping secured to ceiling joists and apply 1/2-inch thick gypsum board to ceilings of rooms 204, 205, 207, 208, 210, 213, 215, 216, 217, 220. Where gypsum board butts door and transom trim, use metal casing. See attached plans by Lawrence A. Sorli and accompanying letter dated July 28, 1983.

3. Cultural resources affected by proposed action (name and LCS number, if appl

Highland House, T16-2, Truro, Massachusetts

4. In affecting cultural resources, the proposed action will (check as many as ap

__Destroy historic fabric
__Remove historic fabric
__Replace historic fabric in kind
__Replace missing historic fabric
X Add nonhistoric elements to a historic structure
__Remove nonhistoric elements from a historic structure
__Alter historic terrain, groundcover, or vegetation
__Introduce nonhistoric elements (visible, audible, or atmospheric) into a historic setting or environment
__Reintroduce historic elements in a historic setting or environment
__Remove historic elements from a historic environment
__Remove nonhistoric elements from a historic environment
__Disturb, destroy, impair, or render inaccessible archeological (surface or subsurface) resources
__Possibly disturb presently unidentified archeological resources or historic
__Incur gradual deterioration of historic fabric, terrain, or setting
__Adaptive reuse
__Other (Describe concisely):

5. The proposed action is limited to cultural resource maintenance Yes(✓) No( )
If not, or if it is a maintenance action covered by an approved maintenance pl identify supporting approved plan(s), comment and/or action thereon by Advisory Council on Historic Preservation, dates of ACHP action and NPS approval, and section(s) of the plan(s) pertaining to the action. If none, so state:

None

6. **Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data:**

This is a temporary measure which will prevent further plaster from falling, is reversible, and will present a good authentic appearance.

7. Identify supporting study data and date(s) of preparation (attach if feasible):

8. Project is to be accomplished by: ( ) in-house staff, ( ) contract.

9. Prepared by David A. Price Date 8/16/83

Title Chief of Maintenance

Signature of Superintendent Herbert Olsen Herbert Olsen Date 8/16/83

B. Regional Professional Review and Certification

1. The foregoing assessment of effect is adequate; the proposed action is consistent with all applicable NPS management policies, standards, and guidelines; and the proposal incorporates all feasible measures to minimize adverse effects to cultural resources.

2. The proposed action is limited to cultural resource maintenance and/or it is authorized by an approved planning document reviewed and concurred in without relevant exceptions by the Advisory Council.

	Yes	No	N/A		
(Negative certifications must be justified on attachments.)	1 (✓)	( )		Dick Ring Hart	9/7/83
	2 (✓)	( )	( )	Regional Archeologist	Date
	1 (✓)	( )		Laurie Tibbitts	8/31/83
	2 (✓)	( )	( )	Regional Historian	Date
	1 (X)	( )		Dann Sklute	8/30/83
	2 (X)	( )	( )	Regional Hist. Architect	Date

Qualifying comments:

C. Regional Director Approval

(Sgd) Charles P. Clapper

for Regional Director Date 1/7/83

D. WASO Record

Assessment received and noted: _____

Chief, Cultural Resources Management Division Date

cc: Superintendent

United States Department of the Interior

NATIONAL PARK SERVICE

North Atlantic Region
15 State Street
Boston, Massachusetts 02109

...Y REFER TO

H30(NAR-PHP)

July 28, 1983

Memorandum

To: Chief of Maintenance, Cape Cod National Seashore

From: Historical Architect, NAHPC, North Atlantic Region

Subject: Improvements to Highland House by Truro Historical Society

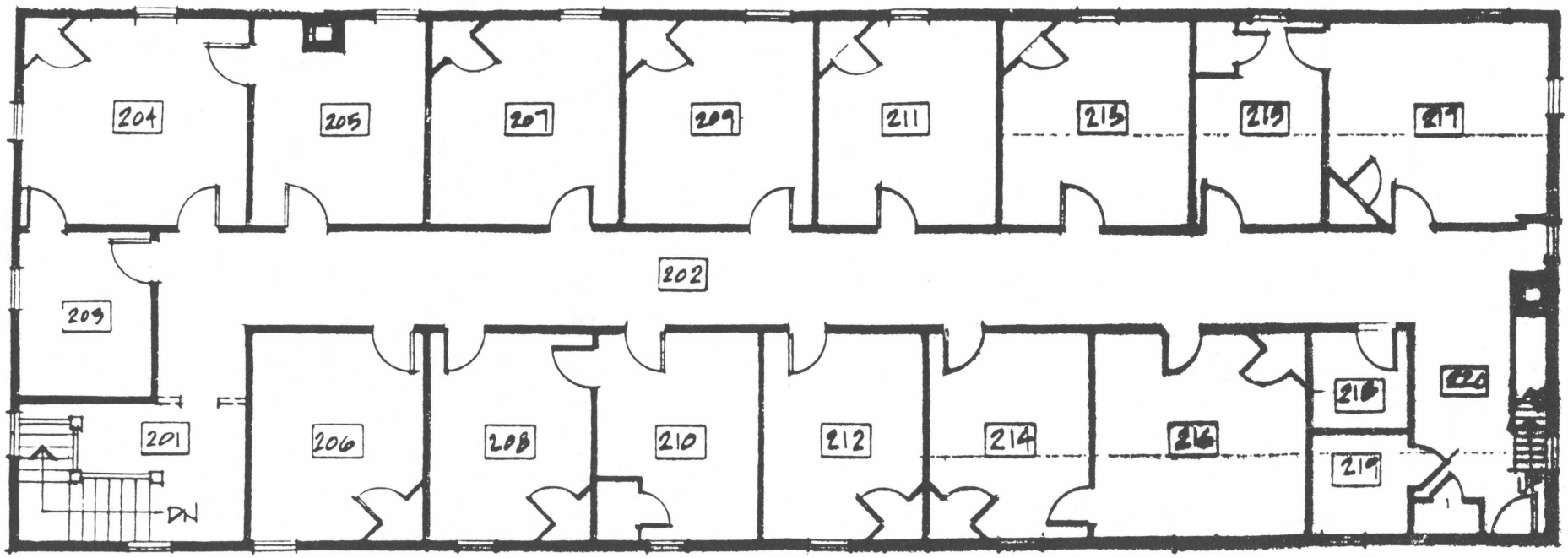
Enclosed are two sheets which describe the proposed repairs to the second floor ceilings. The work is straight forward and emphasis should be put on preserving the existing ceilings with minimal damage. Any work carried out by the Society should be supervised by you or myself.

The work requires a 106. The park should state on the form that this is a temporary measure which will prevent further plaster from falling, is reversible, and will present a good and authentic appearance.

Lawrence A. Sorli

Enclosures

cc:
Blaine Cliver
Jim Skelton



2ND FLOOR PLAN — HIGHLAND HOUSE

NORTH TRURO, MASSACHUSETTS
CAPE COD NATIONAL SEASHORE

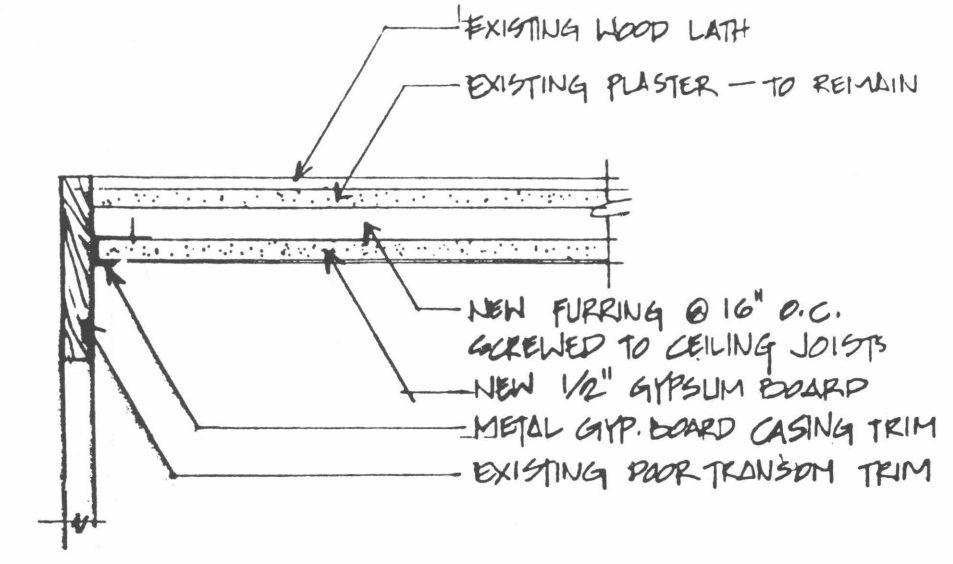
SCALE: 1/8"=1'-0" DOORS, WINDOWS & CLOSETS ARE APPROXIMATELY LOCATED

REPAIR OF PLASTER CEILINGS
HIGHLAND HOUSE
NORTH TRURO, MASSACHUSETTS
CAPE COD NATIONAL SEASHORE

1.) Ceilings which are in reasonable shape needing only scraping, filling of minor cracks and paint are those in rooms (refer to attached plan): 201, 202, 203, 206, 209, 211, 212, 214, 218, and 219.

2.) Ceilings which are in poor shape with falling plaster and extensive previous patching are in rooms:
204, 205, 207, 208, 210, 213, 215, 216, 217, and 220.

These ceilings should be furred with 1x nominal wood or metal strapping secured through to ceiling joists, followed by the application of 1/2-inch thick gypsum board. Where gypsum board butts door and transom trim, use metal casing trim - see detail below:



SECTION THROUGH CEILING AT DOOR TRANSOM TRIM
N.T.S

APPENDIX I.

Memorandum Approving Proposed Repairs to Roofs,
Drain, and Foundation

December 11, 1990

United States Department of the Interior

NATIONAL PARK SERVICE
North Atlantic Region
15 State Street
Boston, Massachusetts 02109-3572

IN REPLY REFER TO

December 11, 1990

H42(NAR-PC)

	ACT	INFO
SUPERINTENDENT	AHR	✓
ENVIRO PLANNING		
RES		
ADMIN		
PROJ		
MAINT		✓
CONCESS		✓
FILE		✓

Memorandum

To: Superintendent, Cape Cod National Seashore

From: Associate Regional Director, Planning and Resource Preservation, North Atlantic Region

Subject: Section 106 Compliance, Highland House

The enclosed XXX form concerning the proposed repairs to the Highland House has been reviewed and approved by this office. The Section 106 review is now complete.

Robert W. McIntosh, Jr.

Enclosure

United States Department of the Interior
NATIONAL PARK SERVICE
CAPE COD NATIONAL SEASHORE
SOUTH WELLFLEET, MASSACHUSETTS 02663

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

November 7, 1990

H4217

Memorandum

To: Regional Director, North Atlantic Region
Attn: Associate Regional Director, Planning and Resource Preservation

From: Superintendent, Cape Cod National Seashore

Subject: Transmittal of XXX Form

Please expedite the approval of this 106 Clearance Form for Highland House, T1594. Repairs need to be completed before winter storms make work impossible.

We have discussed the details of this project with Bill Barlow and have incorporated his ideas into the work plan.

Based on Bill Barlow's input we are proceeding with the ordering of materials so work can proceed as soon as the XXX Form is officially approved.

James C. Killian
for Andrew T. Ringgold

Enclosure

XXX FORM

Assessment of Actions Having an Effect on Cultural Resources

(Attach continuation sheets as necessary)

This form is required for all actions that have the potential to affect historic properties.

A. Originating Office

1. Park: Cape Cod National Seashore

2. Description of proposed action:

[ ] Implementing action included in plan under PMOA.
[ ] Other PMOA action _____
[X] Action not under PMOA.

3. Explain why the action is needed: The north east corner of the roof has been severely damaged by wind and rot. Rain is leaking into the building in large quantities. The foundation is damaged due to a failed french drain system. The shed roof is leaking at the flashing joint to the house.

4. Cultural resources affected by proposed action (name and LCS number, if applicable):

Highland House, T1594, Truro

5. The proposed action will (check as many as apply):

X Destroy historic fabric.
___ Remove historic fabric.
X Replace historic fabric in kind.
___ Replace missing historic fabric.
___ Add nonhistoric elements to a historic structure.
___ Remove nonhistoric elements from a historic structure.
___ Alter historic terrain, groundcover, or vegetation.
___ Introduce nonhistoric elements (visible, audible, or atmospheric) into a historic setting or environment.
___ Reintroduce historic elements in a historic setting or environment.
___ Remove historic elements from a historic environment.
___ Remove nonhistoric elements from a historic environment.
___ Disturb, destroy, impair, or render inaccessible archeological (surface or subsurface) resources.
___ Possibly disturb currently unidentified archeological resources or historic fabric.
___ Incur gradual deterioration of historic fabric, terrain, or setting.
X Other (describe briefly): Replace non-historic fabric with similar fabric See attached description for details.

Describe the indicated effect(s) concisely:

6. Identify supporting approved plan(s), comment and/action thereon by Advisory Council on Historic Preservation, dates of ACHP action and NPS approval, and section(s) of the plan(s) pertaining to the action. If none, so state: None

7. Identify any important relationships between the proposed action as it affects cultural resources and pertinent NPS management policies, standards, and guidelines: None

8. Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data:

9. Identify supporting study date and date(s) of preparation (attach if feasible):

10. Prepared by: Claude O. Phipps Title: Chief of Maintenance

11. Signature of Park Superintendent: [signature] Date: 11/07/90

B. Regional Cultural Resources Staff Review and Certification

1. The foregoing assessment is adequate; the proposed action is consistent with all applicable NPS management policies, standards, and guidelines reviewed and concurred in by the Advisory Council; and the proposal incorporates all feasible measures to minimize adverse effects to cultural resources.

2. The proposed action is authorized by a planning document or program reviewed and concurred in by the Advisory Council.

		Yes	No	N/A		
(Negative certifications must be justified on attachments.)	1	[✓]	[ ]		[signature] Regional Archeologist	12/3/90 Date
	2	[✓]	[ ]	[ ]		
[ ] Energy Consultation Held	1	[✓]	[ ]	[ ]	[signature] Regional Historian	12/3/90 Date
	2	[✓]	[ ]	[ ]		
_____ _____	1	[✓]	[ ]	[ ]	[signature]	12/3/90
Regional Energy Coordinator Date	2	[✓]	[ ]	[ ]	Regional Historical Architect	Date
Additional Requirements	1	[✓]	[ ]	[ ]		12/3/90
of the proposed Action:	2	[✓]	[ ]	[ ]	Regional Curator	Date

C. Regional Director Approval of Proposed Action Including Additional Requirements:

[ ] The proposed action, including any additional requirements stated above, meets all conditions in B.1 and 2.

12/11/90 Date [signature] Regional Director

D. WASO Record

Assessment received and noted: [signature] Associate Director, Cultural Resources Management Date

Project Description, 23 Oct. 90

Highland House, T1594, Truro

A. Repair Roof

1. Strip existing asphalt shingles from about 15' x 20' area.

2. Replace rotted sheathing with 3/4-inch, 42/20 rated, exterior plywood. Plywood sheathing shall be installed in accordance with AIA standards and interlocked with wood board sheathing.

3. Existing rafters will be sistered with 2x6 members if needed to provide a sound surface for securing plywood sheathing.

4. Install 15 pound building felt over sheathing.

5. Install new metal drip edge on all exposed eave and rake edges.

6. Install new three tab, 274 lb. per square, fiberglass roofing shingles with color match to existing shingles. Use six galvanized roofing nails and silicone adhesive on each shingle.

B. Drain Repair

1. Remove all drain rock from the french drain along the south wall. Store rock where it will not become contaminated and is available for reuse. Store drain pipe for reuse.

2. Repair foundation wall where water has washed under bricks by replacing eroded soil with concrete and rebuilding foundation wall with original bricks.

3. Install hypalon rubber liner and reinstall drain rock and pipe, as shown on the attached drawing.

4. Connect drain pipe to existing drain hole in foundation at garage.

C. Repair Foundation Posts

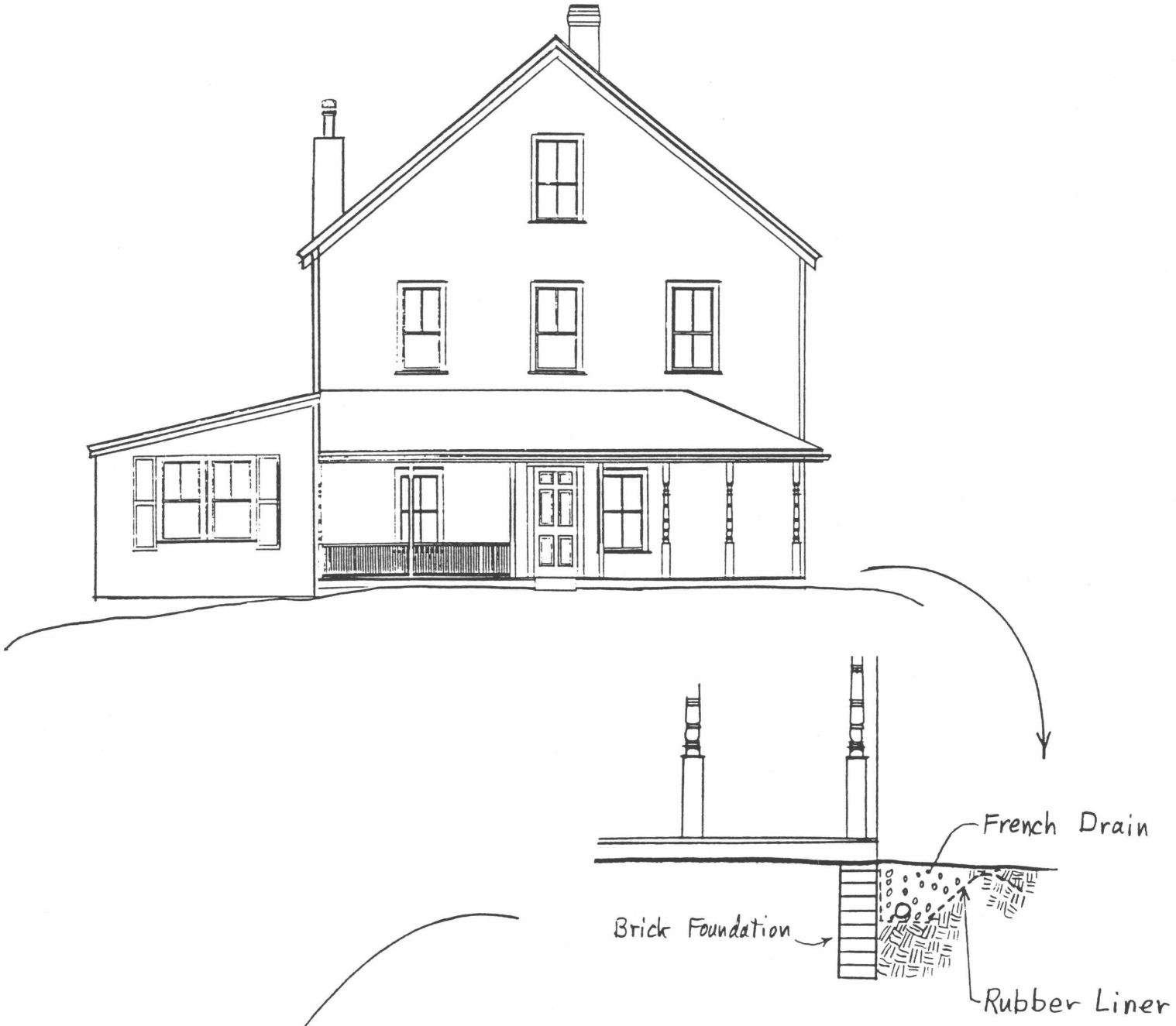
Install 24"x24"x10" concrete footings where the water passing under the building has eroded away existing posts. Install 3-1/2 inch steel lally columns to replace the damaged posts.

D. Eliminate water leak at shed roof intersection with building.

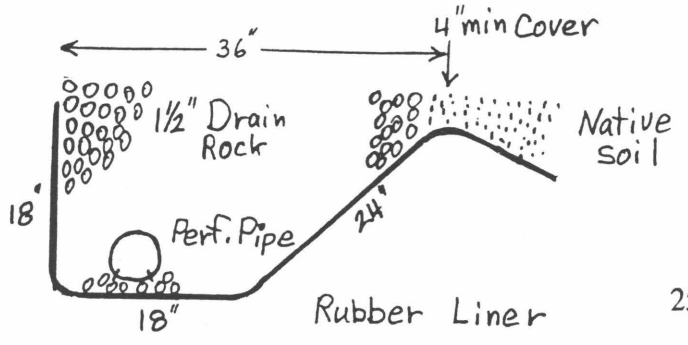
1. Strip all wall shingles between the shed roof and the roof trim, about 250 square feet.

2. Install new building paper and new white cedar shingles.

3. Caulk around second floor windows.



Detail $\frac{1}{4}$" = 1'-0"



HIGHLAND HOUSE

Cape Cod National Seashore
French Drain Liner

6Nov 90

APPENDIX J.

Trip Reports Describing 1991 Storm Damage to Highland House
and Proposed Repair Procedures

August 1991–January 1992

United States Department of the Interior
NATIONAL PARK SERVICE
North Atlantic Region
15 State Street
Boston, Massachusetts 02109-3572

IN REPLY REFER TO:

TAKE PRIDE IN AMERICA

August 23, 1991

H30(NAR-CRC)

Memorandum

To: Chief, Division of Cultural Resources Management

Through: Manager, Cultural Resources Center
Supervisor, Building Conservation Branch

From: Historical Architect, Building Conservation Branch

Subject: Report of trip to CACO

On Wednesday, August 21st, Senior Exhibit Specialist Mike Fortin and I visited the CACO site to observe and assess damage to structures caused by the recent Hurricane Bob. The following summarizes our recommendations for each structure visited:

1. Highland House: The east gable wall of the building was apparently sucked out by negative pressure caused by winds acting on leeward side of the structure. The wall pulled out easily due to the extensive insect infestation which has weakened the framing of this wall. The second floor joists which had been borne by this wall with their ends having been nailed to the wall studs, were unable to resist the pull on the wall and completely let go. The wall was out of plumb approximately 1 foot at the center (near the chimney stack, which was not affected by the movement) and the floor joists are now unsupported at this end. The diaphragm action of the flooring on these joists is all that is holding them from dropping.

At the attic floor level, the wall is similarly pulled out and a section of wall sheathing (3 or 4 boards) was hinged out, shingles attached, where nailing failed at one of the studs in the gable. Both a video and still photos were taken to document the damages.

Upon our arrival, the Park's maintenance crew had already placed a built-up 24 ft wood beam horizontally across the exterior of the bulging wall at the level of the three second floor windows. To this, were attached two steel cables at either end, pulled through the outer two windows and tied back to beams spanning across the central hallway and supported by door jambs at the floor level. Come-alongs were used to pull the wall beam inward. The center of the exterior beam was deflecting, so a third cable was affixed to it through the center window. The wall was pulled in, not to its original position, but sufficient

to stabilize it from further movement. We suggested doing a similar stabilization to the wall just below the attic story where the sheathing had detached. A sheet of plywood with 2 X 6 cleats set with a 6 inch dimension horizontal, could be placed outside the afflicted area and pulled in with cables and come-along to a beam set behind the bottom of the first roof truss -- the vertical and diagonal chords would resist the pulling action. Since the truss is poorly attached at the top, it is important that the stress is only applied at the floor level. The plate in the exterior wall at attic floor level was completely severed near its center. Permanent remedial work must be carried out on this end wall as soon as possible. Stephen Spaulding explained that the park, museum and Building Conservation Branch have been discussing a project to repair the east gable wall. He recommends that a final project scope be developed, estimated and accomplished prior to the end of this construction season.

The maintenance crew was also advised to install a temporary support wall under the ends of the dangling second floor joists as soon as practicable and to keep people off this floor.

2. Ryder House: This had no structural damage; however, the overhead electrical service had been ripped off of the gable end as trees fell on the wires. The Park has instructed the electrician to repair/replace any trim necessary to reinstall the service weatherhead. Such repairs should be executed to minimize removal of existing trim only in the area of damage by splicing in pieces to match the original dimensions.

3. Coast Guard Beach Station: Three porch columns were pulled out at one corner. The Park had installed temporary "A" frame 2 X 4 supports to either side of the afflicted corner. Apparently, the columns were never mechanically attached to the roof plate which caused them to fall away with wind uplift on the roof. Minor damage to the columns can be repaired with wood dutchmen and/or with epoxy fillers. At the very least, the column capitols and shafts should be toe-nailed in place. Pre-drill elements before nailing to prevent splitting.

Wood roof shingles were missing from the one story connecting ell and plywood had been placed over one of the larger areas of roof shingle damage. It is assumed that this is superficial damage.

Lawrence Sorli
Historical Architect

Approved: _____ Date: 8/26/91
Chief, CRC, Management

Concurred: _____ Date: 8/26/91
RRD, PSRP

cc: Superintendent, CACO
Regional Historic Architect

United States Department of the Interior

NATIONAL PARK SERVICE
North Atlantic Region
Cultural Resources Center
Boott Cotton Mills Museum
400 Foot of John Street
Lowell, MA 01852-1195

IN REPLY REFER TO:

September 9, 1991

H30 [NAR-CRC]

MEMORANDUM

To: Chief, Division of Cultural Resources Management

Through: Manager, Cultural Resources Center
Supervisor, Building Conservation Branch

From: Historical Architect, Building Conservation Branch

Subject: Report of trip to CACO and Scope of Work for Highland House repairs.

On Thursday, September 5th, I visited the CACO site to meet with Park officials, representatives of the North Truro Historical Society and the Contractor who will be performing the repairs on the Highland House. Steve Pisani and David St. Louis from our branch came with me in order to measure the existing conditions before demolition. The scope of work as discussed with the tenants and Contractor (who will be paid by the tenants, although materials are to be supplied by the Park) is as follows:

All work to be confined to the east wall of the building which has been damaged over time by insect infestation and most recently by the hurricane Bob.

The work consists of the removal and replacement of framing, sheathing, windows and trim (interior and exterior), shingle siding, interior plaster and flooring materials. The entire first and second stories of wall shall be removed, starting above the 6" x 6" sill and up to and including the double 2" x 4" plate at attic floor level. The gable end wall within the attic story will be preserved to the greatest extent possible. Isolated framing members and sheathing boards will be replaced at the attic level reusing salvageable stock from the lower wall.

The new framing of the first and second floors will consist of standard stock (even though the original studs are dimensionally larger -- typically 1 3/4" x 3 3/4"). Since the framing is or will be concealed by interior wall finishes at the 1st and 2nd floor, it was deemed unnecessary to reproduce the original size stock. The attic wall, however, is exposed to view and the insect infestation is less serious here. The sheathing on the first and

second floor levels will be replaced with 3/4 inch plywood to provide better resistance to wind and racking.

The new framing will be placed to match the original configuration including the framing of filled in window and door openings on the first floor level. Measured framing elevations will be drawn up by the Building Conservation Branch (BCB) and given to the Contractor as construction working drawings. Photographs will be taken of all interior walls prior to demolition by the BCB and we will assist in properly labeling all pieces of interior trim to be removed and reinstalled later. The second floor joists bearing on the end wall to be removed shall be properly shored before demolition and be sistered with 4 ft long sections of 2" x 8" at the bearing end of each and tied into the new wall framing.

Original plaster walls and wood lathing will be sampled before demolition and replaced with gypsum drywall. New window frames and sash will be installed for three of the openings, while two of the existing frames and sash will be salvaged and reinstalled. All window trim boards, projecting cap over the header and sills shall match the original dimensionally. Two window openings in the first story appear to have had a single fixed sash in each (based on the size of the trimmed opening) and were filled in prior to acquisition by the Park. These framed openings and any others will be recreated and sheathed over as are existing, but the sash will not be restored at this time. The intent of the work is to preserve the present appearance of the wall. Galvanized flashing over the window caps will be replaced with lead coated copper.

The entire wall shall be wrapped with "Tyvek" air infiltration barrier before shingling with white cedar shingles. The existing shingle exposure as well as the decorative band treatment will be reproduced.

The second story walls shall be insulated with foil-faced fiberglass batt insulation where covered with gypsum board.
The gypsum board ceiling in the northeast chamber will be repaired as well as the strip maple flooring at the eastern end of this room. Additional maple flooring will be replaced in the hallway in front of the center window. Sub flooring in these areas will be replaced where necessary. The attic stairway shall have both treads and risers replaced (the existing are infested with insects).

All gypsum drywall surfaces shall be taped and finished ready for painting by others. The exterior trim boards including corner boards, window trim and rake boards shall be painted three coats on new wood and one coat on existing.

During construction, while the wall is open, the Contractor must provide temporary closure to keep out weather and for security reasons. All adjacent elements to the demolition work must be

securely shored and braced as required to prevent movement until tied in again to the new work.

BCB staff architect will be available for consultation, periodic inspections as required by Park staff (who will supervising the work on a daily basis), and final inspection at contract completion.

Lawrence A. Sorli
Historical Architect

Approved:_____ Date:_____
Chief, Cultural Resources Management

Concurred:_____ Date:_____
ARD, Planning & Resource Preservation

SCOPE OF WORK
Highland House East Wall Reconstruction

All work to be confined to the east wall of the building which has been damaged over time by insect infestation and most recently by the hurricane Bob.

The work consists of the removal and replacement of framing, sheathing, windows and trim (interior and exterior), shingle siding, interior plaster and flooring materials. The entire first and second stories of wall shall be removed, starting above the 6" x 6" sill and up to and including the double 2" x 4" plate at attic floor level. The gable end wall within the attic story will be preserved to the greatest extent possible. Isolated framing members and sheathing boards will be replaced at the attic level reusing salvageable stock from the lower wall.

The new framing of the first and second floors will consist of standard stock (even though the original studs are dimensionally larger -- typically 1 3/4" x 3 3/4"). Since the framing is or will be concealed by interior wall finishes at the 1st and 2nd floor, it was deemed unnecessary to reproduce the original size stock. The attic wall, however, is exposed to view and the insect infestation is less serious here. The sheathing on the first and second floor levels will be replaced with 3/4 inch plywood to provide better resistance to wind and racking.

The new framing will be placed to match the original configuration including the framing of filled-in window and door openings on the first floor level. Measured framing elevations will be drawn up by the Building Conservation Branch (BCB) and given to the Contractor as construction working drawings. Photographs will be taken of all interior walls prior to demolition by the BCB and we will assist in properly labeling all pieces of interior trim to be removed and reinstalled later. The second floor joists bearing on the end wall to be removed shall be properly shored before demolition and be sistered with 4 ft long sections of 2" x 8" at the bearing end of each and tied into the new wall framing.

Original plaster walls and wood lathing will be sampled before demolition and replaced with gypsum drywall. New window frames and sash will be installed for three of the openings, while two of the existing frames and sash will be salvaged and reinstalled. All window trim boards, projecting cap over the header and sills shall match the original dimensionally. Two window openings in the first story appear to have had a single fixed sash in each (based on the size of the trimmed opening) and were filled in prior to acquisition by the Park. These framed openings and any others will be recreated and sheathed over as are existing, but the sash will not be restored at this time. The intent of the work is to preserve the present appearance of the wall. Galvanized flashing over the window caps will be replaced with lead coated copper.

The entire wall shall be wrapped with "Tyvek" air infiltration barrier before shingling with white cedar shingles. The existing shingle exposure as well as the decorative band treatment will be reproduced.

The second story walls shall be insulated with foil-faced fiberglass batt insulation where covered with gypsum board. The gypsum board ceiling in the northeast chamber will be repaired as well as the strip maple flooring at the eastern end of this room. Additional maple flooring will be replaced in the hallway in front of the center window. Sub flooring in these areas will be replaced where necessary. The attic stairway shall have both treads and risers replaced (the existing are infested with insects).

All gypsum drywall surfaces shall be taped and finished ready for painting by others. The exterior trim boards including corner boards, window trim and rake boards shall be painted three coats on new wood and one coat on existing.

During construction, while the wall is open, the Contractor must provide temporary closure to keep out weather and for security reasons. All adjacent elements to the demolition work must be securely shored and braced as required to prevent movement until tied in again to the new work.

BCB staff architect will be available for consultation, periodic inspections as required by Park staff (who will supervising the work on a daily basis), and final inspection at contract completion.

Prepared 9/9/91
by: Lawrence A. Sorli, Historical Architect
Building Conservation Branch / Cultural Resources Center

United States Department of the Interior

NATIONAL PARK SERVICE
North Atlantic Region
Cultural Resources Center
Boott Cotton Mills Museum
400 Foot of John Street
Lowell, MA 01852-1195

IN REPLY REFER TO:

January 3, 1992

H30 [NAR-CRC]

MEMORANDUM

To: Chief, Division of Cultural Resources Management

Through: Manager, Cultural Resources Center
Supervisor, Building Conservation Branch

From: Historical Architect, Building Conservation Branch

Subject: Report of trip to CACO

On December 27th, 1991, I met Frank Ackerman to observe progress at the Highland House and to determine cause of leakage at one of the "Three Sisters Lighthouses".

We first visited the Highland House which is now substantially completed. The items of work which remain are listed below:

1. Install window sash tracks in those with none.
2. Install fiberglass insulation in first floor east wall.
3. Install diagonal bracing in second floor framing as shown in the latest framing elevation dated 10/91
4. Install stair risers and treads to attic
5. Install gypsum wall board to second story walls and ceilings
6. Install maple flooring in northeast 2nd floor room and in 2nd floor hall near east end
7. Re-install bathroom walls and ceiling elements in first floor which were removed to access the east wall framing
8. Carefully bundle and label removed trim elements from the first floor east room and indicate where they were removed from
9. Reinstall window trim and baseboards removed from east wall at the second floor level after installation of gypsum dry wall

Gordon Russell from the North Truro Historical Society, tenants of the Highland House, requested permission to install new maple flooring in the first floor east room where original finish flooring was removed in an area close to the southeast corner. The Park must request this work in a "Triple - X" form along with the proposed wall plaster removal in the main first floor room. Inspection of this plaster indicates that total removal and replacement with gypsum wall board over existing wood lath is more cost effective than partial removal and selective patching and consolidation. A sample approximately one foot square, including wall paper layers and borders, was removed in a previous visit. This sample of plaster and paper will be kept by the CRC for future reference and study.

After finishing inspection of the Highland House, I proceeded to the "Three Sisters Lighthouses" and went into each of the structures. The primary concern was the leaking observed in the middle lighthouse which still retains its lantern and balcony. The lantern appears to be weathertight; however, the balcony is covered with a membrane type roofing material which has visible puncture holes, wrinkled surfaces which at the seams are open to water penetration, and poor flashing detailing between the membrane and the lantern base. The location of the leaking would indicate problems on the deck of the balcony rather than the lantern roof or walls. The DSC contract drawings show the original balcony deck covered with a layer of plywood as substrate to the new membrane roofing. The drawing also shows a layer of copper clad felt between the plywood and decking boards. In addition, the drawing shows a proper flashing detail around the base of the lantern which was never installed.

It is recommended that this membrane roof be removed, replaced with a new fully adhered membrane system installed with proper flashings around the lantern base.

Lawrence A. Sorli
Historical Architect

Approved: _____ Date: 1/7/92
Chief, Cultural Resources Management

Concurred: _____ Date: 1/7/92
ARD, Planning & Resource Preservation

cc: Superintendent, CACO

APPENDIX K.

Section-106 Compliance Form Requesting Permission to Remove Portions of Wall Plaster in Main Exhibition Room

Approved April 6, 1992

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

A. ORIGINATING OFFICE

1. Park: Cape Cod National Seashore Park district (optional) Truro

2. Work/Project Description:
a. Project name Replace Wall Covering,Highland Hse, T1969 park project #(s) CACO-92-03
b. Describe project and area of potential effects (as defined in 36 CFR Part 800.2(c)); explain why work/project is needed. The plaster is falling off the lath in the main room. This project is to remove all of the plaster and replace it with 1/2-inch gypsum board. New surface may include a skim coat of plaster before painting.

3. Has the area of potential effects been surveyed to identify cultural resources?
___ No
_X_ Yes Source or Reference Draft HSR, Nat. Register listing
___ Check here if no known cultural resources will be affected. (If area has been disturbed in the past, please explain or attach additional sheets to describe nature, extent, and intensity of disturbance.)

4. Affected Resource(s):
Name and number(s): Highland Hse, T1969 location: Truro NR status: Listed
Name and number(s): _____ location: _____ NR status: _____
(REPEAT FOR EACH AFFECTED RESOURCE)

5. The proposed action will: (Check as many as apply.)
_X_ Destroy, remove, or alter features/elements from a historic structure
___ Replace historic features/elements in kind
_X_ Add nonhistoric features/elements to a historic structure
___ Alter or remove features/elements of a historic setting or environment (inc. terrain)
___ Add nonhistoric features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape
___ Disturb, destroy, or make archeological resources inaccessible, or alter terrain
___ Potentially affect presently unidentified cultural resources
___ Begin or contribute to deterioration of historic fabric, terrain, setting, landscape elements, or archeological or ethnographic resources
___ Involve a real property transaction (exchange, sale, or lease of land or structures)
___ (OPTIONAL) Meet criteria for Programmatic Exclusion C.1 ___ in the 1990 Servicewide Programmatic Agreement for Section 106 compliance.
___ Other (please specify)

6. Measures to prevent or minimize loss or impairment of historic/prehistoric fabric, setting, integrity, or data:
A sample of the plaster with wall paper and other historic coatings has been collected and stored at the CRC Lab. Larry Sorli has inspected the site.

7. Supporting Study Data: (attach if feasible; if action is in a plan, give name and project or page number):
Larry Sorli's report is attached.

Attachments: [ ] Maps [ ] Archeological Clearance, if applicable [ ] Drawings [ ] Specifications
[ ] Photographs [ ] Scope of Work [ ] Site plan [ ] List of Materials [ ] Samples
[ ]Other _____
None

Title Chief of Maintenance Telephone (508) 349-3785

10. I certify that the proposed work conforms to NPS Management Policies and NPS-28.

Signature of Superintendent Cynthia D. Ringgold

Date 2/3/92

B. REGIONAL ASSESSMENT

RECOMMENDED ASSESSMENT OF EFFECT (completed by Regional compliance coordinator):

_____No Effect _____No Adverse Effect _____Adverse Effect

COMPLIANCE REQUIREMENTS--PLEASE INDICATE WHICH OF THE FOLLOWING APPLIES.

[ ] 1. STANDARD 36 CFR PART 800 CONSULTATION
Consultation under 36 CFR Part 800 has been carried out subsequent to preparation of this XXX form.

[ ] 2. PROGRAMMATIC EXCLUSION
The above action meets all conditions for a programmatic exclusion under Stipulation C.1 or C.2 of the 1990 Servicewide PA.
APPLICABLE EXCLUSION(s): C.1 _____ [specify a-m] or C.2 addition.

[ ] 3. PLAN-RELATED UNDERTAKING
Consultation about the proposed undertaking was completed in the context of a plan review process, in accordance with the 1990 Servicewide PA, Stipulation E or F, and 36 CFR Part 800. (If Stipulation F of the 1990 PA applied to this case, please so note.)

[ ] 4. MOA-RELATED UNDERTAKING
Consultation about the proposed action was conducted in development of a Memorandum of Agreement or Programmatic Agreement approved by NPS, the SHPO and the Advisory Council.

Contingent upon stipulations developed in the consultation process or listed above, requirements for Section 106 compliance have been met.

STIPULATIONS/CONDITIONS:

Signed _____ Date_____
Regional Compliance Coordinator

Approved _____ Date _____
Regional Director

C. REGIONAL CULTURAL RESOURCES SPECIALISTS REVIEW

EGIONAL CONTROL#_____ IDLCS#_____ IDCLI#_____ CSI/ARI#_____

I have reviewed this proposal for conformity with requirements for the Section 106 process, with the 1990 Servicewide Programmatic Agreement (if applicable), and applicable parts of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, NPS Management Policies, and NPS-28. I have stated any additional stipulations that should apply, and I concur in the recommended assessment of effect above.

SIGNED:

_____ _____

REGIONAL ARCHEOLOGIST Date

Comments:_____

_____ _____

REGIONAL HISTORICAL LANDSCAPE ARCHITECT* Date

Comments:_____

_____ _____

REGIONAL CURATOR Date

Comments:_____

_____ _____

REGIONAL ETHNOGRAPHER* Date

Comments:_____

_____ _____

REGIONAL HISTORIAN Date

Comments:_____

W J Barbee _____ 27 FEB 92

REGIONAL HISTORICAL ARCHITECT Date

Comments:_____

_____ _____

OTHER Date

Comments:_____

egions without a Regional historical landscape architect or ethnographer leave these lines blank.

APPENDIX L.

Trip Report Describing 1992 Storm Damage to Highland House
and Proposed Repair Procedures

December 16, 1992

United States Department of the Interior

NATIONAL PARK SERVICE
North Atlantic Region
Cultural Resources Center
Boott Cotton Mills Museum
400 Foot of John Street
Lowell, MA 01852-1195

IN REPLY REFER TO:

December 16, 1992

H30 [NAR-CRC]

MEMORANDUM

To: Chief, Division of Cultural Resources Management

Through: Manager, Cultural Resources Center
Supervisor, Building Conservation Branch

From: Historical Architects, Building Conservation Branch

Subject: Trip Report to Cape Cod National Seashore, 12/15/92

On December 15, 1991, we traveled to the park, accompanied by Senior Exhibit Specialist Michael Fortin. The purpose of the trip, at the request of the park, was to assess damage caused by the storm of 12/12/92. Chief of Interpretation and Cultural Resources Management Frank Ackerman accompanied us to the sites. The following is a synopsis of our visit:

• The Highland House had the most severe damage of all the park structures. Approximately 14 x 22 feet of the southeast roof (rafters, sheathing and shingles) was lifted by the high wind. There was not much rainfall after the roof blew off so the damage to the interior consisted of minor wetting of the drywall of the ceiling and walls at the southeast corner of the building. Two of the roof rafters that lifted off were weakened at their joints to the wall plate by previous severe infestation by old house borers and powder post beetles. The other two rafters were split off near their base, since they were not insect damaged. The north side of the roof remained without damage.

Other damage at the Highland House included: a portion of the chimney broken away by the pulling out of chimney flashing attached to the roof; a second story north window pane and trim were broken; and 50 square feet of asphalt shingles on the south were blown off.

• The Ryder House was then inspected; it received no apparent storm damage. The chicken house had missing roof shingles near the ridge. We noticed that roof rafters in the Ryder House have been heavily infested with powder post beetles. We have routinely used borate-based preservative/insecticide treatments in such cases. These products are considered environmentally safe and non-toxic to humans; after clearance by the NARO IPM coordinator, it would be desirable to treat park historic structures with this product.

• The Three Sisters Lighthouses were inspected for roof leaks. This was most apparent in the middle lighthouse, but is part of an on-going problem. We have looked at the problem twice in the past year (most recently in October 1992) and recommendations have been made. No remedial work has been accomplished yet, but the recommendations are still valid. We noticed high humidity levels within the North and South Lighthouses and suggested ventilation and air movement to reduce fungal and insect infestation which may thrive on materials with high moisture content. A low-profile metal roof vent could be installed on the top of the roof scuttles. The trap door to the crawlspace could also be left open to allow air movement from the vented crawl space to exhaust up through the proposed roof vent. The extent of the work at the Three Sisters is involved and could be done during good weather by a day-labor crew.

• The Coast Guard Station was the next stop on our assessment tour. The buildings received no apparent storm damage.

• The Penniman House was the last structure visited. The house sustained water damage to interior finishes. There was leaking around the cupola, which caused interior paint peeling and plaster weakening in the second floor ceilings. Openings in the joints between trim pieces around the base of the cupola appeared to have allowed water to penetrate. There was also substantial water intrusion into the North Parlor, causing damage to historic ceiling and wall papers and soaking of an historic carpet. Usually, standard architectural details such as flashing, trim, siding and roof shingles shed water acting under normal conditions. When driven by abnormally high winds, rain is forced in and around the architectural details which normally keep water out of a structure. Additional measures--such as caulking and sealing joints vulnerable to wind driven rain--are needed. Although this was done at the Penniman House, some of the sealed joints have opened and others were not sealed for practical reasons. The leaks in the North Parlor may be reduced by painting the metal pans below the dormer windows and the metal roof of the bay window with an elastic paint finish designed for waterproofing metal roofs.

The wet surfaces of the North Parlor should be allowed to dry out gradually. The park had already lifted and propped the soaked end of the carpet to allow air to circulate and dry it. A portable dehumidifier had been set up in the room and was running. However, it was not extracting water vapor from the air since the ambient temperature was low and not holding much moisture. The room might be more effectively dried out by using a fan to circulate the air.

• The Old Harbor Life Saving Station was not visited due to time constraints. Minimal roof shingle damage and one window sash was reported damaged.

• The Atwood-Higgins House was not inspected due to lack of time. Apparently, the only damage reported was a collapsed fence section.

Follow-up:

Due to the immediate importance of closing up the Highland House roof, Mike Fortin arranged for a day-labor crew to travel the same day to the site so that work could begin early the next morning. He coordinated this emergency temporary stabilization with Bob Petrella and materials were ordered before we left the site. Replacement rafters will have to be special ordered since they are rough sized, 2 x 8 x 22 feet long. The temporary infill will consist of nominal size, 2 x 8, supporting 3/4-inch CDX plywood covered with rolled asphalt roofing. The repair of the north window and temporary roof patches will also be accomplished now.

Attached to this trip report is a rough cost estimate for the permanent repairs for both the Highland House and the Penniman House. The park will also utilize these cost estimates to secure emergency funding.

Lawrence A. Sorli
Historical Architect

Richard C. Crisson
Historical Architect

Enclosures

cc: Superintendent, CACO

Approved: _____ Date: 1/4/93
Chief, Cultural Resources Management

Concurred: _____ Date: 1/4/93
ARD, Resource Management & Research

HIGHLAND HOUSE ROOF REHABILITATION:

PHASE I (Emergency Repairs):

1. Re-roofing section lost and weaving in new areas of shingles blown away on remaining roof (4 squares)
2. Stabilize damaged chimney at southeast
3. Emergency assessment team travel, carpentry crew travel, materials, labor, and related costs

Sub-Total: $8,000

PHASE II (Stabilization Work):

1. Removal of temporary roof closure
2. Removal and disposal of 2 layers existing shingles, entire south roof
3. Install framing and sheathing to replace missing in-kind
4. Treating new framing with insecticides/preservatives
5. Re-shingling entire south roof with new, asphalt high-wind rated shingles
6. Rebuilding and flashing chimney above roof
7. Staging/scaffolding
8. Architectural Design/Supervision

Sub-Total: $20,000

TOTALS PHASE I AND PHASE II: $28,000.00

PENNIMAN HOUSE EXTERIOR/INTERIOR REHABILITATION

1. Application of sealants at all woodwork joints around cupola, north dormer, and north bay window roof

2. Open and replace all roof dormer metal pan sills, north bay window metal pan roofs, and cupola flat roof; apply elastic paint and/or fabric flashing as appropriate to these surfaces

3. Flash top edge of lower roof gutter attached to eaves

4. Repair plaster finish coat and re-paint damaged sections at second story ceiling

5. Treat and re-attach loose and/or water-damaged plaster and historic wallpaper in North Parlor

6. Materials, labor, travel, and related costs

Total: $50,000

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