National Park Service
U.S. Department of the Interior

Olmsted Center
for Landscape Preservation

Cultural Landscape Report for the Historic Motor Road System Acadia National Park

Site History, Existing Conditions, Analysis, and Treatment

Cultural Landscape Report For the Historic Motor Road System Acadia National Park

I suppose that you appreciate the fact that well-built roads are the most durable works of man. They outlast all other structures and monuments.

Charles W. Eliot to John D. Rockefeller, Jr., 1916

Introduction

History

Existing Conditions

Analysis

Treatment

By

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The Olmsted Center for Landscape Preservation promotes the stewardship of significant landscapes through research, planning, and sustainable preservation maintenance. The Center accomplishes its mission in collaboration with a network of partners including national parks, universities, government agencies, and private nonprofit organizations. Techniques and principles of preservation practice are made available through training and publications.

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Cover Photo: Bureau of Public Roads surveyors on Cadillac Mountain Road, 1928. (Courtesy Leo Grossman)

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ACKNOWLEDGMENTS

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INTRODUCTION

PURPOSE OF THIS REPORT

A cultural landscape report serves the National Park Service as the primary report that documents the history, significance, and treatment of a cultural landscape and as the primary tool for long-term management of those landscapes. This cultural landscape report for the historic motor road system at Acadia National Park consists of a narration of its history, an inventory and analysis of existing conditions and landscape significance, and treatment recommendations and guidelines consistent with the Secretary of Interior's Standards for the Treatment of Historic Properties and Cultural Resource Management Guidelines as outlined in Director's Order #28. This report is intended to function as planning tool; therefore it does not provide specific construction drawings or maintenance procedures for the historic motor road system.

The 33.25-mile historic motor road system is a nationally significant property constructed between 1922-1958. It is considered exemplary in the fields of landscape architecture and engineering, and is closely associated with John D. Rockefeller, Jr. and his contributions to the early development of the park. Preliminary compliance documentation related to individual rehabilitation projects on the motor roads were completed in 1993, but the analysis and significance of this resource and its features has not been comprehensively addressed prior to this report. The preparation of this cultural landscape report will provide baseline information to guide property managers during on-going and future rehabilitation and maintenance projects.[1] Identifying and understanding the important landscape characteristics and features will prevent their loss and preserve their integrity.

PROJECT SETTING

The coastal islands and rugged shorelines of Maine serve as the setting for the 47,000-acre Acadia National Park. Rocky mountaintops, woodlands of birch, aspen, oak, freshwater lakes and ponds, and marshes and seaside tide pools are home to a multitude of plants and animals. Quaint coastal villages and private residences are nestled along the shores and small islands dot the vast expanse of the Atlantic Ocean. Upwards of 2.5 million visitors annually experience this diverse landscape, and many do so from the historic motor road system.

Acadia National Park is located approximately fifty miles southeast of Bangor (Figure 0.1). At the Town of Ellsworth, various highways lead to the park, which is comprised of several non-contiguous areas. Most park lands are situated on

Mount Desert Island with smaller parcels on the Schoodic Peninsula, Isle au Haut, and other smaller islands. Towns and villages close to the park include Bar Harbor, Bass Harbor, Southwest Harbor, Northeast Harbor, and Seal Harbor on Mount Desert Island, and Gouldsboro, West Gouldsboro, Winter Harbor, and Birch Harbor on the Schoodic Peninsula. Bar Harbor, with a population of 4820, provides most of the services and accommodations for visitors arriving by car, tour bus, ferry, and cruise ship.[2] Bar Harbor is also home to the College of the Atlantic and a major research facility, the Jackson Laboratory. Most visitations are focused on the attractions on Mount Desert Island and occur between Memorial Day and Labor Day.

State Route 3 provides access to Mount Desert Island and Bar Harbor and loops around the eastern half of the island while State Route 102 loops around the western half. Somes Sound separates the island's two sides. The west side is less developed compared to the east side that features more of the well-known and spectacular sites and destinations. A majority of the historic motor road system is on the island's east side where it criss-crosses some of the park's historic carriage roads, a 44-mile system built by Rockefeller, which predates the motor roads and prohibits vehicular traffic. The motor roads also intersect with the 115-mile network of historic hiking trails that range from woodland walks to rugged climbs. Visitor facilities include a visitor center, two information centers, concession facilities, and restrooms. The park also features six large picnic areas, two swimming beaches, and two campgrounds with over 500 campsites. Operations facilities include a headquarters complex with maintenance areas and employee housing units. On the Schoodic Peninsula, the motor roads trace the shoreline and connect to the former U.S. Naval Radio Station-Winter Harbor, which is being redeveloped as the Schoodic Education and Research Center (Figure 0.2).

The coastal landforms that make up Acadia National Park represent millions of years of geological history written by glaciers and waves. The product of these events is a landscape rich in ecological and biological diversity, one that supports 219 species of birds, 37 species of terrestrial mammals, 11 species of amphibians, 7 species of reptiles, 35 species of fish, and thousands of species of invertebrates. There is one federally listed threatened species – the bald eagle.[3] The park also supports 1135 vascular plants, including 14 that are listed as endangered or threatened in Maine.[4]

Habitats range from the seaside to the mountaintops. The rocky shorelines support intertidal flora and fauna, while coastal and interior lowlands feature wetlands, bogs, and swamps. Red maples and northern white cedars can be found along some of these saturated soils, while larger areas of northern coniferous and southern deciduous forest spread up into the hillsides and abut rock outcrops and ledges.[5] The highest peaks are rocky and interspersed with alpine vegetation, and are the best place to view the expansive scenery of sky, ocean, and land.

HISTORICAL OVERVIEW

> ...In a naturalistic landscape, as far as it is possible, the road should seem to lie upon the surface of the ground without interruption of the natural modeling. The surface of necessary cuts and fills should simulate the natural surface where possible; where this is impossible their modeling should still be as sequential and unbroken a continuation of the natural surface as the designer can arrange...[6]

This quote from Henry Hubbard and Theodora Kimball's 1931 An Introduction to the Study of Landscape Design represents the prevailing attitude of the time towards the design of motor roads in a naturalistic, park setting. It was also the philosophy behind vision of a comprehensive system of motor roads at Acadia National Park as promoted by Rockefeller and the National Park Service. It also guided their successful collaboration with the Olmsted firm and the Bureau of Public Roads.

The design of the historic motor road system accommodated the constraints of challenging topography and complex land boundaries. The best possible route often encountered the ledge rock of granitic mountains or the rocky shorelines battered by storms and tides. A mosaic of property holdings had to be assembled to make these routes possible, and as a result, the circumstances of the site affected the ideal layout of the road. Further complicating matters was the ongoing and contentious debate regarding the development of Mount Desert Island for automobiles, and the resistance of some property owners to accept the project, which resulted in the construction of the motor road system in non-contiguous segments. Nevertheless, the historic motor road system lies lightly on the land.

CONTRIBUTIONS OF DORR, OLMSTED, AND ROCKEFELLER

In addition to the physiographic characteristics described above, development of the historic motor road system was also influenced by the economic interests of the year round residents, the conservation goals of the wealthy summer residents, and the national realities of the Great Depression and World War II. Of course, the historic motor road system would not have been possible without the contributions of many tradesmen and laborers (Figures 0.3-0.5). The motor road projects provided steady work for the local population, especially in the 1930s for those associated with the Civilian Conservation Corps and other New Deal programs. Ultimately, though, it was the vision, advocacy, talent, and passion of several individuals that shaped the design of the historic motor road system.

The origins of Acadia National Park are well documented elsewhere and remains a fascinating story of public and private cooperation and controversy. The central figure in its founding is George Buckman Dorr, who devoted most of his life and fortune to the creation of the park (Figure 0.6). Dorr served as the first Superintendent, from the founding of "Sieur de Monts National Monument" in 1916, until his death in 1944. He was also the park's first naturalist, writing of the many natural wonders to be encountered along the trails that he built, maintained, and personally enjoyed. An incredible number of photographs, taken during Dorr's tenure, of the scenery around Mount Desert Island, reflect the beauty of the island at that time and the power it had over his life.

The historic motor road system is also a product of the talents of many engineers and designers. They included Walters Hill and Paul Simpson, who designed many of Rockefeller's carriage roads, and Benjamin Breeze and Charles Peterson, landscape architects with the National Park Service who contributed to numerous park projects. One of the most notable individuals was Frederick Law Olmsted, Jr. who along with other landscape architects in the Olmsted firm planned and designed several motor road segments and advised on many other routes (Figure 0.7). The Olmsted firm championed the concept of separated circulation systems and the use of native materials in structures and plantings, all of which helped create motor roads that were perfectly integrated with the landscape and existing carriage roads and hiking trails. Another prominent individual was a young resident engineer with the Bureau of Public Roads named Leo Grossman, who managed the Cadillac Mountain Road project and worked closely with Rockefeller in the planning of other Bureau of Public Roads segments of the historic motor road system (Figure 0.8). The correspondences between Olmsted and Rockefeller, and Grossman's diaries and "Final Construction Reports," are very informative as to the planning decisions and construction details for the historic motor road system.

The concept and implementation of the comprehensive motor road system, though, is primarily the result of the vision of John D. Rockefeller, Jr. Just as George Dorr had ideas reaching beyond the Hancock County Trustees for Public Reservations, Rockefeller was thinking about more than merely efficient and well-engineered park motor roads (Figure 0.9).

The deeply ingrained work ethic that demanded painstaking attention to detail and the highest quality products had brought great fortune to the Rockefeller family. Having learned this ethic from his father, and the ideals and practice of philanthropy from family advisor Dr. Gates, John D. Rockefeller, Jr. would never associate himself with any project or gift where quality had been compromised. He always sought to provide the greatest good from his considerable wealth. Reaching well beyond the shores of Mount Desert Island, Rockefeller helped to set the standard of quality for National Park roadways and landscapes by his direct sponsorship of projects in Yellowstone National Park and elsewhere. He was also influential through the close personal relationships he developed with the early Directors of the National Park Service.

An insightful and introspective man, Rockefeller was attracted to the idealism of those who served in the early years of the National Park Service. He once wrote to Director Stephen Mather upon learning of his retirement:

> ...Thus some years ago I had come to realize what extraordinarily fine, able, unselfish men had been brought into the park service. Knowing how meager the salaries which these positions carry, I wondered that men of such high caliber had been attracted to them. This was made clear to me when I came to know you and to learn something of what you have been doing in the department of parks these many years. These young men have been drawn into the service because of their admiration and affection for you and because of the fine example of unselfish public service which you have set for them. They have come to realize that the National Park Service offers an opportunity for a man of ability and idealism to make a very real contribution to the development of his country.[7]

Through his association with the National Park Service, Mr. Rockefeller found himself in the company of others like himself, who sought only the best from themselves and for their country. Through his friendship of over thirty-five years with Director Horace M. Albright, he found an avenue for expressing his vision and values for the entire National Park Service.

When Rockefeller died in 1960, the keen interest and watchful supervision which he gave to the development of Acadia National Park was impossible to replace. Rockefeller's carriage road network was the first to fall into disrepair. Shrinking maintenance dollars and overworked staff, still common issues today, were problems that were especially severe at the time of Rockefeller's death. Culverts gradually became clogged with leaves and other debris, causing washouts across the surfaces. As the carriage roads became impassible, they received less attention from the public and were allocated fewer maintenance resources. Fortunately, the carriage road system has now been successfully rehabilitated, guided by exhaustive studies of their original planning and construction.[8]

Similarly, the historic motor road system has been recognized as a significant cultural resource. Preservation of the integrity of the historic motor road system is essential to the unique character of the park and the enjoyment of visitors that experience Acadia National Park each year.

PROJECT METHODOLOGY AND FORMAT

This cultural landscape report expands on the research, analysis, and recommendations of the 1993 report, "Historic Motor Road System, Acadia National Park, Compliance Documentation and Rehabilitation Guidelines for FHWA Project #PRA-ACAD-4A10." The 1993 report was prepared in advance of the Federal Highway Administration's rehabilitation project for thirteen miles of the historic motor road system, which included Paradise Hill Road and much of the park loop road from Kebo Mountain Road to the grade separation at Otter Cliffs Road. Work was completed in 1993-1994, but due to budget limitations was scaled back considerably and was confined to the portion of the park loop road from the Kebo Mountain Road Extension to the grade separation. The 1993 report focused on specific segments of the historic motor road system affected by the Federal Highways project. It did, however, provide a historical overview of the entire historic motor road system except for the motor road segments on the Schoodic Peninsula.

Extensive research efforts for the 1993 report were only able to locate construction drawings for one of the motor road segments, Paradise Hill Road. Fortunately many more construction drawings were located for this cultural landscape report at the National Archives in College Park, Maryland. These drawings, along with the Bureau of Public Roads "Final Construction Reports," have provided insight into the design and construction of the motor roads as well as the similarities and differences between the motor road segments.

Archives and collections examined for the 1993 report and this cultural landscape report are as follows:

- Acadia National Park, Bar Harbor, Maine
  - Bureau of Public Roads "Final Construction Reports"
  - Park Historic Map Files
  - Denver Service Center fiche cards
- Rockefeller Archive Center, North Tarrytown, New York
  - Rockefeller Family Archives
  - Simpson Family Collection
- National Archives, Federal Records Center, Waltham, Massachusetts
  - MACCC monthly reports
- National Archives (Archives I), Washington, D.C.
  - Central Classified Files of the National Park Service
- National Archives (Archives II), College Park, Maryland
  - Cartographic Branch
- Federal Records Center, Suitland, Maryland
  - Bureau of Public Roads Files
- Federal Highway Administration, Eastern Lands, Sterling, Virginia

Individuals contacted in connection with the research are as follows:

- Leo Grossman, Engineer, Bureau of Public Roads, 1920-1941
- Gladys O'Neil and Irene Marinkee, Bar Harbor Historical Society

Linda McClelland, National Register Program, National Park Service
Robert Page, Director, Olmsted Center for Landscape Preservation, National Park Service
Randall Biallis, Park Historic Architecture Division, National Park Service
Eric Deloney, Chief, Historic American Engineering Record and Historic American Building Study, National Park Service
Leo Dario, Project Engineer, Federal Highway Administration

This cultural landscape report is organized into four chapters. Chapter 1, History of the Historic Motor Road System, traces the physical development of Acadia's motor roads from 1922-1958. The chapter also includes information about circulation features predating the motor roads on Mount Desert Island and Schoodic Peninsula and management of the motor roads after the historic period. Woven into this chronology of events are the stories that ultimately shaped the historic motor road system. They include the powerful economic and conservation interests that pitted the year round residents against the wealthy summer residents, motor road planning in the National Park Service and the collaboration with the Bureau of Public Roads, and above all the strong wills and opinions of George Dorr, Frederick Law Olmsted, Jr., and John D. Rockefeller, Jr.

Chapter 2, Existing Conditions, describes the historic motor road system as it exists today and presents in detail the characteristics and features of all eighteen historic motor road segments in terms of curvature and grades, topography, vegetation, views, circulation, buildings and structures, and small-scale features. Chapter 3, Analysis of Landscape Significance and Integrity, reviews the current status on the National Register of Historic Places, provides a statement of significance, and evaluates the integrity of the extant landscape characteristics and features and their contribution to the historical significance of the historic motor road system. Chapter 4, Landscape Treatment, summarizes the Rustic Design principles prevalent in park road planning and the rustic character of the historic motor road system, discusses current treatment issues as they relate to the park's General Management Plan and the National Park Service's Organic Act, presents a mission statement and a rehabilitation treatment approach for the historic motor road system, and recommends both general and specific treatment strategies that aim to preserve the historic integrity of this important historic resource.

The report concludes with three appendices. Appendix A includes a detailed description of the inventory methodology and the computer database associated with the extensive field work undertaken for this cultural landscape report. Appendix B features fold-out color Existing Conditions maps that document characteristics and features for the entire motor road system. Appendix C consists of summary evaluation tables of all contributing and non-contributing characteristics and features.

SUMMARY OF MAJOR FINDINGS

The scope of the 1993 Compliance Documentation report was focused on those segments affected by a forthcoming Federal Highways rehabilitation project. In addition to a historical overview of the historic motor road system, the 1993 report identified character-defining features and threats to the historic integrity, and provided specific treatment recommendations corresponding to the Federal Highway's construction drawings. For this report, research, inventory, and analysis was undertaken for the entire motor road system, and many of the subsequent treatment recommendations are similar to those presented in1993 report.

The major omission of the 1993 report was the two motor road segments located on the Schoodic Peninsula. Research has revealed that although Rockefeller did not articulate these segments as part of his comprehensive motor road system, they were nonetheless executed with the same Rustic Design qualities and details that characterized the other motor roads built by that time. The two segments were built in 1933-1935 under the interbureau agreement between the National Park Service and Bureau of Public Roads.

Among the other findings in this report is that all of the motor road segments were paved with the modern plant-mixed, hot-asphalt bituminous concretes in the 1950s, and that the last segment of the historic motor road system to be built in 1958, Bureau of Public Roads Project 4A2, was actually the last to receive this treatment. This conclusion differs from the 1993 report and the National Register nominations.

The following character-defining features for Acadia National Park's historic motor road system at have been identified as part of this cultural landscape report:

horizontal and vertical alignment
cross-section
bridges (except Frazer Creek)
causeways
road surface wearing course
vegetated shoulders
paved pullouts
paved parking lots
vegetated ditches
mortared rubble waterways
culverts, inlet structures, and outlet structures
stone guardwalls (angular and rectilinear)
earthen guardwalls
vegetated and stone embankments

stone retaining walls (dry-laid and mortared)
gate (Civilian Conservation Corps)
vegetated and mortared rubble medians
asphalt walkways
gravel trails
stone steps
granite curbs (except sawn-top)
concrete curbs
boulder monuments
views and vistas (selected)
vegetation in and along road corridors

Overall, the historic motor road system at Acadia National Park possesses integrity of location, design, setting, materials, workmanship, feeling, and association. Of the seven threats to the historic integrity identified in the 1993 report, four are still relevant today and include the presence of unpaved pullouts, parking management stones, bituminous waterways, and paved shoulders. All of these features can be linked to increased visitation and increased traffic. While visitor and parking management strategies are beyond the scope of this cultural landscape report, many of the prescriptions developed in 1993 for these four issues have been reiterated and expanded in an attempt to reduce their impact on the historic character of the historic motor road system and to improve the visitor experience on the motor roads.

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[1] This project has been initiated through the National Park Service's Project Management Information System, #84128.
[2] Census data from 2000, from http://factfinder.census.gov/.
[3] NPSpecies - The National Park Service Biodiversity Database. Desktop version 2.2. (accessed 13 April 13 2007)
[4] Greene, C.W., L. L. Gregory, G. H. Mittelhauser, S. C. Rooney, and J. E. Weber. 2005. Vascular flora of the Acadia National Park region, Maine. Rhodora: 107(930)117-185.
[5] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region. October 1992: 10-11, 13.
[6] Henry Vincent Hubbard and Theodora Kimball, *An Introduction to the Study of Landscape Design*, revised ed., New York: The MacMillan Company, 1931: 219.
[7] Joseph W. Ernst, ed., *Worthwhile Places: Correspondence of John D. Rockefeller, Jr. and Horace M. Albright*, New York: Rockefeller Archive Center, 1991: 95-97.
[8] William D. Rieley and Roxanne S. Brouse, "Historic Resource Study for the Carriage Road System: Acadia National Park, Mount Desert Island, Maine," Charlottesville, Virginia: Rieley and Associates, 1989.

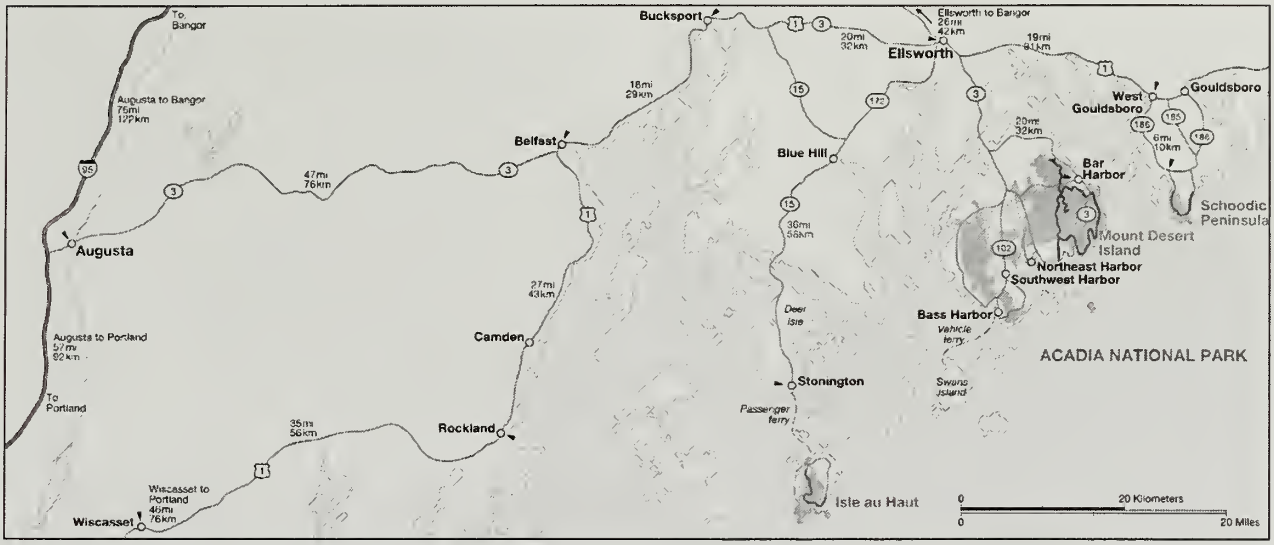


Figure 0.1. Map of Acadia National Park and its environs. (Acadia National Park website)

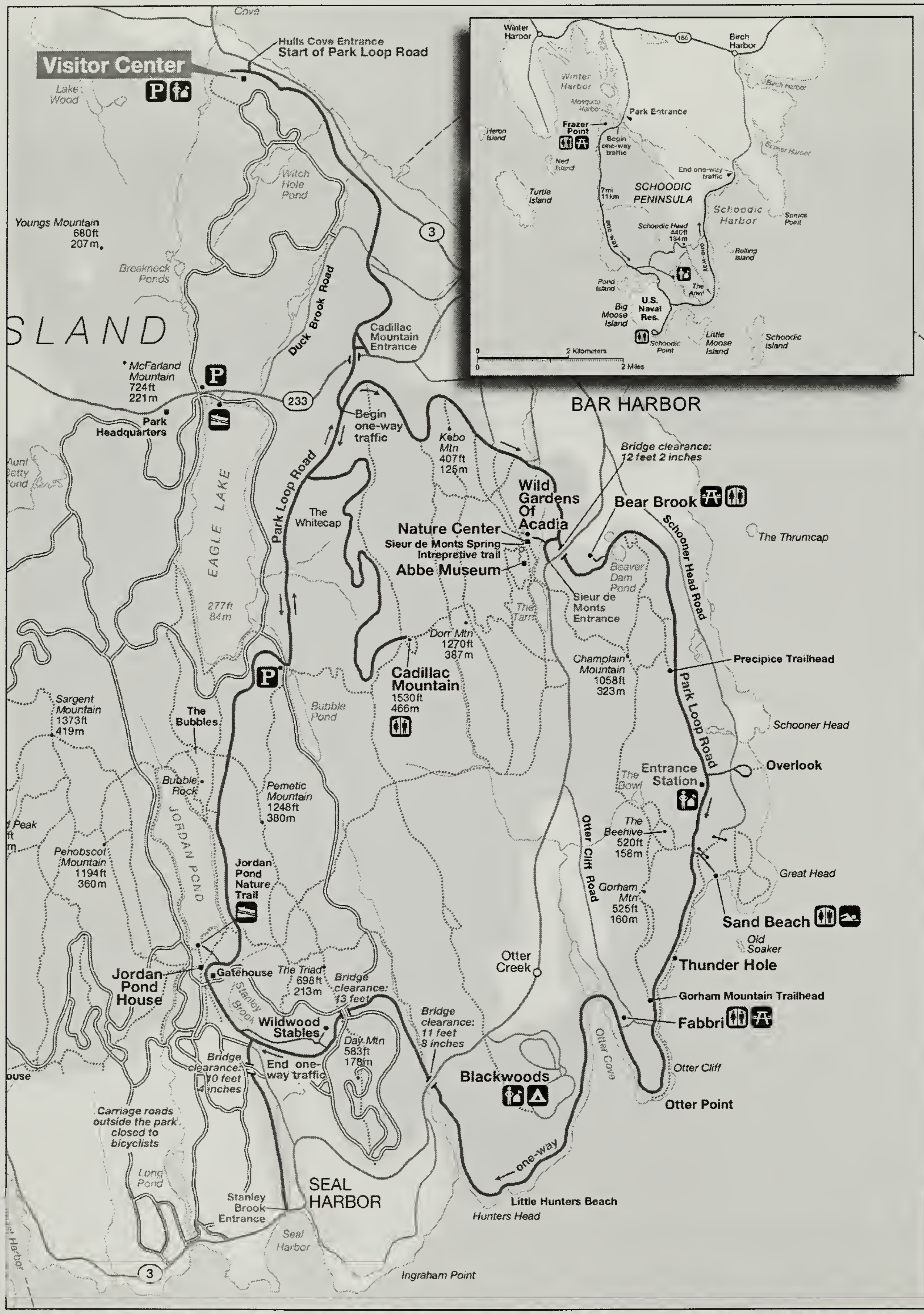


Figure 0.2. Maps showing the Motor Road System on Mount Desert Island and Schoodic Peninsula. (Acadia National Park website)

Figure 0.3. Work crew on Jordan Pond/Eagle Lake Road, 1926. (Acadia National Park archives)

Figure 0.4. Dynamite crew on Cadillac Mountain Road, 1930. (Courtesy Leo Grossman Personal Collection, #51-1)

Figure 0.5. Stone masons at work on Sieur de Monts Bridge, 1940. (Federal Works Agency, Public Roads Administration, "Progress Views of Structure: Kebo Mountain Road Extension and Champlain Mountain Road (Ocean Drive) Project 6A3-8A10.")

Figure 0.6. Superintendent Dorr with park staff, 1941. (Acadia National Park archives)

Figure 0.7. Frederick Law Olmsted, Jr. (Acadia National Park archives)

Figure 0.8. Leo Grossman, engineer with the Bureau of Public Roads, at far right. (Courtesy Leo Grossman Personal Collection)

Figure 0.9. John D. Rockefeller, Jr. supervising construction of a motor road. (Rockefeller Archives Center, Simpson Family Collection)

CHAPTER 1
HISTORY OF THE HISTORIC MOTOR ROAD SYSTEM

The landscape of coastal Maine was shaped millions of years ago by complex events of geological upheaval, scouring, and inundation. Erosion gradually exposed the pink granite bedrock core of the island and peninsula, while glaciers later rounded the peaks and scoured the valleys to form fresh-water lakes and ponds. The physiographic outcome guided the locations of footpaths created by Native American inhabitants and inspired the networks of trails, carriage roads, and motor roads that lace Acadia National Park today.

The historic motor road system on Mount Desert Island and Schoodic Peninsula evolved over thirty-six years, from 1922-1958, to ultimately traverse the bare mountains, lush forests, and rocky shorelines. The natural scenery inspired the design and character of the motor roads. But it was the economic realities at both a national and local level, and the self-interests of residents and tourists, that also influenced the routes of the motor roads.

FOOTPATHS AND ROADS, PRIOR TO 1922

NATIVE AMERICAN AND EUROPEAN SETTLEMENTS

Up to the seventeenth century, coastal areas of Frenchman Bay region were the sites of small Native American camps. Settlements were reportedly located at Frazer Point on the Schoodic Peninsula, and seasonal encampments at several protected coves on Mount Desert Island.[1] Native Americans were fishermen, hunters, and gatherers, who may have used stream valleys as routes to access the interior of the island for resources and as portage and carry routes. However, there is little documentation or archeological evidence for these routes.[2]

French and English settlers also intermittently occupied this area, and their numbers gradually increased after French navigator Samuel de Champlain explored Mount Desert Island in 1604, calling it “Isles de Monts Desert” for the rocky and treeless summits. King Louis XIV granted the island to Antoine de la Mothe Cadillac in 1688 in an effort to establish an outpost of French feudalism, but widespread settlement did not follow due to the continual threat of war between England and France. After the signing of the Treaty of Paris in 1763, the English began to dominate the area and gradually displaced the earlier inhabitants. These new settlers also hunted and fished, but supplemented their livelihood through farming, logging, and especially shipbuilding. This yielded surpluses of fish, lumber, ice, and granite that were traded locally and to distant ports.[3] The Towns of Mount Desert, Eden (later Bar Harbor), Southwest Harbor, Tremont, and Gouldsboro were founded around this time.

Old footpaths were used to move goods and supplies, and over time some were widened for use as horse roads and for logging carriages.[4] New roads were also built, ranging from rudimentary roads cut by loggers to public roads built to improve trade, such as a road from Cromwell Cove in Bar Harbor to Sand Beach, which was in use by 1777.[5] By 1827, a toll bridge was built across the Mount Desert Narrows to connect the island and the mainland. Tolls charged were based on the type of animals and cargo, suggesting the economic impetus behind its construction.[6]

THE INFLUENCE OF THE RUSTICATORS AND THE COTTAGERS

By the mid-nineteenth century, tourism was beginning to displace the extraction of resources as the driving force in the area's economy. In 1844, Thomas Cole, the leading artist of the Hudson River School, arrived on Mount Desert Island. On his way to his lodgings, he complained of the poor condition of the road, describing it as "...exceedingly bad, stony, overhung with beech and spruce, and, for miles, without inhabitant."[7] Nevertheless, the route afforded many fine views that Cole captured through writings, and more significantly, through scenic landscape paintings. These works inspired other artists such as Frederic Church, Thomas Birch, and William Morris Hunt to visit. The island's rich natural resources also attracted the leading scientists of the day. Although transportation to the area was difficult, the island attracted an annual summertime influx of visitors, called the "rusticators," throughout the 1860s and 1870s. Visitors lodged at private homes or inns, such as the Jordan Pond House, and began using the old lumber roads as walking paths to scenic vistas, particularly those situated above the tree lines of the mountains.[8]

One of the more popular destinations was up to the summit of Green Mountain, now called Cadillac Mountain. When the U.S. Coastal Survey established a triangulation station at the summit in 1853, a rough road was built to haul survey equipment to a small frame house.[9] The path to the survey station was very popular and at times crowded with "troops of pedestrians." The Brewer family, who owned most of mountain, improved the path into a "buckboard road," so named for the small wagons popular on the island in the late nineteenth century. They collected tolls on the road, which led to a small hotel called the Summit Tavern that offered panoramic views.[10]

The buckboard road was still in use in 1883 when a cog railway began operating from the east side of Eagle Lake to the summit. The "Green Mountain Railway" was initially successful, so much so that a new hotel was built at the summit after the Brewer's hotel burned. In a sign of conflicts to come, however, railway supporters attempted to discourage use of the buckboard road by erecting gates across the roadway where it crossed the tracks, and when this did not work, dynamited the road. Ultimately, the buckboard road was rebuilt and by 1890 the railway had closed, likely in part because of poor access from Bar Harbor.[11] An 1896 map of the island documents the route of the buckboard road as leaving the Eagle Lake Road (Route 233), climbing to a toll house at Great Pond Hill, passing east of the White Cap, and continuing to a cow yard and to the summit (Figure 1.1). The map also indicates a road extending south from Sand Beach, called Ocean Drive, and connecting to Otter Creek Road (Route 3) that passes through the Tarn valley.

The paintings by the rusticators introduced the island to the larger public, and by 1880 Mount Desert Island was being hailed as one of the most beautiful vacation spots in the country.[12] Wealthy visitors seeking relief from hot summers in Boston, New York, and Philadelphia were among the tourists, and many built massive summer homes, euphemistically known as "cottages," in and around Bar Harbor, Seal Harbor, Northeast Harbor, and Winter Harbor. In 1881 the *Boston Traveler* reported:

> There is more dressiness now than at the opening of last season...natty blue suits giving way to yellowish flannel for young men and maids...of yachts vying with mackerel in the harbor and there being money in a toll road up Green Mountain...[13]

During the land boom and bust of the 1880s, developers such as the Mount Desert and Eastern Shore Company, offered 500 "choice" lots along the shores of Jordan Pond and Eagle Lake.[14] On the Schoodic Peninsula, by the early 1890s much of the land was purchased by John Godfrey Moore, who had hoped to develop it as a recreation area and construct a resort hotel on the Schoodic Head summit.

NEW AND IMPROVED ROADS

The influx of summer tourists had a profound effect on the development of roads. On the Schoodic Peninsula, John Godfrey Moore died before his resort plans were realized, but he did construct a scenic road from Frazer Creek, along the shoreline to West Pond Cove, to Schoodic Head. The Moore Road became popular with local residents who used it for picking berries, picnicking, and enjoying the views.[15] On Mount Desert Island, year-round residents, mostly farmers, loggers, fishermen, and merchants, began to improve the local roads to serve the growing number of tourists and to encourage them to visit the island's natural wonders.[16] In the 1890s, the Town of Bar Harbor constructed Ocean Drive, a scenic road that traced the eastern shoreline from Schooner Head Road to Otter Cove (see Figure 1.1).[17] This road created a convenient loop that connected to Otter Creek Road (Route 3) that passed through the Tarn valley.

Progressive local citizens also thought of ways to extend the summer tourist season into fall. "A road shall be built along the shore of Eagle Lake," wrote a local reporter in 1888, "and thence through dense forests, across picturesque streams and brooks, and under overhanging crags and cliffs with mountains looming up on either side." The purpose of the road was to "at once call the attention of the public to it, so that before many months the nucleus of a fall resort will be established."[18] As historian Neil Maher writes, "where roads had once been built to access and extract natural resources, now they were built to make the beauty of natural resources accessible to tourists; both were a means to achieve these economic ends."[19]

VILLAGE IMPROVEMENT GROUPS, THE TRUSTEES FOR PUBLIC RESERVATIONS, AND THE NATIONAL MONUMENT

Increases in tourism and land development were paralleled by organized actions aimed at improving public amenities and preserving the area's natural beauty. This effort began in earnest in the 1880s with the establishment of local village improvement associations and societies that improved the appearance of public areas in and around the towns. Walking paths linking towns to shorelines and mountain vistas were constructed, eventually expanding into a network of scenic and well-crafted trails. Some trails were endowed by association members, and received continued maintenance funding as well as commemorative markers.

Throughout the country, the acquisition of land for preservation was deemed a worthwhile goal of village improvement groups. On Mount Desert Island, there was a growing concern among the summer residents that the island's natural resources were being squandered not only by the developers buying up huge tracts of land but also from lumbering, which had been made increasingly profitable through the introduction of the portable saw mill. In 1895, the Roads and Paths Committee of the Bar Harbor Village Improvement Association recommended its members donate or purchase parcels so that the trails and scenic vistas could be protected and preserved from developers and loggers.[20]

These calls to action did not have a great impact until 1901 when two summer residents, George Bucknam Dorr, founding member of the Bar Harbor Village Improvement Association, and Charles W. Eliot, president of Harvard University, gathered a group of residents comprised of scientists, businessmen, and ministers to form the Hancock County Trustees of Public Reservations. Their mission was to acquire land parcels on the island, mainly to protect the local water supply while at the same time preserve walking paths and scenic vistas. In 1903 the Trustees were incorporated and given tax-exempt status by the state.[21] In 1909, on behalf of the Trustees, Dorr purchased Boiling Spring at the north end of the Tarn valley, where a bottle works had once stood, and surrounding lands in what would become Great Meadow.[22] Naming the ten-acre parcel Sieur de Monts Spring, Dorr built a spring house and a canopy, an octagonal structure in the Italian Renaissance style featuring concrete arches and a domed tile roof, over the spring to enable visitors to see the source of water.[23]

By 1913, the Trustees had preserved over 5000 acres on Mount Desert Island. However, the organization had its share of critics who argued against removing large tracts of land from the tax roles and possibly discouraging development and commerce. Given the Trustees political vulnerability, Dorr argued that to protect the lands for all time the Trustees should seek federal assistance. At the time, however, there were several bills stalled in Congress proposing establishment of national parks. Dorr asked President Wilson to instead make it a national monument, which did not require an act of Congress. After much lobbying, articles, and title searches, Sieur de Monts National Monument was authorized in July 8, 1916.[24] At this time, the Trustee's reservation had grown to over 6000 acres protecting four lakes and ten mountains, with a contiguous boundary superimposed over a mosaic of donated lands with extant features. By October of that year, Dorr, as the monument's first superintendent, reported that 105,255 tourists and 15,361 automobiles had visited the park.[25]

THE ROLE OF AUTOMOBILES

The fact that automobiles had entered Sieur de Monts National Monument was remarkable in itself because of the often contentious battle that had strained the relationship between the year-round residents and the summer residents for the last fifteen years. The automobile question was essentially a referendum on road building on the island. The year-round residents saw the roads as a pipeline for economic opportunity, by accommodating tourists and summer residents. The summer residents viewed the roads as a threat to the reasons they came here in the first place, which was the island's isolated natural beauty.[26] "It is to escape the sights and sounds of the city that intelligent people come in summer to such a place as this rough and beautiful island," wrote Charles W. Eliot in 1904, "the short season populations do not wish to be reminded in summer of the scenes and noises amid which the greater part of their lives inevitably passes."[27]

In 1903, the cottagers successfully lobbied the state legislators to give town voters the power to prohibit cars on the island. The cottagers won the vote to restrict cars from selected roads near Bar Harbor, and in 1909 were able to extend the ban throughout the island. Year-round residents protested on economic and democratic grounds. One accused the "city millionaires" of attempting by "every means in their power to make Bar Harbor a quiet, exclusive resort where their little clique can have full sway and where no state of Maine man is welcome."[28] George Dorr was able to promote a compromise lifting the vehicle prohibition in Bar Harbor, the economic hub of the island, but maintaining it in other exclusive towns.[29] By 1913, however, automobiles were ubiquitous and the prohibition of cars had been lifted.

ROCKEFELLER'S CARRIAGE ROADS

Having recently bought his 150-acre estate named "Eyrie," on Bar Hill near Seal Harbor, Rockefeller was troubled at the repeal of the automobile ban and concerned that more cars would threaten the tranquility.

> One of the things that had attracted Mrs. Rockefeller and me most to Mount Desert Island some twenty years ago was that there were no motors on the island. I greatly deplore the pressures to open the island roads to motors, and was one of those who opposed their admission to the last.[30]

Rockefeller had shared his concerns about automobiles earlier, in 1915, when he donated money to the Hancock County Trustees of Public Reservations to complete the required title searches for the national monument. Writing to Charles W. Eliot:

> Do you not feel that the establishment of this monument will bring an undesirable class of tourists to Bar Harbor in their automobiles who, if automobiles are admitted to the south side of the Island, will be a real nuisance to the residents there?[31]

Rockefeller's opinion of modern conveniences apparently did not completely disappear, for forty years later, in 1955, he stated that he "would like to see Mount Desert Island invaded as little by modern standards of life as possible."[32] According to historian Neil Maher, it was the presence of cars that inspired Rockefeller to begin construction carriage roads, first at Eyrie and then eventually on lands held by the Trustees or owned by the national monument.

Rockefeller's keen interest in road building can be traced to his father and the carriage road system at Forest Hill, his childhood home in Cleveland. Rockefeller often performed some of the maintenance on the roads, resurfacing, clearing brush, and planting trees. Later, he helped lay out the carriage roads at the family estate at Pocantico Hills north of New York City, where the roads traced the contours of the land and sought out views that reflected what he thought were the best scenic highlights. Young Rockefeller was also influenced by family excursions to the recently completed Central Park in the 1870s. There, carriage paths designed by Frederick Law Olmsted and Calvert Vaux offered uninterrupted carriage riding thanks to the ban of omnibuses, hacks, and railroads from the drives and the diversion of city traffic to sunken roads cutting across the park.[33]

The technical challenges of building carriage roads on Mount Desert Island were too great for Rockefeller to ignore. Sparing no expense, he enlisted the services of the best engineers, architects, and designers, many of whom worked with him at Pocantico Hills. Construction began in 1913, and in 1918 Rockefeller received approval to extend the carriage roads on to national monument lands. When building carriage roads on federal property, Rockefeller established a method of working designed to avoid controversy; he typically chose the route, provided funds for the engineering and construction, and prepared contract documents for Superintendent Dorr's signature.[34]

Rockefeller's attention to detail resulted in carriage roads consistently excellent in design and craftsmanship. State of the art construction techniques were used to build roads with gentle curves and grades that fit the topography and which took advantage of the scenic views. For the local economy, construction provided year-round work for a number of islanders through the Depression.[35] For the park, distinctive features such as rustic stone-faced arched bridges, hand laid rock walls and embankments, large coping stones serving as guardwalls, and gatehouses designed in the French Norman Revival style ultimately had a profound effect on the design and character of future developments.[36] When the last segment was completed in 1940, the carriage road system totaled fifty-seven miles in length.

PLANNING AND CONSTRUCTING THE HISTORIC MOTOR ROAD SYSTEM, 1922-1958

LAFAYETTE NATIONAL PARK AND INITIAL ROAD PLANS

Primarily because of George Dorr's dedication and tireless promotion, Sieur de Monts National Monument was later reauthorized as Lafayette National Park in 1919, so named to honor the island's colonial heritage. The park was the first national park east of Mississippi River and the only park in the country created solely from donations of private land.

Among the additional parcels the park was interested in were lands on the Schoodic Peninsula. Conservation efforts on Schoodic had swelled because development was imminent, mostly because the area was seen by locals and visitors as a respite from crowded Bar Harbor. The Trustees of Public Reservations aimed to preserve the views and to fulfill John Godfrey Moore's vision of the peninsula as a park and recreational area. Moore's widow wished to donate her interests, but at that time the park was not authorized to accept land donations beyond Mount Desert Island. Superintendent Dorr's interim solution was to pursue the donation on behalf of the Trustees.[37]

In 1922 Stephen Mather, Director of the National Park Service, instructed Dorr and all National Park Service superintendents to prepare maps, estimates, and other data concerning proposed road projects. These were to be packaged and submitted to Congress as part of a general roads program for all of the national parks.[38] This directive was aimed at bolstering chances of obtaining funding for national park road construction projects, which up to this time had been minimal. Up to this time, road building funds were scarce, requiring appropriation through the 1916 Federal Aid to Highways Act and administration through the Department of Agriculture's Bureau of Public Roads. Finally, by 1924, Congress successfully authorized $7,500,000 for road construction in the national parks.[39]

Improving public access through new auto roads was a common issue facing national parks and coincided with the period where Americans were introduced for the first time to the wilderness philosophy movement. This debate was framed in 1908 in the aftermath of the San Francisco earthquake and the proposed damming of Hetch Hetchy Valley to provide the city with a reliable water supply. Use of that region's wild character pitted conservationists such as Gifford Pinchot, who promoted wise utilitarian uses of natural resources that could be developed and managed to benefit the public, against conservationists such as John Muir, who believed in the preservation of wild nature.[40]

Assistant National Park Service Director Arno Cammerer successfully argued that national park tour roads could be an "implement of wilderness conservation" since the fundamental concept of the park was "conservation for public use."[41] Public recreational use, it was argued, was a preferable alternative to such land uses as grazing, mining, or lumbering, all of which would have a greater impact on the natural environment. The limited construction of roads, more than any other facet of park development, would strengthen and validate the goal Mather described as "complete conservation" of national park areas.[42]

INTERBUREAU AGREEMENT WITH THE BUREAU OF PUBLIC ROADS

National Park Service Director Mather had long recognized that the "greatest flow of tourist gold" followed the routes of improved highways.[43] However, to make certain the overall visual and ecological effect of road construction would be minimized and would effectively harmonize with the natural environment, Mather required the development of design standards and arranged for careful construction supervision. Mather also worried that major road construction projects, made possible by the large appropriation, might cause unnecessary damage to scenery and that the varied skill levels of National Park Service engineers and different approaches to road building would hinder the agency's ability to manage such projects.

Mather's solution was to establish an interbureau agreement with Department of Agriculture's Bureau of Public Roads in January of 1926. Through this agreement, the Bureau would undertake surveys, develop specifications, and supervise construction while National Park Service engineers and landscape architects would undertake the planning and review. This relationship ensured that the park surroundings were well preserved, and the overall character of the new roads were compatible with the natural environment.[44] However, a funded road project managed according to the interbureau agreement would not arrive at Lafayette National Park until 1928.

CONSTRUCTION OF JORDAN POND/EAGLE LAKE ROAD, 1922-1927

(see Period Plans, Map #1)

Fulfilling Director Mather's road project request of 1922, Superintendent Dorr drew up a plan for a motor road stretching from Eagle Lake Road (Route 233), alongside Eagle Lake and Jordan Pond, to the Jordan Pond Tea House, a popular island eatery since 1896. The "Mountain Road," as it became known, echoed a road plan proposed in 1888. According to Dorr, such a road was necessary "to enable our rangers to pass readily between the northern and southern sides of our mountain range, for wildlife and woods protection."[45] The plan also called for a route to the top of Cadillac Mountain and a variety of trails.

Predictably, Rockefeller took great interest in Dorr's idea, both from a road-building point of view but also as a way to counter his automobile nemesis. Ever since he began constructing carriage roads around the "Eyrie," motorists had attempted and had usually succeeded in driving on them. This practice only grew worse after he donated many of the carriage roads to the park.[46] Rockefeller was also alarmed that motorists were pressuring park officials to officially open up the carriage roads to cars. Motor roads, he thought, would keep the automobiles off his prized carriage roads. In a letter to Dorr, he added that road construction "would still further justify the Government's policy of developing the balance of the park for use by pedestrians and horse drawn vehicles."[47]

Rockefeller and Dorr were well acquainted through the planning and construction of the carriage roads. The two men, along with Chares W. Eliot of the Hancock County Trustees for Public Reservations, agreed that automobiles were not a passing fashion and that their presence and access to park roads needed to be carefully controlled. While Rockefeller wished the motor roads to be as scenic as the carriage roads, he also desired them to be independent of the carriage roads through bridges, grade separations, and gatehouses so that the distinctiveness of both systems could be maintained, much like the circulation systems in New York City's Central Park. Wishing to see that if any road was to be built that it be done well, Rockefeller offered the services of Paul Simpson and Walters Hill, his carriage road engineering and surveying team.

In June 1922, Director Mather and Assistant Director Cammerer visited the park to discuss the plan with Superintendent Dorr. Cammerer commented on the proposed route:

> ...On Tuesday I circled Jordan Pond, partly by the new survey and partly where such existed - by foot trails, and then followed the Motor Road

> survey through the woods along the western slope of Pemetic Mountain from the foot of Jordan Pond to the northern end of Bubble Pond, a distance of about three miles. Surveyor Simpson, who made the survey, and Mr. Lynam accompanied Supt. Dorr and me. The road is excellently located throughout with a maximum five percent grade. With the exception of one or two places where it will cross rock slides, it cannot be seen from either above or below; and along these rock-slide sections boulders and other weathered rocks which are abundant along the route can be so arranged that the road will scarcely appear, at all, in evidence...[48]

In addition to the scenic qualities of the proposed motor roads, Cammerer's report of the trip also focused on the desirability of having the proposed roads in place as a barrier to wildfire, and for making accessible to the typical citizen the wonders of the National Park. Both motor roads in Dorr's plan were approved, with Cammerer emphasizing:

> ...this report must be kept confidential as far as the general public is concerned. Should it become public in any way land values might rise to such figures that the proposed donations will not be sufficient to cover the amount needed for acquisition and the opportunity be lost. Therefore should discussion of individual projects or development work arise it should be carried on generally and without reference to this map or this report...[49]

Rockefeller had received a copy of the map of the proposed route from Superintendent Dorr while in Seal Harbor. Upon his return to New York, he composed a letter of financial commitment to Dorr, who had expressed his doubts that enough public funding would be approved. Thus, Rockefeller formally began his involvement with the creation of Acadia's historic motor road system:

> ...In our various conferences on the subject, you have said that you were disposed to build the road on a day labor basis, and that you were in a position to give it your personal attention. You have also said that you would have specifications prepared and estimates made of the probable cost of the first section, which is common to both the mountain road (to the Cadillac summit) and the lake road (to the Jordan Pond House), and that you would advise me of the estimated cost of this section. Upon receiving this estimate, I shall be prepared to make a definite pledge toward the cost of that section, followed by definite pledges for the road, section by section...[50]

Rockefeller ultimately pledged $150,000 to compensate for insufficient funding from the federal government.

Construction of the first 4300-foot-longsection of the motor road began in the fall of 1922, and was completed in September 1923. Starting at Eagle Lake Road (Route 233), the new motor road tracked west and uphill to the old Puffer farm, offering views of Eagle Lake and the Breakneck Ponds, and ended at the future intersection with Cadillac Mountain Road. The gravel-surfaced motor road was

18 feet wide and featured 2-foot wide shoulders. The average grade was 4.4 percent with a maximum grade of six percent.[51]

Even before the first section of the motor road was finished, opposition surfaced from the summer residents, led by Pennsylvania Senator, and Northeast Harbor resident, George Wharton Pepper. He had earlier opposed plans by Dorr and Rockefeller for a carriage road in the Amphitheatre area of the park. In January 1924, Senator Pepper voiced his concerns to Secretary of the Interior Hubert Work, convincing the Secretary to issue a temporary injunction halting construction, pending a public hearing.[52]

The hearing was scheduled for March 26, 1924, and in the interim other summer residents spoke out. One such opinion was aimed specifically at roads and automobiles, "There would be a constant rumble and roar of the automobile, disturbing to the ear.[53] Other opinions commented on what the roads might bring:

> (Summer residents) frankly stated their fear that the proposed development would bring in a 'peanut crowd' of the Coney Island type, and that the park would speedily be littered with egg shells, banana peels, (and) old tin cans.[54]

By far the biggest concern that was repeatedly stated was the perceived threat to the wilderness quality of the backcountry regions through which the proposed motor road would travel. Senator Pepper inveighed that the proposed Jordan Pond/Eagle Lake Road was "a rich man's folly" and that it "destroys the wilderness for pedestrians and campers without benefiting the mass of people in autos."[55]

At the subsequent hearing in Washington D.C., Rockefeller and Dorr rallied enough support to win the debate and lift the injunction. This was mainly due to the broad support of the year-round residents, the Maine congressional delegation, and through personal testimonies and written letters from influential road proponents such as Charles W. Eliot. The hearing did, however, seem to heighten the concern for the motor road's impact on the wilderness quality of the area. When construction of the next section of the motor road was authorized on July 25, 1924, Secretary Work instructed Superintendent Dorr to "exercise the greatest care in hiding scars of construction."[56]

Later that summer, Secretary Work, accompanied by Director Mather, visited the site of the controversy himself. The *Bar Harbor Times* ran accounts of Work's visit reporting the comments of both men.

> ...Perhaps the very height of his address was reached, so far as local interest is concerned, when he said that though he had believed the

> foreman of Glacier Park, also a Maine man, had the last word in road construction without landscape marring, he had come to the conclusion that he would have all the park engineers, including Chief Daniel R. Hull of the National Park come to Mount Desert Island in September for a gathering here. "I want them all to come and sit at the feet of your chief engineer, Hill," said Mr. Mather, "and study this magnificent development of yours on this Cadillac Mountain road approach, where the very minimum of marring has been so well demonstrated...[57]

From the comments of Director Mather, it is apparent that Section 1 of the Jordan Pond/Eagle Lake Road set a bench mark for quality within the Park Service (Figure 1.2). These comments preceded the 1926 National Park Service interbureau agreement with the Bureau of Public Roads, and Mather did in fact direct Chief Landscape Engineer Daniel Hull to observe the road in person as an example of excellent construction. Hull went on to draft the interbureau agreement.

The remaining sections of the Jordan Pond/Eagle Lake Road were completed by 1927 (Figures 1.2-1.6). As with the first section, the roadway was 18 feet wide, with 2-foot vegetated shoulders on each side. In 1928, the entire motor road was surface treated with bituminous macadam, an early term for surface treatments utilizing asphalt rather than clay to bind together the final aggregate layer of the road. The final seal coat of the surface was topped with native pink granite from a quarry near Bubble Pond, giving the road the same color as the surrounding outcroppings. Drainage systems included stone headwalls, stone box culverts, and corrugated metal pipes. Guardwalls were made of large granite boulders like those used on the carriage roads, and were approximately 3.5 feet high and evenly spaced no more than 4 feet apart. The speed limit was posted at 18 mph, with the road being closed from 9 pm to 7 am. By 1940, the original pavement surface had deteriorated badly and was repaved.[58]

In subsequent years, as other motor roads were built in the park, improvements to the Jordan Pond/Eagle Lake Road were proposed. Project drawings from 1935 indicated a proposed widened traveled way for the entire length of the motor road – from 18 to 22 feet with 2-foot shoulders in cut sections and 1-foot shoulders in fill sections – and the widening and superelevation of the road curves and the addition of spiral transitions. A realignment of the broad S-curve near the Jordan Pond House was also proposed, which moved the motor road away from the building and across a plowed field, requiring the removal of a nearby stable building and several outbuildings. Perhaps the most interesting feature on the 1935 plans for reconstruction of the road, though, was a 350-foot grade separation feature located where the road made its closest track to Jordan Pond (Figure 1.7).[59] This feature may have corresponded to a rock slide area mentioned by Assistant Director Cammerer in his 1922 inspection report. It is not known if the feature was ever constructed.

In 1956-1957, the centerline of the motor road at the Cadillac Mountain Road intersection was shifted seventy feet to the west in order to create a larger level area for a generous intersection between the two motor roads. This redesign broadened the curve of the motor road and added medians and turning lanes as well as new sections of guardwall and mortared rubble waterways. It also transformed the triangular-shaped median at the base of Cadillac Mountain Road to a narrow, rectangular-shaped median. This project also involved overlaying the motor road with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment and reconditioning some of the shoulders with a 1/3 topsoil to 2/3 gravel mixture.[60]

RUSTIC DESIGN AND THE 1927 PARK MASTER PLAN

By the end of the 1920s, planning, design, and construction of park facilities throughout the National Park Service became increasingly standardized. Projects were characterized by an emerging Rustic Design style deriving from the Picturesque Style in landscape design, the "wilderness" qualities of the early parks, and the Prairie Style emphasis on native plants. Constructed features in the Rustic Design style utilized labor-intensive methods to create a rugged and frontier-like quality appropriate to a wilderness setting. General standards were developed, but they allowed flexibility so that features could be customized with local materials such as stone or timber to fit the setting.[61]

Lafayette National Park was unique because not only was it located amidst local communities with an established infrastructure and summer tourism industry, but because its development and boundaries had been mostly shaped by private interests.[62] Design and construction projects in the new park were guided by the traditions already established, which were continued by the characteristics of the Rustic Design style. The park's first master plan, completed in 1927, reflected this complex relationship in its efforts in addressing increasing visitation, which was 70,000 a year in mid-1920s.[63] The master plan proposed a general development scheme that included the "essential extensions of the park, plans for roads and trails, utility sites, and other developments," illustrating that present and future construction projects were part of an overall plan.[64] The master plan supported the nearly completed Jordan Pond/Eagle Lake Road along with the recently approved Cadillac Mountain Road project.

Chief Landscape Engineer Thomas Vint and Assistant Director Arno Cammerer reviewed the 1927 park master plan, and in a memorandum to Secretary Work remarked that normal objections to road construction in wilderness areas did not apply to Lafayette National Park because the Mount Desert Island landscape had existing wagon roads and had been logged for years. The memorandum went on to state that roads in national parks provided access to areas that would otherwise be unreachable except by "the most strenuous of exertions" and that roads could serve a public that by and large "...(did) not desire walking trips over rugged territory or strenuous climb."[65]

Not surprisingly, the proposals made in the 1927 master plan met some resistance. Earlier, in 1926, a group of summer residents, still stung by their defeat in the 1924 hearings, hired Charles Eliot II to work on an alternative park development plan Eliot was a summer resident on Mount Desert Island and also the nephew of Trustees for Public Reservations founder Charles W. Eliot. Writing to Cammerer, Rockefeller opined, "This committee was organized for the sole purpose of preventing or at least delaying as long as possible the further construction of any roads."[66]

Eliot's plan, *The Future of Mount Desert Island*, was published in 1928 and proposed doubling the acreage proposed in the Master Plan and establishing ten "wilderness zones" that would be separate from developed areas. Eliot wrote, "the introduction of large scale man made objects such as buildings, roads, etc., should be avoided as far as possible." As for the motor roads, he felt the existing system, including the proposed Cadillac Mountain Road, was sufficient and that the best way to take in the scenery was by walking on the trails and footpaths.[67] The park did not adopt Eliot's plan.

The 1927 master plan ultimately served as the foundation for many of the projects completed from 1928-1940. In 1929, Lafayette National Park was renamed as Acadia National Park. The legislation authorized the expansion of park acreage through donations but gave no power to purchase additional lands. It was through this legislation that the park acquired lands on the Schoodic Peninsula, which had been previously held in reserve by the Hancock County Trustees for Public Reservations.

CONSTRUCTION OF OCEAN DRIVE: THUNDER HOLE DEMONSTRATION SEGMENT, 1929

(see Period Plans, Map #2)

By the summer of 1929, with his interest in motor roads in Acadia National Park growing, Rockefeller directed his engineers and construction crews to reconstruct a 500-foot section of Ocean Drive at Thunder Hole, the old scenic road built by the Town of Bar Harbor in the 1890s (Figure 1.8). Rockefeller, making use of his experience with and pleasure in road construction, completed this work as an example of what the whole of Ocean Drive could become. Construction was funded by the Town of Bar Harbor through a $2,000 grant from the State of Maine. The completed road was 24 feet wide with 2-foot shoulders in order to accommodate the parking of cars along the west side.[68] The road section also featured rubble-lined ditches, drainage by stone drop inlets and reinforced concrete pipes with stone headwalls, and used the same type of guardwall stones as used on the Jordan Pond/Eagle Lake Road. There was also a 4-foot wide shore path on the ocean side, paralleling the motor road, allowing townspeople and visitors to observe the demonstration section and the ocean views.[69]

CONSTRUCTION OF CADILLAC MOUNTAIN ROAD, 1928-1932

(see Period Plans, Map #3)

Both the preliminary road proposals submitted by Superintendent Dorr to Director Mather in 1922 and the 1927 park master plan advocated for a motor road leading to the summit of Cadillac Mountain. By the early 1920s, the existing buckboard road was deteriorated to the point where horsemen were unwilling to use it, prompting Maine Congressman John A. Peters to write Director Mather in April supporting a new road designed for automobiles.[70] In his June 1922 inspection trip report, Assistant Director Cammerer urged Director Mather to support the road and spoke eloquently of the project:

> ...anyone who has climbed any one of the major mountain masses will come to the sure conviction that a road for motorists should lead to the top of at least one of the mountains so that those who cannot climb may get an opportunity to receive the inspiration and feel the exaltation of spirit that come with an hour spent on the breeze-swept hills with their superb views over sea and island, losing themselves in the far distance. If the good motor road to the top of Cadillac Mountain is not provided on this plan, it will inevitably come through popular insistence in the future...In my opinion a road up Cadillac Mountain will not be equaled anywhere in the United States for its combination of mountain massing, valley, inland lakes, and ocean and should be given when built a distinctive name that will identify it as a national scenic road and give it individuality throughout the world, even as the Corniche and other old-world drives are world famous.[71]

In July 1922 Mather directed Dorr to proceed with the project. In a separate letter to Dorr, Cammerer added that, "it is equally important in my opinion that no road go to the top of any other mountain."[72]

Sometime around the completion of the first section of Jordan Pond/Eagle Lake Road in 1923 and the hearings of 1924, preliminary grading for Cadillac Mountain Road was begun by National Park Service crews. By 1928, though, they had only advanced to the top of the White Cap, a prominent outcrop on the northwest side of the Cadillac Mountain (see Figure 1.1).[73] Cammerer and Chief Landscape Engineer Vint felt that the National Park Service should develop the plans and specifications for the remainder of the motor road. Mather, perhaps noting the slow progress, decided that the Bureau of Public Roads, per the 1926 agreement, should carry out this work as well as the actual construction.

In 1928, the Bureau of Public Roads surveyed an improved alignment for the road. The original grading work up to the White Cap was retained as much as possible. From the White Cap to the summit, new alignments were surveyed. The grades were consistent with the Bureau standards for road construction in the national parks. To accommodate the limitations of early twentieth century automobiles, the grades did not exceed seven percent. For economy of construction, there were no level sections to increase the length and cost of the road. Instead, the road was designed to climb continuously all the way to the summit through a series of curves.[74] The road curvature was laid out with spiral transitions and superelevations, an adaptation of railroad industry techniques resulting in a smoother and more fluid transition between tangents and curves.[75]

In July 1929, a young resident engineer named Leo Grossman arrived in Bar Harbor to begin his administration of the Cadillac Mountain Road project and his first assignment with the Bureau of Public Roads. Grossman immigrated to the United States as a young boy with his family from Odessa Russia and was later educated at the Massachusetts Institute of Technology, receiving a degree in engineering. He remembered the work of his early career with the Bureau of Public Roads as a wonderful experience in helping to create an American treasure. He would later work closely with Rockefeller in the planning of other Bureau of Public Roads segments of the motor road system. The diaries of Leo Grossman, as well as his “Final Construction Reports,” provide informative details to the construction of the motor roads.

The Cadillac Mountain Road was completed in 1932 for a cost of $350,000 and became an excellent example of outstanding road construction in mountainous terrain and the use of the Rustic Design style. Some of the embankments had to be hand laid using a derrick because the rocks would not stay in place on some of the steeper slopes. Drilling in the rock was also a challenge, and Bureau of Public Roads had to consult with experts to advise on a strategy. In blasted areas where excess material was produced, the fill sections were widened to create a pullout. The motor road was surfaced with Pentolithic macadam, a proprietary name type of bituminous macadam. The top layer featured a pink aggregate blasted out of a 50-foot cut two-thirds of the way up the mountain, helping the motor road to blend in with the surrounding landscape (Figures 1.9-1.11).[76]

Cadillac Mountain Road also featured boulder guardwalls. According to Grossman, “As wooden or steel cable guide rail did not seem to be appropriate for this type of road, it was specified that selected boulders should be taken from the excavation...” The guardwall stones were similar to those used along Jordan Pond/Eagle Lake Motor Road and were about 3.5 feet in height, set in a 6-inch trench in the fill section on the shoulder of the road. The stones were spaced so that the opening between the stones was no greater than 4 feet, creating a “very substantial and pleasing” effect (Figure 1.12).[77] The typical cross-section for this project was 25 feet wide featuring an 18-foot traveled way, 2-foot shoulders in cut, and 3-foot shoulders in fill.[78] Drainage features included stone box culverts and reinforced concrete pipes. Some of the stone box culverts from the original section graded by the National Park Service were retained.[79]

Road surfacing on Cadillac Mountain Road was completed in October 1931, at which point automobiles were allowed access during daylight hours (Figures 1.13, 1.14). On opening day, more than 3000 visitors in 800 cars made the trip.[80] Although the motor road was open, the roadside cleanup had not yet been completed. A month earlier, Assistant Landscape Architect Charles E. Peterson of the National Park Service inspected the motor road and was disappointed in the contractor's poor cleanup and the large amount of blasting debris remaining along the roadside. Peterson was adamant that this problem be addressed given the past criticism of road building projects in the park and because the new park road would be compared to Rockefeller's excellent work on the carriage roads.[81] Peterson also proposed some widening at the inside of curves and the removal of some of the guardwalls that were used "greatly in excess of that which we regularly follow in Park work."[82] These issues were resolved by the time Cadillac Mountain Road was formally dedicated, on July 23, 1932. The *Portland Sunday Telegram* hailed the road as "one of the finest mountain drives in the world." The article noted that it was now possible to motor to the summit in "high gear" because the former steep grades had been eliminated, and that the pavement was supposedly "non-skid" for drivers exercising normal caution.[83]

Beyond the road, Charles Peterson was critical of inadequate parking provided at the summit, consisting of only a widened pullout just prior to the terminal loop. One of the worst areas of construction debris was found inside this loop, and Peterson felt a large parking area here would limit landscape impacts and concentrate the damage. He also recommended a system of trails to connect the parking lot with view points and the construction of a teahouse.[84] In the fall of 1932, Peterson's recommendations for a larger parking area and trails at the summit were begun (Figure 1.15).[85]

In 1956-1957, a project was undertaken to address repairs and modifications to the parking lot pavement, stone curbs, catch basins, and sidewalks at the summit. This project also included the reconfiguration of the entrance to the motor road, with the small triangular median (which had once included low shrubs) replaced by a longer median; this work was done in conjunction with the addition of medians, turning lanes, and broader curves on Jordan Pond/Eagle Lake Road (Figure 1.16). The project also involved overlaying the existing asphaltic surface treatment on the motor road with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment and reconditioning some of the shoulder areas with a mixture of 1/3 topsoil to 2/3 gravel mixture.[86]

A COMPREHENSIVE MOTOR ROAD SYSTEM

In the summer of 1929, with the Ocean Drive demonstration section complete, construction of Cadillac Mountain Road underway, and the Jordan Pond/Eagle Lake Road almost two years old, Rockefeller became a proponent of the automobile in the park. His earlier idea of a limited number of motor roads separate from his carriage roads expanded into a much larger motor road system of scenic roadways taking motorists from the mountaintops to the coasts. In order to control how his vision might be realized, Rockefeller proposed that he assume the costs associated with its construction. His change of heart toward automobiles may have come in light of the good effect of his sponsorship of roadside improvements and landscaping in Yellowstone National Park. It was through the Yellowstone projects that Rockefeller began a lifelong correspondence and friendship with Horace M. Albright, future Director of the National Park Service.[87]

In August 1929, Rockefeller hired the Kidde Construction Company of New York City as a consultant, a company he had worked with at his Pocantico Hills estate:

> As you know, I have for some years been building roads here on Mount Desert Island, partly on my own land, partly in Acadia National Park - roads, some of them for horses, some for automobiles. I have for some time been working on a large scheme for an automobile road, which means some twelve to fifteen miles of road going from mountain tops to the seacoast. At length I have about secured the necessary land to make this development possible. I have here two engineers constantly in my employ, one Mr. Simpson, whose father preceded him in this work, the other Mr. Hill, a Bar Harbor man...Mr. Simpson is thoroughly competent for this kind of work....Mr. Simpson and Mr. Hill, with the one or two helpers which they have, could not possibly do the amount of reconnaissance work required to make ready for this larger scheme, without prolonging the preliminary studies for too long. I am wondering whether Mr. Miller could assume responsibility for the making of these surveys and studies for me, using Mr. Simpson and Mr. Hill with their helpers and supplementing them with some of your engineers from Tarrytown or others whom you might get.[88]

One month after engaging the services of the Kidde Construction Company to study the possible routes for the motor road system he had in mind, Rockefeller also brought in the expertise of the Olmsted Brothers, a landscape architectural firm based in Brookline, Massachusetts. The Olmsted firm's services were initially solicited to settle a dispute between Superintendent Dorr and Rockefeller about the location of a motor road and entrance road in the vicinity of the Sieur de Monts Spring area, which was the original core of the park when it was first known as Sieur de Monts National Monument. Most of the features here had been developed by Dorr, including the Sieur de Monts Spring, Abbe Museum, and the Wild Gardens of Acadia. To the north was the Great Meadow and to the south was the Tarn, a former wetland area dammed into a small lake and bounded by hiking trails.

To connect the Jordan Pond/Eagle Lake Road with the ocean views on the eastern shore of the island, Rockefeller felt the most scenic route was to traverse the north side of Kebo Mountain, hug the eastern base of Dorr Mountain along Hemlock Road, continue behind and west of Sieur de Monts Spring, and then proceed down the west side of the Tarn. Dorr felt the motor road should come down off Kebo Mountain, avoid Hemlock Road and instead pass through Great Meadow and in front of and east of Sieur de Monts Spring, and then continue down the east side of the Tarn. From the Tarn, both agreed, the route should then head south down the valley until turning east near Gorham Mountain and the Beehive saddle to join Ocean Drive.[89] As both men owned parcels over which either route would pass, Rockefeller wrote, "Neither of us can develop our ideas most fully or most satisfactorily without the complete cooperation of the other."[90]

As Frederick Law Olmsted, Jr. was occupied at the time on a project in the west, Rockefeller wrote to Henry Hubbard, a principal in the Olmsted firm, hoping to resolve the issue:

> As I discussed on the ground the first two of these problems yesterday with Mr. Dorr, it became clear to me that neither he nor I could, with the aid simply of our engineers, arrive at their best solution. I suggested to him that entirely at my own expense and as a personal matter, I invite Mr. Olmsted and his associates to study these problems from a purely detached and unbiased standpoint, and give us their opinion. With this suggestion Mr. Dorr was in completest accord and delighted at the idea"..."If you will undertake the study of this problem, which I assume I can count on your being willing to do, for it does not involve the execution of the program but simply the maturing of a comprehensive, well ordered plan, which Mr. Dorr, the Government or I will carry out from time to time as we may see fit...[91]

The correspondence between Dorr and Rockefeller reveals that to a large extent, both gentleman's opinion of the preferred routes was significantly altered by consulting with the Olmsted firm. Consultation with Hubbard and later Frederick Law Olmsted, Jr. helped to answer initial questions regarding the layout of an entrance road and the line of a motor road in the Tarn valley. Most interesting was the adoption of plans for the motor road to turn to the east at the north end of the Tarn, and then to turn south again and travel down the east side of the Tarn, paralleling Route 3 (Figure 1.17).

Charles Eliot II, learning of Olmsted's ongoing consultation with Rockefeller, wrote Olmsted to express his concerns regarding the road projects:

> ...but I am one of those that feel that his hobby of building roads is inclined to take him further than the conditions justify. I am delighted that you have been called in on this problem, and am hopeful that you can divert Mr. Rockefeller's activities into useful lines...[92]

After almost a year of study, collaborating with engineers Hill and Simpson through the Kidde Construction Company and correspondence on the matter of the expanded Motor Road System, Frederick Law Olmsted, Jr. prepared a lengthy report to sum up the conclusions of the firm's planning effort.[93] The proposed 14-mile circuit route featured the following sections:

> Section A: Beginning at the Jordan Pond/Eagle Lake Motor Road and passing around the north end of Great Pond Hill to the Great Meadow region.
>
> Section B: From the Red Rock Spring, past the Kebo golf course, and on to the east side of the Great Meadow.
>
> Section C: From the east side of Great Meadow, to Sieur de Monts Spring, to the north end of the Tarn, then continuing south on the east side of the Tarn on a route parallel, but elevated above the county road, over the saddle at Gorham Mountain's "Bowl and Beehive." The road would then descend Gorham Mountain's east side and connect with the existing Ocean Drive.
>
> Section D: Ocean Drive. The route would follow essentially the same line as this existing scenic drive, which was built in the 1890s. Some minor changes in alignment would be necessary, but it was not recommended that the road be widened to the same width as the demonstration at Thunder Hole. This route was also contingent on the Town of Bar Harbor turning over this drive to park.[94]
>
> Section E: Otter Cliffs section, a continuation of Ocean Drive. According to Olmsted, "This section would first swing inland, then rise rapidly to occupy the crest of a line of cliffs with views over and between the trees to the ocean, but coming out on a curve close to the brink of the cliffs on a flattish rocky knoll which surmounts them at their highest point---a superb outlook. The Otter Cliffs foot trail as far as it now extends, being closer to the shore, will remain practically unaffected by this road."

Olmsted's report also alluded to another motor road segment, from the Otter Cliffs section through the Blackwoods and then continuing through to Hunter's Beach and connecting with Route 3, which would be designed to meet the guidelines within the report. Design standards included the following:

> Speed limit: Eighteen miles per hour
> Width: Standard pavement width of 18 feet with widening at the curves, 2-foot shoulders, with shoulders to be vegetated.
> Maximum curvature: 200-foot radius
> Maximum gradient: Seven percent

Anticipating controversy, Olmsted added:

> The underlying basis for almost any such questions lies in the fact that no motor roads can be constructed, maintained and used in a region of natural scenery such as characterizes Mount Desert without some sacrifice, either through interference with the perfection of enjoyment of the region by other means, or through objectionable alteration of the scenery itself, or both; thus offsetting in greater or less degree the increase of enjoyment of the region by motorists which is made possible by the roads. The fact is in general no less indisputable...that the use of motor cars is, with all of its limitations and drawbacks, one of the important means of enabling people to enjoy such a region and tends to be used for more "man-hours" of enjoyment than any other one means, regardless of any one's opinion of relative human values...

Olmsted went on to make an oblique reference to his fellow landscape architect Charles Eliot II who had voiced opposition to an expanded system of motor roads in his study, *The Future of Mt. Desert Island*:

> ...The view has been expressed by some who have thought seriously about this problem at Mount Desert that the existing public roads, together with the existing park motor road and that under construction on Cadillac Mountain, provide adequately enough for enjoyment of the scenery by motorists, and that, in view of the effect of additional motor roads on the scenery and their interference with the perfection of its enjoyment by other available means, practically no more motor roads should be built in the Acadia National Park.
>
> I am sure, on at least two grounds, that this extreme view is mistaken. First, portions of the existing public roads which must now be used in making any considerable circuit by motor for enjoyment of the scenery of the National Park and associated landscapes run through localities which are now, and others which are bound to become incongruous and disturbing elements in the landscape seriously interrupting the continuity of the typical natural scenery. Cases in point are along the County Highway from where it leaves the National Park lands south of the Tarn to a point beyond Otter Creek Village, and along the various east and west roads north of the mountains which run through the village of Bar Harbor or its outskirts.

Olmsted's report included a plan, and both were sent to the park office in Bar Harbor to be posted for public comment. Rockefeller had already made the offer to the Federal Government to fund this immense project, which not surprisingly received a favorable response from the National Park Service.[95] Rockefeller then released the story to the local press, and on September 10, 1930, the biggest local news story of the year appeared in the *Bar Harbor Times*: "Rockefeller Offers to Build a $4,000,000 Motor Road for Park."[96] The news was picked up by the Associated Press wire service the following day; since the country had entered the Great Depression, the story was of national interest:

> Bar Harbor, Me., Sept. 10 (A.P.)
>
> Fourteen miles of public highway on Mount Desert Island will be built by John D. Rockefeller, Jr., at a cost of $4,000,000 it was announced today by George G. (sic) Dorr, superintendent of Acadia National Park.

> The project would employ 500 men for three years. Dorr said Mr. Rockefeller has his engineers reports at hand, but had not announced when work on the road would be started. Mr. Rockefeller has built approximately 40 miles of public motor and carriage roads on the island, in the Seal Harbor section of which is situated his luxurious summer home.

The headlines caught the residents of Mount Desert Island off guard, as Superintendent Dorr had been reticent about the road planning effort[97] Once again, a cloud of controversy gathered over Rockefeller and his roads. Many residents were angry, especially some of the summer residents who felt that a motor road through the Tarn valley would destroy one of the last vestiges of wilderness on the east side of Mount Desert Island. Within the week of the news release, editorials filled local papers, and letters were sent to not only to Rockefeller but also to the Secretary of Interior, Ray Wilbur, insisting that he refuse Rockefeller's offer. Others went even further. Mr. Potter Palmer, owning land along the proposed route, simply refused to sell his land for the project.[98]

Frederick Law Olmsted, Jr. did not escape the controversy either. He was soon upbraided for his part by a former classmate and Schooner Head Road resident Richard W. Hale:

> The fact is obvious. The generosity of giving Four Million Dollars and the gratitude which ought to be felt when you and Mr. Rockefeller are 80 to 90% right in a great public improvement,--those are all very well. But we smart under the domination of benefactors of great wealth who, like an Oriental Caliph, give us something delightful and ram it down our throats. My gullet takes it kindly for I like the benefactor.
>
> But going into the Pot and Kettle Club and telling that gang with a map what you are going to do is not taking the public into your confidence while your plans are still fluid.
>
> I hate to be in opposition and I hate to be associated with some of the people and some of the views in opposition to Mr. Rockefeller, but I smart under these conditions.

Hale's anger grew with time, as he felt neither Olmsted, Rockefeller, nor the park adequately addressed his concerns. He took his complaints directly to Secretary Wilbur, making another personal attack on Rockefeller. In an effort to portray him as an eccentric, he related the following story to Wilbur:

> ...The motive force behind what is going on was well described to me by the late Charles William Eliot, Ex-President of Harvard University, who made substantially the following statement: "I know Mr. John D. Rockefeller, Jr., well. I have seen him socially at his home and in business relations of intimacy about his charities. He has no pleasure in life except the pleasure which he takes in these roads upon Mount Desert Island."
>
> The force with which this statement was made stimulated my interest and surprised me. So I cross-examined President Eliot. I inquired about

> religion, family, children, sports, and Eliot stood his ground. He said in substance: "There is great virtue and sterling worth there, but all those other things are taken seriously with high moral purpose and [yet] I see no pleasure except in expenditure upon the roads..."[99]

Hale went on in his letter to Secretary Wilbur to describe the summer residents of Mount Desert Island as living under a kind of "benevolent despotism...of one or two-man rule" where the Federal Government took the role of enforcing the decisions and wishes of Rockefeller.[100]

The personal attacks did not escape Rockefeller. He was a sensitive man, and took these attacks seriously. By January 1931, he decided to withdraw his generous offer. In a letter to the Director Albright dated January 19, he wrote:

> ...Within the last three months, as you are aware, quite a few summer residents of Mount Desert Island, all of them my friends, have in one way or another voiced their opposition - in some instances quite bitterly - to further road construction in Acadia National Park and on Mount Desert Island in general, and to Road No. 1 in my offer in particular. Moreover, a small piece of land over which that road was laid out to pass, has been withheld from sale or gift, for the frankly stated purpose of preventing the construction of the road. This in itself is evidence of the overwrought feeling that has developed.
>
> I spend my summers on Mount Desert Island, because of the beauty and restfulness of the place and the pleasure of being among congenial friends. But any such enjoyment would be largely negatived by the feeling which has been aroused and which is naturally most distressed to one who in offering to build these roads, sought to render a public service. In view of what has developed and in order to eliminate myself as a factor in the situation, I am writing to ask you to release me from further obligation under my offer of June 27th, beyond the completion of Road 3.[101]

In a similar letter to the communities of Mount Desert Island, he wrote, "I have no desire to be put in the position of forcing on upon even a small minority of the people who frequent Mount Desert Island something they do not want." In a response to a letter by a Dr. Francis Peabody to the *Bar Harbor Times*, Rockefeller used the term "loop road" for the first time to describe the proposed motor road system.[102]

The news of Rockefeller's withdrawal of the road program offer was as big a news story as his initial offer. On January 30, the news appeared in the *Boston Herald*:

> No wonder Europeans often have trouble in understanding us Americans! Down on Mt. Desert Island in Maine, it is the wealthy summer residents who have been campaigning to maintain the primitive, simple foot trails in Arcdia [sic] National Park. The "ordinary folk" have been eager for John D. Rockefeller, Jr., to build modern highways through the park so that they could travel over them in their automobiles. Mr. Rockefeller is so disturbed by the animosity resulting from his generous offer of $4,000,000 for improvements that he has withdrawn his tender. In substance the controversy at Bar Harbor is no

> different from that which has led Cohassett and other South shore communities to restrict the use of their beaches to residents. Property owners at these resorts resent the intrusion of thousands of outsiders who go there to picnic and bathe. For much the same reason older settlers on Mt. Desert Island, solicitous of the present natural beauties of their retreat, dislike attempts to "civilize" it...[103]

The effect of Rockefeller's withdrawal was to once again pit the wealthy summer residents against the year-round residents, and essentially the wilderness preservation philosophy against local economic interests. The response from the summer residents was to organize a committee to sort out the apprehension and controversy. This committee was organized by Dr. Arthur Train, and one of the members of the committee, Dave Morris, was a personal friend of Rockefeller's. Morris wrote to Rockefeller asking for some answers to several questions that had come up in the committee's discussions, and Rockefeller responded with uncharacteristic frankness about his disposition towards his charitable gifts to the park. In this letter, Rockefeller explained why more community involvement was not sought in planning the motor roads.

> ...When the so-called Bishop Lawrence committee was created several years ago, its chairman sought to gain my cooperation with the committee. I said I was always glad to work on a problem of common interest with a group of men when all had the same relation to the enterprise. But that was not the case in that instance. The members of the committee were putting in time and thought but no money while I was putting in time and thought and all the money. That being the situation I frankly stated I could not work with the committee and that I was not prepared, nor did I think I should be asked, to submit the question of how my money should be spent to any group of people however intelligent, public spirited and competent...as to my relation to the further development of Acadia National Park. What I have done thus far has been to acquire strategic lands in order to preserve and protect them. Some of these lands have already been deeded to the park. I have also built roads, both motor and horse, and done forestry work and planting. All these things I have done not under compulsion but as a pleasure...This I will say, however, that the Government is entirely familiar with and fully in accord with such further possible developments as have thus far suggested themselves to me. To speak of future possibilities to any anyone else is in a sense to commit myself to the carrying out of those possibilities. Moreover, because of certain land purchases involved, to do so might mean to make such possibilities impossible before they had been entered upon. That, therefore, I have not done heretofore, nor am I prepared to do so now. If cooperation on my part in the development of Acadia National Park becomes an obligation and a duty rather than an opportunity and a privilege, I should probably drop the whole matter...[104]

The members of the Train committee could not agree on a response, and subsequently split into two factions and wrote separately to Rockefeller. Both groups felt strongly against the section of the motor road planned along the east side of the Tarn, paralleling Route 3, and continuing down the Tarn valley and up over Gorham Mountain. However, the dissenting faction led by Rockefeller's friend expressed the opinion that if this route is found to be the only way to make a "circuit road" possible, that this less desirable route should be undertaken. Dr. Train's faction communicated to Rockefeller its total opposition to any further road construction.[105]

The response to the withdrawal of Rockefeller's offer from the year-round residents was much more dramatic. Leading their cause was the Bar Harbor Board of Trade, recognizing the important economic link between the town economy and the tourist dollars the proposed motor roads would bring. A.L. Getchell, President of the Board of Trade, commented "...it would seem most regrettable that (Rockefeller) should be influenced, by what seems to me to be such an inferior minority among our summer visitors."[106] Organizing a "Citizens Committee," the Board determined that a majority of year-round residents supported Rockefeller's plan and encouraged the submittal of letters of support to politicians and the press. One such resident said, "Mr. Rockefeller's proposed roads would have meant so much to all of those who do not have an opportunity to "get rich quick" during the short summer season."[107]

The Town of Bar Harbor, in spite of the Rockefeller's withdrawal of the offer, voted to abandon their ownership interest in Ocean Drive in March of 1931, fulfilling a precondition to the commencement of Rockefeller's road program.[108] Going one step further, town officials passed a resolution appealing to Rockefeller that he reconsider his withdrawal. Similar appeals were also tendered by the National Park Service, and in May 1931 Rockefeller agreed to let his request for release from the motor road project to "lie on the table" for the period of one year. This decision was made concurrently with the completion of the Kidde Construction Company's motor road construction drawings commissioned earlier by Rockefeller for the road proposal (Figure 1.18).

While Rockefeller's offer lay "on the table" from mid-1931 to 1932, the leadership of the Department of the Interior advanced several projects that would enable Acadia's road program to be resumed. One such task involved sorting through the legal details of the Town of Bar Harbor's abandonment of Ocean Drive, which were being worked out in close consultation with Rockefeller and the National Park Service.

One of the most complex tasks involved the removal of the Otter Cliff Naval Radio Station (Figure 1.19). The station was originally built in 1917 by Alessandro Fabbri and acquired by the Navy in 1919. By 1930, many of the buildings were in disrepair.[109] The removal of the radio station was critical because it was in the direct path of the proposed motor road, and the donation of several thousand more acres to the park by Rockefeller was contingent upon its removal. The effort of relocating a military facility required a great amount of lobbying and political deal-making on the part of Rockefeller. That fall, two possible locations on Mount Desert Island, at Gorham Mountain and Bass

Harbor, were rejected in favor of a site on the Schoodic Peninsula. The Navy agreed to move the facility to Schoodic pending construction of an access road and new buildings.[110]

Rockefeller used the one year period to continue to work on motor road projects outside of the park, closer to the "Eyrie," his Seal Harbor estate. In June 1932, Rockefeller once again contacted the Olmsted Brothers landscape architectural firm seeking advice on a motor road he was planning for the Stanley Brook valley. He also sought out the Olmsted firm's services for the reconstruction of Ocean Drive, with the assistance of his engineers Hill and Simpson. Around this time, the Cadillac Mountain Road was formally dedicated.

Perhaps one of the biggest changes to Rockefeller's proposed motor road system came about in early 1933 when Hill and Simpson had been conducting a preliminary survey of a possible route around the north end of Champlain Mountain. This route was preferable to the controversial route through the Tarn valley and over Gorham Mountain because it was shorter in length and less expensive. Rockefeller had avoided it until this time because he thought it impossible to obtain land for the alignment from the wealthy summer residents along Schooner Head Road.

Also in early 1933, Secretary Wilbur, of the outgoing Hoover Administration, was making plans for his political retirement. Rockefeller feared that the verbal understandings he had forged with the Department of the Interior and the National Park Service would become lost with the installation of a new Secretary of the Interior. Rockefeller was anxious to have some agreement on paper as to the planning and execution of the Motor Road System before Secretary Wilbur's departure. At the same time, he did not want to appear eager, as his enthusiasm for road building had been the source of so much controversy. Rockefeller's solution was to draft a letter for Secretary Wilbur's signature where the Secretary would appear to approach Rockefeller with a proposed understanding of the responsibilities of the parties involved. Secretary Wilbur's acceptance and return of this draft effectively took the road program "off the table" and allowed construction to proceed:

> Dear Mr. Rockefeller:
>
> As you know, I have been greatly interested in the development of Acadia National Park in Maine and in the building of roads there. In this connection you have been kind enough to aid the Government by making possible extensive studies of certain additional horse and motor roads, partly in Park lands, partly in adjacent lands that were purchased having the interests of the Park in mind. The Motor Road as projected will in my judgment be one of the finest scenic roads in this country, while the horse roads will be beautiful in themselves and in addition will round out the existing horse road system. Because of the opposition of a few summer residents as well as because certain conditions made by you

> in your road building offer have not been wholly met, work on the motor road has not been begun as yet.
>
> The Government has consented to your building these roads and you have already built one of them, but I am anxious to make some arrangement with you before I leave office which will go as far as now is possible toward insuring their completion. My proposal, therefore, is that the conditional offer made you some time ago and accepted by the Government be left as follows:
>
> 1. Consent heretofore given to you to build the horse and motor roads in question is now confirmed on the following terms: You to build them if and as you may elect and within the period (if and as extended) mentioned below; you to be under no obligation to build any of the said roads. This consent is conditioned upon your beginning work upon some section of one of the roads within five years from the date of your acceptance of this proposal, with the understanding that if during that period work has been begun, the period shall thereupon be extended for five years from the date at which you stop the work so begun.
>
> 2. If work is begun upon any of the said roads or upon a section of one of them, which section is connected at each end with a public highway or an existing Park road, the completion of that particular road or section shall be regarded as incumbent upon you, if living, or otherwise upon your heirs unless an easy and safe provision for a circular turning comfortable for public use is made at the point where the road is discontinued, or unless some other adjustment of the matter satisfactory to the National Park Service is made.
>
> Because of the great importance to Acadia National Park of the completion of this road system and because of my desire before retiring from office to leave matters in a situation as favorable to the ultimate consummation of the project as possible, I earnestly hope my proposal will meet with your acceptance.

Secretary Wilbur added on his own:

> I am pleased to learn from the Director of the National Park Service that it now seems more hopeful that the motor road may be routed around the northern and eastern slopes of Newport " [Champlain]" Mountain instead of through the Gorge and over the mountain to the Ocean Drive. Although questions of land ownership appeared to prevent the location of the road on this more advantageous line, you have always been favorable to it, and so have my immediate predecessors and I. The officers of the National Park Service, too, have always advocated this route. I hope that new location may eventuate.[111]

After receiving essentially his own letter in return, Rockefeller responded to Secretary Wilbur:

> I beg to acknowledge the receipt of your letter of February 2nd. The proposal therein contained is entirely satisfactory to me, and at your instance I am happy to accept it.
>
> Your letter dated February 2nd and my reply of this date cover the entire understanding between the Department of the Interior and myself in regard to the Acadia National Park road building project.[112]

THE NEW DEAL AND THE CIVILIAN CONSERVATION CORPS

The year 1933 became a watershed year for the motor road program at Acadia National Park. All approvals necessary to begin Rockefeller's plan, meeting with so much controversy in 1930, had been secured. As much as anything else, the deepening Great Depression eliminated the vocal opposition to the multi-million dollar building project. In its worst period, the Depression left fifteen million people out of work, and economies based on tourism, like those at Mount Desert Island, were hit hard as Americans simply went without vacations and eliminated leisure time expenses.[113]

Rockefeller's own great fortune, which before the stock market crash of 1929 was estimated at nearly one billion dollars, was reduced to less than 500 million by 1934, and to 291 million by 1939.[114] In spite of this drastic reduction of his wealth, Rockefeller continued to sponsor many charitable causes, which because of the Depression, needed his good works more than ever. Nevertheless, Rockefeller became less enthusiastic about being sole benefactor of the motor road project at Acadia.

During 1933, the Roosevelt administration's "New Deal" make-work programs were passed into law as an effort to stop the downward spiral of the nation's economy. The New Deal provided money and labor to the National Park Service, mostly through the Public Works Administration and the Emergency Conservation Works Act. The New Deal affected the physical development of national parks more than any other single political, economic, or social force.[115] Motor road construction was accomplished under contract primarily from and making use of Emergency Conservation Work funds. The Civilian Conservation Corps, which performed "Emergency Conservation Work," had a key role in the development of the motor road system. Two Civilian Conservation Corps camps were located within the park, and Camp NP-1 at McFarland Hill was involved in many work projects on the Motor Road System from 1933-1941. In addition to trail and landscaping work, the Civilian Conservation Corps fabricated many of the site details for the motor road such as granite curbs, wood gates and fences, and signs.[116] Camp SP-1, based out of Ellsworth, worked on the construction of the new naval station, park road, and developed areas on the Schoodic Peninsula from 1933-1937.

During 1933, there was much progress on the motor road system. Refinements to Rockefeller's proposed road along Stanley Brook were nearing completion with the Olmsted firm, through engineer Simpson. Rockefeller and Olmsted were also consulting over a proposed route around the north end of Champlain Mountain. This route was an alternative to the controversial alignment through the Tarn valley. The planning for the reconstruction of Ocean Drive, coordinated through engineer Hill, was well ahead of these other road projects and was set to begin construction in April.[117]

CONSTRUCTION OF OCEAN DRIVE: THUNDER HOLE TO OTTER CLIFFS, THUNDER HOLE TO SAND BEACH, 1933-1934

(see Period Plans, Map #s 4-5)

The next segment of Ocean Drive to be reconstructed was a 2300-foot section running south from the Thunder Hole Demonstration Section, completed in 1929, to the surveyed line for the Otter Cliffs segment. This section was completed by August 1933. Work then began on the segment of Ocean Drive extending north from Thunder Hole to Sand Beach and the neighboring Satterlee property at Great Head, which was completed in August of 1934 (Figure 1.20).

Olmsted took care in his correspondence with Rockefeller and Hill to avoid what he perceived as errors in the Thunder Hole Demonstration Segment. In his report from July 1930, Olmsted described this segment as being too wide. Although no cross-section documents survive for the demonstration section, Hill described its cross-section and the new proposed cross-section to Rockefeller in a letter:

> In answer to your letter of the 25th: You asked if it is the plan to make the road on the Ocean Drive the same width and general character throughout as the stretch previously built at Thunder Hole.
>
> My understanding of Mr. Olmsted's cross sections call for an 18' traveled way with a 2' shoulder of fairly good earth material, making a grass border on each side. But on the curve at Monument Cove he has widened to a 24' travel way and on the small curve south of that he has widened to a 20' way, still keeping the two foot soft earth shoulder.
>
> On the section previously built at Thunder Hole we started with a 24' travel way, a one foot hard shoulder on the west and a 2' hard shoulder on the east side. When we put the hard top surface on we topped both shoulders as well as the travel way, and we also found that we had a lot of water in the ditch at times so we oiled that as well, and I have noticed that about all the parking has been done using the ditch as well as the road. This really gives a 32' roadway on that section.[118]

Olmsted later confirmed Hill's account of the two cross-sections, but emphasized that there was to be no "topped ditch" in the new cross-section.[119] Rockefeller was interested in these and every detail of the Ocean Drive construction. Olmsted advised Rockefeller on the layout of Thunder Hole's "pedestrian concourse" and on minor changes to the sidewalk curbing next to the old parapet at Thunder Hole.

As to the informal widenings that Olmsted and Hill were busy laying out on the curves of the southern section of Ocean Drive, Rockefeller added his own emphatic instructions:

> Dear Mr. Hill:
>
> Mr. Olmsted tells me that any questions in connection with the southern section of the Ocean Drive which you brought up were settled satisfactorily during his recent visit. I find on talking with him that he had forgotten our agreement not to have any more parking places provided along the edge of the road south of the Thunder Hole, but rather to provide such spaces off the road under the trees at various convenient and available intervals. Even if parking along the road does not block the road, it so seriously detracts from the beauty of the ocean view that it seems to me greatly to be deplored. I thought it was clear in your mind that no more roadside parking provision was contemplated.
>
> Upon learning of this misunderstanding, I at once communicated with Mr. Ralston and asked him to stop construction on any roadside parking places. Mr. Olmsted will try to go to Maine for a day or two in the not distant future and locate with you appropriate interior parking places. When this is done, work thereon can be undertaken without delay, unless it interferes with traffic...[120]

Hill ordered that the roadside parking spaces be obliterated. When Olmsted arrived three weeks later, he found the:

> enlarged round place, for turning and stopping to see the view, just south of cove, where the old cemented granite parapet borders the road, had been graded when Rockefeller's communication had been received, but Hill had loamed the area over and sprinkled it with hunks of weathered granite to keep automobiles out and partly planted.[121]

In March of 1934, bituminous surface treatment was applied on the five parking lots designed to offer an alternative to roadside parking alongside Ocean Drive. A sixth parking lot at Sand Beach was created out of the old roadbed of the 1890s Ocean Drive. Here, the new motor road alignment was at a higher elevation, requiring the construction of a stone retaining wall (Figure 1.21).[122] This section of pre-existing roadbed already offered informal widenings that had been used as parking for Sand Beach since its construction in the 1890s. The southern lobe of the old Sand Beach parking lot also contained remnants of some stairs and a path that used to cross the Satterlee property to access the beach. Apparently, the presence of stray dogs was a source of vexation for Mr. Satterlee, who periodically threatened to close the beach off to the public. Recommendations were made by Olmsted to construct a dog-tight fence with a self-closing gate for this path.[123]

Aware of the opportunity that the Civilian Conservation Corps presented to the development of the motor road system, Rockefeller and Superintendent Dorr took steps to obtain the greatest benefit from the availability of that labor. The Civilian Conservation Corps was directed to rebuild and improve the Ocean Drive footpath system, a 4-foot wide trail paralleling the motor road from Sand Beach to Otter Point.[124] Initially, the quality of the work on the trail had some shortcomings. Rockefeller recognized the talent and amiable nature of a young landscape architect named Benjamin Breeze, and wrote to Director Cammerer suggesting Breeze be appointed to direct this Civilian Conservation Corps project.

The trail and motor road projects were proceeding simultaneously, and the two sets of workers shared construction materials, with excess debris from the road used on the trail. According to S.F. Ralston, Rockefeller's supervisor at Seal Harbor, "the (Civilian Conservation Corps) laborers. . .are doing much better than when I last wrote you and are taking care of our surplus material as fast as we can deliver it."[125] The Civilian Conservation Corps also built granite curbs in the parking lots and erected protective safety railings around Thunder Hole.

Rockefeller was also involved in giving instructions to the Civilian Conservation Corps forestry crew under Superintendent Dorr's supervision as they worked adjacent to the new Ocean Drive. Writing to Dorr in January 1934:

> ...The reports are generally favorable. Apparently the work is much better than any forestry work that has been done by town men in recent years. In some instances burning has been done in places where good trees were burned, necessitating their being cut down. In one instance a fire had been made under a moss covered bluff that could be seen from the roadside. These are slips which always have to be guarded against and are to be regretted.
>
> If you feel it is wise, I should be disposed to suggest that the men continue their work down to the Ocean Drive but that they be instructed to cut only actual dead stuff down or standing, leaving the cutting of less good material to be done in the spring by some of our specially selected men when the snow is off the ground and careful selection can more easily be made...[126]

By late July 1934, the reconstruction work along Ocean Drive was largely complete. A ranger station was built at Thunder Hole and the roadsides were seeded with a mixture of bentgrass and hard fesque. The curvilinear alignment along the shoreline, the use of native stone in the guardwalls and culvert headwalls, and the abundant sweeping vistas were all representative of the Picturesque Style. Ocean Drive also represented the first section to be completed of Rockefeller's comprehensive yet controversial motor road system. Rockefeller was obviously pleased as he wrote to Superintendent Dorr in August 1934:

> ...I greatly miss not being in Maine this summer but was glad to have been able to spend two days last week up there. It is needless to say that I went not once, but three or four times to the Ocean Drive and was thrilled with its beauty and completely satisfied with the result of the rebuilding of the road. I think Mr. Olmsted was most successful in his designing of the road and that Mr. Ralston has been equally successful in the construction of it. I was delighted to see your No Parking signs and during my several visits to the Drive saw only one car parked on it. The parking areas seem to me most convenient and adequate and to leave no just reason for any parking on the road itself.

> I noticed with much satisfaction the path between the Drive and the sea. The work that has been done under your supervision on the southern end is as charming as the path work done a year ago on Cadillac Mountain. I feel sure this path will be much used and greatly enjoyed and am eager to see the subsidiary paths running from it to various points along the shore also developed and constructed as I presume you are proposing to do.
>
> Now that the work of road construction has been completed, I feel that I should withdraw entirely from any further responsibility for the development and care and upkeep of the area surrounding the Drive, which is owned by the Park. Since you have competent landscape men at work under you and since they have the C.C.C. labor which is, I take it, becoming more efficient right along, I would hope that you would proceed to refine and develop the area adjoining the Ocean Drive on both sides as rapidly as that is possible. By this I mean the completion of the paths, the improvement and planting of the roadsides, some of which we have left graded but raw, also the sides of the path which we constructed to the north, the planting which is desirable to screen the parking places at different points and to soften certain places along the ocean side...[127]

Rockefeller also wrote of his satisfaction with the completed work to Director Cammerer, enclosing a copy of his instructional letter to Dorr. To this, Cammerer responded:

> ...I am delighted over your enthusiasm on the road accomplishment. Such praise means a lot, especially coming from you, for I am keen to have all the work we do there measure up to what you have accomplished in the past. The plan you outline [to Dorr] appears to be entirely satisfactory from every standpoint. I am hoping that my time will permit me to visit Acadia before the year is over and see this work...
>
> ...I am particularly delighted on the road side clean-up done in some of the parks with available CCC labor and the results achieved in better road side conditions incident to new road construction for which your efforts in Yellowstone several years past have been the guide...[128]

In 1953-1955, a large terraced parking lot was constructed at Sand Beach, north of the existing parking lot. This parking area had its own entrance off the motor road featuring concrete curbs, stone steps, dry rubble masonry retaining walls, rock paved gutters, bituminous sidewalks and split stone guardrails.[129] The parking lot was paved with a modern plant-mixed, hot-asphalt bituminous concrete surface, as was the entire stretch of Ocean Drive segment. The motor road paving project also included reconditioning some of the shoulders with a mixture of 1/3 topsoil to 2/3 gravel.[130]

CONSTRUCTION OF SCHOODIC LOOP ROAD AND SCHOODIC POINT ROAD, 1933-1935 (see Period Plans, Map #s 4, 6)

Concurrent with the Ocean Drive reconstruction project, new motor roads were designed and constructed on the Schoodic Peninsula. Conservation efforts by local citizens and the Hancock County Trustees for Public Reservations successfully transferred the lands once owned by John Godfrey Moore to Acadia

National Park in 1929. However, few improvements were planned there until late 1932 when the Navy Department agreed to relocate the naval radio station from Otter Cliff on Mount Desert Island to Big Moose Island. One of the first stipulations for the move was to construct a suitable access road from Winter Harbor to Big Moose Island, and in 1932 the National Park Service received an appropriation of $250,000 for the project.

The first section of what would become the Schoodic Loop Road, from the north side of Frazer Creek to Big Moose Island, was completed in November 1933 and incorporated many parts of the old Moore Road that tracked along the peninsula's western shoreline. This section was historically called Moore Road as well as Winter Road. The 22-foot cross-section was designed with a 16-foot traveled way, 2-foot shoulders in cut, and 3-foot shoulders in fill, but a year later the motor road was repaved and the traveled way increased in width to 18 feet, narrowing each shoulder by a foot. The road also featured widened and superelevated curves with spiral transition sections.

Project drawings from 1933 show the motor road ending as a curved driveway on the east side of the Big Moose Island, presumably at the entrance to the proposed naval radio station. However, drawings from 1934 eliminated this driveway and extended the motor road to an entrance on the south side of the island.[131] At Frazer Creek, project drawings show a new route over Frazer Creek, alongside an existing timber bridge, and indicate that a much shorter timber bridge within a long causeway was constructed. Later drawings from 1948 and 1957 show a concrete box culvert with masonry stone abutments and a causeway clad in rip rap and stone guardwalls along both sides of the road, suggesting that the proposed bridge and causeway may not have been constructed until well after the motor road was first constructed (Figure 1.22).[132]

The reconstruction of the Moore Road /Winter Road, along with the 1934 completion of an approach road from the Town of Winter Harbor to Frazer Creek, satisfied the Navy's required access route from Winter Harbor to Big Moose Island, and permitted the Navy to begin construction of its new radio facility. Earlier park planning efforts had envisioned the motor road extending beyond Big Moose Island only if land to the north (up to Wonsqueak Harbor) became available.[133] By 1934, these land acquisitions had apparently taken place and the park began planning a longer motor road serving as the unifying element to providing public access to facilities and scenic views.[134] This second section of the future Schoodic Loop Road, from Big Moose Island to Wonsqueak Harbor, was also known as Wonsqueak Road or Summer Road and followed portions of an old road bed along the eastern peninsula shoreline (Figures 1.23, 1.24).

The low marshy area and spongy soils at the beginning of Wonsqueak Road/Summer Road, where Big Moose Island met the peninsula, required the construction of an unusual "timber mattress" to support the roadbed.[135] At the northeast boundary of the park, the proposed route required the removal of several fish shacks and outbuildings and the construction of several service roads in order to access private in-holdings at the interior of the peninsula.

Like the first section, this motor road section was designed with spiral transitions and widened and superelevated curves, yet this portion of the new road featured a wider cross-section of 26 feet, an 18-foot traveled way, 2-foot shoulders in cut, and 4-foot shoulders in fill.[136] The Schoodic motor road was completed in early 1935. Blueberry Hill, a popular trailhead during Moore's time prior to construction of the motor road, was formalized as part of the new park motor road with an entrance road and a small parking area.

The motor road now known as Schoodic Point Road, on Big Moose Island, was also completed in 1935 and featured superelevated curves and spiral transitions. This motor road had two cross-sections: from its current beginning to the Naval Radio Station entrance, the cross-section was 22 feet with an 18-foot traveled way, 1-foot shoulders in cut and 2-foot shoulders in fill; from the Naval Radio Station entrance to the parking lot the cross-section was 24 feet with an 18-foot traveled way, 2-foot shoulders in cut and 3-foot shoulders in fill. Project drawings indicate that one of the pavement layers was Pentolithic macadam, the same brand specified for Cadillac Mountain Road.[137]

The motor road terminated as a large paved parking area designed by the National Park Service, and featured three levels separated by stone steps and boulder embankments that allowed for panoramic views (Figure 1.25). In 1936 or early 1937, a commemorative plaque acknowledging John Godfrey Moore's contributions was erected near one of the steps. In 1940, the Works Progress Administration constructed a restroom and pumphouse near the parking area.[138]

Similar to Cadillac Mountain Road, the motor roads on Schoodic Peninsula were built cooperatively through the interbureau agreement between the National Park Service and the Bureau of Public Roads, with Leo Grossman supervising the construction. Hill and Simpson, Rockefeller's engineers, provided construction consultation and regular updates to Rockefeller. The motor roads on Schoodic Peninsula were not articulated as part of Rockefeller's comprehensive motor road system, and consequently there was no direct design input from Rockefeller or the Olmsted landscape architectural firm on these projects. Nevertheless, the motor roads featured similar Rustic Design characteristics as the motor roads built on Mount Desert Island. The curvilinear alignments traced the general shape of the shoreline, and local stone materials were used on culvert headwalls, angular-shaped stone guardwalls, and hand laid rock embankments, all of which blended in with the exposed granite outcrops and cobble beaches. Vistas were plentiful, and small pullouts, likely vestiges of Moore's roads, as well as the more developed parking areas, were designed to take advantage of the excellent ocean views. Civilian Conservation Corps crews, supervised by the park's landscape architect, Benjamin Breeze, contributed to the construction of culverts and headwalls, roadside cleanup, surveying, fire hazard reduction, maintenance, and landscaping through 1937.[139]

In February 1935, the new 26-acre naval radio facility was commissioned. The complex featured a receiving building, powerhouse, pumphouse, and a radio compass building, all linked by a network of service roads connecting to Schoodic Point Road. However, the most notable feature at this military facility was a two-story apartment building, sharing design characteristics with the two carriage road gatehouses on Mount Desert Island. The building was designed in the French Norman Revival style by Grosvenor Atterbury, whose services were retained by Rockefeller as part of the agreement to relocate the station from Otter Cliff.

Such attention to detail came from the legislation that authorized the transfer of land from the Department of the Interior to the Navy, giving the Secretary the Interior the right to approve the design of buildings and structures at the new station "in the interest of protecting scenic values."[140] Owing to National Park Service oversight, two steel radio towers nearby were shortened to lessen the visual impacts. Rockefeller was reportedly pleased that the bulk of the naval facility was situated on the east side of Big Moose Island where it would not be as visible from Bar Harbor.[141] The Naval Station expanded several times through the remainder of the historic period.

CONSTRUCTION OF STANLEY BROOK ROAD AND OTTER CLIFFS ROAD, 1934-1936 (see Period Plans, Map #7)

Before the work was complete on the reconstruction of Ocean Drive, and concurrent with the park motor road projects on the Schoodic Peninsula, work was underway in June 1934 on clearing and grubbing out a line for the Stanley Brook Road. This project marked the end of a two-year period of consultation and design with Frederick Law Olmsted, Jr. and his renowned landscape architectural firm that started while Rockefeller's road program offer "lay on the table." The design process had begun when Rockefeller had written Olmsted the following letter in June 1932:

> ...The Stanley Brook valley at Seal Harbor is parallel with the Jordan Pond Road and between that road and the Seaside Inn. The brook is a beautiful rushing brook with large mossy boulders and flowing through a fine stand of timber. It empties into the sea at the bridge on the Seal

> Harbor -Northwest Harbor highway between the Seaside Inn and the drinking fountain at the corner of the village green.
>
> For some time I have been seeking to acquire land in this valley so as to make possible a pleasure motor road through it that would connect with the present Jordan Pond Road about a mile from the sea just north of the Seal Harbor Cemetery where the Wildwood Farm Road from Mr. Dane's place comes into the highway at right angles. In the back of my mind I have thought that this road, if built and thus connected with the Jordan Pond Road as above outlined, would make a magnificent park motor entrance to the present Acadia Park motor road from Jordan Pond to the Eagle Lake Road and up to the top of Green Mountain (Cadillac)...It would make unnecessary the use of the Jordan Pond Road in its lowest section for pleasure traffic.
>
> I now own the land necessary for this road. Mr. Simpson and I have laid out the road. The valley is narrow, the brook is tortuous. To make the most of both, we had thought to cross the brook from six to ten times. Because this would be a motor road, the crossings would need to be flat; because they are numerous they should not be too expensive. In studying these crossings with Mr. Simpson on various occasions, I have found that the problem in some instances at least quite a delicate and complicated one...
>
> I covet the value of your opinion on the location of this road. Moreover, since the question of the building of a road through this valley has aroused considerable local discussion and at one time criticism, it would help matters greatly were it known that the road as ultimately built had been studied and approved by you. I will appreciate it if you can arrange to spend a couple of days at Seal Harbor during the text two or three months for a full study of this problem with Mr. Simpson. The whole distance involved is only a mile...
>
> ...Let me make it clear that I have in mind to turn this road and the area through which it passes over to the Acadia National Park ultimately. The road will be built through its entire length on property which I own, therefore no consents will be needed for the construction of any road which I finally adopt.[142]

Olmsted made several visits to Mount Desert Island to consult with Simpson on the alignment, and offered recommendations on ways to reduce the size of the road prism, or graded area, within the narrow valley and on an appropriate bridge design for the many crossings over the Stanley Brook. At the motor road's southern end and its intersection with the county road in Seal Harbor, Olmsted advised on vegetative treatment of the road edges that would take advantage of the dramatic prospect of the harbor.

Each visit to the site resulted in the re-adjustment of the centerline staking at certain stations to achieve the desired effect. Some of Olmsted's comments related to the increasing of particularly tight radii, and avoiding specimen trees. At given points this also meant a realignment of Stanley Brook's channel. Regarding any alignment under discussion, Olmsted wrote, "...Alternatives should be staked and adjusted on the ground before a final decision is reached.[143]

The alignment of the south section of the road, as it entered Seal Harbor, was of the greatest interest to Olmsted. Here he wrote:

> ...Before finally deciding the alignment and profile of this part of the road I believe it is important to alter the landscape of the lower end of the valley, south of Station 69 by some quite radical and extensive, but very carefully and skillfully directed removal and pruning of trees and bushes. I think it may be found, when this is done, that the most agreeable and at the same time most economical location for the road will be more nearly as indicated in ink on Sheet No. 7, somewhat to the west of the line as shown by the blueprint and as now staked with laths. It is hardly worth while to re-stake this portion of the line before this cutting is done. But if I am to review the proposed restakings north of Station 67 (and especially alternatives A, B and C), some time this autumn as has been suggested, I should greatly welcome the opportunity of personally directing, at the time of that visit, the removal of trees and bushes at all the more critical places near the mouth of the valley so as to develop the landscape effects I have in mind. If Mr. Ralston could put a gang of axmen at my disposal at that time, it would not take long to fix the limits of the desirable clearings, and I could then make definite recommendations for the completion of the clearings. For certain additional planting which will be desirable...[144]

As the more visible work on the Ocean Drive reconstruction project diverted attention away from the Stanley Brook Road project, the topic was not revisited until May of 1933 when the Ocean Drive construction was well underway. At this time only minor adjustments were made to the alignment of the road, and Olmsted's comments again focused on minimizing the landscape damage to the narrow and beautiful Stanley Brook valley. His view was that to avoid damage due to grading of the road prism, the road surface should be kept as narrow as possible. This would include the elimination of shoulders for the road. In cases where the fill of the road was to pass over the roots of trees, Olmsted recommended adding a layer of sand and gravel over the roots to better protect them.

As to the multiple bridges for the proposed Stanley Brook Road, Olmsted decided on a "very simple and unpretentious granite-lintel bridge or culvert, not very different in appearance from 'indigenous' structures of this sort to be found on many of the old roads of Mount Desert."[145] This resulted in low bridges with wooden guardrails supported by granite posts that blended in perfectly in design and scale with the surrounding landscape.

With regard to the width of the Stanley Brook Road, Olmsted advised:

> ...I recommended and he assented to a standard minimum clear width of road bed on tangents and long radius curves of 22 feet. I did not intend to recommend paving the whole 22 feet although the subgrade is to be solidly built to that width sufficient to support a 22 foot pavement if ever desired. Whether the paving shall be 18, 20 or 22 feet on tangents remains to be determined; but I think the maximum width of paving that could possibly be justified on tangents is 20 feet, in which opinion, I

> understood you to say, the Park Service now concurs according to your latest information through Mr. Dorr.
>
> Where retaining walls are required to support the road-bed I recommended allowing 20 inches for parapet width outside the clear road-bed width of 22 feet on tangents plus the additional widenings on curves.[146]

Olmsted also proposed experimentation with wheel guides along the edge of the road to contain the road in a type of channel, a road edge treatment technique he had learned from the Chief Engineer at Zion National Park. Olmsted enclosed with his report to Rockefeller a set of diagrams with which he hoped to experiment (Figure 1.26). He wrote to his client:

> ...Any of these smooth types of wheel-guides, set close to the traveled-way, should of course flare gradually away from the edge of the road at the end where it joins on to an unguarded shoulder of the ordinary sort, so that if a car approaching it has over-run moderately onto the shoulder it will be guided back onto the traveled-way without damage.[147]

These experiments were conducted but were all seen as failures. Apparently, the sloped-faced wheel guides had the disconcerting tendency to allow an auto to ride up onto and over them, leaving the vehicle stuck straddling the wheel guide.

In April 1936, the Stanley Brook motor road was complete except for some final planting details, and soon thereafter Rockefeller deeded the property to the federal government. The design of the road was a classic example of the Picturesque Style. Its features blended in with the surrounding landscape and yet were uniquely adapted to fit the local site conditions. Features included six low bridges across Stanley Brook and the retaining walls built with rounded stones rather than angular stones used on the other motor roads in the park. Another unique feature was the triple-arched bridge designed by Charles Stoughton in 1933 to carry the Barr Hill-Day Mountain Carriage Road over the motor road, Stanley Brook, and a trail.

The survey for Otter Cliffs Road was completed in 1930 near the time of Olmsted's original comprehensive report on the proposed motor road system. As was the case with the road through Stanley Brook, this work was deferred due to the reconstruction of Ocean Drive. There, an existing road was already in place was a simpler project due to cost and minimal public opposition. Once the reconstruction of Ocean Drive was complete and had received high praise, the Stanley Brook and the Otter Cliffs segments moved into construction at the same time period.[148]

Otter Cliffs Road began at the southern end of the reconstructed Ocean Drive, tracing the shoreline of Otter Point, and ending as a turnaround loop at the former naval radio station. There was also a connection with Otter Cliff Road. As had been the case with Stanley Brook Road, the Olmsted firm had a major role in the design of this motor road, which resulted in similar Picturesque Style effects.

At Otter Cliffs, considerable analysis was undertaken to ensure that the motor road harmonized with the existing landscape and that important views were preserved. At the summit of the cliffs, where the topography was particularly challenging, Olmsted designed a grade separation feature where the two lanes of traffic were separated by a change in elevation and retaining walls. Incorporated into this structure was a lower third level accommodating the rebuilt Ocean Path (Figures 1.27, 1.28). This remarkable design prevented the construction of a single massive retaining wall and at the same time allowed for spectacular views uninterrupted by other automobiles. Viewed from water, the structure looked as if it was part of the granite bedrock outcroppings. Sited above and tucked behind the grade separation and rock outcrops was a parking area. Another pullout/parking area was located at Otter Point.[149]

Olmsted also revised the alignment around the former naval radio station so that the motor road would track closer to water and take in the view toward Otter Cove and the long north view to the summits of Cadillac Mountain, Day Mountain, and the glacial gorge between the summits.[150] Rockefeller agreed with the proposed change: "I can see that if this line were followed and the high bank upon which the Radio Station building stands cut down as you suggest, that view of the Inlet would be materially improved."[151]

The revised alignment passed over the foundation of the former naval radio station building, which the Navy finally abandoned in 1935 when it moved operations to the Schoodic Peninsula. Its removal made possible the earlier agreed upon donation of several thousand acres to the park. In a letter to Secretary of the Interior Harold Ickes, Rockefeller stated his willingness to deed these lands to the park:

> "The lands I am now prepared to give total 3835 acres and cost me over $600,000. For their development with roads and the usual other improvements I have already spent at least $500,000. In addition, I have spent for roads built on Park lands roughly $2,000,000. My total expenditure on the project is therefore some $4,000,000."[152]

Designed without Bureau of Public Roads involvement, the Otter Cliffs Road was completed in August of 1936. The road cross-section was 24 feet wide featuring an 18-foot traveled way and 2-foot shoulders on each side, and was paved with a bituminous macadam surface treatment. There are no superelevated curves or spiral transitions. Drainage was handled by rubble ditches and reinforced concrete pipes with stone headwalls and drop inlets. This motor road segment was the first to make use of some sections of rectilinear-shaped guardwall stones, which derived from drawings that showed the coping stones as rectilinear forms on the shoulder. This detail evolved into the more rigidly rectilinear quarried blocks installed on subsequent motor road segments built by the Bureau of Public Roads.

In 1955, the existing bituminous surface treatment on Otter Cliffs Road was overlayed with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment, and some of the shoulders were reconditioned with a 1/3 topsoil to 2/3 gravel mixture. In 1956-1957, the same overlay procedure was undertaken on Stanley Brook Road.[153]

ROCKEFELLER'S ROLE CHANGES

The Roosevelt administration's New Deal programs directed federal funding to road construction to Acadia National Park. In June 1935, while the Stanley Brook Road and the Otter Cliffs Road segments were under construction, the Acting Director of the National Park Service notified Rockefeller that $350,000 had been allocated to extend the motor road system from the northern end of Jordan Pond/Eagle Lake Road to the vicinity of Sieur de Monts Spring.[154] This was good news to Rockefeller; his fortune had been greatly diminished by the Depression, and as noted earlier, he had been hopeful of forging such a financial arrangement for future construction of the park's motor roads.

Rockefeller's role in the motor road system thus changed from design, construction, and direct project funding to donating and acquiring the land needed for the remaining motor road segments. The new role allowed Rockefeller to essentially retain direct control over the design and the quality of the road, and also continue to use the services of the Olmsted landscape architectural firm. Consequently, all relevant parties kept Rockefeller apprised of the progress of any given project. Regarding his concerns or ideas about the motor roads, Rockefeller never hesitated to contact anyone, from Bureau of Public Road's Leo Grossman in Bar Harbor to the Secretary of the Interior in Washington D.C. From this point on, the National Park Service and the Bureau of Public Roads partnered in the design and construction aspects of the motor road system, with John D. Rockefeller serving much like an independent third party coordinating the activities of both.

CONSTRUCTION OF KEBO MOUNTAIN ROAD, 1936-1938

(see Period Plans, Map #8)

The first motor road segment constructed following the 1935 appropriation became known as Kebo Mountain Road. This road connected to the 1924 portion of Jordan Pond/Eagle Lake Road and traversed around the north end of Great Pond Hill up into the Kebo Brook Valley, around the north end of Kebo Mountain, and joined the pre-existing Harden Farm Road flanking the eastern side of the Great Meadow. The land over which the new motor road passed was owned by Superintendent Dorr, Rockefeller, and the Town of Bar Harbor.

The concept for this motor road segment first appeared on a draft version of the plan submitted by Superintendent Dorr to Director Mather in 1922, but any mention of it escaped written comment. This route also later appeared in Rockefeller's comprehensive 1930 proposal, and was envisioned as an approach road from the town of Bar Harbor to the Jordan Pond/Eagle Lake Road and Cadillac Mountain Road, effectively bypassing County Route 233 (see Figure 1.18).[155] In that plan, an elaborate system of carriage roads paralleling the motor road and connecting to Bar Harbor was proposed but never built. It was around this time, in 1930, that Rockefeller first asked Frederick Law Olmsted, Jr. to collaborate with the Kidde Construction Company in the preparation of surveys and plans.

The route of Kebo Mountain Road was revised after the Bureau of Public Roads reviewed the original surveys prepared by Kidde. As noted in Engineer Leo Grossman's "Final Construction Report":

> In 1935, the Bureau of Public Roads was asked to make such additional surveys as might be required and to prepare Plans, Specifications and Estimates preliminary to the advertising of the project for contract. In reviewing the surveys of the Kidde Company, it was found that none of their center line was located on standards of curvature and economy required by the Bureau. It was necessary to make an independent survey which involved extensive changes in location. These changes were shown to Rockefeller and Superintendent Dorr and were approved by them...[156]

Director Arno Cammerer and Chief Landscape Engineer Thomas Vint requested that Rockefeller make Olmsted's services available to the park for a plan-in-hand inspection prior to letting the contract. Olmsted agreed to the site visit and wrote to Rockefeller:

> ...Both Mr. Vint and I found the center line location and profile, as worked out by the Bureau Engineers, to be in general excellent, embodying distinct improvements over all earlier studies by the Bureau and others...[157]

Construction work began on the Kebo Mountain Road shortly after the inspection of May 1936 and was completed in September 1938. The 28-foot cross-section featured a 20-foot traveled way, 2-foot shoulders in both cut and fill, and was paved with a bituminous surface treatment. The motor road was designed with spiral transitions and superelevated curves, most curves being quite broad, over 500 feet in radius. The maximum gradient was seven percent. The project also included construction of a two-forked approach road at Great Meadow that connected to Bar Harbor.[158]

The mountainous terrain required the construction of dry-laid and mortared stone retaining walls, hand laid rock embankments, and the Kebo Brook Bridge (1937-1938). This bridge was a single-arched and slightly curved structure designed and constructed by the National Park Service and the Bureau of Public Roads, in consultation with the Olmsted firm (Figures 1.29-1.33). The concrete bridge was clad in mortared stone, allowing it to blend in with the surrounding landscape. Stormwater drainage was facilitated with culverts featuring stone drop-inlets and stone headwalls, some of which were incorporated into retaining walls. There were also several sections of underdrains installed, which were perforated asphalt coated pipes used to help drain the saturated and heavy clay subsoils. Because such subsoils tended to heave culverts, underdrains were also placed under some of the culvert pipes and retaining walls.

Where the motor road crossed the Great Meadow, project drawings proposed an 8x7-foot box culvert, yet according to Grossman:

> ...the [National] Park Service requested that we restrict the flow of the stream ...This enabled us to use 42 inch R.C.C. pipe culvert...[The culvert has]since been submerged, carrying water under a head of pressure, but the height of the fills have dammed the water back without damage. [159]

Limiting the discharge out of the Great Meadow may have been driven by downstream flood control issues or perhaps out of a desire to raise the water level in the Great Meadow and prevent it from becoming a woodland.

Engineer Grossman's "Progress Views" for the Kebo Mountain Road project document the widespread use of rectilinear quarried blocks of granite as guardwalls, a significant departure in the type of stones used as guardwalls on earlier motor road segments. The spacing between some of the stones was much closer than the 4-foot maximum gap between stones as was the convention on the Bureau's earlier Cadillac Mountain Road (t(Figure 1.34). The project drawings provided detailed original specifications for the stones:

> Length of stones and distance between gaps vary between 18-24" and 3-4';
>
> Notes specify that the number of large stones 3-4' in length to small stones 18-24" in length should be three to two. Arrangements of stones in a typical five stone length may be: one small - three large - one small, or two large - one small - one large - one small, but not continuously alternating as one large - one small - one large - one small - one large.
>
> The height above the finished surface of the shoulder at the roadside face of the stone should be approximately twenty inches. Variations of two inches above or below are allowed but not in consecutive stones. [160]

In 1939-1940, Civilian Conservation Corps helped build a paved pullout, which provided a panoramic view of Bar Harbor and Frenchman Bay.[161] In 1955, Kebo Mountain Road was overlayed with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment, and some of the shoulder areas were reconditioned with a 1/3 topsoil to 2/3 gravel mixture.[162]

CONSTRUCTION OF OTTER COVE CAUSEWAY AND BLACKWOODS ROAD, 1938-1939 (see Period Plans, Map #9)

In September 1936, the National Park Service successfully obtained another appropriation for road construction at Acadia. This time the amount was $500,000 to continue the motor road system from the terminus of Otter Cliffs Road, across Otter Cove, around to Western Point, and ending at Route 3. After the funding was obtained, Rockefeller deeded to the federal government the lands necessary to complete the work.[163] Planning for this motor road segment began much earlier. In 1925 Rockefeller engaged the C. G. White Engineering Company to study and provide estimates for a bridge and causeway over Otter Cove to replace a structure that had been destroyed by the sea some years previous.[164] This evaluation was further advanced in drawings by the Kidde Construction Company and the Olmsted firm and published as part of Rockefeller's 1930 comprehensive motor road proposal.

The motor road crossing at Otter Cove posed engineering challenges. The cove was not only very wide, but all previous structures had eventually succumbed to the high sea levels and constant tidal action. As described by Bureau of Public Roads engineer Leo Grossman, the distance to overcome was "...a long stony bar thrown up by the full force of the seas above normal tides and the suctional pull of the ocean even at normal tides."[165] To support the roadbed, a stable and high dike was needed that would also permit outflow of Otter Creek. Given these complexities and the highly visible location, the National Park Service again asked Rockefeller to retain the Olmsted firm as a consultant.[166]

After surveying the site, Olmsted initially felt that the causeway road line drawn first by the Kidde Construction Company, featuring sharp curves at the approaches and a flat curve in the causeway itself, would mimic the appearance of the natural sandbar on which the structure rested. However, the Bureau argued that the sharp, broken-back curves would necessitate difficult maneuvering by motorists, and proposed an alternative with a more gradual line crossing the causeway on a continuous 500-foot radius curve.[167] The National Park Service, Olmsted, and Rockefeller concurred with the recommendation and the Bureau of Public Roads initiated contract plans and specifications. Construction of the Otter Cove Causeway and Blackwoods Road began in the spring of 1938.

This collaboration resulted in one of the most spectacular features on the motor road system. Buried deep within the broad arc of the causeway was a long concrete stem wall designed to serve as a spine preventing the undermining of the fill. The causeway was faced on both sides with dry-laid rubble except at the west end around the bridge, where the rubble was mortared in place. The bridge was constructed entirely of masonry to avoid saltwater degradation and featured three arched bays that allowed for unimpeded passage of water from Otter Cove with the changing of the tide (Figures 1.35-1.37).[168] The three arches in the bridge were also designed to receive removable flashboards impounding the tidal outflow behind the causeway and forming a massive natural swimming pool.[169] This feature of the bridge was associated with preliminary plans for a recreational beach behind the causeway and bridge, along with a two-story concession building, pier, and access road. The plans were ultimately abandoned.

In addition to the causeway, the motor road required the construction of two bridges, both designed by the Bureau of Public Roads in 1938. These were the Fish House Bridge, carrying the motor road over the realigned Fish House Road, and the Little Hunters Beach Brook Bridge, a bridge structure and walkway at Little Hunters Beach. Additionally, several small perennial streams were rerouted through culverts under the new motor road.

The motor road's 28-foot cross-section featured a 20-foot traveled way (26 feet at the causeway), 2-foot shoulders in cut, and 4-foot shoulders in fill, and was paved with a bituminous surface. The road curves were designed with spiral transitions and were widened and superelevated (Figure 1.38). Three formal pullouts were planned and built along the motor road to take in the panoramic views of the Atlantic Ocean. Project drawings show locations for mortared stone masonry retaining walls and hand laid rock embankments, and include specifications for the rectilinear quarried block guardwalls that were similar to those installed on Kebo Mountain Road. Several drawing sheets also include a design for an approach road connecting to the Blackwoods Campground, but it was not built because Rockefeller did not want trucks and trailers on this or any park motor road.[170]

When construction was completed in September 1939, Rockefeller wrote to Olmsted:

> The Otter Creek Inlet Causeway and Motor Road around the Black Woods has just been opened and is more beautiful and successful than I had even dared to hope it would be. The causeway looks as if it had always been there, so naturally is it related to the surrounding country, while the curve only adds to its beauty. People are delighted with the road and regard it as a great addition to the motor road system.
>
> My heartiest congratulations to you on the important part you have had in bringing this undertaking to so eminently satisfactory a conclusion.[171]

In 1955, the existing bituminous surface treatment on the motor road was overlayed with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment, and some of the shoulder areas were reconditioned with a 1/3 topsoil to 2/3 gravel mixture.[172]

CONSTRUCTION OF KEBO MOUNTAIN ROAD EXTENSION AND CHAMPLAIN MOUNTAIN ROAD, 1939-1940

(see Period Plans, Map #10)

The construction of the Kebo Mountain Road Extension and the Champlain Mountain Road segments of the motor road system signified a commitment to the route around the north end of Champlain Mountain, and forever abandoned the controversial route of the 1930 proposal, which was envisioned to traveled down the Tarn valley and up and over Gorham Mountain.

This new route around Champlain Mountain was fraught with difficulties in obtaining land holdings and rights-of-way from the wealthy residents of the Schooner Head Road area. In reference to this decision, Rockefeller wrote to Secretary of the Interior Ickes:

> ...I am optimistic enough to believe, as a result of many years of effort to bring about certain results here on Mount Desert Island, that the policy of following the line of least resistance, so long as it is the right line, even when it entails sometimes a weary period of patient waiting, is in the long run the most successful. With most of this road actually built on the around the mountain route in line with your recent decision, I have a feeling it will only be a question of time when the land necessary for the remaining link will become available and the complete circuit of park road possible. If I thought that the omission of this remaining link was regarded as anything other that temporary, I should feel very differently about having recommended this plan but, knowing that the whole theory of the Acadia Park Motor Road is that there shall be a continuous, unbroken-by-highways, park road circuit to the top of Cadillac Mountain, down to the sea, for miles along the seacoast and back to Cadillac Mountain, I view with equanimity the necessary temporary use of existing highways...[173]

The landholdings in question belonged to Mr. Atwater Kent and Mr. Potter Palmer of Schooner Head Road. Kent within time donated his property to the park, as did the Palmer family. However Palmer's widow held back her land until shortly before her own death in 1955. The two road segments worked towards a union at these two difficult properties.

The Kebo Mountain Road Extension consumed the remainder of the 1935 appropriation. From the east end of Kebo Mountain Road, at Harden Farm Road, the Extension continued south and east past the Great Meadow along an existing section of Harden Farm Road and then past the Sieur de Monts Spring area turned eastward crossing lands formerly owned by Superintendent Dorr, passing by the Bear Brook campground, and ending at the Beaver Dam Pond where it connected to Dorr Quarry Road. This in turn connected to Schooner Head Road. The Champlain Mountain segment was a northerly extension of Ocean Drive, continuing that road from Sand Beach to the "Wire Gate Road," which connected to the Schooner Head Road. Thus, until the Kent and Potter lands could be acquired, Schooner Head Road became the temporary link between Kebo Mountain Road and Ocean Drive.

Both motor roads were designed in collaboration between the National Park Service and the Bureau of Public Roads, with construction beginning in November 1939 and ending in November 1940. The final construction cost was $143,285. Engineer Grossman's "Final Construction Report" for these projects offers additional details:

> ...The survey of the project No. 6A3 (Kebo Mountain Road Extension) was made in 1938-1939...The survey of project No. 8A1 (Champlain Mountain Road) was made in 1936-1939.
>
> ...Both surveys included several alternate locations, the final locations being decided by Mr. T. C. Vint, Chief, Branch of Planning of the National Park Service and by Mr. Frederick Law Olmsted, Consultant Landscape Architect for Mr. John D. Rockefeller, Jr.
>
> The design throughout provided for twenty-foot pavement of bituminous surface treated gravel with two-foot shoulders in cut and six-foot shoulders in fill. Except on curves, the ditch to ditch width was 28 feet in cuts; the shoulder width if fills was 32 feet. All curves were designed with spiral transitions and were widened and superelevated on the basis of fifty miles per hour. The minimum radius of the curvature was 409 feet on the Park Road...Grades were rolled to conform with the natural ground contour, the maximum grade used being seven percent...[174]

Much of the Kebo Mountain Road Extension followed the alignment of existing roads, and as such the project drawings indicate extensions for existing reinforced concrete pipe culverts, replacement of existing pipes with wider pipes and different inlet structures, and replacement of existing corrugated metal pipes with reinforced concrete pipes. Other engineering features along the road included dry-laid stone retaining walls and underdrains.[175] The project also included a redesign of the circulation in and around Sieur de Monts Spring. This project required the elevation of Route 3 onto an overpass, the Sieur de Monts Spring Bridge, designed by Arthur R. McFarland in 1940. A new access road connecting Route 3 and the motor road was constructed, from which another road was built to access a new parking area and loop on the east side of the Sieur de Monts Spring area (Figure 1.39).

In 1955, the existing bituminous surface treatment of both these motor roads was overlayed with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment, and some of the shoulder areas were reconditioned with a 1/3 topsoil to 2/3 gravel mixture.[176]

CONSTRUCTION OF DAY MOUNTAIN ROAD, 1939-1941

(see Period Plans, Map #11)

The idea for a motor road connecting Otter Cove Causeway and Blackwoods Road with the Jordan Pond/Eagle Lake Road first appeared as a product of the collaboration of the Kidde Construction Company and Frederick Law Olmsted, Jr. On the key map that accompanied the construction plans printed for Rockefeller's controversial 1930 proposal, the Day Mountain Road appeared as a dashed line, indicating "planned/not approved."

Construction of the two-mile project was routed between Day Mountain and the Triads and was administered by the Bureau of Public Roads. Consistent with other Bureau work of this time, Day Mountain Road featured spiral transition curves, and superelevation and widening on the curves for a design speed of 50 mph. As with Ocean Drive, neither Rockefeller nor the National Park Service were able to acquire all of the necessary rights-of-way to build the entire road within park boundaries, so the west end was linked to Jordan Pond/Eagle Lake Road and Stanley Brook Road via a local road and temporary timber bridge (Figure 1.40). The remainder of the road was built on land donated by Rockefeller.

Topographic conditions and the presence of existing roads required the construction of five bridge structures along Day Mountain Road. The most challenging and most innovative was the Blackwoods Bridge, designed by Bureau of Public Roads engineers (1939-1941), carrying Route 3 over the motor road. Because of heavy clay subsoils, construction of this bridge necessitated what engineers called a concrete barge, and the bridge became known as the "Floating Bridge" (Figure 1.41).[177] Near this bridge was the Hunters Beach Brook Bridge, designed by the Bureau (1939-1940) to carry the motor road over the creek. The Triad-Day Mountain Bridge, designed by Leo Grossman and Philip Mabel (1939-1941) conveyed the Triad-Day Mountain Carriage Road over the motor road, while the Dane Farm Bridge, designed by the National Park Service and the Bureau of Public Works (1939) carried the motor road over a portion of the Wildwood Farm Road. The fifth bridge structure was a 150-foot long timber trestle built over a small creek near the west end of the road. Except for the timber bridge, all of the bridges as well as the other built features, including hand laid rock embankments, mortared and dry-laid retaining walls, stone culvert headwalls, and guardwalls comprised of rectilinear quarried blocks utilized native stone material consistent with the Rustic Design vocabulary found on the other motor roads in Acadia National Park.

Construction began in September of 1939 and was completed in May 1941 for a final contract sum of $239,322.[178] Day Mountain Road featured a 30-foot cross-section with a 20-foot traveled way, 2-foot shoulders in cut, 6-foot shoulders in fill (Figures 1.42-1.44).[179] A pullout was planned along the motor road, presumably to highlight a long view to the north of the valley formed by Pemetic Mountain and Cadillac Mountain, but apparently was not built.[180] In 1955, the existing bituminous pavement was overlayed with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment, and some of the shoulder areas were reconditioned with a mixture of 1/3 topsoil to 2/3 gravel.[181]

CONSTRUCTION OF PARADISE HILL ROAD, 1940-1941
(see Period Plans, Map #11)

Concurrent with the construction of Day Mountain Road was the construction of a motor road connecting Hulls Cove at Route 3 to the northern terminus of the Jordan Pond/Eagle Lake Road at Route 233. Planning for this road, named Paradise Hill Road, first commenced in 1934 when Rockefeller directed Paul Simpson to survey the road, most of which was on Rockefeller's property.[182] As early as March 1935, Rockefeller communicated his intentions with Secretary of the Interior Ickes to deed the federal government lands making the Paradise Hill Road possible.[183]

Engineer Grossman provided the following background in his "Final Construction Report:"

> ...Just prior to the award of the contract for this project, the major portion of the lands traversed belonged to Mr. John D. Rockefeller, Jr. The deed of gift of the required lands to the Federal Government was offered contingent upon the abandonment of the New Eagle (Lake) Road and permission to relocate the County Road (Route 233). By authority of the County Commissioners and by a special town meeting, both of these contingencies were provided for.
>
> The survey of this project was first begun in September 1938 and was continued intermittently until just before it was advertised for bids in November 1940. Several alternate designs were studied before the final location was decided upon and properties finally acquired by the Government. The location and design as finally settled upon were decided by Mr. H. J. Spelman District Engineer, Public Roads Administration, Mr. T. C. Vint, Chief, Branch of Planning of the National Park Service, and by Mr. John D. Rockefeller, Jr.[184]

Although Rockefeller was an advocate for the motor road, he also had some concerns about its effect on the town of Bar Harbor. During the late 1930s, Bar Harbor was prone to traffic congestion caused by increases in park visitation. Grossman noted that one of the reasons for building this road was to directly connect the park motor road system with the state highway system and bypass the congested streets of Bar Harbor.[185] This would mean visitors would turn into the park before they had entered the residential areas of Bar Harbor, which Rockefeller worried would "...be appreciated by the summer people but regretted by the winter residents and summer storekeepers."[186] Nonetheless, the project proceeded, and with some urgency. World War II had begun in Europe in 1939 and it was Rockefeller's understanding that as the war progressed, and the potential of the United States being drawn into the conflict increased, funding for these road projects would be diverted to the war effort.[187] Thus, Rockefeller pressed both this project and the Day Mountain Road project as priorities.

Construction on the 3.5-mile Paradise Hill Road segment commenced in December 1940. Rough grading was finished in June 1941 and the project was completed in October 1941. Contract funding amounted to $209,945 but the appropriation did not include sufficient monies to construct three bridges that the route required. One bridge was necessary at Route 233 and another at what was then known as the "New Eagle Lake Road." The last bridge, at Duck Brook, was a 402-foot long triple-arch span, the longest bridge in the park. World War II intervened before funding was obtained for the three bridges, leaving the motor road unusable until they were completed eleven years later (Figure 1.45).[188]

The design for Paradise Hill Road featured a 30-foot cross-section, 20-foot traveled way, 2-foot shoulders in cut, and 6-foot shoulders in fill. The alignment featured spiral transition curves, and curves were widened and superelevated based on the design speed of 50 mph. The minimum radius of curvature was 440.74 feet on the main road and 54.13 feet on the approaches. The maximum gradient was seven percent except on an access road and broad triangle-shaped intersection connecting the motor road to Route 233. Paradise Hill Road also featured hand laid rock embankments, rectilinear quarried guardwall stones, and mortared and dry-laid stone headwalls, all of which followed the Rustic Design characteristics of the National Park Service. Spectacular views from the motor road toward Frenchman Bay and Kebo Mountain were highlighted at four formally designed pullouts (Figure 1.46).[189]

In 1955, the existing bituminous surface treatment on Paradise Hill Road was overlayed with a modern plant-mixed, hot-asphalt bituminous concrete surface treatment, and some of the shoulder areas were reconditioned with a 1/3 topsoil to 2/3 gravel mixture.[190]

1941 PARK MASTER PLAN

Beginning in 1933, the park's resident landscape architect, Benjamin Breeze, designed and implemented many projects aimed at improving public facilities at

Acadia National Park. Meticulously drawn plans were created for picnic areas, campgrounds, recreation areas, and the naval station on Schoodic Peninsula as well as the motor roads on both the island and peninsula. The designs and details of these projects were consistent with the master planning components of the "Park Development Outline" developed for the National Park Service by Chief Landscape Engineer Thomas Vint and prescribed by Director Albright. All of the projects subscribed to the Rustic Style park development.[191]

In 1941, Breeze improved and repackaged the site plans and schematics as a new park master plan which addressed both existing and proposed facilities (Figure 1.47). The master plan is significant in that it served as a snapshot of what projects had been accomplished and what was left to be done. It also illustrates that by late 1941 a majority of Rockefeller's comprehensive motor road system was built or nearly completed. The plan documented the overall layout of the motor roads and distinguished between built roads and the segments under construction at the time, which were Kebo Mountain Road, Kebo Mountain Road Extension, Champlain Mountain Road, Otter Cove Causeway and Blackwoods Road, Day Mountain Road, and Paradise Hill Road. The master plan indicated pullouts and developed areas along the motor roads, and also showed the proposed realignment of the S-curve at the Jordan Pond House, on Jordan Pond/Eagle Lake Road. This realignment was initially proposed in drawings from 1935.

The 1941 master plan also illustrated three missing segments that were needed to complete the motor road system. These consisted of a new link between Day Mountain Road and Jordan Pond/Eagle Lake Road on park property; the bridges along Paradise Hill Road, and a new road on the east side of Champlain Mountain connecting the Kebo Mountain Road Extension and the Champlain Mountain Road. In the plan, this last segment was shown with two alternative routes through the park, both of which continued to follow a stretch of the town of Bar Harbor's Schooner Head Road. [192] All three of these missing segments were eventually completed.

In June 1941, Director Newton Drury instructed Acting Superintendent Hadley to formulate a program of vegetation maintenance at the scenic overlooks on the Motor Road System. The correspondence suggests that the vegetation on some of the older motor road segments was maturing and beginning to obstruct views. It is unclear what came of this directive given the onset of World War II.

WORLD WAR II AND THE GREAT FIRE

In 1941, priorities in the park, not to mention throughout the country, were changing as the likelihood of the nation entering World War II increased. The focus of the Civilian Conservation Corps was shifted to civil defense projects, while on the Schoodic Peninsula the naval radio station was expanded, with some structures constructed on park lands. That same year, the U.S. Army Air Corps began operation of a radar station on Cadillac Mountain built to seek out enemy submarines. The facility was located just below the summit and accessed by a short road off Cadillac Mountain Road (this area is now the Blue Hill Overlook). During the duration of the war, Cadillac Mountain Road remained closed to the public.[193]

As the New Deal programs ended, the Civilian Conservation Corps camps were closed and Benjamin Breeze left Acadia National Park. Project work in the park subsequently declined and was limited to the completion of park facilities begun in the 1930s and repairs to deteriorated buildings. For the motor road system, land acquisition, construction, and design essentially stopped as there was little money available and there were few qualified engineers available for road design and construction.[194] Leo Grossman was one of the Bureau of Public Roads engineers reassigned to other military and civil defense duties.

As the end of World War II drew near, Rockefeller again took up the cause to finish the motor road system. The following letter to Director Drury puts Rockefeller's role in the completion of the motor road system into context, calling upon him to be the project's primary cheerleader spurring the federal government on towards its completion:

> Dear Mr. Drury:
>
> Some day the war will be over; I hope it will not be in the far distant future. When it is and public work projects are again possible and desirable both intrinsically and for the sake of giving employment, I am greatly hoping that the completion of the roads and bridges in connection with the unfinished road system in Acadia Park will be one of the projects that can be shortly undertaken.
>
> You will recall the difficult experience in the past in getting the plans and specifications for these roads and bridges prepared and approved by the various departments. Is this work going forward? Has the preparation been completed? Is the necessary data already so that bids on this work can be gotten without delay when the time comes?
>
> We have not been on Mount Desert Island for the past two summers. Mrs. Rockefeller and I are going to the Seaside Inn at Seal Harbor for the first two weeks of this August. It is this proposed visit which brings these matters again to my mind and leads me to write this letter.[195]

Drury wrote back to Rockefeller that he had not forgotten about Acadia's motor road program, informing him that the plans for two of the bridges on Paradise Hill Road were complete and that plans for the third and longest, Duck Brook Bridge, were in preparation. He further explained that much of the effort of the Bureau of Public Roads during the war effort had revolved around the construction of roads serving the Pentagon building in Washington and the construction of the Alcan Highway.[196]

In October 1947, after an unusually dry summer, 17128 acres of land on Mount Desert Island, 8750 acres of which were on park lands at the time, were devastated by the "Bar Harbor Fire."[197] Several park buildings and structures were destroyed, such as the springhouse building at Sieur de Monts Spring, as were log guardrails, road and trail signs, gates, and most of the plantings by Beatrix Farrand along the carriage roads. More than 170 homes of year-round residents and sixty-seven summer cottages were destroyed, among them Mrs. Potter Palmer's "Hare Forest" and Richard Hales' "Schooner Head." The fire was of such intensity that it smoldered until January 1948.

Both the carriage roads and motor roads were invaluable in the firefighting effort, serving as firebreaks and access points. Two clean up crews, one of which was funded by Rockefeller, salvaged timber, burned slash, and installed soil erosion measures along roads and throughout areas around visitor facilities.[198] Rockefeller also sponsored some of the reforestation efforts in the park (Figure 1.48).

CONSTRUCTION OF DAY MOUNTAIN ROAD EXTENSION, 1951
(see Period Plans, Map #12)

The first of the three segments to be built after Word War II completing the motor road system was the Day Mountain Road Extension. This short route, which was made possible by Rockefeller's ongoing philanthropy, eliminated use of local roads, providing a direct connection between Day Mountain Road and Jordan Pond/Eagle Lake Road, and relocated the intersection of these motor roads with Stanley Brook Road to within park boundaries (Figure 1.49).

Contract funding for the project, which was completed in 1951 by the Bureau of Public Roads, amounted to $31,000.[199] Like the Day Mountain Road segment, this Extension featured a 30-foot cross-section with a 20-foot traveled way, 2-foot shoulders in cut, and 6-foot shoulders in fill. The project made necessary the relocation of portions of local roads in the vicinity, removal of the spur and timber trestle built in 1941, construction of a box culvert for Stanley Brook, and several runs of pipe underdrain.[200] In 1955, some of the shoulder areas were reconditioned with a 1/3 topsoil to 2/3 gravel mixture and a modern plant-mixed, hot-asphalt bituminous concrete surface treatment was applied.[201]

CONSTRUCTION OF PARADISE HILL ROAD BRIDGES AND ACCESS ROADS, 1950-1952
(see Period Plans, Map #13)

As noted earlier, the three bridges along Paradise Hill Road were planned and designed by the Burea of Pubic Road in the mid-1940s, but it was not until well after the end of World War II that money was appropriated for their construction. The project was included in the Department of Interior's 1950 roads and trails appropriation, and work began that year. The bridges were completed in 1952, and the approximate contract funds for this project were $152,000 (Figure 1.50).[202]

In November 1955, a new access road was completed connecting Paradise Hill Road with New Eagle Lake Road (Figure 1.51). At this intersection, the motor road was widened and medians were added to accommodate new turning lanes onto West Street.[203]

CONSTRUCTION OF BUREAU OF PUBLIC ROADS PROJECT 4A2, 1956-1958
(see Period Plans, Map #14)

As early as 1938, Rockefeller had walked the centerline of this route with Leo Grossman, and survey work proceeded intermittently up until 1942 when the Bureau of Public Roads office in Bar Harbor was closed because of World War II.[204] Alternatives for this segment were also illustrated in the 1941 Master Plan. During the intervening years between choosing and surveying the route many refinements were made, but the basic design decisions remained in force through the project's completion. Much of this changed, though, in 1955 when Schooner Head Road resident Mrs. Potter Palmer deeded the portion of her property to the Federal Government. This gift allowed the park to connect the Kebo Mountain Road Extension and Champlain Mountain Road on park property, and represented the last segment of the Motor Road System. Her gift to the park came after the devastation of the 1947 fire, which destroyed her home, and shortly before her death.[205]

Bureau of Public Roads Project 4A2 was a "Mission 66" project. Mission 66 was a ten-year program of park development designed to help the national park system accommodate the enormous increase in visitation after the war. The shear volume of projects oftentimes led to a lack of oversight on the part of the National Park Service, and many of the Mission 66 projects have been criticized for not keeping to the high standards and rustic traditions of the pre-war National Park Service. This cannot be said of this final segment of Acadia's motor road system as there was a remarkable consistency in the use of features in the Rustic Design style. This included the use of rectilinear quarried blocks for the guardwalls, hand-laid rock embankments, stone headwalls and inlet structures, and especially the large amount of mortared rubble waterways. Project drawings included drainage structure details developed by the Public Roads Administration in 1946-1947.[206] Such design consistency can probably be attributed to George O'Neil, the Bureau's resident engineer for the project. O'Neil had earlier worked with Leo Grossman before the war and was well familiar with the high standards established by Rockefeller with which the previous motor road segments were designed and constructed.

Clearing work on Bureau of Public Roads Project 4A2 began in October 1956, and drilling and blasting of ledge rock and establishment of the rough grade continued in 1957. The project was completed for $521,225 in August 1958 except for mulching of the shoulders and minor cleanup. The cross-section of the motor road was 31 feet with a 20-foot traveled way, 3-foot shoulders in cut, and 6-foot shoulders in fill, and consistent with Bureau of Public Roads work elsewhere in the park, the curves along the road were widened and superelevated and designed with spiral transitions.[207] There were some firsts for this road segment, including the use of precast concrete curbing and rubble medians at some of the pullouts and developed areas. The project also included a paved pullout called Champlain Mountain Overlook and a pullout/parking lot at the Precipice Trailhead (Figure 1.52). Like the other segments of the Motor Road System by this time, this motor road was paved with a plant-mixed, hot-asphalt bituminous concrete as a surface treatment.

This project does not benefit from Engineer Grossman's penchant for detail in the "Final Construction Reports" or the high quality black and white photography which accompanied them. This report of a later era offers:

> ...All phases of the work were performed using standard construction practices and procedures. There were no innovations in construction methods and no unusual conditions or circumstances were encountered on the project. It is noted that the greater part of excavation was in solid ledge, principally granite...

THE COMPLETED MOTOR ROAD SYSTEM

Rockefeller spent less time on Mount Desert Island during his later years, his advanced age limiting his service as the informal director of quality control as had been his practice on earlier segments. The completion of Acadia National Park's Motor Road System was an undertaking which occupied well over three decades. The missing portions of the motor road were completed in time for Rockefeller, nearing the end of his life, to realize the fruition of his goal. His vision had been challenged many times along the way, which he came to accept. Writing to a friend in 1931, soon after the comprehensive plan was made public:

> The people who are opposing the road program are contentious, high-minded people who believe they are rendering the community a real service. They are as much entitled to their view as are those on the other side, and should be treated with the same neighborly courtesy and respect.[208]

In February 1955, Mr. Rockefeller responded to the birthday wishes of his old friend Horace M. Albright, and reflected on a life filled with good works and friendship:

> Your letter on congratulations and good wishes from Mrs. Albright and yourself on my birthday, was one of the most beautiful I received and I thank you for it from my heart. What a wonderful friend you have been to me over these many years, what interesting things we have done together and what happiness we have had in doing them.
>
> I have been richly blessed throughout my life. To few men have come such opportunities as have come to me. With them have come responsibilities, great and varied. These I could not have carried with any degree of success had it not been for a small group of able, high-minded, public-spirited men like yourself with whom I have been fortunate in being able to surround myself.
>
> When someone once asked my father to what he attributed his success, he said: "To my associates." In even larger measure has that been true in my life. No man ever had a finer, wiser, or more loyal associates than I have had. Without them I could have accomplished little. To have worked with them has been on of the high privileges of my life.
>
> Mrs. Rockefeller and I are greatly enjoying our stay here and are profiting by it in every way. With renewed thanks for your beautiful letter and above all for your friendship...[209]

Mr. Rockefeller died at the age of eighty-seven on May 11, 1960.

MANAGING THE MOTOR ROAD SYSTEM, POST-1958

PROJECTS IN DEVELOPED AREAS

The Mission 66 programs at Acadia National Park focused on developed areas by adding restrooms, improving access, and upgrading utilities. Projects in areas associated with the historic motor road system included the conversion of the Bear Brook campground into a picnic area (1958); construction of a new concession building and rerouting of some trails at the Cadillac Mountain summit (1960, 1983); improved public access and updated swimming facilities at Sand Beach (1961); construction of the Wild Gardens of Acadia at Sieur de Monts Spring (1961); and construction of restrooms at Bear Brook and Fabbri (1962).

In 1964, Frazer Point, off of Schoodic Loop Road, was developed as a picnic area. An access road from the motor road and a parking lot were built at this time, and recently restrooms and a pumphouse were constructed. When the motor road was built in 1933-1935, this area was conceived as a boat landing for National Park Service use and not as a developed area, possibly because at the time there was a lobster pound operation nearby. It later closed in the 1950s. The footings for the current pier may date to that time.[210] In 1967, the Hulls Cove visitor center was constructed, along with a large parking area and a spur road leading to Paradise Hill Road.

There have been numerous post-Mission 66 improvements closely related to the historic motor road system. These include the following: construction of the Fabbri picnic area in the 1980s; construction of a new Jordan Pond House in 1982 (the original structure burned in 1979); redesign of the parking lot, trails, concourse; construction of restrooms at Thunder Hole in the late 1980s and in 1997; new buildings at the Entrance Fee Station (2000); and most recently a new accessible walkway at the historic Thunder Hole ranger station which is now a concessions-operated store and information center.

MOTOR ROAD REALIGNMENTS

The changes to the historic motor road system since the end of the historic period in 1958 can be understood as responses to the steady increases in vehicular traffic, and arguably the most significant was the redesign of Jordan Pond/Eagle Lake Road. Various aspects of this project had materialized previously in 1935 and 1941, but it was a planning effort from 1954-1955 that set the stage for the eventual reconstruction with standards and details that were consistent with the later constructed segments of the historic motor road system. At that time, it was proposed to widen the motor road to 20 feet, realign the S-curve at Jordan Pond and build additional parking, construct new pullouts along the motor road, and realign the road at Bubble Pond.[211]

Rockefeller was taken aback somewhat by these proposals, especially the part where the curve at Bubble Pond would be shifted 100 feet out into the water. This motor road was, of course, the first one he built at Acadia:

> "To let people in motors see Bubble Pond from its natural edge without disturbing its pristine beauty seemed to me to justify a curve which, of course, the modern road builders cannot accept. Whether the gain in safety and accessibility is worth the sacrifice of beauty, I hope will be decided by you with your love of the beautiful rather than by the most skillful road engineer – nor shall I have any reservations about the wisdom of your decision."[212]

When the National Park Service and the Bureau of Public Roads could not agree on the alignment details and design standards, most of the plan was dropped except for repaving and a redesign of the intersection at Cadillac Mountain Road.[213] However, the project was revived again in 1962-1964, during which time the road was closed in order to reconstruct the road. Work involved widening the traveled way to 20 feet with 5-foot shoulders in fill and 2-foot shoulders in cut, widening and superelevating the curves, and adding spiral transition sections. At the Jordan Pond House, the S-curve was broadened and realigned, requiring the removal of several dormitories and outbuildings that predated the park. At

Bubble Pond, the previous proposal was revised so that the tight radius curve passing alongside the shoreline of the pond was eliminated and shifted well away from the water. This realignment abandoned the portion of the motor road passing under the Bubble Pond Bridge that carried the Bubble Pond Carriage Road (Figure 1.53). Additional pullouts were also created along the motor road, along with expanded parking at the Jordan Pond House and Bubble Pond. With a new design speed of 35 mph, the project was intended to "bring up to acceptable standard of construction the last portion of the loop road..."[214] The project cost $486,000 to complete.[215]

A year later, on Paradise Hill Road, a second grade separation feature on the historic motor road system was developed. The grade separation was built at the first panoramic overlook encountered by visitors after they entered the park. Congestion here had become a major problem with southbound motorists crossing northbound traffic to park at the existing overlook.[216] The new road for southbound traffic was built uphill from the original motor road, which was converted to northbound traffic. Both levels included a paved pullout, walkways, and wayside signs.

MOTOR ROAD ADDITIONS, ALTERATIONS, AND MAINTENANCE

All the roads have been resurfaced at least once since 1958. In 1987, the parking areas at Cadillac Mountain, Bubble Pond, Jordan Pond, and the Precipice were resurfaced, striped, and in some cases extended.[217] As a safety measure, centerline striping has been added to all of the motor roads, and fog lines are present on Cadillac Mountain Road. The park also recently completed one of the most daunting tasks, the rehabilitation of all of the bridges associated with the historic motor road system.

The treatment of some of the individual features associated with the historic motor road system, such as waterways, shoulders, curbs, walkways, gates, signs, and fences, also has changed since 1958. Soon after Rockefeller's death in 1960, sections of bituminous waterways were installed in some of the roadside ditches, especially along Cadillac Mountain Road. Several sections of the vegetated shoulder were replaced with bituminous asphalt or loose rubble in 1988, again mostly in the Jordan Pond/Eagle Lake Road and Cadillac Mountain Road vicinity.[218] Other changes have included the installation of sawn-top granite curbing around some pullouts, sidewalks, and medians; construction of several concrete walkways; installation of galvanized steel pipe access gates; the use of contemporary directional and regulatory signs, metal entrance signs, and wayside signs; and the installation of post and rail fencing along some stretches of the Otter Cove Causeway and Blackwood Road segment.

Perhaps the most noticeable feature added to the historic motor road system since the historic period is the presence of the parking management stones, which in most cases are rounded boulders smaller in size than the historic guardwall stones. First introduced in the 1970s, the park has installed the stones to prohibit parking on the vegetated shoulders, especially at the popular developed areas such as the Jordan Pond House, Sand Beach, and Thunder Hole. Much of the park loop road, from Kebo Mountain Road to Day Mountain Road, was converted to one-way traffic in the 1980s. Although automobiles can utilize the right lane to park, traffic and parking are among the most challenging issues on the historic motor road system today.

[1] ACAD Staff comments on 95% Review Draft, compiled by Rebecca Cole-Will, Cultural Resources Specialist, June 8, 2007; National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 7: 13.
[2] ACAD Staff comments on 95% Review Draft, compiled by Rebecca Cole-Will, Cultural Resources Specialist, June 8, 2007.
[3] Neil Maher, "Historic American Engineering Record, Acadia Motor Roads, Acadia National Park, HAER No. ME-11," U.S. Department of the Interior, Historic American Engineering Record, 1995: 8. (hereafter HAER ME-11)
[4] ACAD Staff comments on 95% Review Draft, compiled by Rebecca Cole-Will, Cultural Resources Specialist, June 8, 2007.
[5] This road is likely the present-day Schooner Head Road. HAER ME-11: 9 (from Tom St. Germaine and Jay Saunders, *Trails of History: The Story of Mt. Desert Island's Paths from Norumbega to Acadia*, Bar Harbor, Maine: Parkman Publications, 1993: 10).
[6] HAER ME-11: 10 (from Harlan D. Unrau, *A Short History of Thompson Island and Historical Assessment of Cultural Resources on Thompson Island, Acadia National Park, Maine*, Denver, Colorado: National Park Service, Denver Service Center, 1979: 9).
[7] HAER ME-11: 9 (quoted in Tom St. Germaine and Jay Saunders, *Trails of History: The Story of Mt. Desert Island's Paths from Norumbega to Acadia*, Bar Harbor, Maine: Parkman Publications, 1993: 24).
[8] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 4.
[9] Richard A. Quin, "Historic American Engineering Record, Cadillac Mountain Road, Acadia National Park, HAER No. ME-58," U.S. Department of the Interior, Historic American Engineering Record, Draft 1995: 3 (from Richard Walden Hale, Jr, *The Story of Bar Harbor: An Informal History Recording One Hundred Fifty Years in the Life of a Community,* New York: Ives Washburn, Incorporated, 1949: 124). (hereafter HAER ME-58)
[10] HAER ME-58: 3 (from Tom St. Germaine and Jay Saunders, *Trails of History: The Story of Mt. Desert Island's Paths from Norumbega to Acadia*, Bar Harbor, Maine: Parkman Publications, 1993: 35-36).
[11] Tourists had travel from Bar Harbor to the west side of Eagle Lake and then take a boat to the base of the railroad. An electric railway to connect to Bar Harbor and other towns was proposed, but was opposed by summer residents. HAER ME-58: 3-5 (from Richard Walden Hale, Jr., *The Story of Bar Harbor: An Informal History Recording One Hundred Fifty Years in the Life of a Community,* New York: Ives Washburn, Incorporated, 1949: 156-159; Sargent F. Collier, *Mt. Desert Island and Acadia National Park: An Informal History*, Camden, Maine: Down East Books, 1978: 46; Frank J. Matter, "The Train Up Cadillac Mountain," *Acadia Weekly*, 28 August 1994, 9; and Tom St. Germaine and Jay Saunders, *Trails of History:The Story of Mt. Desert Island's Paths from Norumbega to Acadia*, Bar Harbor, Maine: Parkman Publications, 1993: 35-36.

[12] Ann Rockefeller Roberts, *Mr. Rockefeller's Roads: The Untold Story of Acadia's Carriage Roads & Their Creator*, Camden, Maine: Down East Books, 1990: 36; HAER ME-11: 11 (from Samuel Eliot Morison, *The History of Mount Desert Island*, Boston: Little Brown and Company, 1960: 44; Tom St. Germaine and Jay Saunders, *Trails of History:The Story of Mt. Desert Island's Paths from Norumbega to Acadia*, Bar Harbor, Maine: Parkman Publications, 1993: 36).

[13] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 5.

[14] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 19.

[15] The Moore Road and the old roadbed now maintained as the Alder Trail provided access to these areas. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 17-18.

[16] HAER ME-11: 11-12.

[17] Catherine Evans, "Evaluation of Eligibility of the Historic Motor Road System, Acadia National Park, for the National Register of Historic Places," Brookline, Massachusetts: National Park Service, Olmsted Center for Landscape Preservation, 1993: 3; George Dorr to Horace Albright, 4 May 1931, Rockefeller Family Archives, Homes, box 127, folder 124.

[18] HAER ME-11: 12 (from "A Grand Boheme,"*Bar Harbor (ME) Record*, 25 October 1888.)

[19] HAER ME-11: 12.

[20] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 19 (from Warren H. Manning, "The History of Village Improvement in the United States," *Craftsman*, No. 5, February 1904: 430-431).

[21] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 20-21.

[22] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 9.

[23] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 22.

[24] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 22-23.

[25] HAER ME-11: 17 (from Richard Warren Hale, *The Story of Bar Harbor: An Informal History Recording One Hundred and Fifty Years in the Life of a Community*, New York: Ives Washburn, Inc., 1949: 200).

[26] HAER ME-11: 12-14.

[27] HAER ME-11: 12 (from quoted passage in Judith Goldstein, *Crossing Lines: Histories of the Jews and Gentiles in Three Communities*, New York: William Morrow and Company, Inc., 1992: 181).

[28] HAER ME-11: 13 (from "Opponents of Automobile Bill, Circulating Scurrilous Letter Reflecting on Bar Harbor Summer People," *Bangor (ME) Daily Commercial*, 27 January 1909).

[29] HAER ME-11: 13 (from Richard Savage, "The Bar Harbor Auto War," *Downeast Magazine*, no date given).

[30] HAER ME-11: 14 (from undated and untitled article by *Bar Harbor Times* editor Albion Sherman, folder 1079, box 109, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).

[31] HAER ME-11: 17 (from John D. Rockefeller to Charles W. Eliot, 26 February 1915, folder 1047, box 109, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).

[32] HAER ME-11: 15 (from John D. Rockefeller to Charles K. Savage, 17 May 1955, folder 1078, box 109, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[33] HAER ME-11: 16.
[34] Ann Rockefeller Roberts, *Mr. Rockefeller's Roads: The Untold Story of Acadia's Carriage Roads & Their Creator*, Camden, Maine: Down East Books, 1990: 87.
[35] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 29 (from Jaylene B. Roths, "Charles W. Eliot and John Gilley: Good Hope for Our Island," *The History Journal of Mount Desert Island*, June 1998: 19).
[36] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 29.
[37] The transfer to the Trustees was finalized in 1927. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 18-19.
[38] Arno B. Cammerer, "Report of Inspection Trip: Lafayette National Park, Maine," 10 June 1922, Record Group 79, National Park Service Central Classified Files, National Archives, Washington, D. C.
[39] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 29 (from Jaylene B. Roths, "Charles W. Eliot and John Gilley: Good Hope for Our Island," *The History Journal of Mount Desert Island*, June 1998: 19).
[40] HAER ME-11: 22-23 (from Roderick Nash, *Wilderness and the American Mind*, New Haven: Yale University Press, 1967: 129, 138, 161).
[41] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 76 (from Sellars, 106, Sellars cites a 1936 article in *Planning and Civic Annual*).
[42] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 75.
[43] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 75 (from National Park Service, *1925 Annual Report*, 1 as cited by Susan Begley and Ethan Carr, "National Historic Landmark Nomination for Going to the Sun Road, Glacier National Park," 14).
[44] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 76.
[45] HAER ME-11: 20 (from Russ and Pam Butcher, "Carriage Roads and Bridges of Acadia National Park," *Downeast Magazine*, August 1972: 54).
[46] HARE ME-11: 17-18 (from Frederick Law Olmsted Jr. to Rockefeller, 11 July 1930, Folder 127, Box 125, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[47] John D. Rockefeller, Jr. to George Dorr, 29 September 1922, Rockefeller Family Archives, Homes, box 125, folder 100, Rockefeller Archive Center, North Tarrytown, New York.
[48] Arno B. Cammerer, "Report of Inspection Trip: Lafayette National Park, Maine," 10 June 1922, Record Group 79, National Park Service Central Classified Files, National Archives, Washington, D. C.
[49] Arno B. Cammerer, "Report of Inspection Trip: Lafayette National Park, Maine," 10 June 1922, Record Group 79, National Park Service Central Classified Files, National Archives, Washington, D. C.
[50] John D. Rockefeller, Jr. to George Dorr, 29 September 1922, Rockefeller Family Archives, Homes, box 125, folder 100, Rockefeller Archive Center, North Tarrytown, New York.
[51] HAER ME-58: 9.

[52] HAER ME-11: 20 (from Arno B Cammerer, Assistant Director, National Park Service, to Dorr, 5 January 1924, in "Papers Relating to Road Hearing Before Secretary Work, March 26, 1924," Acadia National Park Library).
[53] HAER ME-11: 21 (from Cammerer to Stephen Mather, Director, National Park Service, 2 July 1924, National Park Service, in "Papers Relating to Road Hearing Before Secretary Work, March 26, 1924," Acadia National Park Library Library).
[54] HAER ME-11: 21 (from Herbert Gleason, "Distinguished Specialists Overcome Obstacles in Park Road Case," *Boston Evening Transcript*, 9 August 1924).
[55] HAER ME-11: 22 (from Joseph Allen, "Scarring Mount Desert," *New York Herald Tribune*, editorial dated 10 January 1925, folder 1133, box 113, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[56] HAER ME-11: 23 (from Work to Dorr, 25 July 1924, in "Papers Relating to the Road Hearing Before Secretary Work, March 26, 1924," Acadia National Park Library.
[57] "Sec'y Work Inspects Park at Bar Harbor," *Portland Evening Express*, 12 July 1924, newsclipping: National Park Service Central Classified Files, Record Group 79, National Archives, Washington, D. C.
[58] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Repair and Bituminous Surface Treatment of Bubble Pond and Kebo Mountain Roads, Project 3A3-6A4," Bar Harbor, Maine, 1940.
[59] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Surfacing and Improving Bubble Pond Road, Project 3A1, Acadia National Park, Hancock County, Maine," 1935.
[60] U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Plans for Proposed Grading, Draining, Surfacing, and Other Work, Project 1A7-4A3-7A2-33A1," Bar Harbor, Maine, November 1955; Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Grading, Drainage, Surface Treatment Type 1-1 Hot Asphalt Concrete Pavement and Other Work, Project 1A7-4A3-7A2-33A1," Bar Harbor, Maine, 5 February 1958.
[61] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 63.
[62] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 62.
[63] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 8.
[64] In topics related to the motor roads, the master plan reported on the great benefit of the carriage roads, even only if for fire protection; proposed continuation of the teahouse at Jordan Pond; and recommended that a new teahouse on Cadillac Mountain be "low, inconspicuous, and well designed." The plan did not address the creation of an identifiable park entrance, likely because of the park's noncontiguous acreage and the interweaving of park and local roads. The plan also advised against building hotel facilities in the park as they were available in the surrounding towns, but it did address the need to provide more public campground areas, approving a campground near Bear Brook. A year earlier, Rockefeller began developing a public campground at Blackwoods on land that he owned. National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 62-64, 73 (quote from Cammerer and Vint, "Memorandum on a Development Plan for Lafayette National Park," 1).

[65] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 31,63 (from Cammerer and Vint, "Memorandum on a Development Plan for Lafayette National Park," 26, 31.)

[66] HAER ME-11: 24 (from Rockefeller to Cammerer, 7 September 1926, quoted in Ann Rockefeller Roberts, *Mr. Rockefeller's Roads: The Untold Story of Acadia's Carriage Roads & Their Creator*, Camden, Maine: Down East Books, 1990: 98).

[67] HAER ME11-24 (from Charles W. Eliot, 2nd, "The Future of Mount Desert Island: A Report to the Planning Committee, Bar Harbor Village Improvement Association," Bar Harbor, Maine: Bar Harbor Village Improvement Association, 1928:25-26).

[68] S.F. Ralston to John D. Rockefeller, Jr., 27 September 1929, Rockefeller Family Archives, Homes, box 127, folder 124.

[69] National Register Registration Form for "Acadia National Park Historic Motor Road System," Hancock County, Maine, draft, 1 March 1999, Section 7: 4-5. Copy at Olmsted Center files.

[70] HAER ME-58: 8 (from John A. Peters, U.S. House of Representative, to Stephen I. (sic) Mather, Director, National Park Service, 9 April 1921; George B. Dorr, Superintendent, Lafayette National Park, to Arno B. Cammerer, Assistant Director, National Park Service, 14 June 1922, NARA, Record Group 79, Central Classified Files, Arno B. Cammerer Papers).

[71] HAER ME-58: 8-9 (from Cammerer, "Report of Inspection Trip to Lafayette National Park, Maine," 10 June 1922, NARA, Record Group 79, Central Classified Files).

[72] HAER ME-58: 9 (from Cammerer to Dorr, 26 July 1922, "Papers Relating to Road Hearing Before Secretary Work, March 16, 1924," Acadia National Park, Carriage Roads files).

[73] HAER ME-58: 12 (from Mather, Stephen T. to Thomas H. MacDonald, Chief, Bureau of Public Roads, 12 April 1928, NARA, Record Group 79, Central Classified Files; Waldron Bates, Edward L. Rand and Herbert Jaques, "Path Map of the Eastern Part of Mount Desert Island, Maine," Boston: Geo H. Walker and Co., 1928).

[74] HAER ME-58: 12-13 (from Grossman,"Unusual Engineering and Construction Features," 2-3; Idem, "Cadillac Mountain Project, Acadia National Park, Mount Desert Island, Maine, 19 April 19 1928- 31 July 1929, Summary," Acadia National Park, historical collection).

[75] Leo Grossman, Bureau of Public Roads Resident Engineer 1929-1942, Interview with Eliot Foulds, 21 July 1993, Bethesda, Maryland.

[76] U.S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Cadillac Mountain Grading Project, Project 1A," Bar Harbor, Maine, 1930; HAER ME-58: 17-18 (from Grossman, Project Diary, 30 December 1930 to 16 May 1931); U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Cadillac Mountain Project, Acadia National Park, Maine," Project 1, 1931.

[77] U.S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Cadillac Mountain Grading Project, Project 1A," Bar Harbor, Maine, 1930.

[78] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Cadillac Mountain Project, Acadia National Park, Maine," Project 1, 1931.

[79] HAER ME-58: 12-13; Leo Grossman, "Unusual Engineering and Construction Features, Acadia National Park, Maine," typed manuscript, 1989: 2-3.

[80] HAER ME-58: 18 (from"3000 Visitors to Cadillac Sunday," *Bar Harbor Times*, 14 October 1931).

[81] HAER ME-58: 15 (from Idem, "Memorandum for the Director No. 1: Cleanup on the Cadillac Mountain Road," 26 September 1931, NARA, Record Group 79, Central Classified Files).

[82] HAER ME-58: 15-16 (from Idem, "Memorandum for the Director No. 2: Special Widenings for the Cadillac Mountain Road," 26 September 1931, NARA, Record Group 79, Central Classified Files).
[83] HAER ME-58: 20 (from "Notables of State and Nation Attend Opening of Cadillac Mountain Road," *Portland Sunday Telegram*, 24 July 1932).
[84] HAER ME-58: 16 (from Idem, "Memorandum for the Director No. 3: Parking Area on the Summit of Cadillac Mountain" and "Memorandum for the Director No. 4: Path on the Summit of Cadillac Mountain," 26 September 1931, NARA, Record Group 79, Central Classified Files).
[85] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Parking Area and Improvements, Cadillac Mountain Project, Acadia National Park, Hancock County, Maine," Project 1A, 1931.
[86] U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Plans for Proposed Grading, Draining, Surfacing, and Other Work, Project 1A7-4A3-7A2-33A1," Bar Harbor, Maine, November 1955; Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Grading, Drainage, Surface Treatment Type 1-1 Hot Asphalt Concrete Pavement and Other Work, Project 1A7-4A3-7A2-33A1," Bar Harbor, Maine, 5 February 1958.
[87] Joseph W. Ernst, ed., *Worthwhile Places: Correspondence of John D.Rockefeller, Jr. and Horace M. Albright*, North Tarrytown, New York: Rockefeller Archive Center, 1991: 120.
[88] John D. Rockefeller, Jr. to Walter Kidde, 22 August 1929, Rockefeller Family Archives, Homes, box 125, folder 95.
[89] HAER ME-11: 26.
[90] HAER ME-11: 27 (from John D. Rockefeller, Jr. to Henry Hubbard, Olmsted Brothers, 19 September 1929, Record Group 9138, Manuscripts Division, Library of Congress).
[91] John D. Rockefeller, Jr. to Henry Vincent Hubbard, 18 September 1929, Olmsted Papers.
[92] Charles W. Eliot 2nd, to Frederick Law Olmsted, Jr., 23 November 1929, Olmsted Papers.
[93] Frederick Law Olmsted, Jr. to John D. Rockefeller, Jr., 11 July 1930, Rockefeller Family Archives, Homes, box 124, folder 137.
[94] HAER ME-11: 29.
[95] Joseph W. Ernst, ed., *Worthwhile Places: Correspondence of John D.Rockefeller, Jr. and Horace M. Albright*, North Tarrytown, New York: Rockefeller Archive Center, 1991: 110.
[96] Albion F. Sherman to John D. Rockefeller, Jr., 22 January 1931, Rockefeller Family Archives, Homes, box 122, folder 65.
[97] Raymond B. Fosdick to John D. Rockefeller, Jr., Rockefeller Family Archives, Homes, box 121, folder 63.
[98] HAER ME-11: 28-29 (from John D. Rockefeller to Arno Cammerer, 7 Sept 1933, box 118, folder 1195, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[99] Richard W. Hale to Secretary of the Interior, 10 November 1930, Record Group 79, National Park Service, Central Classified Files.
[100] HAER ME-11: 29 (from Richard W. Hale to Secretary Work, 10 November 1930, Central Classified Files, Record Group 79, National Park Service, NARA).
[101] John D. Rockefeller, Jr. to Director, National Park Service, 19 January 1931, Rockefeller Family Archives, Homes, box 128, folder 137.
[102] HAER ME-11: 29-30 (from "Rockefeller Moves to Withdrawal Offer to Build Park Motor Road," *Bar Harbor Times*, 28 January 1931).
[103] "Bar Harbor Roads," *Boston Herald*, 30 January 1931, newsclipping, Olmsted Papers.
[104] John D. Rockefeller, Jr. to Dave H. Morris, 27 July 1931, Rockefeller Family Archives, Homes, box 128, folder 137.

[105] Arthur C. Train, et. al., to John D. Rockefeller, Jr., 1 September 1931, Rockefeller Family Archives, Homes, box 128, folder 133.
[106] HAER ME-11: 30 (from A. L. Getchell to Secretary of the Interior Ray Lyman Wilbur, 19 February 1961, box 113, folder 1138, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[107] HAER ME-11:30 (from "Bar Harbor Men Favor Building Park Road," editorial by Mr. A,L. Higgins, *Bar Harbor Times,* 17 December 1930).
[108] HAER ME-11: 31 (from Serenus Rodick to Charles Heydt, 3 March 1931, folder 1202, box 119, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[109] Soon after construction, the radio station became the premier transatlantic receiving center for Navy during WWI. In the 1920s, it provided direction-finder services and meteorological reports, in addition to receiving radio communications from Europe. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 20 (from Louis Berger and Associates, "Cultural Resources Survey Naval Security Group Activity, Winter Harbor, Maine, manuscript submitted September 1999).
[110] HAER ME-11: 37 (from Sargent Collier, *Mt. Desert Island and Acadia National Park: An Informal History*, Camden, Maine: Down East Books, 1978: 128).
[111] Raymond L. Wilbur, Secretary of the Interior, to John D. Rockefeller, Jr., 2 February 1933, Rockefeller Family Archives, Homes, no box.
[112] John D. Rockefeller, Jr. to Raymond L. Wilbur, 6 February 1933, Rockefeller Family Archives, Homes, no box.
[113] HAER ME-11: 35.
[114] Joseph W. Ernst, ed., *Worthwhile Places: Correspondence of John D. Rockefeller, Jr. and Horace M. Albright,* North Tarrytown, New York: Rockefeller Archive Center, 1991: 13.
[115] Other programs, such as the Federal Emergency Relief Act, made the National Park Service responsible for turning sub-marginal lands vacated by agricultural families into recreation areas, and as a result the park acquired around 8000 acres on the west side of Mount Desert Island. National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 69.
[116] HAER ME-11: 36.
[117] John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 3 May 1933, Olmsted Papers.
[118] Walters Hill to John D. Rockefeller, Jr., July 1933, Olmsted Papers.
[119] Memorandum from Olmsted Bros. Landscape Architects to John D. Rockefeller, Jr., 11 April 1933, Olmsted Papers.
[120] John D. Rockefeller, Jr. to Walters Hill, 26 June 1933, Rockefeller Family Archives, Homes, box 127, folder 123.
[121] Intra-Office Trip Report, 11-12 July 1933, Olmsted Papers.
[122] U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Sand Beach Parking Area, Plans for Proposed Grading, Draining and Surfacing, Project 43A1, Hancock County, Maine," Bar Harbor, Maine, February 1953.
[123] Intra-Office Trip Report, 11-12 July 1933, Olmsted Papers.
[124] Margaret Coffin Brown, *Pathmakers: Cultural Landscape Report for the Historic Hiking Trail System of Mount Desert Island. History, Acadia National Park, History, Existing Conditions, and Analysis*, Boston, Massachusetts: National Park Service, Olmsted Center for Landscape Preservation, 2006: 217.
[125] HAER ME-11: 36 (from S. F. Ralston to John D. Rockefeller, Jr., 26 November 1933, box 119, folder 1201, Record Group 2, OMR, Rockefeller Family Archives, Rockefeller Archive Center, North Tarrytown, New York).
[126] John D. Rockefeller, Jr. to George Dorr, 22 January 1934, Rockefeller Family Archives, Homes, box 127, folder 124.
[127] John D. Rockefeller, Jr. to George Dorr, 9 August 1934, Rockefeller Family Archives, Homes, box 127, folder 123.

[128] Arno Cammerer to John D. Rockefeller, Jr., 28 August 1934, Rockefeller Family Archives, Homes, box 127, folder 123.
[129] U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Sand Beach Parking Area, Plans for Proposed Grading, Draining and Surfacing, Project 43A1, Hancock County, Maine," Bar Harbor, Maine, February 1953.
[130] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.
[131] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Schoodic Peninsula Project, Acadia National Park, Hancock County, Maine," Project 2, 1933; "United States Department of the Interior, National Park Service, Plans for Surfacing Certain Roads on Schoodic Peninsula and Big Moose Island, Project 2A4, Acadia National Park, Hancock County, Maine," 1934.
[132] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Schoodic Peninsula Project, Acadia National Park, Hancock County, Maine," Project 2, 1933; "United States Department of the Interior, National Park Service, Acadia National Park, Plans for Proposed Project 2A3, Bridge over Frazer Creek, Hancock County, Maine," Arlington, Virginia, June 1957; and Federal Works Agency, Public Roads Administration, "Acadia National Park, Maine, Proposed Bridge Over Frazer's Creek," Project 2A5, June 1948.
[133] Notes written by Mr. Taylor on conversations with Superintendent Dorr in regard to a Six Year Development Plan for the Park, September 15, 1932.
[134] National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 24 (from NARA, College Park, Maryland, Record Group 79, box 804, folder 611).
[135] Leo Grossman, "Unusual Engineering and Construction Features, Acadia National Park, Maine," typed manuscript, 1989: 5.
[136] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, Office of National Parks, Buildings, and Reservations, Plans for Proposed Big Moose Island: Wonsqueak Harbor Project, Acadia National Park, Hancock County, Maine," Project 5A1, 1934. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 7: 7.
[137] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, Office of National Parks, Buildings, and Reservations, Plans for Proposed Big Moose Island Extension and Parking Area, Acadia National Park, Hancock County, Maine," Project 2A2, 1933-1934; "United States Department of the Interior, National Park Service, Plans for Surfacing Certain Roads on Schoodic Peninsula and Big Moose Island, Project 2A4, Acadia National Park, Hancock County, Maine," 1934.
[138] Near the end of the New Deal period, some projects were completed with WPA funds, which provided work for skilled labor. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 24.
[139] In the summer of 1936, a Civilian Conservation Corps side camp was eventually formed from Camp SP-1 in Ellsworth, a camp that was primarily set up to work at state parks. Comprised of fifty enrollees, the side camp consisted of twelve buildings and structures north of radio station, in a cleared field. Some structures were built from surplus lumber from old Otter Cliffs station. Structures included a mess hall, barracks, latrines, shower room, recreation hall, kitchen, paved road, two wells, and excellent drainage. The camp operated until the fall of 1937, and in 1941 the National Park Service granted the Navy permission to remove the camp. Some structures were removed by the Works Progress Administration. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS #

0700614, Section 8: 24-25 (see CCC camp applications, NARA Waltham, Massachusetts, Record Group 19, Box 4, Folder 24).
[140] 49 Stat. 795 enacted August 24, 1935. Initially the Secretary of Interior reviewed the Navy's plans, but to expedite the process, the responsibility was transferred to the Superintendent of Acadia National Park. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 22 (NARA College Park, MD Record Group 79, Central Classified Files 1933-39, box 805, folder 620).
[141] During World War II, the radio station was expanded and some structures were erected on park lands, such as three rhombic antenna arrays and a boundary fence, both of which required some clearing of trees. In 1947, an additional 152 acres was transferred to the station, increasing its size to 178 acres. Language in the legislation stipulated that if property became surplus it would revert back to Department of the Interior. During the Cold War, additional administration and housing facilities were built, and the rhombic antenna system was expanded again, covering most of Big Moose Island. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 22-23.
[142] John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 3 June 1932, Olmsted Papers.
[143] John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 3 June 1932, Olmsted Papers.
[144] Frederick Law Olmsted, Jr. to John D. Rockefeller. Jr., 19 August 1932, Olmsted Papers.
[145] Intra-Office Trip Report, 21-26 May 1933, Olmsted Papers.
[146] Frederick Law Olmsted, Jr. to Paul D. Simpson, 22 June 1934, Olmsted Papers.
[147] Intra-Office Trip Report, 21-26 May 1933, Olmsted Papers.
[148] John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 5 August 1936, Olmsted Papers.
[149] See 1941 Master Plan.
[150] Olmsted Brothers, "Miscellaneous: Otter Creek Road, Revisions of Staking 60 to 70: Acadia National Park, Mount Desert Island, Maine," Drawing. No. 9138-105, September 1934.
[151] HAER ME-11: 37 (from John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 11 August 1934, folder 7, Record Group 9138, Manuscripts Division, Library of Congress).
[152] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 32 (quoted from John D. Rockefeller, Jr. to Harold Ickes, 14 March 1935. Letter on file at the William Otis Sawtelle Collections and Research Center, Acadia National Park).
[153] U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Plans for Proposed Grading, Draining, Surfacing, and Other Work, Project 1A7-4A3-7A2-33A1," Bar Harbor, Maine, November 1955; Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Grading, Drainage, Surface Treatment Type 1-1 Hot Asphalt Concrete Pavement and Other Work, Project 1A7-4A3-7A2-33A1," Bar Harbor, Maine, 5 February 1958; and "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.
[154] Hillory A. Tolson to John D. Rockefeller, Jr., 27 June 1935, Olmsted Papers.
[155] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Kebo Mountain Road, Project 6A1, Acadia National Park, Hancock County, Maine," 1936.
[156] U. S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Kebo Mountain Road, Project 6A1," Bar Harbor, Maine, 1938.

[157] Frederick Law Olmsted, Jr. to John D. Rockefeller, Jr., 12-14 May 1936, Olmsted Papers.
[158] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Kebo Mountain Road, Project 6A1, Acadia National Park, Hancock County, Maine." 1936; U. S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Kebo Mountain, Project 6A1," Bar Harbor, Maine, 1938.
[159] U. S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Kebo Mountain Road, Project 6A1," Bar Harbor, Maine, 1938.
[160] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Kebo Mountain Road, Project 6A1, Acadia National Park, Hancock County, Maine," 1936.
[161] Federal Works Agency, Public Roads Administration, "Final Construction Report: Acadia National Park, Repair and Bituminous Surface Treatment, Bubble Pond and Kebo Mountain Roads," 1940.
[162] Federal Works Agency, Public Roads Administration, "Final Construction Report: Acadia National Park, Type I-1 Hot Asphalt Concrete Pavement and Other Work, Project 3A4, 4A4,4A5, 6A6, 10A7, 26A1, 27A1, 43A2," 1 March 1956 .
[163] John D. Rockefeller, Jr. to Harold L. Ickes, 9 September 1936, Rockefeller Family Archives, Homes, no box.
[164] White Engineering to John D. Rockefeller, Jr., "Estimate of Cost: Otter Cove Causeway-Bridge," 1925-1926, Olmsted Papers, Manuscript Division, Library of Congress, Washington, D. C.
[165] Leo Grossman, "Unusual Engineering and Construction Features, Acadia National Park, Maine," typed manuscript, 1989: 3.
[166] John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 24 February 1937, Olmsted Papers.
[167] Frederick Law Olmsted, Jr. to John D. Rockefeller, Jr., 12, 14-15 November 1935.
[168] Project drawings for the bridge at the causeway show the old bridge abutment which was ultimately retained. The bridge opening required a cut into the ledge on the west bank. Within the causeway itself is a concrete core wall located approximately under the road centerline. Leo Grossman, "Unusual Engineering and Construction Features, Acadia National Park, Maine," typed manuscript, 1989: 4; U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Black Woods Road, Project 7A1, Acadia National Park, Hancock County, Maine," 1937.
[169] Memorandum from B. L. Hadley, Superintendent, to Regional Director, Region One, 25 January 1946.
[170] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Plans for Proposed Black Woods Road, Project 7A1, Acadia National Park, Hancock County, Maine," 1937; 1941 Master Plan; and H. Eliot Foulds, *Cultural Landscape Report for Blackwoods and Seawall Campgrounds, Acadia National Park*, Cultural Landscape Publication No. 11, Brookline, Massachusetts: National Park Service, Olmsted Center for Landscape Preservation, 1996: 28 (from Arno Cammerer to Superintendent Hadley, 28 August 1938).
[171] John D. Rockefeller, Jr. to Frederick Law Olmsted, Jr., 15 September 1939, Rockefeller Family Archives, Homes, box 127, folder 126.
[172] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.
[173] John D. Rockefeller, Jr. to Harold L. Ickes, 22 August 1939, Rockefeller Family Archives, Homes, box 122, folder 72.

[174] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Kebo Mountain Extension and Champlain Mountain Road, Project 6A3-8A1," Bar Harbor, Maine, 1940.
[175] Federal Works Agency, Public Roads Administration, "United States Department of the Interior, National Park Service, Acadia National Park, Kebo Mountain Road Extension and Champlain Mountain Road (Ocean Drive), Plans for Proposed Grading, Draining, Surfacing, and Highway Grade Separation, Project 6A3-8A1, Hancock County, Maine," Bar Harbor, Maine, September 1939.
[176] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.
[177] Catherine Evans, "Evaluation of Eligibility of the Historic Motor Road System, Acadia National Park, for the National Register of Historic Places," Brookline, Massachusetts: National Park Service, Olmsted Center for Landscape Preservation, 1993: 4.
[178] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Day Mountain Road, Project 9A1h" handwritten, Bar Harbor, Maine, 1941.
[179] U.S. Department of Agriculture, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Day Mountain Road, Plans for Proposed Grading, Draining, Surfacing, and Structures, Project 9A1, Hancock County, Maine," Bar Harbor, Maine, June 1939.
[180] 1941 Master Plan.
[181] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.
[182] Paul Simpson to John D. Rockefeller, Jr., 18 September 1934, Rockefeller Family Archives, Homes, box 118, folder 122.
[183] John D. Rockefeller, Jr. to Harold L. Ickes, 14 March 1935, Rockefeller Family Archives, Homes, no box.
[184] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Paradise Hill Road, Project 10A1," Bar Harbor, Maine, 1942.
[185] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Paradise Hill Road, Project 10A1," Bar Harbor, Maine, 1942.
[186] HAER ME-11: 41 (from Rockefeller to Cammerer, 20 October 1938, Record Group 2, box 114, folder 1151, OMR, Rockefeller Family Archives, Rockefeller Archives Center, North Tarrytown, New York).
[187] The tenor of correspondence from Rockefeller to the Park Service and the Department of the Interior reflects an urgency which comes from the growing conflict in Europe. During this time, Rockefeller is actively encouraging that the road projects which had been under study for so long, be completed as soon as possible. John D. Rockefeller, Jr. to Arno Cammerer, 2 September 1938, Rockefeller Family Archives, Homes, no box.
[188] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Paradise Hill Road, Project 10A1," Bar Harbor, Maine, 1942.
[189] Federal Works Agency, Public Roads Administration, "United States Department of the Interior, National Park Service, Acadia National Park, Paradise Hill Road, Plans for Grading, Drainage and Surfacing, Project 10A1, Hancock County, Maine," Bar Harbor, Maine, April 1940; 1941 Master Plan.
[190] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.
[191] National Register Multiple Property Documentation Form for "Historic

Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 66-67; Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 302-303.

192 The plan articulated proposals for winter sports and recreation at Bear Brook, Beaver Pond, and Eagle Lake and a museum at Otter Cove. Unexecuted plans on Schoodic called for damming Frazer Creek for use as a lake. 1941 Master Plan; National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 8: 24 (from NARA, College Park, MD, Record Group 79, Entry 6, box 804, folder 611).

193 HAER ME-58: 21-22 (from Federal Works Agency, Public Roads Administration, District No. 9, "Final Construction Report" 1941, Acadia National Park, National Defense Installation, Cadillac Mountain).

194 Between 1944 and 1945, the park did acquire Isle au Haut, Thompson Island, and Marsh Island. Catherine Evans, "Evaluation of Eligibility of the Historic Motor Road System, Acadia National Park, for the National Register of Historic Places," Brookline, Massachusetts: National Park Service, Olmsted Center for Landscape Preservation, 1993: 3.

195 John D. Rockefeller, Jr. to Newton Drury, 13 July 1944, Rockefeller Family Archives, Homes, box 123, folder 75.

196 Newton Drury to John D. Rockefeller, Jr., 17 July 1944, Rockefeller Family Archives, Homes, box 123, folder 75.

197 NPS fee-owned park land today is much larger than in 1947. The total area burned now in federal ownership is 11,753 acres. ACAD Staff comments on 95% Review Draft, compiled by Rebecca Cole-Will, Cultural Resources Specialist, June 8, 2007.

198 National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 11.

199 Newton Drury to John D. Rockefeller, Jr., 26 January 1951, Rockefeller Family Archives, Homes, box 123, folder 77.

200 U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, Day Mountain Road Extension, Plans for Proposed Grading, Draining, and Surfacing, Project 9A2, Hancock County, Maine," Bar Harbor, Maine, November 1950.

201 U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 3A4-4A4-4A5-6A6-10A7-26A1-27A1-43A2, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1956.

202 Newton Drury to John D. Rockefeller, Jr., 9 September 1947, Rockefeller Family Archives, Homes, box 123, folder 77.

203 Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 6A5-10A6-43A1, Grading, Drainage, Bituminous Surface Treatment, Split Stone Guardrail and Other Work," Bar Harbor, Maine, 1957; U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, New Eagle Lake Road Extension, Plans for Proposed Grading, Draining and Surfacing, Project 6A5, Hancock County, Maine," Bar Harbor, Maine, July 1952.

204 Leo Grossman to John D. Rockefeller, Jr., 10 December 1938, Rockefeller Family Archives, Homes, box 122, folder 73; U. S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 4A2, Grading, Drainage, Hot Asphalt Concrete Pavement and Other Work," Bar Harbor, Maine, 1959.

205 G. W. Helfrich and Gladys O'Neil, *Lost Bar Harbor*, Camden, Maine: Down East Books, 1982: 69.

206 U.S. Department of Commerce, Bureau of Public Roads, "United States

Department of the Interior, National Park Service, Acadia National Park, East Side Loop-Route 4 (Portion), Plans for Proposed Grading, Draining, and Surfacing, Project 4A2, Hancock County, Maine," Bar Harbor, Maine, April 1956.

[207] U.S. Department of Commerce, Bureau of Public Roads, "United States Department of the Interior, National Park Service, Acadia National Park, East Side Loop-Route 4 (Portion), Plans for Proposed Grading, Draining, and Surfacing, Project 4A2, Hancock County, Maine," Bar Harbor, Maine, April 1956.

[208] HAER ME-11: 42 (from John D. Rockefeller, Jr. to Serenus Rodick, 13 February 1931, folder 1139, box 113, OMR, Rockefeller Family Archives, Rockefeller Archives Center, North Tarrytown, New York).

[209] Joseph W. Ernst, ed., *Worthwhile Places: Correspondence of John D. Rockefeller, Jr. and Horace M. Albright*, North Tarrytown, New York: Rockefeller Archive Center, 1991: 322.

[210] The old apple trees and lilacs likely date from the late 1800s. National Register Registration Form for "Schoodic Peninsula Historic District, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section 7: 13.

[211] Letter from Conrad L. Wirth to John D. Rockefeller, Jr., 17 May 1955, Rockefeller Archives Center, North Tarrytown, New York.

[212] John D. Rockefeller, Jr. to Conrad L. Wirth, 17 May 1955, Rockefeller Archive Center, North Tarrytown, New York.

[213] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 4A6-33A2-48A1-85A1," Arlington, Virginia, 1962.

[214] U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Project 4A6-33A2-48A1-85A1," Arlington, Virginia, 1962.

[215] "Much Improvement Seen on Bubble Pond Road Which Opened Monday," 16 July 1964, newspaper clipping.

[216] HAER ME-11:41 (from Federal Works Agency, Public Roads Administration, "Final Construction Report: Acadia National Park Project 10A8, Paradise Hill Grade Separation" Arlington, Virginia: Bureau of Public Roads, Virginia District, Region 15: 1, Acadia National Park Archives).

[217] Catherine Evans, "Evaluation of Eligibility of the Historic Motor Road System, Acadia National Park, for the National Register of Historic Places," Brookline, Massachusetts: National Park Service, Olmsted Center for Landscape Preservation, 1993: 5.

[218] At this time, the park loop road, from Kebo Mountain Road to Day Mountain Road Extension, was converted to one-way traffic. The medians at these two intersections, and the intersection at Ledgelawn Avenue, were reconfigured. U.S. Department of Transportation, Federal Highway Administration, "Final Construction Report: Acadia National Park and St. Croix Island National Monument, Project PRA-ACAD 12(2), 301(1) and PRA-SACR 100(1), Reconstruction, Overlay, Widening of Existing Roadways, New Roadway Construction, Intersection Improvements, Parking Area Construction, Roadway slope protection, and Other Work," Sterling, Virginia, 1988.

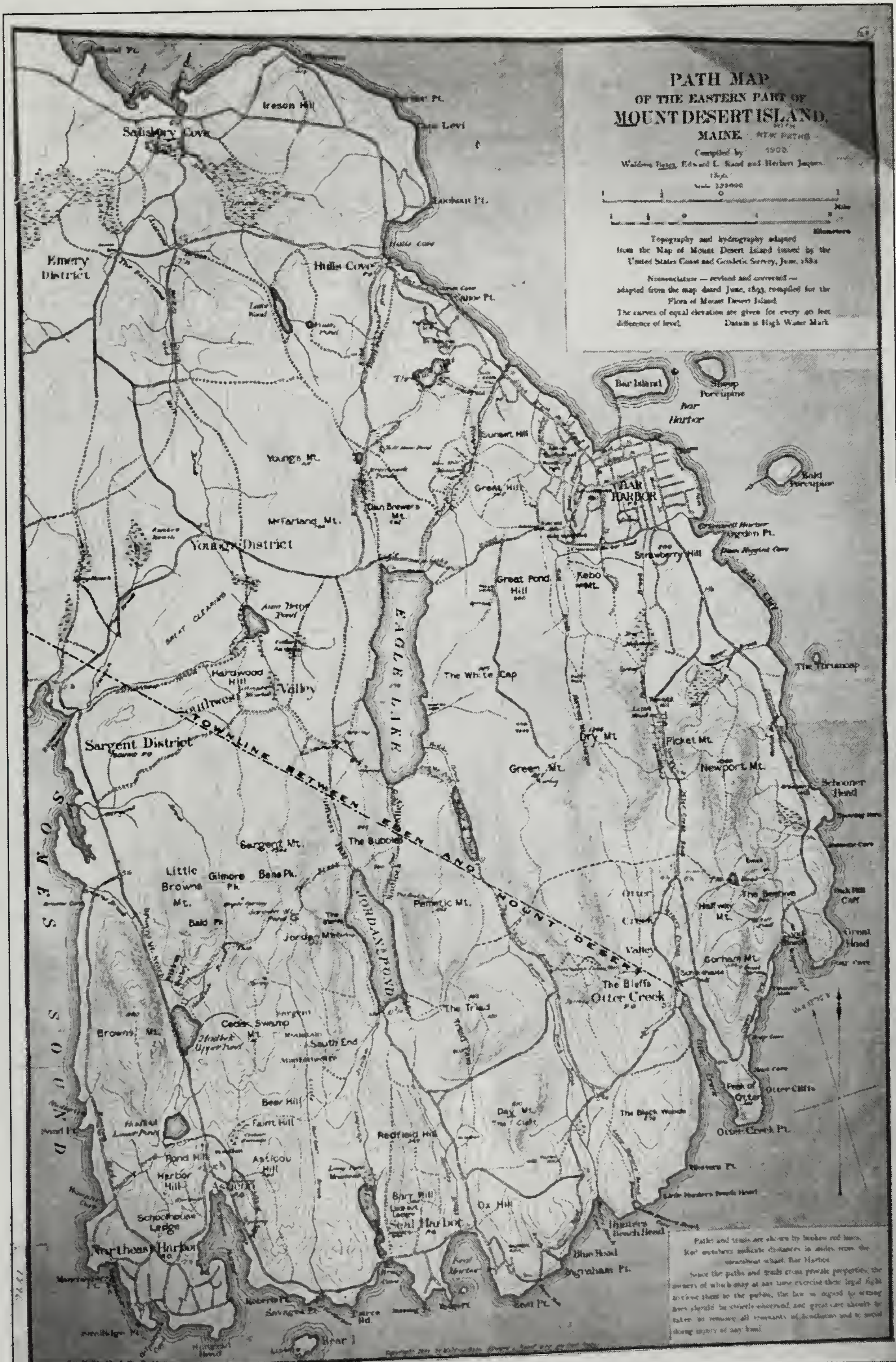


Figure 1.1. Path Map of Mount Desert Island from 1896 showing a road up to Green (Cadillac) Mountain and Ocean Drive. ("Path Map of the Eastern Part of Mount Desert Island." Bates, Waldron, Edward L. Rand, and Herbert Jacques. Scale 1:25,000. Printed by George W. Stadly and Co., Boston, Massachusetts, 1896. Property of the Northeast Harbor Library)

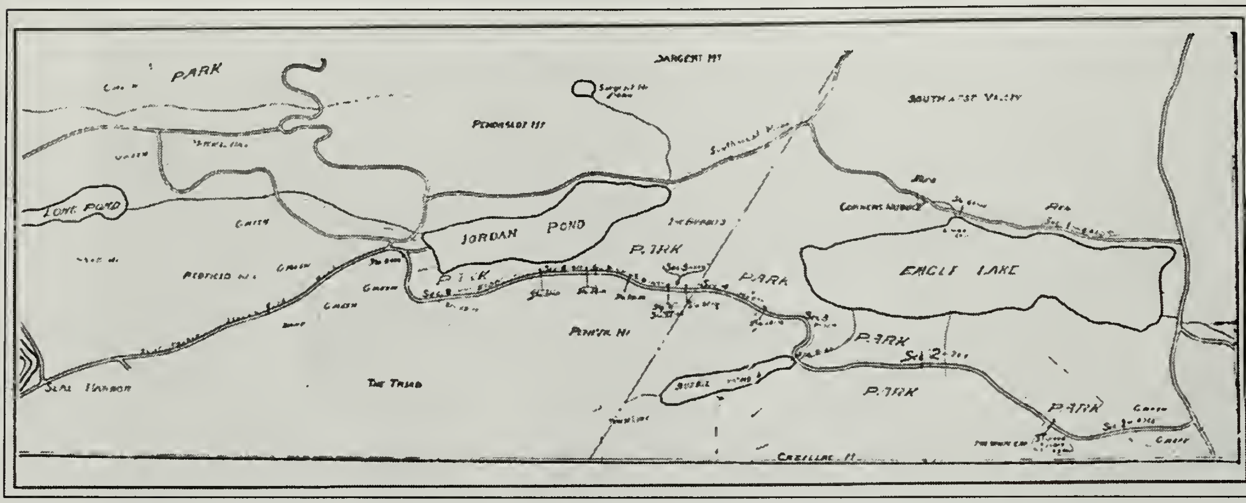


Figure 1.2. Proposed construction sections of the Jordan Pond/Eagle Lake Road, circa 1927. (Acadia National Park archives)

Figure 1.3. View from Jordan Pond/Eagle Lake Road, looking north at Bubble Rock. (Rockefeller Archives Center)

Figure 1.4. View from Jordan Pond/Eagle Lake Road, looking north at Jordan Pond, with Bubble Rock in the distance. (Acadia National Park archives)

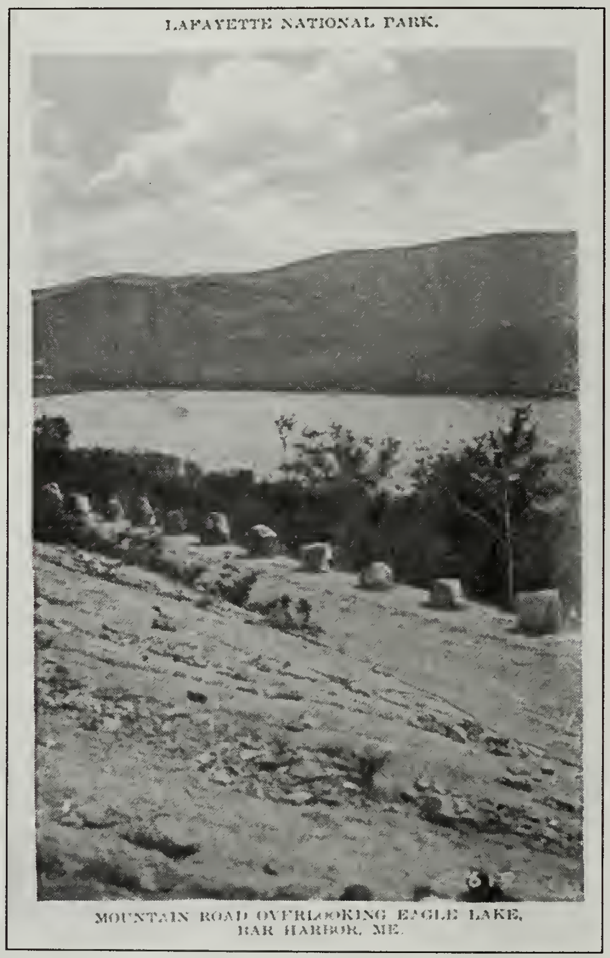


Figure 1.5. Historic postcard of Eagle Lake from Jordan Pond/ Eagle Lake Road, circa late 1920s. (Courtesy of Irene Marinkee)

Figure 1.6. View of the Jordan Pond/Eagle Lake Road passing under the Bubble Pond Carriage Road bridge, no date. (Courtesy Leo Grossman Personal Collection, #28-1)

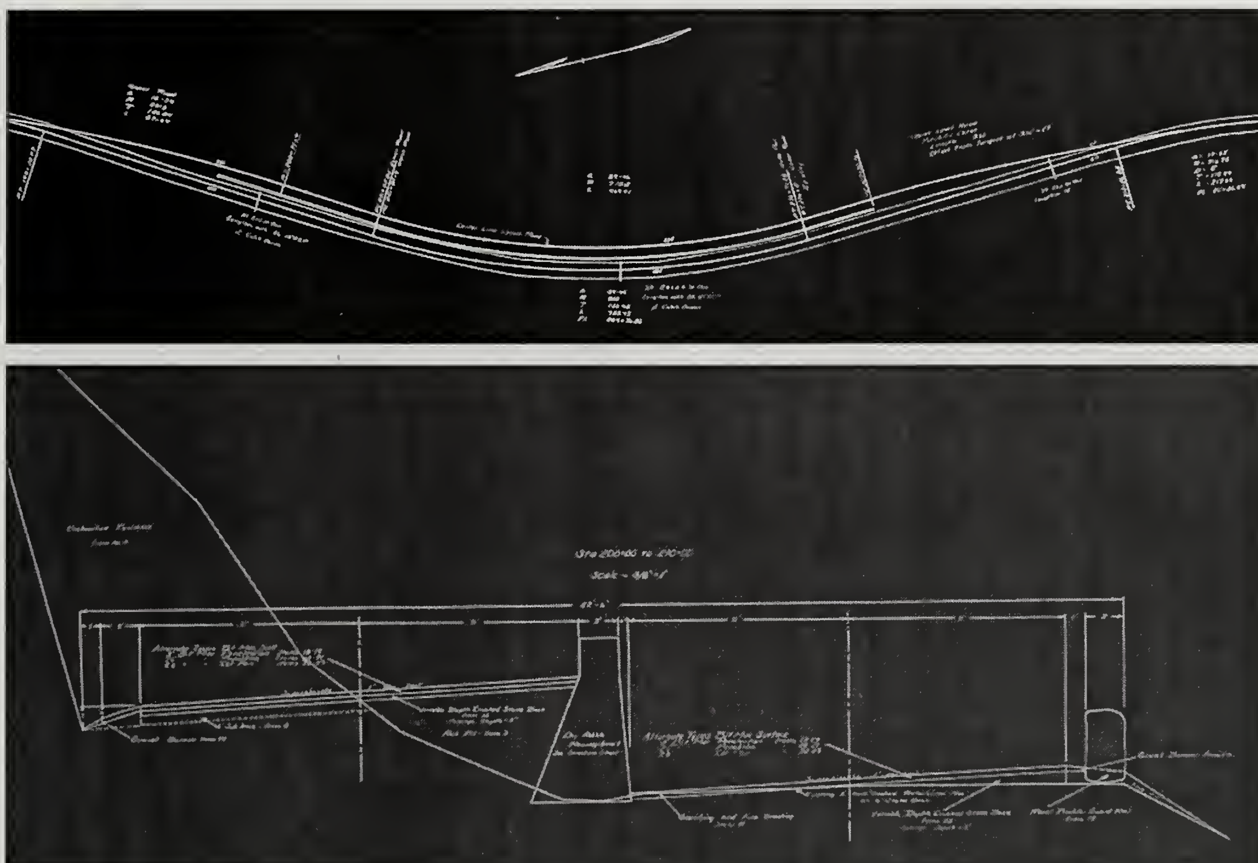


Figure 1.7. Plan and cross-section of a grade separation feature on Jordan Pond/Eagle Lake Road, near the north end of Jordan Pond, 1935. It is not known if this feature was built. (U.S. Department of Agriculture, Bureau of Public Roads, Project 3A1, 1935)

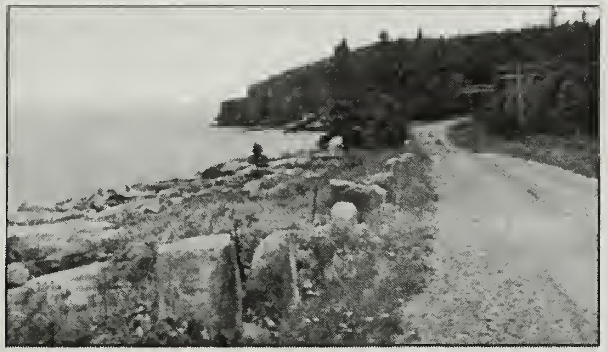


Figure 1.8. Ocean Drive, circa 1928, view looking south. (Charles Eliot II. *The Future of Mount Desert Island.* Bar Harbor, Maine: Bar Harbor Village Improvement Association, 1928)

Figure 1.9. View of the rock cut on Cadillac Mountain Road from 1929. (Acadia National Park archives)

Figure 1.10. Later view of the rock cut on Cadillac Mountain Road from 12 September 1931. (Courtesy Leo Grossman Personal Collection, #66-6)

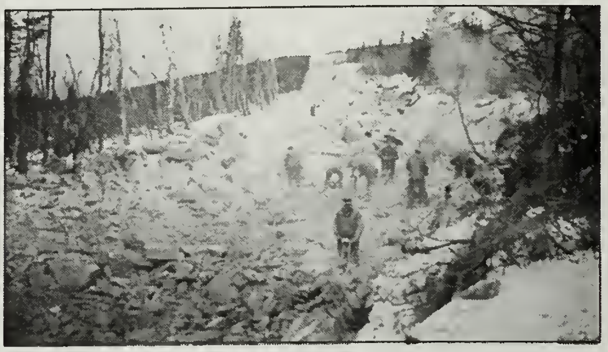


Figure 1.11. Construction of Cadillac Mountain Road, at Station 85+50 (after the major rock cut). View looking north toward Station 95 on 6 December 1929. (Courtesy Leo Grossman Personal Collection, #37-3)

Figure 1.12. View of Cadillac Mountain Road at Station 144 looking north toward Station 140, ready for the application of asphalt on 26 September 1930. (Courtesy Leo Grossman Personal Collection, #51-5)

Figure 1.13. Good view of the guardwall stones on Cadillac Mountain Road after completion, in 1932. View looking north. (Acadia National Park archives)

Figure 1.14. Pullout on Cadillac Mountain Road, no date. (Courtesy Leo Grossman Personal Collection, #28-4)

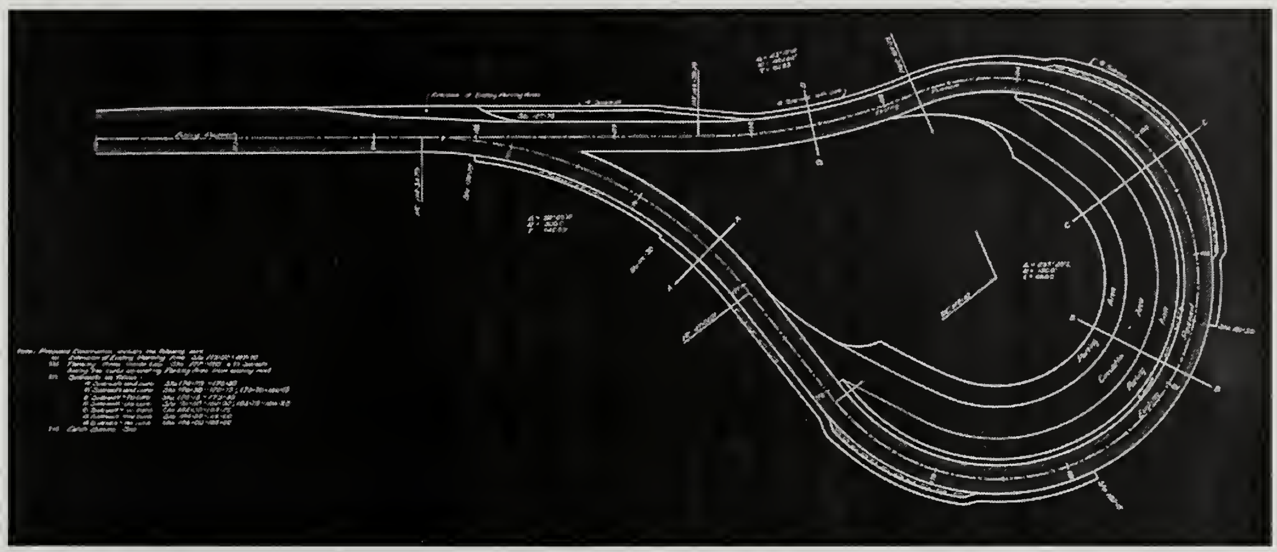


Figure 1.15. Plan for the parking lot as part of the loop at the terminus of Cadillac Mountain Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 1A, 1931)

Figure 1.16. Plan for the reconfiguration of the intersection of Cadillac Mountain Road and Jordan Pond/Eagle Lake Road, constructed in 1956-1957. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A, Sheet 6 of x, November 1955)

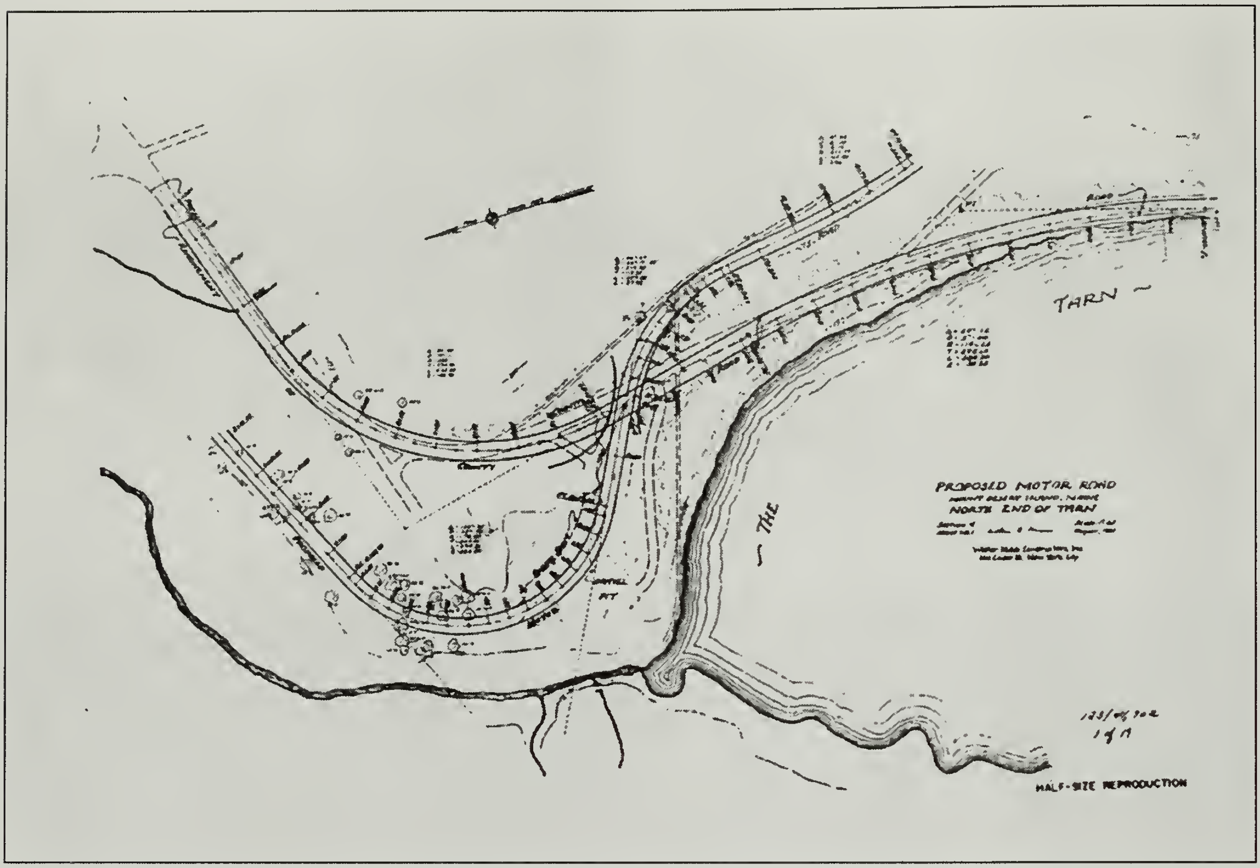


Figure 1.17. Controversial proposed route of a motor road along the east side of the Tarn, 1930. (National Park Service, Denver Service Center Microfilm Collection)

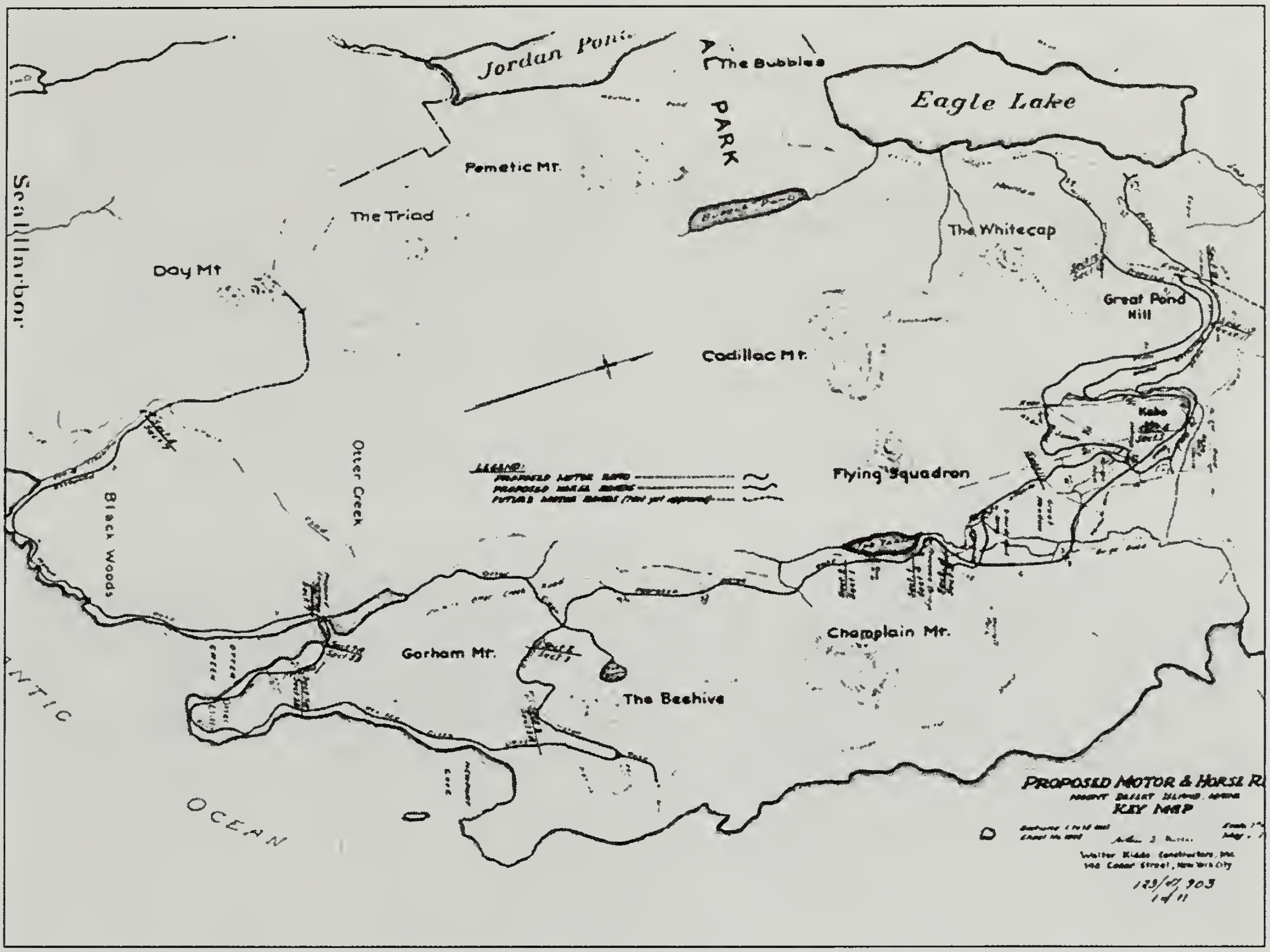


Figure 1.18. Key map of Rockefeller's motor road proposal by the Kidde Construction Company, 1931. (National Park Service, Denver Service Center Microfilm Collection)

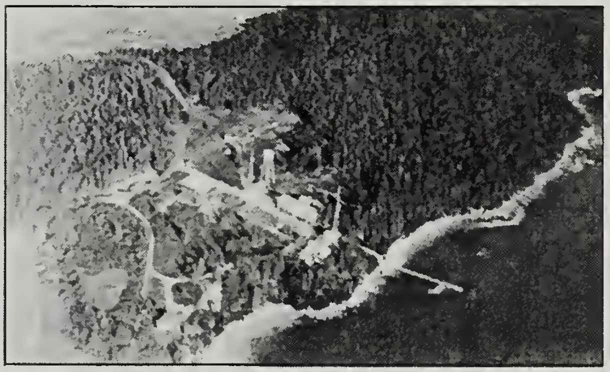


Figure 1.19. Otter Cliff Naval Radio Station at Otter Point, looking southeast, no date. (Courtesy of Irene Marinkee)

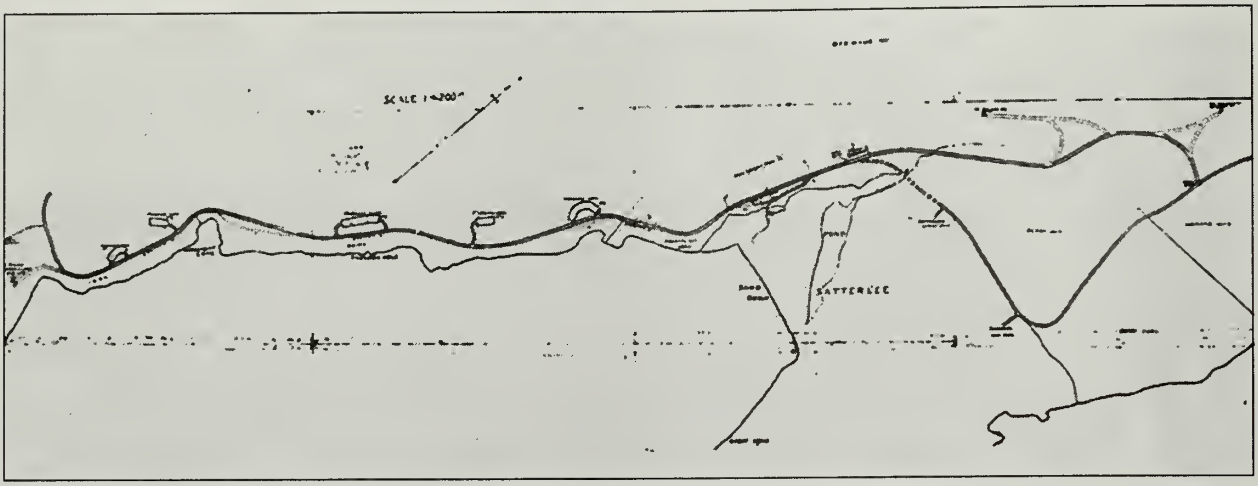


Figure 1.20. The reconstruction of Ocean Drive, 1934. (Rockefeller Archives Center)

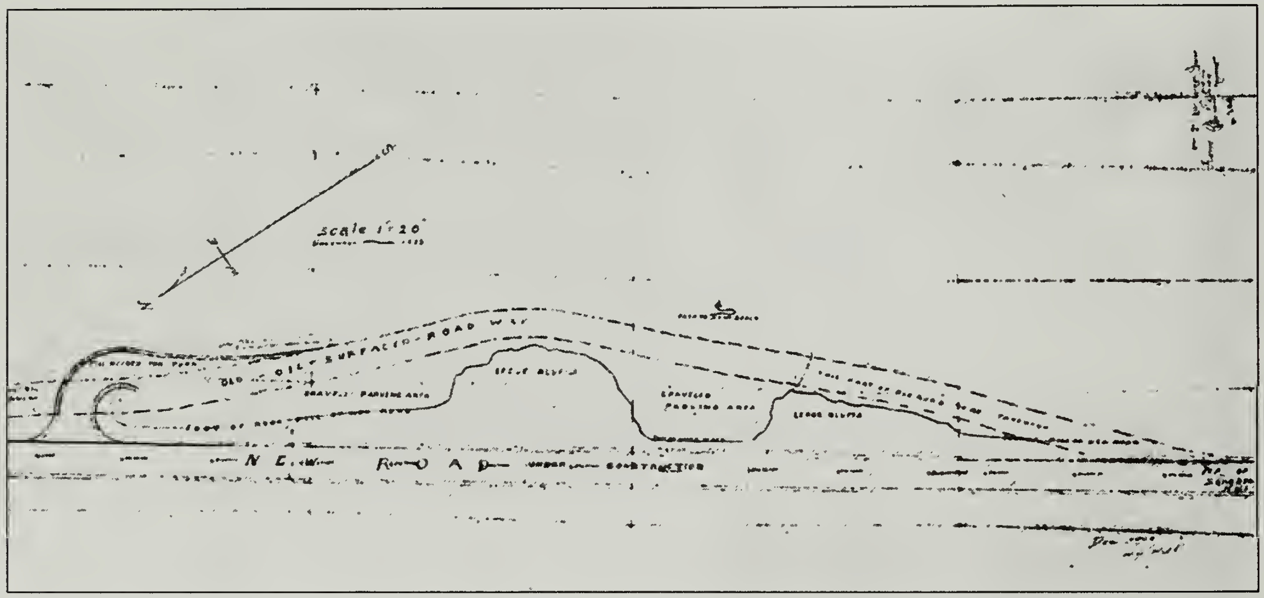


Figure 1.21. Section of the former Ocean Drive reconfigured as a parking lot, at Sand Beach. (Rockefeller Archives Center)

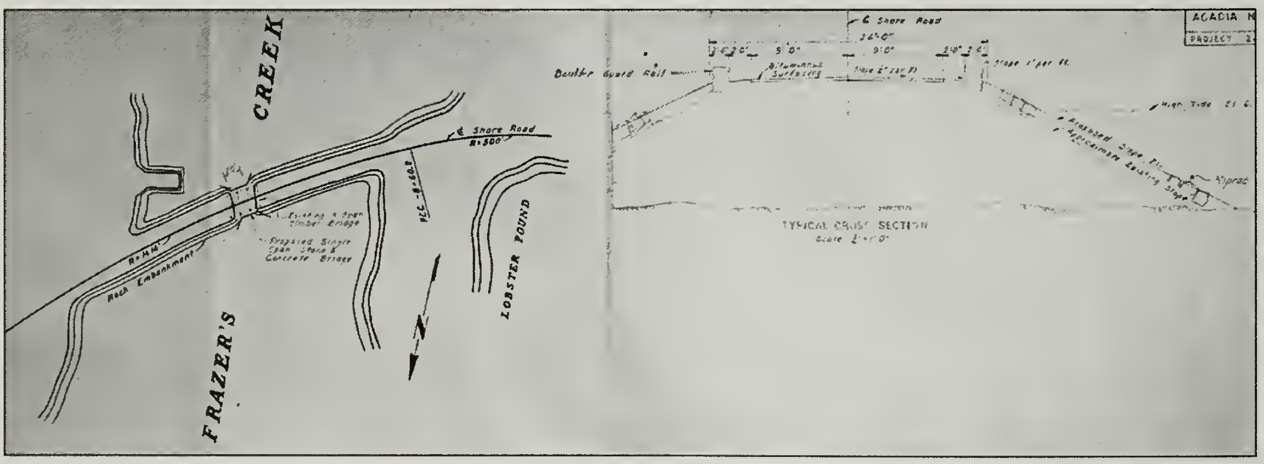


Figure 1.22. Detail of the bridge and causeway at Frazer Creek, 1948. (Federal Works Agency, Public Roads Administration, Project 2A5, Sheet 1 of x, June 1948)

Figure 1.23. Construction of Schoodic Loop Road, known historically as Wonsqueak Road/Summer Road, 1934-1935. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Schoodic-Acadia-Big Moose Island-Wonsqueak Harbor, Project 2A1-2A4-5A1.")

Figure 1.24. Finished view of Wonsqueak Road/Summer Road, 1934-1935. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Schoodic-Acadia-Big Moose Island-Wonsqueak Harbor, Project 2A1-2A4-5A1.")

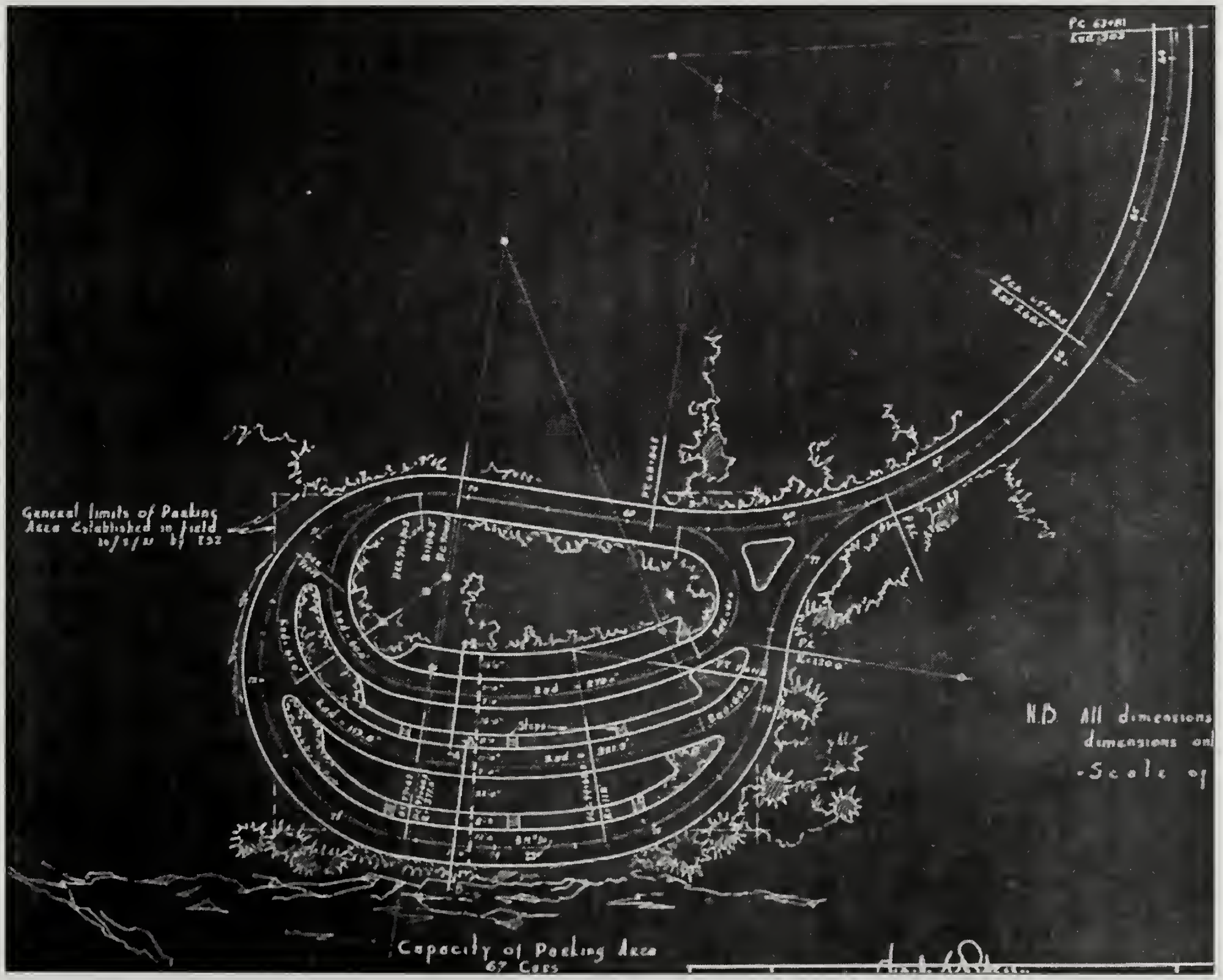


Figure 1.25. Plan for the multi-tiered parking lot at the end of Schoodic Point Road, 1933. (U.S. Department of Agriculture, Bureau of Public Roads, Project 2A2, Sheet 1 of 1, 1933-1934)

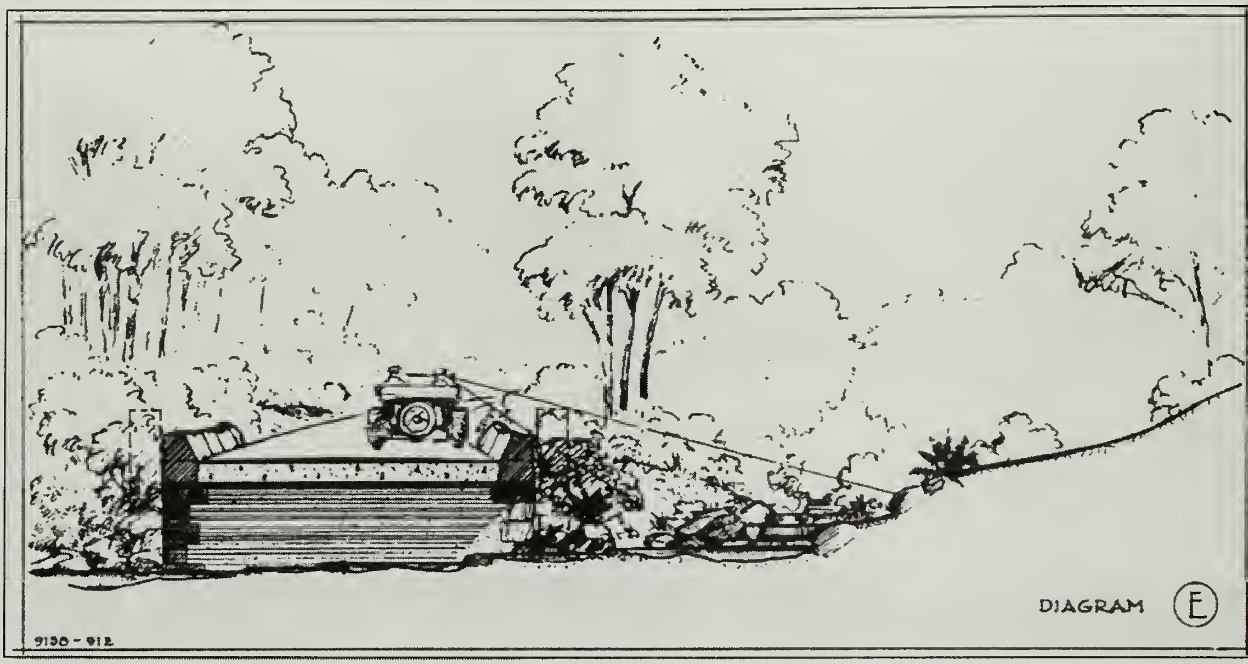


Figure 1.26. Proposed design and effect of curbing on Stanley Brook Road, intended to minimize the impact of the motor road through the narrow valley, 1933. (National Park Service, Frederick Law Olmsted National Historic Site)

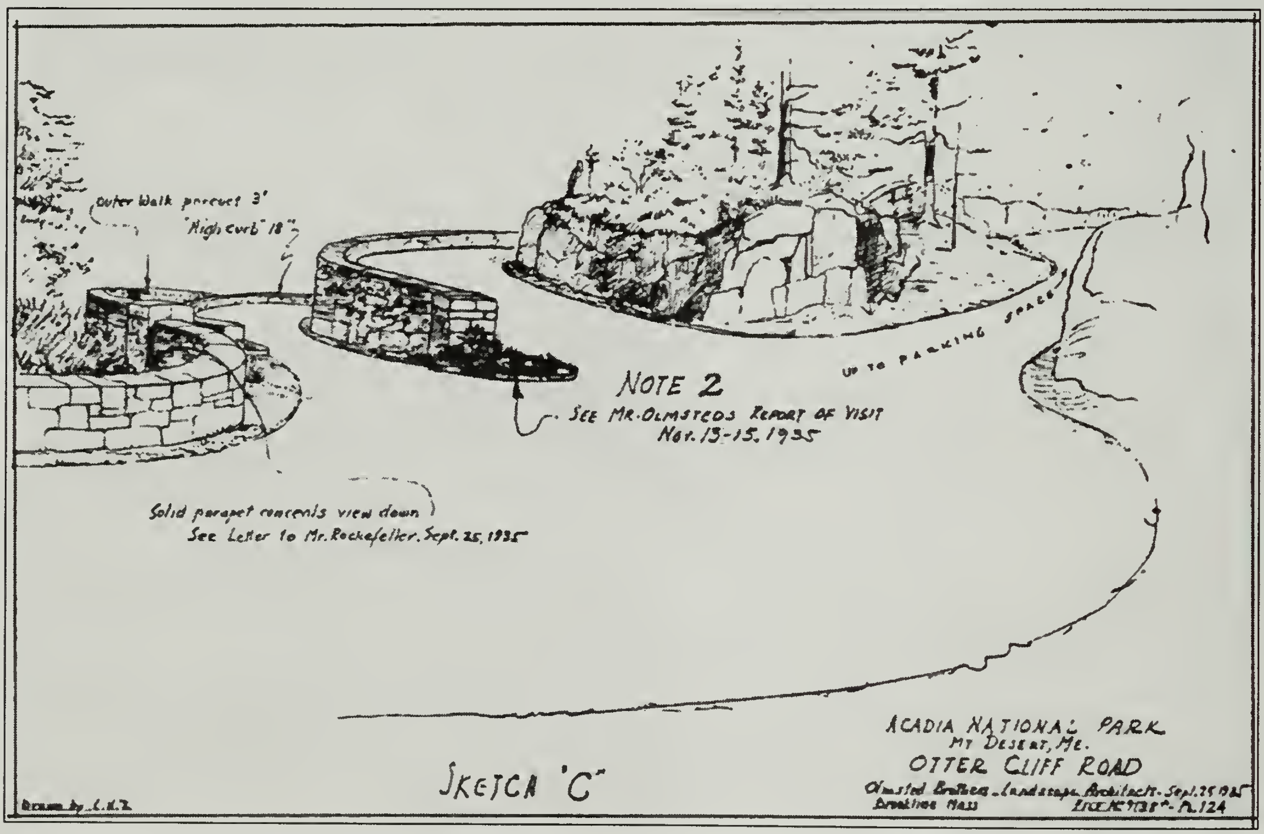


Figure 1.27. Olmsted's design for the grade separation and parking lot on Otter Cliffs Road, 1935. (National Park Service, Frederick Law Olmsted National Historic Site)

Figure 1.28. Postcard view of the grade separation feature on Otter Cliffs Road, no date. (State of Maine Historical Commission)

Figure 1.29. Kebo Mountain Road at Station 83+25, during construction. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Kebo Mountain Project 6A1.")

Figure 1.30. Kebo Mountain Road at Station 83+25, after construction. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Kebo Mountain Project 6A1.")

Figure 1.31. Dry-laid retaining wall on Kebo Mountain Road, 1936-1938. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Kebo Mountain Project 6A1.")

Figure 1.32. Hand-laid stone embankment and rectilinear guardwall stones on Kebo Mountain Road, 1936-1938. Note the preserved trees within the structure. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Kebo Mountain Project 6A1.")

Figure 1.33. Kebo Brook Bridge, 1938. (U.S. Department of Agriculture, Bureau of Public Roads, "Progress Views: Kebo Mountain Project 6A1.")

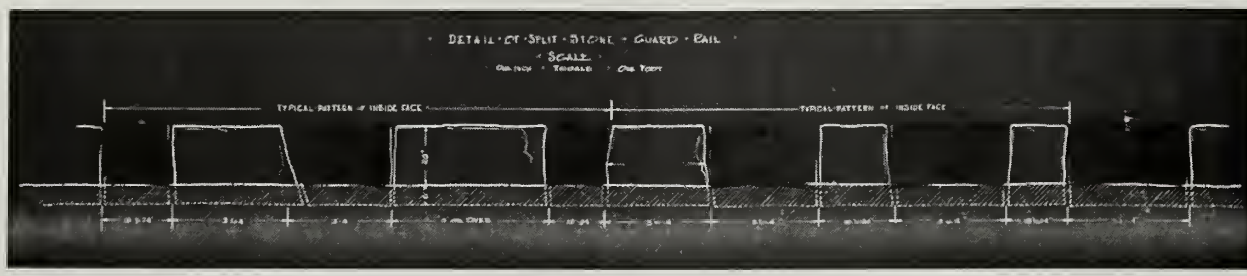


Figure 1.34. Detail of rectilinear guardwall stones on Kebo Mountain Road, 1936. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 14 of 14, 1936)

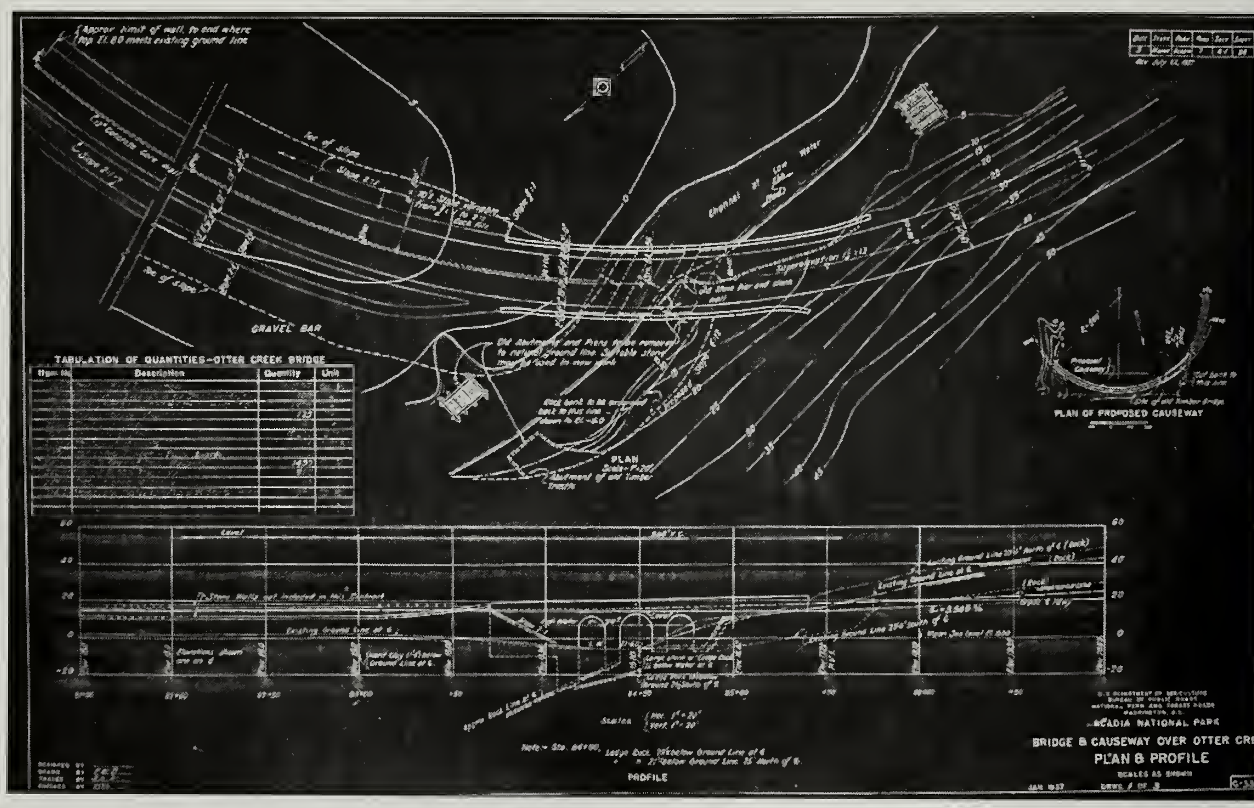


Figure 1.35. Plan and elevation of the causeway and bridge at Otter Cove, 1937. (U.S. Department of Agriculture, Bureau of Public Roads, Project 7A1, Sheet 24 of 79, 1937)

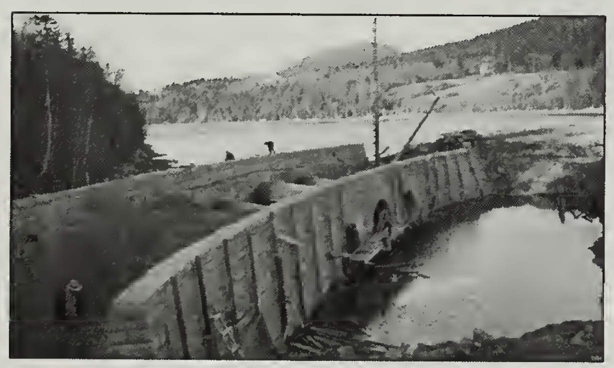


Figure 1.36. Construction of causeway at Otter Cove in 1939, view north. (Federal Works Agency, Public Roads Administration, "Progress Views: Structures, Black Woods Project 7A1.")

Figure 1.37. Postcard view of the completed causeway at Otter Cove, no date. (State of Maine Historical Commission)

Figure 1.38. View of Blackwoods Road, 1939. (Federal Works Agency, Public Roads Administration, "Progress Views: Structures, Black Woods Project 7A1.")

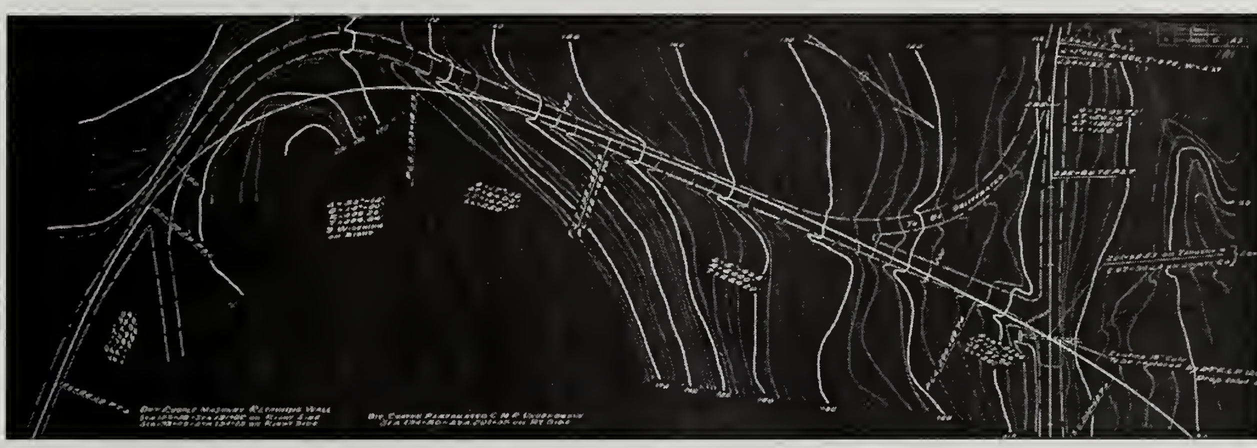


Figure 1.39. Plan of Kebo Mountain Road Extension showing the alignment along existing roads and the location of the bridge carrying State Route 3 over the motor road. (Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 4 of x, September 1939)

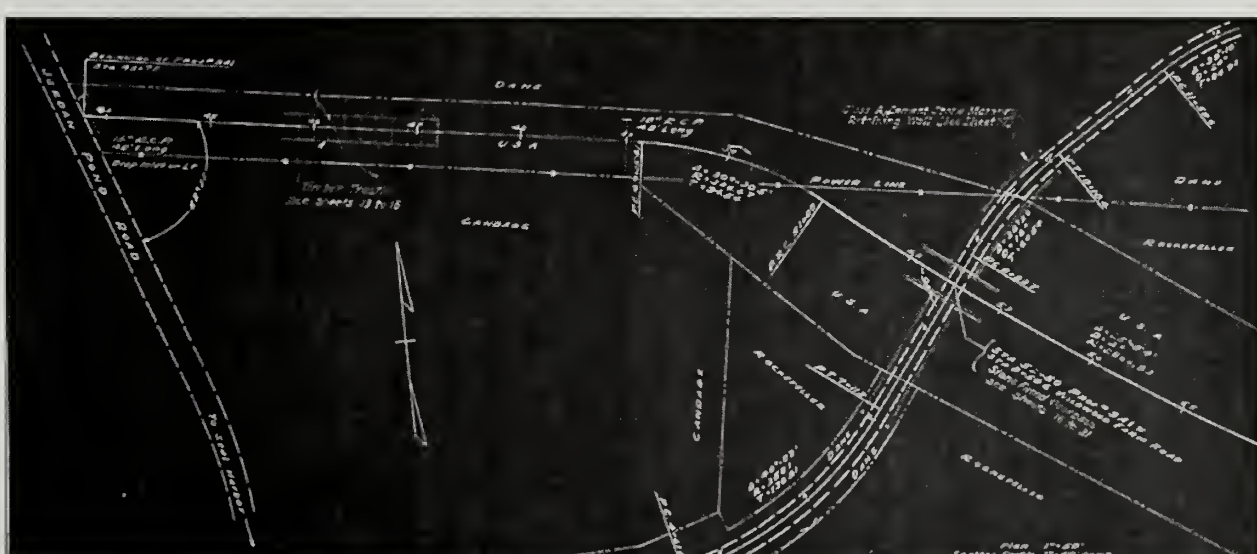


Figure 1.40. Plan showing the temporary alignment at the west end of Day Mountain Road, 1939. (U.S. Department of Agriculture, Bureau of Public Roads, Project 9A1, Sheet 3 of x, June 1939)

Figure 1.41. Day Mountain Road in 1941, looking southeast. Hunters Beach Brook Bridge is in the foreground and Blackwoods Bridge is in the background. (Federal Works Agency, Public Roads Administration, "Progress Views of Structures: Day Mountain Road, Project 9A1.")

Figure 1.42. Clearing and grubbing along Day Mountain Road at Station 77+00, view looking northwest, 1939-1940. (Federal Works Agency, Public Roads Administration, "Progress Views of Highway: Day Mountain Road, Project 9A1.")

Figure 1.43. Dry-laid stone retaining wall along Day Mountain Road at Station 77+00, 1941. (Federal Works Agency, Public Roads Administration, "Progress Views of Highway: Day Mountain Road, Project 9A1.")

Figure 1.44. View looking west along Day Mountain Road and the parapets of the Dane Farm Bridge, 1941. The motor road curves to the left to its temporary intersection with Stanley Brook Road (today, the road bends to the right). (Federal Works Agency, Public Roads Administration, "Progress Views of Structures: Day Mountain Road, Project 9A1.")

Figure 1.45. A completed Paradise Hill Road, minus the bridge, 1941. (Federal Works Agency, Public Roads Administration, "Progress Views of Highway: Paradise Hill Road, Project 10A1.")

Figure 1.46. View of Frenchmans Bay from Paradise Hill Road, 1941. (Federal Works Agency, Public Roads Administration, "Progress Views of Highway: Paradise Hill Road, Project 10A1.")

Figure 1.47. Part of the Master Plan for Acadia National Park, 1941. The plan shows motor roads existing, under construction, and proposed. It also shows two alternative routes to connect Kebo Mountain Road Extension and Champlain Mountain Road. (National Park Service, Denver Service Center)

Figure 1.48. Barren landscape along Paradise Hill Road in 1953, six years after the Great Fire. (Federal Works Agency, Public Roads Administration, "Progress Views of Highway: Paradise Hill Road, Project 10A1.")

Figure 1.49. Plan of the new intersection of Day Mountain Road Extension, Jordan Pond/Eagle Lake Road, and Stanley Brook Road, 1950. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 3 of 11, November 1950)

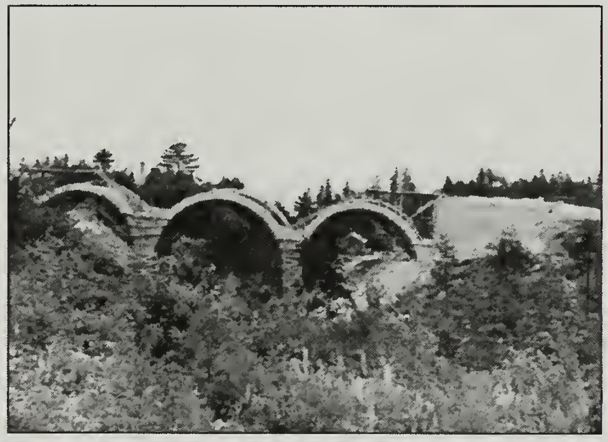


Figure 1.50. Construction of Duck Brook Bridge, 1952. (Courtesy of Bar Harbor Historical Society)

Figure 1.51. Plan for the new access road connecting Paradise Hill Road and New Eagle Lake Road, 1952. (U.S. Department of Commerce, Bureau of Public Roads, Project 6A5, Sheet 5 of 24, July 1952)

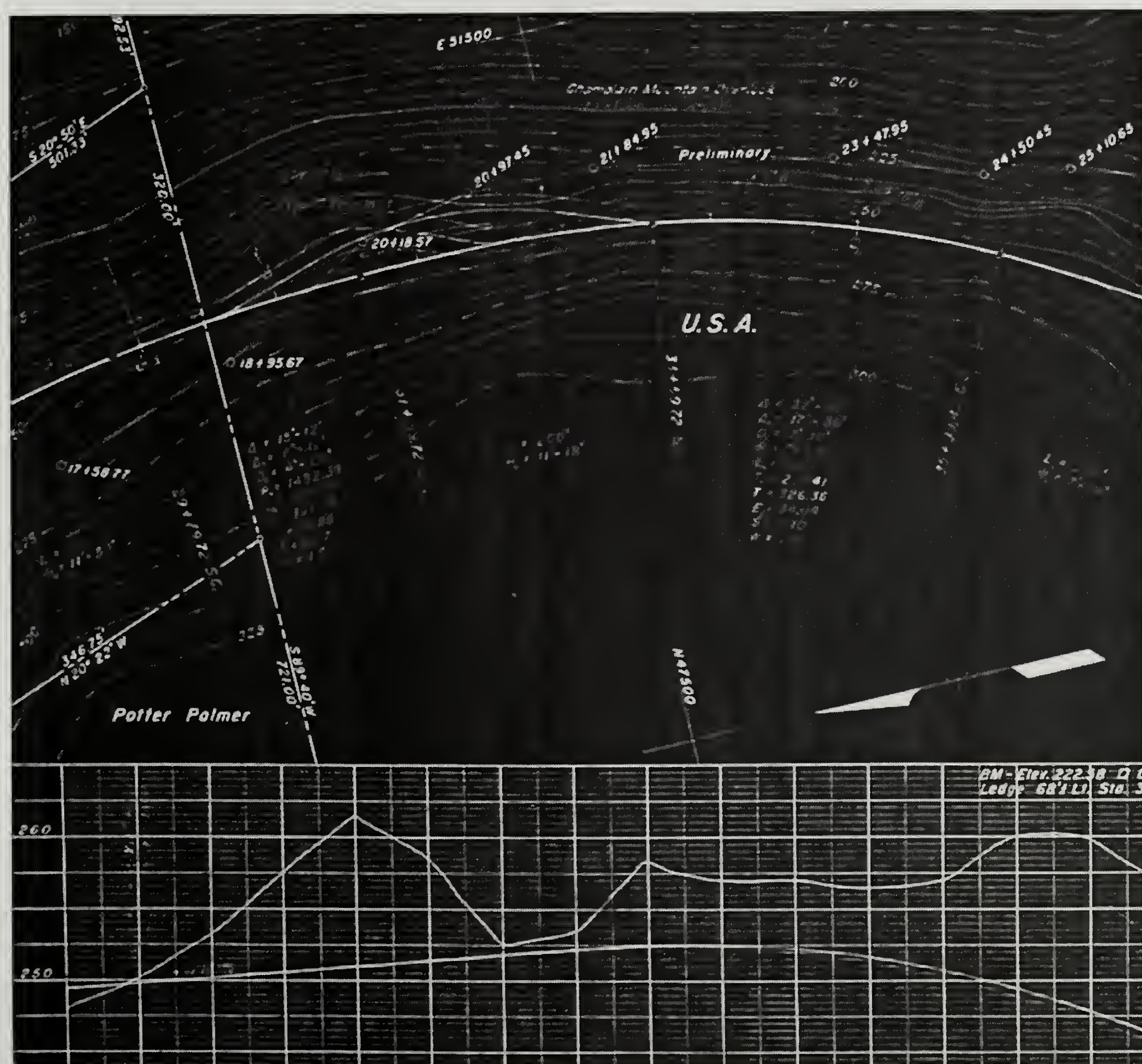


Figure 1.52. Plan and profile of the Champlain Mountain pullout, Bureau of Public Roads Project 4A2, 1956. (U.S. Department of Commerce, Bureau of Public Roads, Project 4A2, Sheet 6 of 64, April 1956)

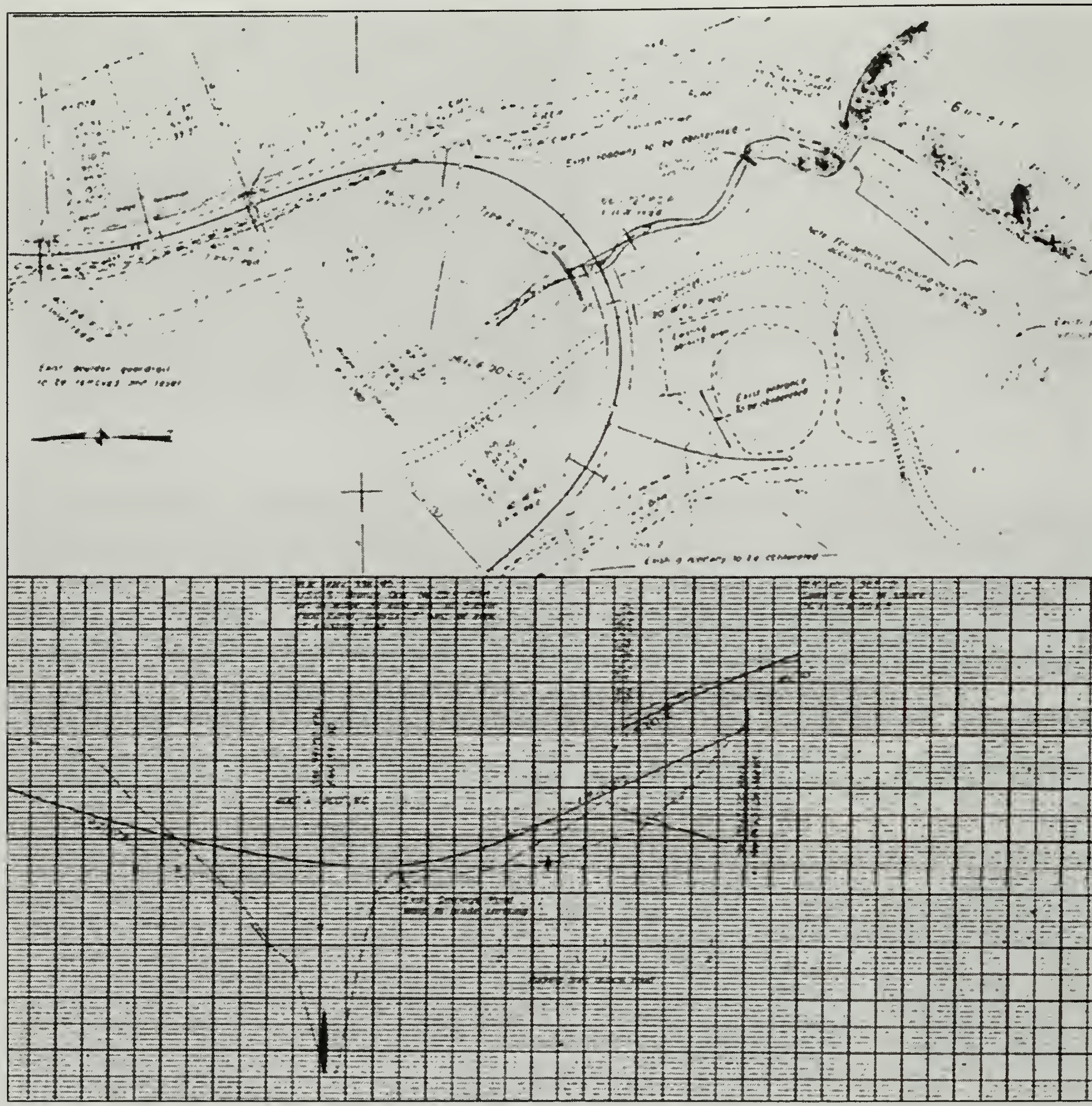
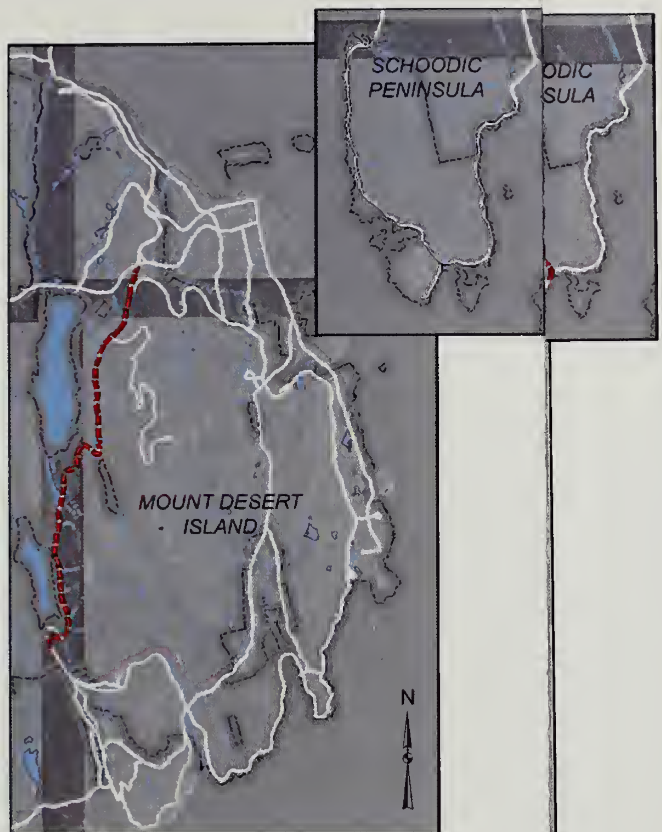
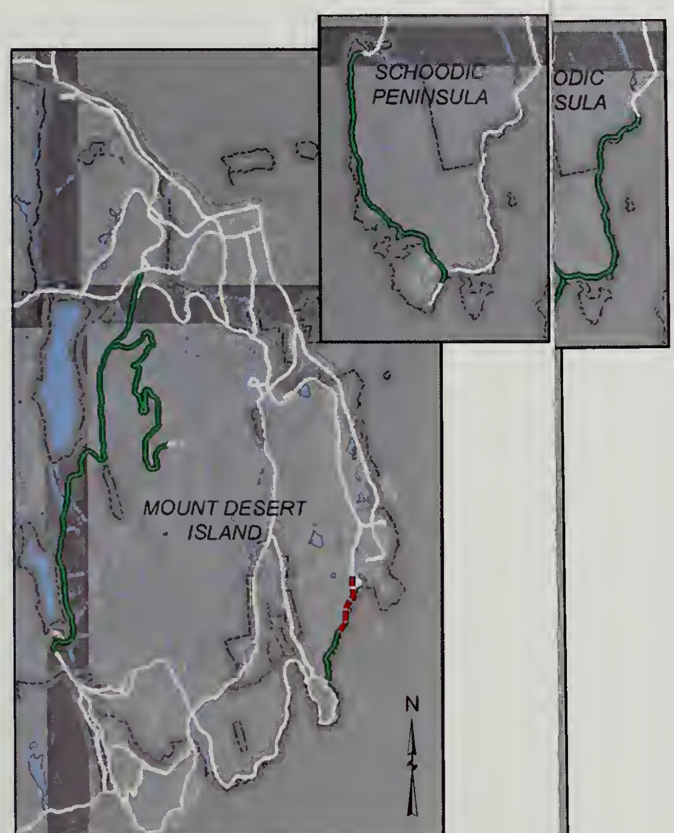


Figure 1.53. Realignment of Jordan Pond/Eagle Lake Road, at Bubble Pond, 1962. (Courtesy of Gladys O'Neil)



1. Jordan Pond/Eagle Lake Road
Completed 1927

tter Cliff
Road)



5. Ocean Drive: Sand Beach-Thunder Hole
Completed 1934

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

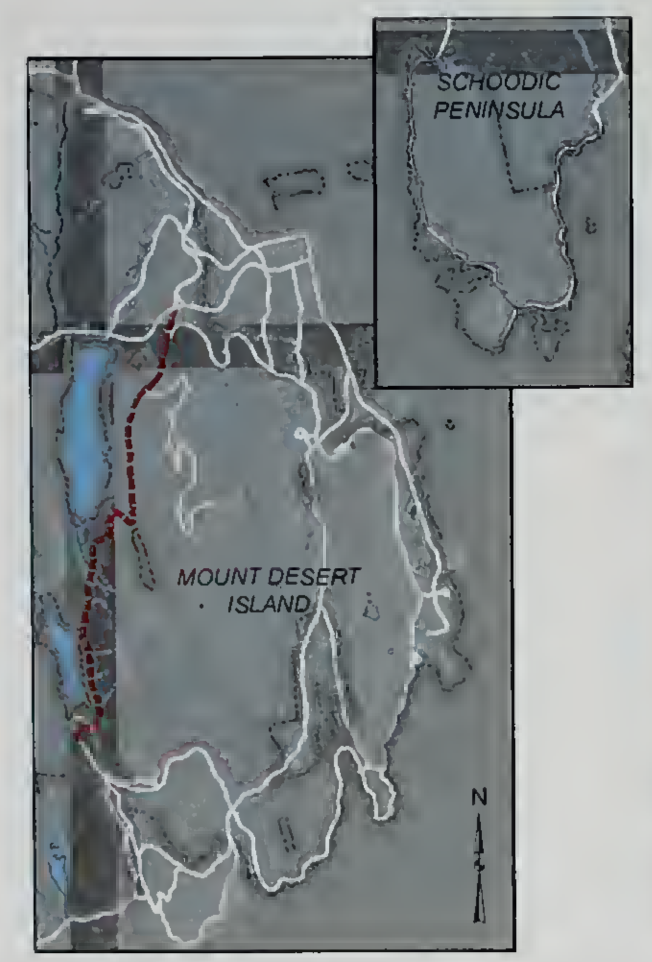
Period Plans
1922-1958

National Park Service
Olmsted Center for Landscape Preservation
http://www.nps.gov/oclp/

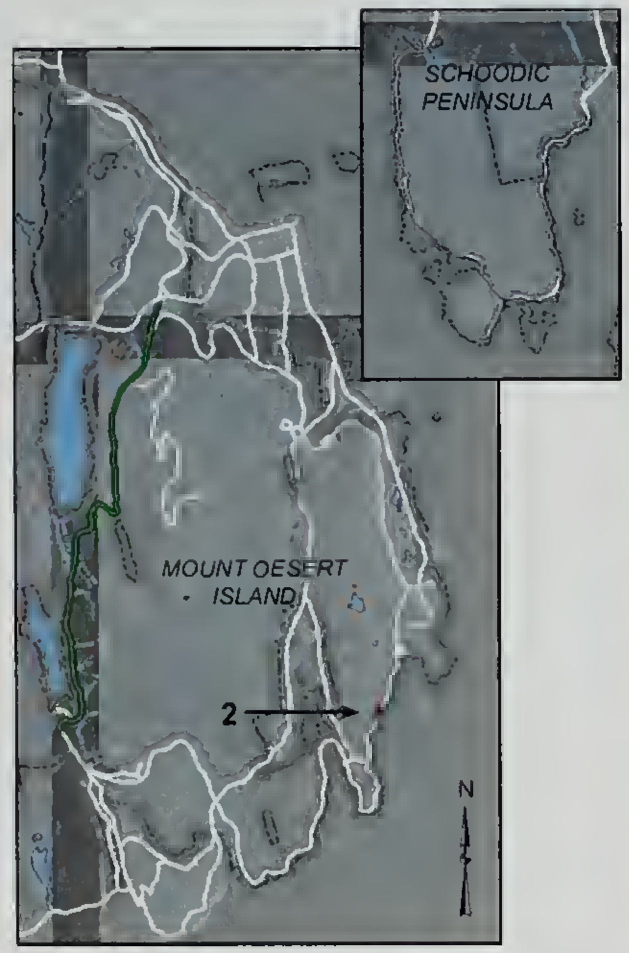
SOURCES
FHWA RIP Data, May 2002; ACAD GIS; OCLP Field Surveys, 2005/2006

DRAWN BY
Jeff Killion using ArcMap GIS 9.1, Nov 2006

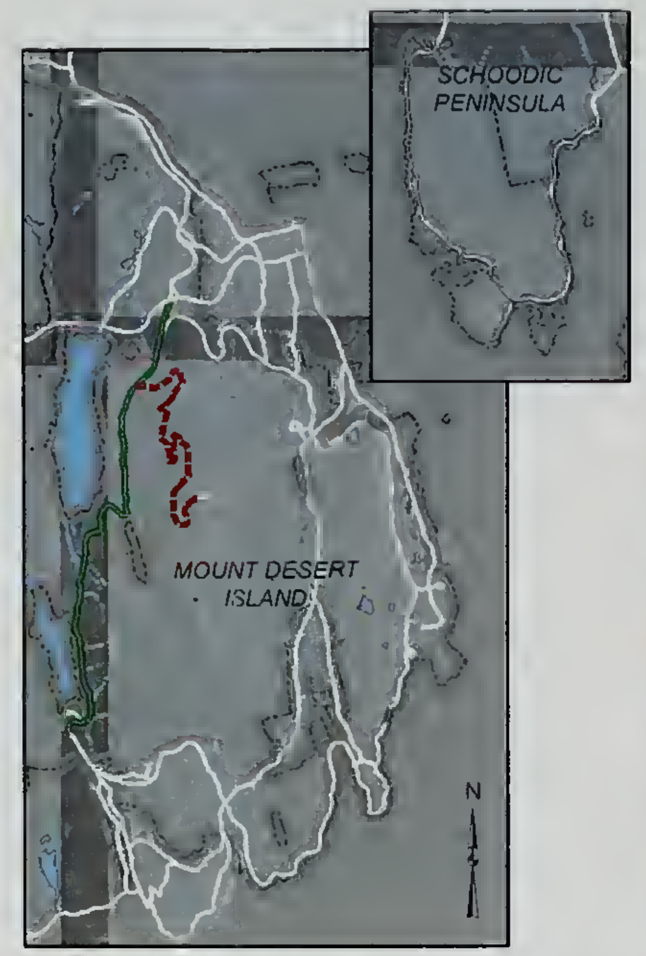
LEGEND
- Completed segment of Motor Road System
- Existing segment of Motor Road System
- Completed Bridge
- Existing Bridge
- park boundary (2004)
- stream
- pond



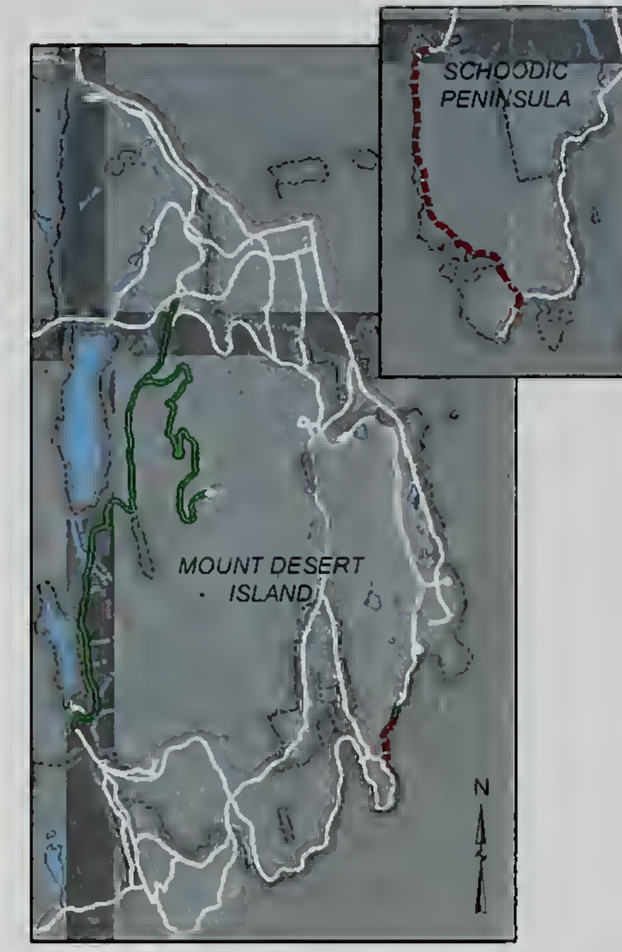
1. **Jordan Pond/Eagle Lake Road**
Completed 1927



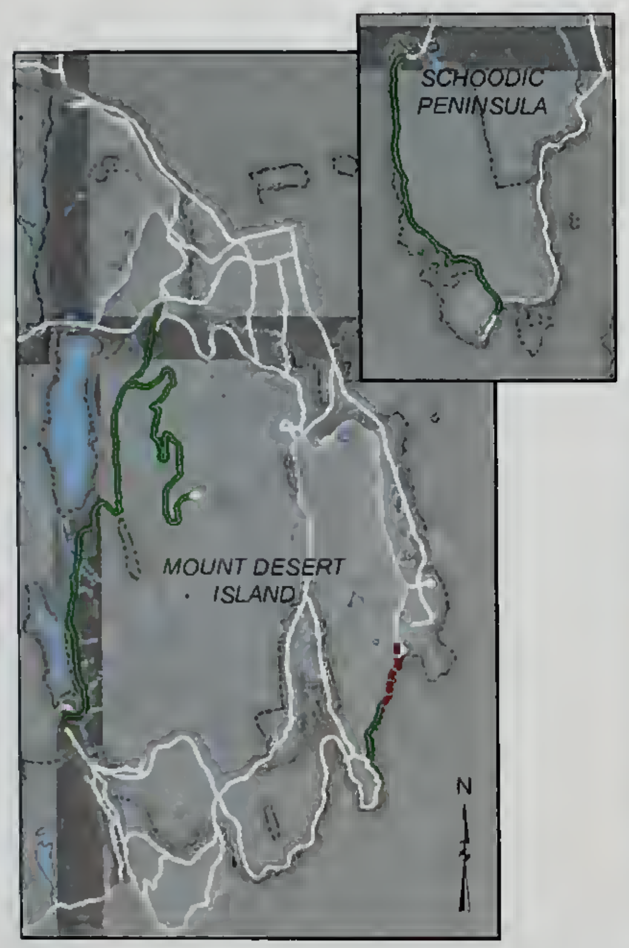
2. **Ocean Drive Demonstration Segment**
Completed 1929



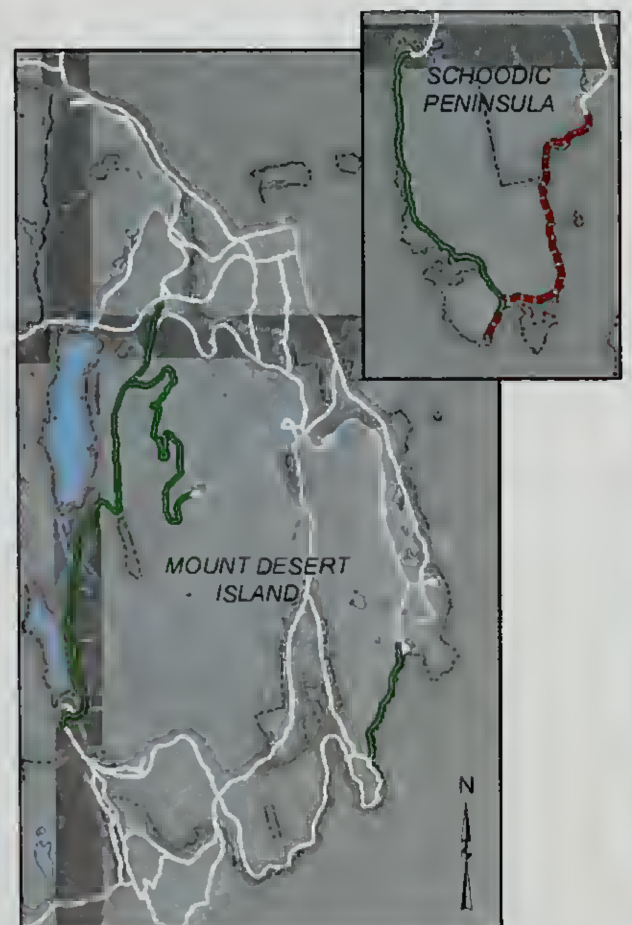
3. **Cadillac Mountain Road**
Completed 1932



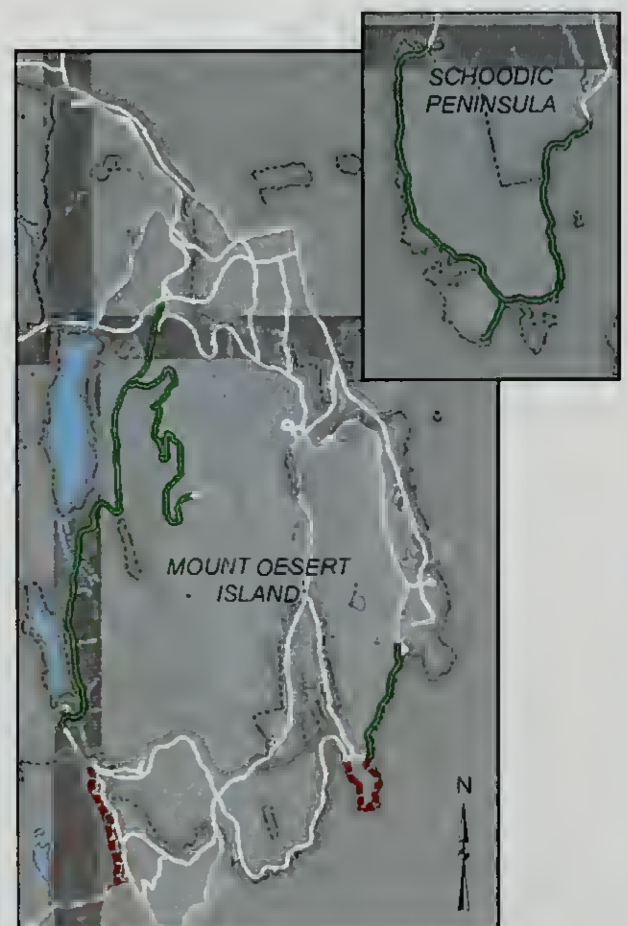
4. **Ocean Drive: Thunder Hole-Otter Cliff**
Schoodic Loop Road (Winter Road)
Completed 1933



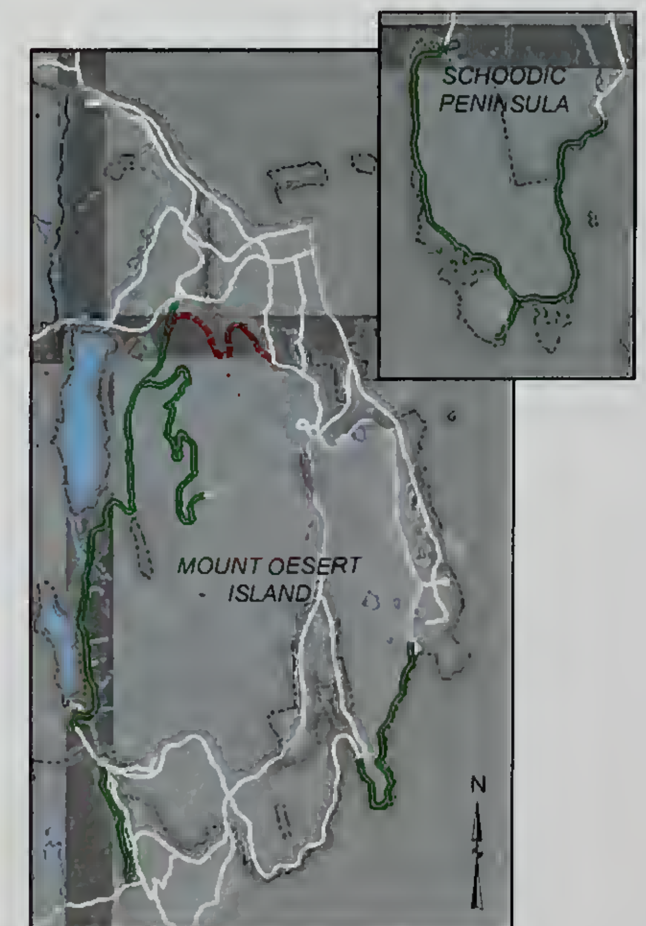
5. **Ocean Drive: Sand Beach-Thunder Hole**
Completed 1934



6. **Schoodic Loop Road (Summer Road)**
Schoodic Point Road
Completed 1935



7. **Otter Cliffs Road**
Stanley Brook Road
Completed 1936



8. **Kebo Mountain Road**
Completed 1938

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Bar Harbor, ME

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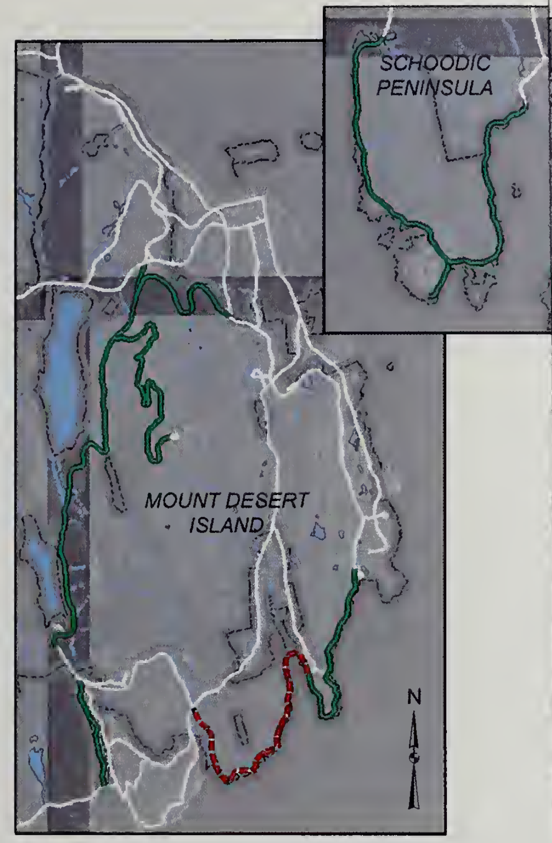
http://www.nps.gov/oclp/

SOURCES
FHWA RIP Data, May 2002; ACAD GIS; OCLP Field Surveys, 2005/2006

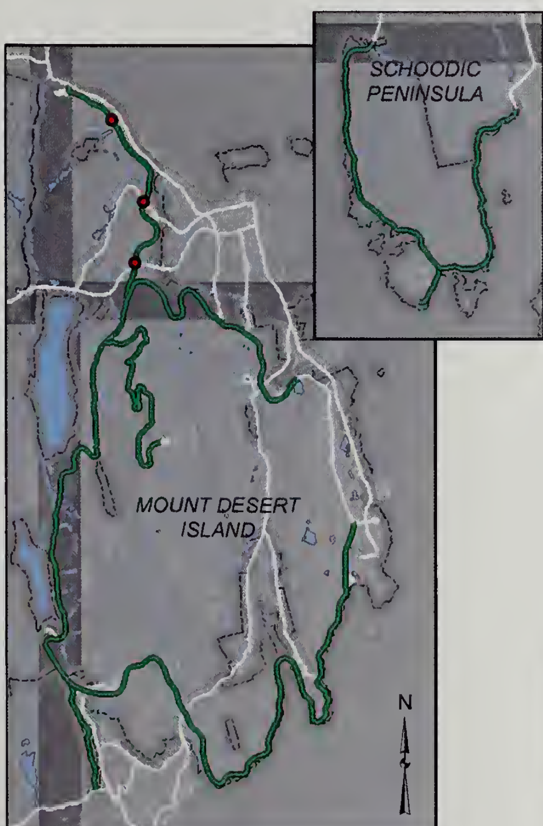
DRAWN BY
Jeff Killion using ArcMap GIS 9.1, Nov 2006

LEGEND
Completed segment of Motor Road System
Existing segment of Motor Road System
Completed Bridge
Existing Bridge
park boundary (2004)
stream
pond



9. Otter Cove Causeway and Blackwoods Road
Completed 1939

on



13. Paradise Hill Road bridges
Completed 1952

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System
Acadia National Park
Bar Harbor, ME

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1922-1958

NATIONAL PARK SERVICE

OLMSTED CENTER for LANDSCAPE PRESERVATION

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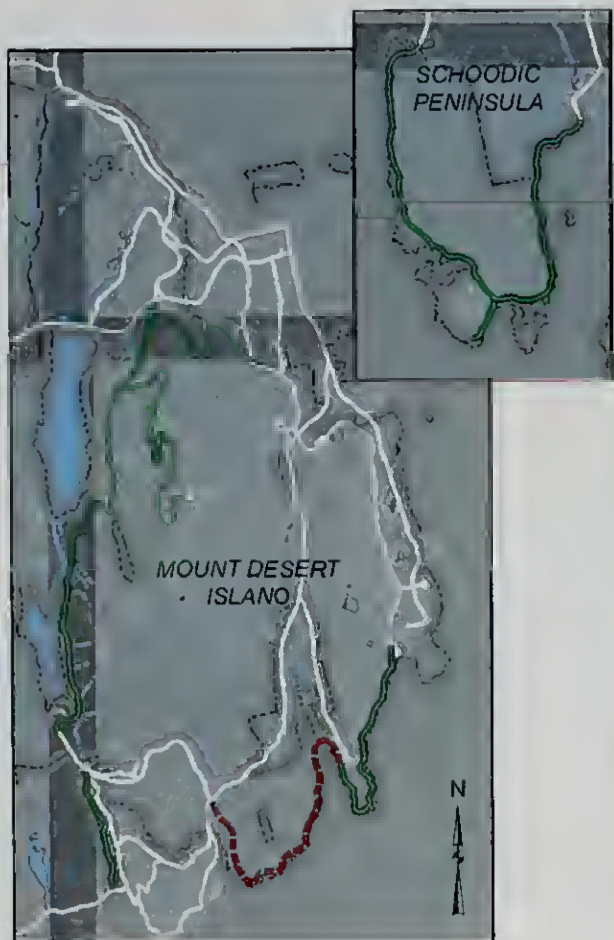
SOURCES
FHWA RIP Data, May 2002; ACAD GIS; OCLP Field Surveys, 2005/2006

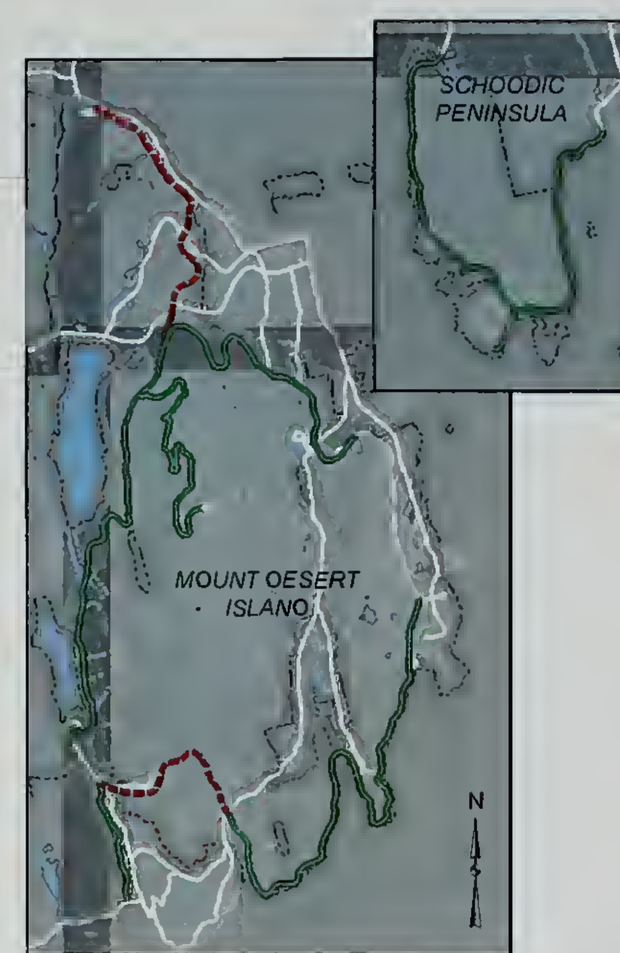
DRAWN BY
Jeff Killion using ArcMap GIS 9.1, Nov 2006

LEGEND
- Completed segment of Motor Road System
- Existing segment of Motor Road System
- Completed Bridge
- Existing Bridge
- park boundary (2004)
- stream
- pond

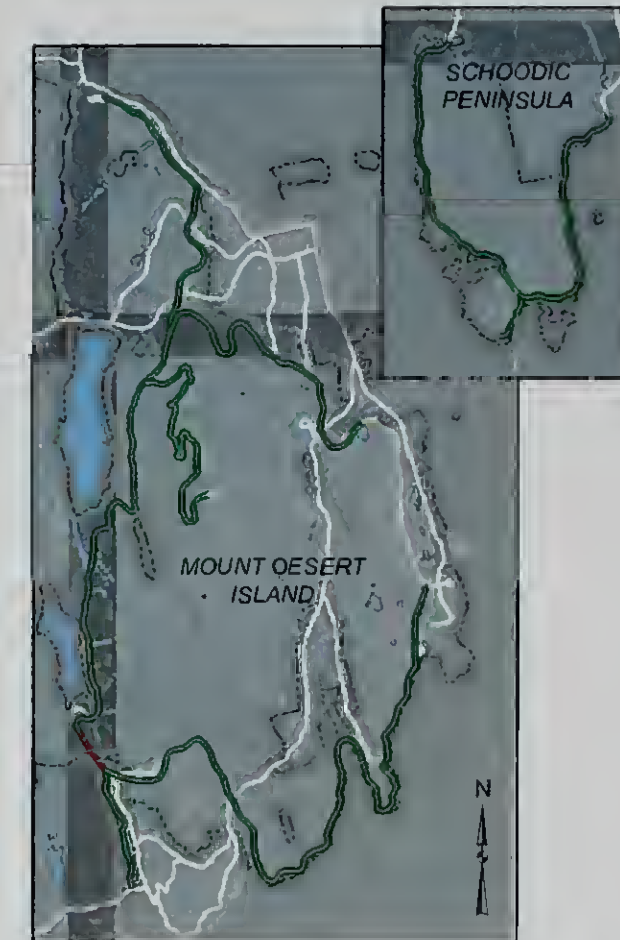


9. Otter Cove Causeway and Blackwoods Road
Completed 1939

10. Kebo Mountain Road Extension Champlain Mountain Road
Completed 1940

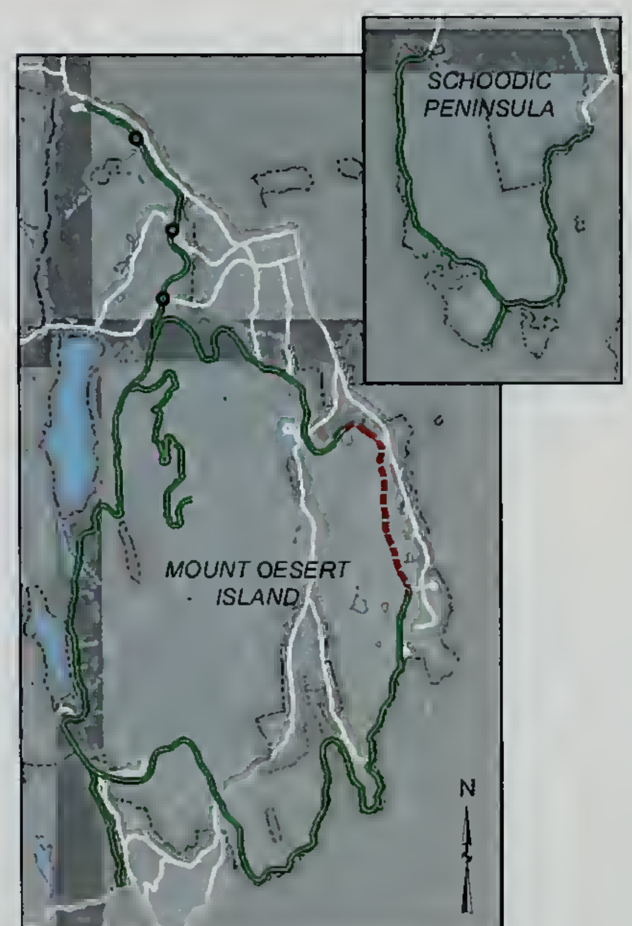


11. Paradise Hill Road (no bridges) Day Mountain Road
Completed 1941



12. Day Mountain Road Extension
Completed 1951

13. Paradise Hill Road bridges
Completed 1952



14. Bureau of Public Roads Project 4A2
Completed 1958

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Bar Harbor, ME

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1922-1958

Olmsted Center for Landscape Preservation

National Park Service
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SOURCES
FHWA RIP Data, May 2002; ACAD GIS; OCLP Field Surveys, 2005/2006

DRAWN BY
Jeff Killion using ArcMap GIS 9.1, Nov 2006

LEGEND
- Completed segment of Motor Road System
- Existing segment of Motor Road System
- Completed Bridge
- Existing Bridge
- park boundary (2004)
- stream
- pond

CHAPTER 2
EXISTING CONDITIONS

This chapter of the cultural landscape report begins with an overview of the extant characteristics and features of the historic motor road system. The remainder of the chapter discusses in detail each of the eighteen segments of the historic motor road system, beginning with the one-way segments that comprise the park loop road. The motor roads are described in the direction of travel that the existing conditions data was collected in the field.

Each motor road description begins with basic road information and then discusses specific characteristics and features as they apply to the road corridor. These include curvature and grades, topography, vegetation, views, circulation, buildings and structures, and small-scale features. Each road segment also includes a corresponding route number assigned by the Federal Highway Administration and, in the case of the park loop road, specific mileage numbers of each historic motor road segment.

Inventory field work was completed in 2005 and 2006. A description of the inventory methodology and the extensive tables and maps of existing conditions can be found in Appendices A and B at the end of this report.

OVERVIEW OF THE HISTORIC MOTOR ROAD SYSTEM

The 33.25-mile historic motor road system was constructed in eighteen different phases from 1922-1958. Sixteen historic road segments are located on Mount Desert Island, and twelve of them comprise the 18.5-mile park loop road. They include Kebo Mountain Road, Kebo Mountain Road Extension, Bureau of Public Roads Project 4A2, Champlain Mountain Road, Ocean Drive (consists of three segments), Otter Cliffs Road, Otter Cove Causeway and Blackwoods Road, Day Mountain Road, Day Mountain Road Extension, and Jordan Pond/Eagle Lake Road. The other four segments are spurs that connect to the park loop road. They include Paradise Hill Road on the north side of the loop (two segments, the road and bridges), Stanley Brook Road on the south side, and Cadillac Mountain Road, an interior spur that extends to the summit of Cadillac Mountain. Although originally designed for two-way traffic, most segments of the park loop road, from Kebo Mountain Road to Day Mountain Road, were converted to one-way traffic in the 1980s.

The historic motor road system on Mount Desert Island can be accessed at five points, three of which are along State Route 3. They are the Hulls Cove Entrance and Hulls Cove Visitor Center northwest of Bar Harbor, the Sieur de Monts Entrance south of Bar Harbor, and the Stanley Brook Entrance just west of Seal

Harbor. West of Bar Harbor is the Cadillac Mountain Entrance off State Route 233, and heading south out of town is Schooner Head Road, which provides access to the entrance fee station along the park loop road. Several other local roads also connect with the historic motor road system.

The Schoodic Peninsula is the location of the other two segments of the historic motor road system. Schoodic Loop Road is a one-way road that traces the shoreline. It connects to local roads off State Route 186. Schoodic Point Road is accessed from Schoodic Loop Road and accommodates two-way traffic.

A drive along the historic motor road system today reveals characteristics and features that are both consistent in their design and that are unique to a specific period of construction. As originally designed, the horizontal and vertical alignments of roadways were carefully planned to follow and preserve the natural contours wherever possible. As such, the motor roads wind along the mountain slopes and around the coastlines, but because of the use of superelevation and spiral transition curves, it is possible to maintain the posted speeds of 25-35 mph (Figure 2.1). In areas of cut and fill, fifty-three stone retaining walls and thirty-seven rock embankments help minimize the size of the road prism. The motor road is surfaced in bituminous concrete and the grades never exceed seven percent. Pavement widths average 18.7 feet and are typically wider at curves. The vegetated shoulders average just over three feet in width.

Two areas feature grade separations where travel lanes are divided by topography. At Otter Cliff, an impressive three-tiered, curved retaining wall structure designed by the Olmsted Brothers in 1936 takes advantage of panoramic views of the Atlantic Ocean. The uppermost level accommodates southbound vehicular traffic, below which is another travel lane originally designed for northbound traffic but now used by southbound vehicles on the one-way park loop road. At the lowest tier is the pedestrian-only Ocean Path that features a granite staircase built into the mortared masonry wall. A second grade separation is located on Paradise Hill Road. A new southbound lane was constructed uphill from the original route in 1963 to highlight the panoramic view to Frenchman Bay (Figures 2.2 and 2.3).

The historic motor road system crosses over water features, carriage roads, and other road systems via sixteen bridges. Most of the structures are reinforced concrete with masonry parapet walls, facings, and ornamentation that contributes to the park's rustic character (Figure 2.4). Two causeways span tidal water bodies on Mount Desert Island and the Schoodic Peninsula and feature flat stone embankments as reinforcement. The bridges within these structures are slightly different in design and appearance; at Otter Creek the three-arched bridge is entirely masonry and at Mosquito Harbor the bridge is a concrete structure with no arches or masonry facing. The masonry bridges throughout the park have recently been rehabilitated.

Stormwater drainage on the motor roads is handled by 444 culverts and 86 waterways. A majority of culverts are constructed of reinforced concrete pipe. The wide variety of inlet and outlet structures used along the motor roads were generally determined by topographic conditions. Types include dry-laid stone headwalls or mortared stone headwalls, curb type concrete and brick inlets, dry-laid stone or concrete drop-inlets, loose stones, or just pipes. There are also several interesting examples of older stone box culverts. About twenty percent of the culverts are fed by waterways, a third of which feature either loose or mortared rubble that, like the bridges and the culvert headwalls, blend in with the surrounding landscape. The others have been paved with asphalt, which has solved some erosion problems but has changed the character of some road sections. At Cadillac Mountain Road, some of the bituminous waterways abut the edge of pavement, essentially extending the travel lane and widening the overall road cross-section (Figure 2.5).

Along steep shoulders, native stones are also used in the construction of the guardwalls, and are arguably the most identifiable feature on the historic motor road system. Most of the 136 guardwall structures are comprised of large angular ledge stones typically between two and four feet high and set between three and five feet apart into the road shoulder. However, fifty-two of the guardwalls feature large rectangular quarried blocks, mostly on the Paradise Hill, Kebo Mountain, and Bureau of Public Roads Project 4A2 segments, which were constructed under the supervision of the Bureau. These guardwalls are not quite as high as the other walls and feature narrower gaps between each stone. There are also sixteen combination guardwall/retaining wall structures that feature guardwall stones set on top of a retaining wall. Since the late 1960s, as visitation increased, the park installed parking management stone walls along the motor roads to control parking and protect the roadside vegetation. These stones are typically smaller than the guardwall stones and are rounded, making them easily distinguishable from the historic guardwalls.

The historic motor road system features numerous roadside parking areas. Several are associated with major developed areas like Sand Beach, Thunder Hole, and the Jordan Pond House while others are less developed, some including restrooms, trailheads, or wayside signage. These areas are typically set back from the road corridor and are usually screened from the motor road by vegetation. Directly off the motor road are 110 paved and unpaved pullouts that extend from the travel lanes and allow for easy access. Like the guardwalls and culverts, the period of construction can be read in the choice of curbing material. The rough cut pink and gray granite curbs are the oldest, such as those at the summit of Cadillac Mountain or at Thunder Hole, those made of concrete curbing were installed after Word War II, and more recently, granite curbs with smooth cuts and sharper edges have been installed. Some of the heavily used pullouts feature marked parking stalls, narrow vegetated or mortared rubble medians, and pedestrian crosswalks. Pullouts typically correspond to intersections with carriage roads, hiking trails, bridges, and overlooks that offer views of the mountains, lakes, and the ocean.

Parking is also allowed in the right lane of the one-way park loop road and Schoodic Loop Road. However, visitors sometimes continue to pull off on to the shoulders to park. During summer afternoons, traffic congestion is common before and after major overlooks and particularly at the Sand Beach, Thunder Hole, and Jordan Pond House areas (Figure 2.6). Slower speeds are usually required around these areas, but along other sections of the historic motor road system the traffic moves along well. The presence of tour buses is also noticeable at the major attractions and especially on Cadillac Mountain Road and the summit.

There are a total of twenty-five panoramic viewsheds and fifty-seven framed and filtered viewsheds along the historic motor road system. Today, maturing vegetation has closed some of the historic views. In other places, developments beyond the park boundaries are visible from the motor roads (Figure 2.7). Vegetation along the road corridor ranges from deciduous and coniferous forests to open meadows and wetlands. In the more forested areas where the road corridor is bordered by trees, the canopies do not typically extend over the roadway to create a tunnel effect. Instead, the overhead view is usually open (Figure 2.8).

As the design and construction of the historic motor road system proceeded, great efforts were made to limit the removal of vegetation and preserve mature specimens. After the devastating fire in 1947, burned out areas were reforested. Adjacent to the motor road itself are the vegetated shoulders covered with a mix of grass and native plants. Like the built structures, they also contribute to the rustic character of the historic motor road system.

KEBO MOUNTAIN ROAD

(Federal Highways Route 0300: Miles 0.000 – 1.818)

(see Appendix B: Existing Conditions 2006, Kebo Mountain Road and Kebo Mountain Road Extension)

Construction of Kebo Mountain Road was completed in 1938, the tenth segment to be finished in the historic motor road system. The motor road was designed and constructed by the National Park Service and the Bureau of Public Roads, with significant consultation from Olmsted and Rockefeller. The motor road now functions as the first section of the one-way portion of the park loop road. Situated southeast of Bar Harbor, the motor road begins at the intersections of Jordan Pond/Eagle Lake Road and Paradise Hill Road, and then generally heads in an easterly direction to its intersection with Harden Farm Road. The motor road has a bus stop and intersects four marked hiking trails: Cadillac Mountain North Ridge Trail (#34), Gorge Path (#28), Kebo Mountain Path/Dorr Mountain North Ridge Trail (#21), and Stratheden Path (#24). The motor road is 1.8 miles long and has an average pavement width of 19.3 feet with 4.3-foot wide left shoulders and 3.1-foot wide right shoulders. The speed limit is posted at 25 mph.

The first two-thirds of Kebo Mountain Road is a continuous series of curves that tracks along the northern and eastern slopes of Kebo Mountain while the latter third is somewhat straighter as it descends into the broad plain called the Great Meadow. Although there are several significant changes in elevation, the grade changes along the motor road are gradual and do not exceed seven percent. The terrain on the right side of the road corridor is steep with dense trees and numerous rock outcroppings, some of which come close to the road edge. On the east side of the corridor, the land falls away but is still densely forested. Only in the last third of the segment do these topographic conditions begin to balance out. Because of the terrain and forest cover, there are only three significant viewsheds along the entire route. A paved pullout corresponds to the motor road's only panoramic view, while the four unpaved pullouts are located at trailheads and at the Kebo Mountain Bridge (Figures 2.9, 2.10).

The motor road's most impressive built feature is the curved Kebo Brook Bridge (BR18P, LCS #041118), a single-arched mortared stone and concrete structure that spans Kebo Brook. The bridge features grass shoulders and parapet walls approximately three feet high. The large number of culverts and walls along the road corresponds to the area's steep topography. There are twenty-one reinforced concrete pipe culverts and one dry-laid stone box culvert. About half of the culverts feature dry-laid stone drop-inlets, and some, along with two mortared stone waterways, are incorporated into dry-laid stone retaining walls. There are also six guardwalls that employ rectilinear quarried blocks, and one riprap embankment. Small-scale features include four trailhead markers, a cable-type gate supported by two large stone boulders at the beginning of the motor road, and a remnant pier of an old gate, also at the road's beginning (Figures 2.11-2.15).

KEBO MOUNTAIN ROAD EXTENSION

(Federal Highways Route 0300: Miles 1.819 – 3.419)

(see Appendix B: Existing Conditions 2006, Kebo Mountain Road and Kebo Mountain Road Extension)

Construction of the Kebo Mountain Road Extension, the thirteenth segment of the historic motor road system, was completed in 1940, the same year that the Champlain Mountain Road segment was completed. Together, these two motor roads advanced the development of historic motor road system along the east side of the Mount Desert Island. The second segment on the one-way part of the park loop road, the Kebo Mountain Road Extension begins around Harden Farm Road and generally tracks in a southeasterly direction before ending at the Beaver Dam Pond. Just prior to the pond is the Bear Brook developed area offering picnicking and restroom facilities. The motor road intersects with other roads that connect to the Town of Bar Harbor and other parts of the island. These roads include the Ledgelawn Road Extension and State Route 3, the latter of which spans the motor road via the Sieur de Monts Spring Bridge (BR06P, LCS #041131). This intersection also serves as the park's Sieur de Monts entrance and provides access to the Wild Gardens of Acadia, the Nature Center, and the Abbe Museum. The motor road also crosses the Jesup Path (#14) and Hemlock Trail (#23) and parallels the Great Meadow Loop (#70). The Kebo Mountain Road Extension is approximately 1.6 miles long with an average pavement width of 18.7 feet, left shoulder width of 3.0 feet, and right shoulder width of 3.4 feet. The speed limit is signed at 35 mph.

The Kebo Mountain Road Extension follows a level course along the north and east sides of Great Meadow before turning and gradually climbing the lower north slope of Champlain Mountain. The road grades do not exceed seven percent, and the curves are widened, superelevated, and designed with spiral transitions. Woodland vegetation borders both sides of the road corridor, but it is generally less dense on the right side, which allows for two framed/filtered views of Great Meadows and the Beaver Dam Pond. The motor road's seven unpaved pullouts are on the right side of the road, and two of them are located at these viewsheds (Figures 2.16, 2.17).

Drainage-related features along the Kebo Mountain Road Extension include seventeen culverts, a majority of which are reinforced concrete pipe types, and two bituminous waterways. Cromwell Brook flows under the motor road through a large pipe and drains Great Meadow, although it is often backed up with water a debris from beaver dams. The relatively flat topography flanking the motor road means there are few wall structures needed to support the road; however, there are two guardwalls comprised of rectilinear quarried blocks and four parking management stone walls. The only notable small-scale features are three trailhead signs (Figures 2.18, 2.19).

BUREAU OF PUBLIC ROADS PROJECT 4A2

(Federal Highways Route 0300: Miles 3.420 – 5.331)

(see Appendix B: Existing Conditions 2006, BPR Project 4A2 and Champlain Mountain Road)

Bureau of Public Roads Project 4A2 was completed in 1958, three years after a private landowner deeded a portion of her property to the Federal Government, which made the completion of the eighteenth and final segment of the historic motor road system possible. Today, the motor road represents the third one-way segment of the park loop road, beginning at the Beaver Dam Pond and ending at the Wire Gate Road intersection just prior to the park's entrance fee station. This segment also marks the point where the loop road turns to the south. The motor road also intersects with Bear Brook Trail (#10) and the Precipice Trail (#11). The 1.9-mile motor road has an average pavement width of 19.8 feet and shoulders that average 3.1 feet on the left and 3.6 feet on the right. The speed limit is 25 mph but slows to 15 mph as the road approaches the entrance fee station.

Except for Cadillac Mountain Road, portions of Bureau of Public Roads Project 4A2 feature some of the most substantial grade changes in the historic motor road system. From Beaver Dam Pond, the motor road makes a steady climb eastward before turning south and making a long and gradual descent along the lower east face of Champlain Mountain. The latter third of the motor road traces the west side of a broad plain where there are several small ponds. Although Champlain Mountain is wooded, the vegetation does not restrict or frame views nearly as much as the many rock outcroppings that seemingly lean against the road. Some of these palisades are quite dramatic, especially at the Precipice trailhead. The popularity of this area for climbers and hikers was the impetus for creating a paved parking area off the motor road. Although it is not a developed area like others along the motor road, the parking area does include tooled stone benches and steps and a paved walkway. Two paved pullouts can also be found along the left side of the motor road, one of which highlights a panoramic view of the ocean. There are seven other framed and filtered views, mostly of the broad plain, ponds, and ocean that are off to the left (Figures 2.20, 2.21).

Drainage-related features on Bureau of Public Roads Project 4A2 include thirty-one culverts, all but one of which are reinforced concrete pipe types, and eleven waterways, all but one of which are mortared rubble. Some of the culvert outlet pipes are located in riprap embankments, of which there are five. The embankments are all within the first half-mile of this road segment, owing to the amount of cut and fill required to carry it around the north and east slopes of Champlain Mountain. There are also three guardwalls of rectilinear quarried blocks and six parking management stone walls. Small-scale features include two trailhead signs, three wayside signs at the Precipice trailhead, and a metal pipe gate located just before the Wire Gate Road intersection (Figures 2.22-2.26).

CHAMPLAIN MOUNTAIN ROAD

(Federal Highways Route 0300: Miles 5.332 – 5.931) (see Appendix B: Existing Conditions 2006, BPR Project 4A2 and Champlain Mountain Road)

Champlain Mountain Road represents the twelfth completed segment part of the park's historic motor road system and the fourth section of the one-way park loop road. It was completed in 1940, the same year as the Kebo Mountain Road Extension. The motor road begins at the former Wire Gate Road, which connects to Schooner Head Road. An entrance fee station is located at this intersection and is the park's only fee collection booth on the motor road (Figure 12.1). The park also collects fees at the visitor center and at the campgrounds. Just prior to its end at Sand Beach, the motor road crosses the trailhead for the Bowl Trail (#6). The average pavement width on Champlain Mountain Road is 18.9 feet, with shoulders widths averaging 3.2 feet on the left and 5.6 feet on the right. The speed limit on the 0.6 mile-long road is 25 mph.

Just to the west of the motor road is the very steep terrain of Enoch Mountain and The Beehive. However, Champlain Mountain Road traverses the lower slopes of these geological features and is mostly level with only two gradual curves. Both sides of the road corridor are densely wooded, except on the lefts side prior to Sand Beach where the trees thin out and allow for a framed and filtered view of a pond down the hillside. There is one unpaved pullout located immediately after the entrance fee station. Parking is allowed in the right lane, and in the busy season is often used as one approaches the Sand Beach area (Figure 2.27). Prior to Sand Beach, an unmarked trail on the right side of the motor road leads to a popular rock climbing area on Champlain Mountain.

The steep terrain to the west justifies the ten reinforced concrete pipe culverts found along Champlain Mountain Road. The culverts vary in design and types of inlets and outlets. The motor road's lone rectilinear quarried block guardwall and section of parking management stones are located near the Sand Beach area. The only small-scale feature is a trailhead marker, also near Sand Beach (Figures 2.28-2.31).

OCEAN DRIVE: SAND BEACH TO THUNDER HOLE

(Federal Highways Route 0300: Miles 5.932 – 6.627)

(see Appendix B: Existing Conditions 2006, Ocean Drives, Otter Cliffs Road, and Otter Cove Causeway/Blackwoods Road)

Between 1929 and 1934, portions of Ocean Drive, a scenic road developed by the Town of Bar Harbor in the 1890s, were reconstructed as part of the historic motor road system. This segment, the fifth to be completed in the system, was completed in 1934 and is the fifth segment of the one-way of the park loop road. It tracks south, stretching from Sand Beach, one of the park's most popular developed areas with restrooms, paved parking, and a beach, to Thunder Hole. The motor road also parallels the well-used Ocean Path (#3). At 0.7 miles long, the average pavement width is 16.2 feet and the left shoulder width is 2.0 feet; the width of the right shoulder is negligible. The posted speed limit is 25 mph.

This segment of the historic motor road system tracks along the eastern face of Gorham Mountain through a series of tangents and meandering turns. Grade changes are gradual but clearly perceptible, particularly around Sand Beach where the motor road rises above the old roadbed of Ocean Drive, which serves as one of three parking areas located off the road. Rockefeller hoped such areas would discourage parking alongside the motor road, which he felt would distract from the views. However, at the Sand Beach area in the summer months, the right lane is often filled with parked cars. The land on the right side of the road corridor is steep and features more rock outcrops at the Sand Beach area than at the Thunder Hole end of the road. It is primarily wooded with occasional openings that allow glimpses of the mountain. The left side of the motor road corridor is much more open as the land falls away to the shoreline, giving way to numerous panoramic and framed/filtered views of Old Soaker and the ocean (Figure 2.32).

Built features along this segment of the motor road include eleven culverts, most of which are reinforced concrete pipe types and three of which are connected to loose rubble waterways. While the inlets and waterways are on the right side of the road, all but one of the wall structures is on the left side. There are three guardwalls constructed with angular ledge stones, one dry-laid stone guardwall/retaining wall, and three dry-laid stone retaining walls. There is also a run of parking management stones after the paved parking area, a set of tooled stone steps alongside the Ocean Path, and the remnant of what may be an old stone-lined well (Figures 2.33-2.35).

OCEAN DRIVE: THUNDER HOLE DEMONSTRATION SEGMENT

(Federal Highways Route 0300: Miles 6.628 – 6.722)

(see Appendix B: Existing Conditions 2006, Ocean Drives, Otter Cliffs Road, and Otter Cove Causeway/Blackwoods Road)

The Thunder Hole Demonstration Segment was the first section of Ocean Drive to be rebuilt and the second section in the historic motor road system. Rockefeller reconstructed this 500-foot segment in 1929 to demonstrate what Ocean Drive could become as part of the historic motor road system. Today, it represents the sixth segment of the one-way park loop road with travel to the south. The beginning and end points generally correspond to the two intersections on the right side of the road that access the Thunder Hole developed area, which includes a gift shop, restrooms, and paved parking. The overlook to Thunder Hole is on the left side of the motor road, just off the Ocean Path (#3). The 0.1-mile long motor road is 15.8 feet wide and averages 1.7 feet in width on the left shoulder. There is no shoulder on the right side. The posted speed limit in this area is 25 mph.

The motor road is straight and level in grade. The terrain on the right side of the road corridor gradually slopes up to the parking lot in the developed area and is partially wooded but not particularly dense. The land on the left side falls away to the rocky cliffs of the shoreline and is more open, thus the filtered and panoramic views to Old Soaker and the ocean are on this side of the road corridor. Four painted crosswalks connect numerous paths on the right side to the paths and overlook area on the left side. The path systems are made up of a series of paved and unpaved walkways, accessible ramps with railings, and steps. There are no pullouts along this stretch, but the right lane has marked stalls designated for Americans with Disabilities Act and bus use. A stone box culvert and a dry-laid stone retaining wall are located at the south end of this road section (Figures 2.36, 2.37).

OCEAN DRIVE: THUNDER HOLE TO OTTER CLIFFS

(Federal Highways Route 0300: Miles 6.723 – 7.185)

(see Appendix B: Existing Conditions 2006, Ocean Drives, Otter Cliffs Road, and Otter Cove Causeway/Blackwoods Road)

In 1933, as the eventual shape of the historic motor road system was becoming clearer, this longer section of Ocean Drive was reconstructed, from Thunder Hole south to the Otter Cliff Road intersection. It represents the fourth completed segment in the historic motor road system and the seventh segment of the one-way park loop road, paralleling the Ocean Path (#3) and crossing the Gorham Mountain Trail (#4). At just under one-half mile long, it features an average pavement width of 17.7 feet and a left shoulder approximately 1.5 feet in width. There is no measurable shoulder on the right. The speed limit is posted at 25 mph.

The motor road features a series of tangents and gradual curves, and is consistent in elevation. The topography to the right of the road corridor varies from flat areas to low hills that eventually rise up to Gorham Mountain, while the land on the left side slopes down the rocky shoreline. Vegetation is much more prominent and dense on the right side of the motor road when compared to the left; as such, this road segment is dominated by both panoramic and filtered/framed views to the ocean to the left. Two paved parking areas are located off the right side of the motor road after Monument Cove, one of which serves the popular trailhead to Gorham Mountain. Parking is allowed in the right lane, and there is only one unpaved pullout (Figure 2.38).

There are seven culverts along this segment, most of which feature dry-laid stone drop-inlets. All of the wall structures are on the left side of the motor road and include two dry-laid stone retaining walls, two angular ledge stone guardwalls, and two guardwall/retaining walls. Many of these structures are situated between the motor road and the Ocean Path. The guardwall/retaining wall at Monument Cove is a particularly impressive mortared stone structure that drops well over fifty feet below the grade of the road. Other features include a set of tooled stone steps that connect the Ocean Path to the Gorham Mountain trailhead area (Figures 2.39-2.42).

OTTER CLIFFS ROAD

(Federal Highways Route 0300: Miles 7.185 – 8.356)

(see Appendix B: Existing Conditions 2006, Ocean Drives, Otter Cliffs Road, and Otter Cove Causeway/Blackwoods Road)

Otter Cliffs Road represents the ninth completed segment of the historic motor road system and was finished in August 1936, a few months after Stanley Brook Road was completed. The motor road was primarily designed by the Olmsted firm. The motor road begins at the southeast terminus of Otter Cliff Road and ends at the southwest terminus of Otter Cliff Road, which heads north and intersects with State Route 3. Otter Cliffs Road is the eighth one-way segment of the park loop road and heads south before turning back to the north. The route parallels the Ocean Path (#3) for part of the way and includes a bus stop at a grade separation feature. The motor road is around 1.25-miles long and has an average pavement width of 15.2 feet, left shoulder width of 0.8 feet, and right shoulder width of 5.0 feet. The speed limit is 25 mph, although there are no signs along this segment.

The motor road's alignment essentially traces the shoreline of the small peninsula known as Otter Point. The wooded east slope of the peninsula's highest point corresponds to the highpoint of the road, which is also the location of the historic motor road system's most unique grade separation feature, designed by the Olmsted Brothers. Here, as the motor road curves, it splits into three tiers separated by guardwall/retaining walls. The upper two levels carry vehicles, while a third level is located below the two lanes for the pedestrian Ocean Path. Although the two travel lanes no longer separate opposing traffic, this feature nonetheless continues to offer unobstructed panoramic views to the ocean from all levels. In fact, most of the road segment features either panoramic or framed/filtered views, and as it is a popular destination, the two parking areas at the grade separation and at Otter Point are well used. A crosswalk connects the parking area and Ocean Path (Figure 2.43).

Given the terrain of the Otter Cliff area, it is not surprising that there are many structures associated with road prism. There are thirteen culverts, and all of the inlets are on the right side of the motor road. Nine of the culverts feature dry-laid stone drop-inlets. Wall structures include six guardwall/retaining walls, one retaining wall, and four guardwalls. One of the guardwalls is a low earthen berm, one of only five along the historic motor road system. The three curved walls that form the grade separation, and the set of steps built into the lower wall, are constructed with pink mortared stone blocks that blend in with the adjacent rock cuts; it is one of only a few places on the historic motor road system where visitors can appreciate such engineered features. Other structures include three parking management stone walls, three trailhead signs, and a metal pipe gate just after the Otter Cliff Road intersection (Figures 2.44-2.49).

OTTER COVE CAUSEWAY AND BLACKWOODS ROAD

(Federal Highways Route 0300: Miles 8.358 – 11.422)

(see Appendix B: Existing Conditions 2006, Ocean Drives, Otter Cliffs Road, and Otter Cove Causeway/Blackwoods Road)

Otter Cove Causeway and Blackwoods Road represents the eleventh completed segment of the historic motor road system and the ninth segment of the one-way park loop road. The motor road was designed and constructed by the Bureau of Public Roads in 1939, with major design contributions by Olmsted and Rockefeller. The motor road begins at the southwest terminus of Otter Cliff Road and ends at the Blackwoods Bridge (BR03P, LCS #041103) that carries State Route 3 over the motor road. This road segment also marks the point where the loop road turns and heads west across the southern shoreline of Mount Desert Island. The Fabbri developed area is situated at the beginning of the road segment and features restrooms and a picnic area. Soon after the causeway is the Blackwoods Campground. Although a there is no public vehicular access to it from the motor road, there is a gravel service road used by park vehicles and by campers that hike to a nearby beach. The motor road is 3.06 miles long and features an average pavement width of 18.5 feet. The average width of both shoulders is 4.6 feet and the signed speed limit is 35 mph.

Much of the motor road traces the curving shoreline formed by Otter Cove and the Atlantic Ocean before it turns to the northwest. The curves are widened and superelevated and designed with spiral transitions. Grade changes are gradual but obvious as the motor road descends down to the causeway and bridge and then slowly rises to Western Point and Little Hunters Beach before straightening and leveling out as it tracks alongside Hunters Brook. The right side of the corridor is mostly wooded with the terrain gradually sloping uphill except just after the causeway and bridge where there are impressive rock cuts. The land on the left side of the road corridor drops down to the ocean, and in places where the slopes are steep there are fewer trees, which allows for one panoramic view and four framed/filtered views to the sea. To the right, panoramic views of Otter Cove and Cadillac Mountain are also found from the causeway and bridge. Eleven pullouts are found along the motor road and most are on the left side (Figures 2.50-2.53). Crosswalks connect a parking area near Fabbri with the Fabbri monument.

Arguably, the most impressive engineering feat along Blackwoods Road and possibly the entire historic motor road system is the Otter Creek Cove Bridge and Causeway (BR19P, LCS #041122), which carries the motor road across Otter Cove. This massive structure was designed to withstand the pounding sea and at the same time allow water to flow from Otter Creek. The ocean side of the earthen causeway is stabilized with a broad embankment of irregularly-shaped, flat stones. The causeway's arced shape is continued at the west end by a triple-arched bridge that features asphalt shoulders and 30-inch-high parapet walls. The bridge is the only solid masonry bridge on the historic motor road system and has recently been rehabilitated. The two other bridges on the road segment – the Fish House Bridge (BR02P, LCS #041112) and the Little Hunters Beach Brook Bridge (BR08P, LCS #041119) – are masonry and concrete single-arched structures with grass/gravel shoulders and 30-inch-high parapet walls. Other structures include thirty-one culverts, five guard/retaining walls, six retaining walls, and eight guardwalls, five of which are earthen berm types, two are rectilinear quarried blocks, and one is angular ledge stones. Consistent with the topography, most of the culvert inlets are on the right side of the motor road and wall structures are on the left side. Other built features include five sections of parking management stones, eight walkways, two post-and-rail fences, a set of wood steps and a set of tooled stone steps, and the Alessandro Fabbri Memorial Plaque (MON20, LCS #041356) mounted on a large boulder (Figures 2.54-2.65).

DAY MOUNTAIN ROAD

(Federal Highways Route 0300: Miles 11.423 – 13.308)

(see Appendix B: Existing Conditions 2006, Day Mountain Road, Stanley Brook Road, and Cadillac Mountain Road)

The Bureau of Public Roads completed Day Mountain Road in 1941. It represents the fourteenth completed segment of the historic motor road system and the tenth and final segment of the one-way portion of the park loop road. The direction of travel is westward with a beginning point at the Blackwoods Bridge (BR03P, LCS #041103) that carries State Route 3 over the motor road and ending at the intersection with Day Mountain Road Extension and Stanley Brook Road. The motor road intersects with one of two vehicular entrances to Wildwood Stables and with two trails: Hunters Brook Trail (#35) and Day Mountain Trail (#37). The motor road is also spanned by the Triad-Day Mountain Bridge (BR05S, LCS #041139) which carries the Day Mountain carriage road over the motor road. At 1.9-miles in length, Day Mountain Road features average widths of 18.2 feet for the pavement, 5.2 feet for the left shoulder, and 4.8 feet for the right shoulder. The speed limit is 35 mph but there are no posted signs along this segment.

The motor road hugs the lower east slope of Day Mountain just above Hunters Brook and then, through a series of superelevated curves designed with spiral transitions, passes through a narrow valley between Day Mountain and the Triad. The road grades are relatively consistent. Along the first two-thirds of the motor road, the land on the left side of the road corridor is hilly with several rock outcroppings. On the right side of the road corridor, the terrain generally slopes down and away. The scene changes around the Wildwood Stables area where the terrain flattens out. Much of the road corridor is densely wooded, which limits long views, although there are brief glimpses of the stable area. Nonetheless, there are seven pullouts along this road segment and a walkway (Figure 2.66).

Day Mountain Road features two single-arched mortared stone and concrete bridges: the Hunters Beach Brook Bridge (BR21P, LCS #041113) and the Dane Farm Bridge (BR04P, LCS #041106) over an abandoned carriage road to Wildwood Stables. Both bridges have parapet walls and grass shoulders. Numerous sections of the motor road feature long dry-laid stone retaining walls; those on the left that retain the steeper slopes of Day Mountain are visible from the road, while those on the right that retain the road prism are not. There are nineteen culverts, and six are fed by loose rubble waterways. The waterways and most of the culvert inlets are on the left. Other structures include a guardwall of rectilinear quarried blocks, three parking management stone walls, two trailhead signs, and a metal pipe gate (Figures 2.67-2.72).

DAY MOUNTAIN ROAD EXTENSION

(Federal Highways Route 0012: Miles 0.000 – 0.475)

(see Appendix B: Existing Conditions 2006, Day Mountain Road Extension and Jordan Pond/Eagle Lake Road)

The Day Mountain Road Extension, completed in 1951, was the sixteenth segment of the historic motor road system and provided a new connection between Day Mountain Road and Jordan Pond/Eagle Creek Road that was off private property. Located in the south portion of the park and north of Seal Harbor, the two-way motor road is part of the park loop road and is oriented generally north-south. It begins at the intersection with Stanley Brook Road and Day Mountain Road and ends at the Jordan Pond House. Soon after the beginning of the route is one of two gravel entrances to Wildwood Stables and near the end of the route is Jordan Pond Gatehouse – Gatekeeper's House and the at-grade crossing of the Triad-Bubble Pond Carriage Road. The motor road is close to one-half mile long and has a speed limit of 35 mph. The average pavement width is 20.6 feet and the average lane width is 11.3 feet. Average shoulder widths are 3.0 feet on the left side and 3.3 feet on the right side.

The motor road is more or less straight and the grade gradually slopes down from south to north, but the change in grade is barely perceptible. The land on both sides of the road corridor is generally level and is covered in forest which allows limited views into the interior. Due to the flat topography, there are only two culverts, although one of them is an impressive two-pipe structure with mortared stone headwalls. The only other notable feature is a run of parking management stones at the carriage road intersection (Figure 2.73).

JORDAN POND / EAGLE LAKE ROAD

(Federal Highways Route 0012: Miles 0.476 – 5.156)

(see Appendix B: Existing Conditions 2006, Day Mountain Road Extension and Jordan Pond/Eagle Lake Road)

The Jordan Pond/Eagle Lake Road was the first segment completed in the park's historic motor road system, in 1927. In 1962, portions of the motor road were widened and curves were modified, and there was a realignment at the Bubble Pond area. The two-way motor road is part of the park loop road and is located southwest of Bar Harbor, essentially running in a north-south direction through the middle of the park and the heart of the eastern side of Mount Desert Island. The route extends from the Jordan Pond House (Mile 0.476) to just south of Route 233 at the intersection with Paradise Hill Road (Federal Highways #0010) and Kebo Mountain Road (the beginning of the one-way park loop road, Federal Highways #0300) and includes a turnoff to Cadillac Mountain Road (Federal Highways #0013). The popular Jordan Pond House features a concession-operated restaurant and gift shop as well as a bus stop and a parking area. At the route's midway point is another developed area called Bubble Pond with parking, restroom, bus stop, and drinking water. The motor road also intersects with the Bubbles-Pemetic Trail (#36) and the Pond Trail (#20). The asphalt motor road is 5.15 miles long and features an average pavement width of 20.9 feet and an average lane width of 10.6 feet. The shoulder averages 3.0 feet wide on both sides. Speed limits are posted at 35 mph except near Bubble Pond where it slows to 25 mph.

The motor road traverses the western faces of Pemetic Mountain, Cadillac Mountain, and the Whitecap at a generally consistent elevation. Much of the route can be characterized as a series of long tangents connected by subtle turns except in two areas – just north of the Jordan Pond House and south of Bubble Pond – where curves tighten and speeds must be reduced. The land on the right side of the road corridor rises in the form of forested hillsides and rock outcroppings that in places come quite close to the edge of the motor road. On the left side of the road corridor, the land generally slopes down to the Jordan Pond and Eagle Lake areas. This slope too also wooded, although there are many gaps in the range of treetops that provide both framed and panoramic views to the pond and lake and to the many mountain ranges to the west. There are five paved and three unpaved pullouts along the motor road, and six of them take advantage of these scenic views (Figures 2.74, 2.75).

Jordan Pond/Eagle Lake Road has eighty-seven culverts, all of which are reinforced concrete pipes except one. Many of the inlets are marked by three or four coping stones because of the rather narrow shoulders, making their locations easily identified from the roadway. Some of the structures feature massive stone headwalls and are the most impressive in the park. Twenty-seven of the inlets are served by waterways, and while most are paved, five located in the section between Route 233 and Cadillac Mountain Road still feature mortared rubble designs; this stretch of the motor road was the first section to be completed, in 1924. The inlets and waterways are generally on the right side of the road while most of the wall features are on the left side. The motor road features twenty-two angular ledge stone guardwalls, two mortared stone guard/retaining walls, and one riprap embankment. There are also four retaining walls and four parking management stone walls. Small-scale features include two trailhead signs and one wayside sign. There are three metal pipe gates located just north of the Jordan Pond House, south of the intersection with Cadillac Mountain Road, and near the junction with the park loop road and Paradise Hill Road (Figures 2.76-2.79).

STANLEY BROOK ROAD

(Federal Highways Route 0014)

(see Appendix B: Existing Conditions 2006, Day Mountain Road, Stanley Brook Road, and Cadillac Mountain Road)

Stanley Brook Road represents the seventh completed segment of the historic motor road system and was one of two roads finished in 1936. Frederick Law Olmsted, Jr. played a major role in the design of the motor road, which was somewhat atypical in its design in response to the winding and narrow Stanley Brook valley. The motor road serves as the southern entrance to the main part of the park and connects to the village of Seal Harbor. Oriented in a north-south direction, the two-way motor road begins at the intersection of two segments of the park loop road – Day Mountain Road and the Day Mountain Road Extension – and ends at State Route 3. The motor road passes under Stanley Brook Bridge (BR26S, LCS #006572), which was designed to accommodate the motor road, Stanley Brook, a Barr Hill-Day Mountain Carriage Road, and a trail (Seaside Path, #401). The average pavement width on the 1.3-mile long motor road is 17.7 feet with an average lane width of 9.9 feet. Shoulder width on the left side averages 4 feet and on the right side averages 3.9 feet. The signed speed limit is 25 mph (Figure 2.80).

The elevation of Stanley Brook Road gradually descends from north to south. Most of the motor road is a series of tangents and gentle curves, although the curves tighten somewhat midway along the route when the course of Stanley Brook enters the road corridor area from the northeast. From here, the land flattens out and the motor road and the stream repeatedly trade sides along the valley floor. Both sides of the road corridor are heavily wooded except at the very southern end where the landscape opens up to allow for a view of Seal Harbor. The dense forest makes it difficult to perceive the topography of the valley, but at the same time blocks views of buildings and structures in the village of Seal Harbor, which is just to the east of Stanley Brook. The six pullouts along the motor road are all unpaved and are located near the Stanley Brook Bridge and along Stanley Brook. There is also a set of steps built into one of the bridge abutments (Figures 2.81, 2.82).

The motor road crosses the Stanley Brook six times on mortared stone and concrete bridges that feature grass shoulders and 18-inch-high parapets (Stanley Brook Road Bridge #s 1-6, BR28P – BR33P, LCS #s 041133 – 041138). All of the bridges are low in profile and unobtrusive, and represent Olmsted's desire for a simple and unpretentious bridge design. Unique to four of the bridges are wood guardrails held by square stone piers and anchored atop the bride walls. The motor road also passes over twenty culverts, fifteen of which are dry-laid stone box types. Some of the box culverts feature stone-lined gutters. Although the inlets of culverts can be found on both sides of the road, most of the wall structures are on the west side of the road. There are twelve dry-laid stone retaining walls, one of which is associated with a series of pools in a perennial stream near the carriage road overpass. Most walls are located in the northern portion of the motor road, and many of these are partially covered with mosses and plants, giving them a timeless quality. There are also two guardwalls and one guardwall/retaining wall. Small-scale features are limited to two metal pipe gates located near the route's beginning and end points (Figures 2.83-2.87). Several low stone structures that appear to function as check dams can be found along portions of Stanley Brook but were not inventoried for this report.

CADILLAC MOUNTAIN ROAD

(Federal Highways Route 0013)

(see Appendix B: Existing Conditions 2006, Day Mountain Road, Stanley Brook Road, and Cadillac Mountain Road)

The third completed segment of the historic motor road system, Cadillac Mountain Road, was finished in 1932 and was the first road at Acadia National Park completed in cooperation with the Bureau of Public Roads. The winding, two-way motor road begins at Jordan Pond/Eagle Lake Road (park loop road) and climbs to the summit of Cadillac Mountain, where there are restroom facilities, the concession-operated Cadillac Summit Center, and a large paved parking lot. The motor road parallels portions of the Cadillac Mountain North Ridge Trail (#34) and the Cadillac Mountain South Ridge Trail (#26). It is 3.35 miles long and has an average pavement width of 23.1 feet and an average lane width of 11.8 feet. The motor road's middle section has limited shoulders; in the other areas average widths are 3.5 feet on the left and 3.1 feet on the right. The speed limit alternates between 15 and 25 mph.

Although Cadillac Mountain Road tracks across park's most rugged terrain, the maximum gradient is seven percent. The motor road ascends from beginning to end and features spiral transition curves. There are few straight sections as the road twists and turns across the slopes of The Whitecap and Cadillac Mountain, and in some cases, through impressive rock cuts. The first one-half mile of the road corridor is wooded on both sides, with slopes rising up on the right side and falling away on the left, after which the landscape alternates between scattered masses of trees and open areas with interesting rock outcroppings. The topography and vegetation combine to offer five panoramic and five framed/filtered views. The popularity of the views is signified by the large number of pullouts, fourteen in total, eleven of which are paved (Figures 2.88, 2.89).

Consistent with the mountainous terrain are the high number of culverts, waterways, wall structures, and embankments. There are fifty-six culverts, which includes several fine examples of dry-laid stone box culverts, mostly within the first mile. There are twenty-five waterways, and all but two are paved. The twenty guardwalls are all constructed with large angular ledge stones, and the five embankments and two retaining walls are built with dry-laid stones and rip rap, respectively; they are found on both sides of the motor road depending on the topography. The seven parking management stone walls are also angular ledge stones but much smaller than the guardwall stones. Small-scale features include a metal pipe gate and a wayside sign (Figures 2.90-2.95).

PARADISE HILL ROAD

(Federal Highways Route 0010)

(see Appendix B: Existing Conditions 2006, Paradise Hill Road)

Paradise Hill Road represents the fifteenth and seventeenth segments completed on the historic motor road system; due to insufficient funding in the original funding appropriation and the events of World War II, it was constructed in two phases – most of the road surface was completed in 1941 but the bridges required to make it passable were not finished until 1952. The two-way motor road generally runs north-south and begins northwest of Bar Harbor off Route 3 at the Hulls Cove Entrance, the park's northernmost access point and site of the Hulls Cove Visitor Center. The ending is at the beginning of Kebo Mountain Road and the end of Jordan Pond Road (this intersection is also the beginning and ending of the park loop road, respectively). There are two major vehicular intersections along the route – one with Duck Brook Road and another with Route 233, which is the park's Cadillac Mountain Entrance – as well as a trail intersection. The motor road is 3.05 miles long with an average pavement width of 22.7 feet and an average pavement width of 11.3 feet. Average shoulder width on the left side is 2.6 feet and on the right is 3.9 feet. The posted speed limit is 35mph.

Spiral transition curves and a maximum gradient of seven percent translate to a meandering route that hugs the eastern slopes of Paradise Hill and Great Hill and spans the deep ravine of Duck Brook. As such, much the road corridor is bounded on the right by hilly wooded terrain and occasional rock outcroppings that allow for limited views into the forest. The land typically falls away on the left side of the road corridor and offers glimpses of Frenchman Bay and Kebo and Dorr Mountains. Three panoramic views and six framed and filtered views can be found along the motor road, one of which is the result of a grade separation built in 1963 to overlook Frenchman Bay. There are six paved pullouts, all on the left side of the motor road, and eleven unpaved pullouts (Figures 2.96, 2.97).

Paradise Hill Road features three mortared stone and concrete bridges. The New Eagle Lake Road Bridge (BR10P, LCS #041121) and the Route 233 Bridge (BR20P, LCS #041123) are single-arched structures approximately 100-feet long with grass shoulders and 30-inch- high parapet wall. The third structure, the Duck Brook Bridge (BR01P, LCS #041107), is a massive three-arched feature with raised sidewalks that serve as shoulders and 30-inch-high parapet walls. At around 400 feet long, it is the park's longest bridge. The motor road features nine bituminous waterways and forty-five culverts, all but one of which is the type reinforced concrete pipe. In general, most culvert inlets and bituminous waterways are on the right side of the road, while culvert outlets and walls are on the left side. Walls alongside the traveled way include twenty-one guardwalls of rectilinear quarried blocks and seven parking management walls of rounded stones. Compared to other segments of the historic motor road system, there are only a few built structures supporting the road prism – two riprap embankments and four dry-laid stone retaining walls. There are also two stone walls visible from the motor road probably associated with old roads predating the park. Small-scale features along the motor road include several trailhead and wayside signs, and two metal pipe gates just after the beginning of the road and prior to the Route 233 Bridge (Figures 2.98-2.103).

SCHOODIC LOOP ROAD

(Federal Highways Route 0301)

(see Appendix B: Existing Conditions 2006, Schoodic Loop Road)

Schoodic Loop Road was built in two sections from 1933-1935 and represents the sixth completed segment of the park's historic motor road system. Designed and constructed by the Bureau of Public Roads and the National Park Service, its development was driven by the relocation of the naval radio station from Otter Cliff to Schoodic Peninsula. The motor road is located on park lands on the southern tip of Schoodic Peninsula, south of the villages of Winter Harbor and Birch Harbor. A local road off State Route 186 provides access to the beginning of this motor road at Mosquito Harbor. The motor road becomes one-way after Frazer Point, and then traces much of the peninsula coastline until its end at Schoodic Harbor where it continues as another local road back to the state highway. There are two developed areas, at Frazer Point, that has restrooms and picnic facilities, and at Blueberry Hill, which features parking and trail access to The Anvil. The motor road also intersects with three trails, Alder, Anvil, and East, and passes the recently closed campus of the old naval radio station. Schoodic Loop Road is 5.8-miles long and features an average pavement width of 18.0 feet. The average shoulder width on the left is 3.6 feet and 3.8 feet on the right, although there is about a mile where the shoulder widths are negligible. The posted speed limit is 35 mph except around the intersection with Schoodic Head Road where it is 25 mph.

Much of the motor road traces the shoreline of Schoodic Peninsula through a series of broad curves and longer tangents. Curves are designed with spiral transitions, and there are changes in grade but they are not particularly noticeable except around West Pond and Big Moose Island. The left side of the road corridor is generally characterized by wooded terrain and occasional rock outcroppings that slope up and away from the road, especially in the vicinity of the peninsula's higher elevations at the Anvil, Schoodic Head, and Buck Cove Mountain. The land on the right side of the road corridor falls away to the water and features scattered masses of trees. Predictably, the six panoramic views and the sixteen framed/filtered views are on the right side of the motor road with views to the oceans and islands. The motor road features twelve paved pullouts and fourteen unpaved pullouts, and most of them are also on the right side of the road (Figures 2.104-2.106).

Schoodic Loop Road's most noticeable structure is the causeway and bridge at Mosquito Harbor, which allows water from Frazer Creek to flow to Winter Harbor. On both sides of the causeway, the upper half is covered in grass while the lower half is stabilized by massive irregular-shaped, flat pieces of granite. The bridge is made of concrete, like a majority of the bridges at Acadia National Park, but it is unique in that it does not have a masonry façade or an arched opening. There are fifty-nine culverts and most are the reinforced concrete type. Guardwall structures total forty and are typically located on the right side of the road. The guardwalls are constructed with large angular ledge stones except at the causeway and bridge, which features rectilinear quarried blocks. Some of the guardwalls are backed by eighteen riprap embankments that extend down the shoreline. Small-scale features include three trailhead signs, a wayside sign, and a utility line from the former Naval Station (Figures 2.107-2.114).

SCHOODIC POINT ROAD

(Federal Highways Route 0249)

(see Appendix B: Existing Conditions 2006, Schoodic Point Road and Access Roads)

Schoodic Point Road was completed in 1935 by the Bureau of Public Roads and the National Park Service and represents the seventh completed segment in the historic motor road system. It is situated along the southeast side of the Big Moose Island portion of the Schoodic Peninsula. The two-way motor road generally tracks alongside the shoreline in a northeast-southwest direction. It begins at Schoodic Loop Road as a broad triangle-shaped intersection that separates traffic and ends as a broad one-way loop that encircles a tiered parking lot. The motor road provides access to the former naval radio station currently being developed as the Schoodic Education and Research Center. At around 0.5-miles long, the road has an average pavement width of 15.9 feet and average lane width of 8.9 feet. The width of the left shoulder is negligible while the right shoulder averages 3.0 feet. The signed speed limit is 25 mph.

The motor road, and the surrounding terrain, is mostly level until the end where it curves and rises slightly to the parking area. Except for a broad gap at the entrance to the former naval station, there are no views on the right side of the road because of the forest cover. Longer breaks in the mass of vegetation are on the left side and allow for two framed/filtered views of Arey Cove, Little Moose Island, and the Atlantic Ocean. A panoramic ocean view can be found at the end of the road. The motor road features two paved pullouts, an unpaved pullout, and six impressive sets of tooled stone steps that connect the three levels of the paved parking lot (Figures 2.115, 2.116).

Schoodic Point Road features eleven reinforced concrete pipe culverts, many of which drain into a long rip rap embankment on the ocean side of the road. There are also three guardwalls comprised of angular ledge stones and one run of parking management stones with rounded stones. Small-scale features on the motor road include a sign identifying the entrance to the future education and research campus, an iron pipe gate just past the campus entrance, as well as the John Godfrey Moore Memorial Plaque (MON28, LCS #041362), a boulder monument located at the parking lot (Figures 2.117-2.121).

ACCESS ROADS

(see Appendix B: Existing Conditions 2006, Schoodic Point Road and Access Roads)

Four of the more well-used access roads to the historic motor road system were included in the 2005 field inventory. The Access Road to State Route 233 (Federal Highways Route 0101) is located just west of Bar Harbor and is identified as the park's Cadillac Mountain Road Entrance. The Y-shaped route links the highway to Paradise Hill Road, which in turn connects to Jordan Pond/Eagle Lake Road and then Cadillac Mountain Road. It features a run of rectilinear quarried block guardwall and parking management stones, a culvert, two unpaved pullouts, a paved median, a metal gate, and two large metal park signs in wood frames at the highway (Figure 2.122).

The Sieur de Monts Entrance Road (Federal Highways Route 0016) connects State Route 3 to the one-way section of the park loop road. It also provides access to the Wild Gardens of Acadia, the Nature Center, the Sieur de Monts Spring interpretive trail, and the Abbe Museum. The 0.2-mile road features a culvert, two unpaved pullouts, two grass medians, a metal gate, and a wood park sign in a wood frame next to the highway (Figure 2.123).

The Schooner Head Overlook Access Road (Federal Highways Route 0222) provides another entrance to the park loop road, and is located prior to the park's only entrance fee station where monies are collected. The 0.2-mile road connects to Schooner Head Road and the Schooner Head Overlook, which provides dramatic views to the east. The road features two culverts, a paved pullout, a metal gate, a rustic wood gate, and a wood park sign framed in wood (Figures 2.124, 2.125).

On Paradise Hill Road, the 0.3-mile long West Street Extension (Federal Highways Route 0100) connects the motor road to Duck Brook Road (which passes under the motor road) and Bar Harbor. The road features six sections of rectilinear quarried block guardwalls, two culverts, and two metal gates (Figure 2.126).

Figure 2.1. View of spiral transition curves on Cadillac Mountain Road. (Acad0013_1.934, OCLP 2005)

Figure 2.2. The panoramic view of the Atlantic Ocean from the Otter Cliff grade separation, on the one-way park loop road. Both roads serve southbound traffic now, but the lower road was originally for northbound traffic. (Acad0300_7.456(1), OCLP 2005)

Figure 2.3. View of Frenchman Bay from the grade separation on Paradise Hill Road. Below is the original road which is now dedicated to northbound traffic. (Acad0010_0.578(1), OCLP 2005)

Figure 2.4. This reinforced concrete bridge features masonry facing. It carries Paradise Hill Road over State Route 233. (Acad0010_2.647(2), OCLP 2005)

Figure 2.5. Paved waterways on Cadillac Mountain Road have widened its paved cross-section. (Acad0013_2.327, OCLP 2005)

Figure 2.6. Parking in the right lane is allowed on the one-way portions of the park loop road. On a typical summer afternoon at Sand Beach, it is often used as overflow parking when the off-road parking lots are full. (Acad0300_6.023(3), OCLP 2005)

Figure 2.7. View of the Jackson Laboratory from the park loop road, at Beaver Dam Pond. (Acad0300_3.417, OCLP 2005)

Figure 2.8. Vegetation borders much of the motor road system but rarely extends completely over the roadway. (Acad0300_2.838, OCLP 2005)

Figure 2.9. The first pullout along Kebo Mountain Road is well-used, offering a panoramic view and serving as a trailhead for the Cadillac Mountain North Ridge Trail. (Acad0300_0.318(1), OCLP 2005)

Figure 2.10. Kebo Mountain Road also includes dramatic interior views such as this view towards Dorr Mountain and Champlain Mountain. (Acad0300_1.775, OCLP 2005)

Figure 2.11. View looking upstream at Kebo Brook and the single-arched Kebo Mountain Bridge. (Acad0300_0.910(3), OCLP 2005)

Figure 2.12. Some of the dry-laid stone drop-inlets and mortared waterways are incorporated into dry-laid stone retaining walls. (Acad0300_10.484_In(2), OCLP 2005)

Figure 2.13. Many culvert inlets feature long granite lintel stones. (Acad0300_1.687_In(1), OCLP 2005)

Figure 2.14. Of the four retaining walls along the road, only this one is mortared stone. (Acad0300_1.130, OCLP 2005)

Figure 2.15. Guardwalls along Kebo Mountain Road feature rectilinear quarried blocks similar to those on Cadillac Mountain Road. (Acad0300_1.723(2), OCLP 2005)

Figure 2.16. Framed/filtered view across Great Meadow to Huguenot Head and Champlain Mountain. (Acad0300_2.149(1), OCLP 2005)

Figure 2.17. Unpaved pullout north of the Sieur de Monts Spring Bridge. (Acad0300_2.790, OCLP 2005)

Figure 2.18. Outlet of the 48-inch diameter reinforced concrete pipe culvert along Cromwell Brook that drains Great Meadows and The Tarn. Note the poor condition of the headwall. (Acad0300_2.159_Out(2), OCLP 2005)

Figure 2.19. One of two dry-laid stone box culverts along the Kebo Mountain Road Extension. (Acad0300_2.306_Out, OCLP 2005)

Figure 2.20. The second paved pullout along Bureau of Public Roads Project 4A2 provides a panoramic ocean view of The Thrumcap. (Acad0300_3.825(1), OCLP 2005)

Figure 2.21. The third paved pullout along the road is at the Precipice trailhead, an area that also features wayside signs and seating benches. (Acad0300_4.546, OCLP 2005)

Figure 2.22. View of a curb type culvert inlet, a mortared stone waterway, and a rectilinear quarried block guardwall. (Acad0300_3.966, OCLP 2005)

Figure 2.23. Route 4 also features culverts with mortared stone headwalls. This outlet has an interesting curved design. (Acad0300_5.008_Out, OCLP 2005)

Figure 2.24 This embankment near the ginning of Bureau of Public Roads Project 4A2 is located east of the Beaver Dam Pond and supports the road as it gradually climbs around the northeast slope of Champlain Mountain. (Acad0300_3.431, OCLP 2005)

Figure 2.25. Embankments are common along the first half of Bureau of Public Roads Project 4A2 where the road tracks along the northeastern slopes of Champlain Mountain. (Acad0300_ 3.754(1), OCLP 2005)

Figure 2.26. One of two trailhead signs along Bureau of Public Roads Project 4A2. (Acad0300_4.077, OCLP 2005)

Figure 2.27. Entrance Station at the intersection of the park loop road and Schooner Head Overlook Access Road. (IMG 0001, OCLP 2005)

Figure 2.28. At the popular Sand Beach area, this guardwall of rectilinear stone blocks help protect the adjacent path. (Acad0300_5.843, OCLP 2005)

Figure 2.29. Parking management stones separate vehicles and pedestrians at the Bowl Trail trailhead at Sand Beach. (Acad0300_5.911, OCLP 2005)

Figure 2.30. Numerous culvert headwalls feature long lintel stones. (Acad0300_5.414_ln, OCLP 2005)

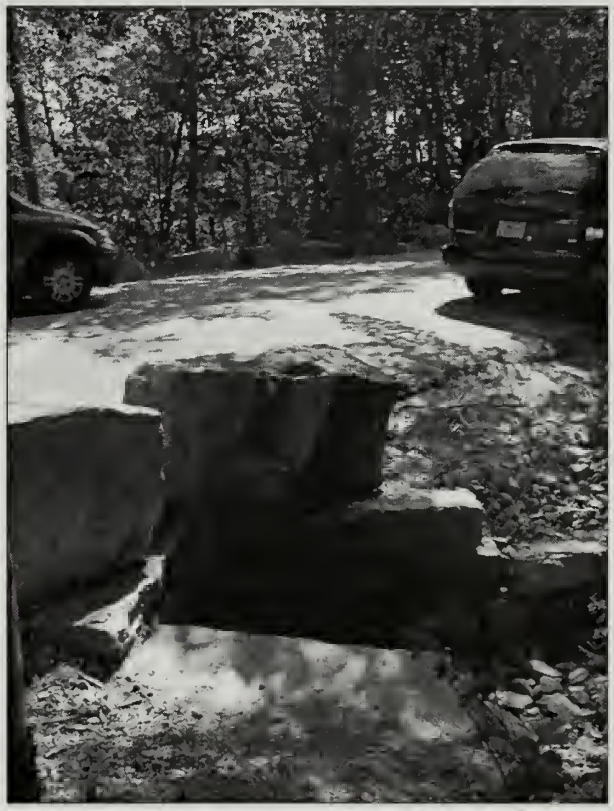

Figure 2.31. View of an interesting U-shaped dry-laid stone inlet headwall along the Champlain Mountain Road. (Acad0300_ 5.912_ln, OCLP 2005)

Figure 2.32. The segment of Ocean Drive prior to Thunder Hole features several panoramic views such as this. (Acad0300_6.185, OCLP 2005)

Figure 2.33. One of three loose rubble waterways along this segment of Sand Beach to Thunder Hole section of Ocean Drive. (Acad0300_6.215, OCLP 2005)

Figure 2.34. This massive guardwall/retaining wall separates the motor road from the old Ocean Drive roadbed below, which is now are parking area. (Acad0300_6.004(2), OCLP 2005)

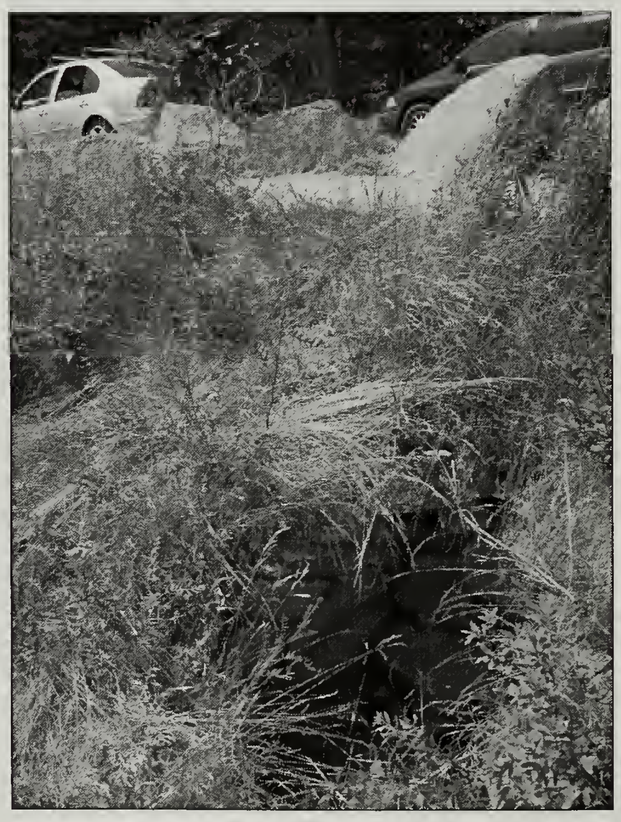

Figure 2.35. An old dry-laid stone well next to the road may have been associated with the former Satterlee property. (Acad0300_6.205, OCLP 2005)

Figure 2.36. The accessible walks and ramps are a recent addition at Thunder Hole. (Acad0300_6.678, OCLP 2005)

Figure 2.38. Visitors can park in the right lane to take in the views to the ocean. (Acad0300_7.103, OCLP 2005)

Figure 2.37. At Thunder Hole, the presence of a stone box culvert illustrates the age of this section of road. (Acad0300_6.710_ln, OCLP 2005)

Figure 2.39. View of a dry-laid stone drop-inlet topped by a large coping stone. (Acad0300_6.972_ln(2), OCLP 2005)

Figure 2.40. This dry-laid stone retaining wall supports both the motor road and the Ocean Path. (Acad0300_7.117, OCLP 2005)

Figure 2.41. A run of angular ledge guardwall stones separates this section of road from the Ocean Path. (Acad0300_6.945(1), OCLP 2005)

Figure 2.42. This guardwall/retaining wall separates road traffic from foot traffic on the Ocean Path. (Acad0300_7.024, OCLP, 2005)

Figure 2.43. The upper and lower lanes of the grade separation at Otter Cliff are both one-way. (Acad0300_7.439, OCLP 2005)

Figure 2.44. This dry-laid stone drop-inlet near the former Naval Station is over eight feet deep. (Acad0300_8.130_In(3), OCLP 2005)

Figure 2.45. The dry-laid stone outlet headwall of the culvert shown in Figure 8.2 is in poor condition because of a severe lean. (Acad0300_8.310_Out(2), OCLP 2005)

Figure 2.46. Topographic conditions in the Otter Cliff area warranted the construction of numerous guardwalls/retaining walls like this one. (Acad0300_7.301, OCLP 2005)

Figure 2.47. The pink granite guardwall/retaining walls at the grade separation blend into the surrounding rock outcrops. (Acad0300_7.452, OCLP 2005)

Figure 2.48. View of the outermost guardwall/retaining wall at the grade separation and a set of granite steps. (Acad Otter Cliff Ret Wall, OCLP 1998)

Figure 2.49. One of several markers at Otter Point parking area. (Acad0300_7.818, OCLP 2005)

Figure 2.50. Panoramic view across Otter Cove, looking left from the Otter Creek causeway. (Acad0300_8.623, OCLP 2005)

Figure 2.51. Panoramic view looking right from the Otter Creek causeway to Cadillac Mountain and Dorr Mountain. (Acad0300_ 8.621, OCLP 2005)

Figure 2.52. View looking left, near Little Hunters Beach. (Acad0300_10.524, OCLP 2005)

Figure 2.53. View of one of the three paved pullouts at Western Point. (Acad0300_9.720, OCLP 2005)

Figure 2.54. The design of the curves on Blackwoods Road can be appreciated when viewed from the third paved pullout at Western Point. (Acad0300_9.809, OCLP 2005)

Figure 2.55. The loss of past structures at Otter Cove were the impetus to construct this formidable causeway with riprap embankments. (Acad0300_8.618(3), OCLP 2005)

Figure 2.56. The handsome curved bridge is part of the Otter Creek causeway and was recently rehabilitated. (Acad0300_8.618(5), OCLP 2005)

Figure 2.57. The Fishhouse Road Bridge is another example of grade separation. The bridge was recently rehabilitated. (Acad0300_8.469(4), OCLP 2005)

Figure 2.58. View of the Little Hunters Brook Bridge and Little Hunters Beach. (Acad0300_10.324(6), OCLP 2005)

Figure 2.59. The outlet headwall of this concrete box culvert is impressive but is failing. (Acad0300_11.356_Out(2), OCLP 2005)

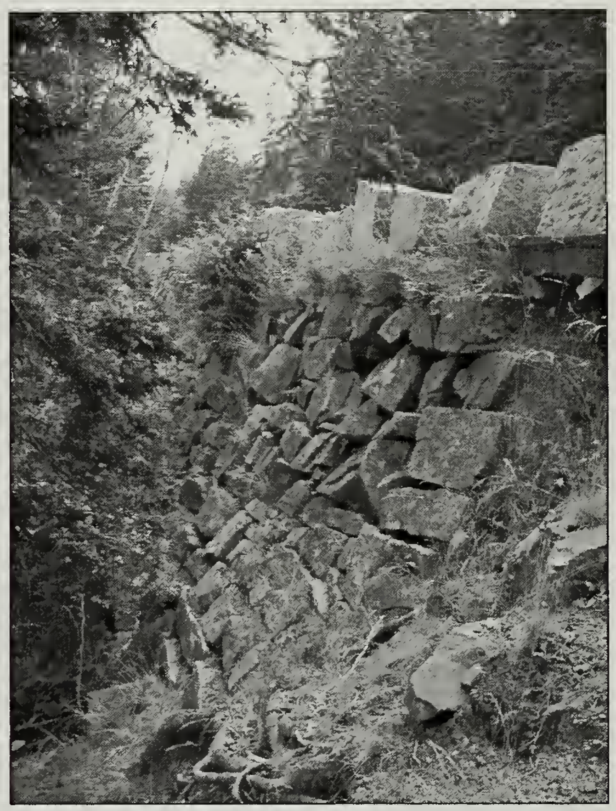

Figure 2.60. Guardwall/retaining wall along Blackwoods Road using dry-laid stones. (Acad0300_9.511(2), OCLP 2005)

Figure 2.61. Guardwall/retaining wall employing mortared stonework. Note the skewed and missing blocks on top. (Acad0300_10.203(2), OCLP 2005)

Figure 2.62. Several of the riprap embankments at Western Point have carefully been rebuilt. Note the longer retaining wall above it. (Acad0300_9.799, OCLP 2005)

Figure 2.63. Mortared stone retaining wall along Blackwoods Road. (Acad0300_10.175(1), OCLP 2005)

Figure 2.64. View of one of two post-and-rail fences on the motor road system. (Acad0300_9.466(1), OCLP 2005)

Figure 2.65. The Fabbri monument features a bronze plaque attached to a massive pink granite boulder. (Acad0300_8.360, OCLP 2005)

Figure 2.66. Framed and filtered view to the east from Day Mountain Road. (Acad0300_11.978, OCLP 2005)

Figure 2.67. This small mortared and stone bridge spans Hunters Brook. (Acad0300_11.500(2), OCLP 2005)

Figure 2.68. View of the single-arched bridge over the now abandoned Wildwood Stables entrance road. (Acad0300_13.049(2), OCLP 2005)

Figure 2.69. Impressive mortared stone outlet headwall of a concrete box culvert on Day Mountain Road. (Acad0300_13.227_Out(2), OCLP 2005)

Figure 2.70. Mortared stone retaining walls segue to the carriage road bridge over Day Mountain Road. (Acad0300_12.448, OCLP 2005)

Figure 2.71. The last half of Day Mountain Road features retaining walls on both sides of the road. (Acad0300_11.642(2), OCLP 2005)

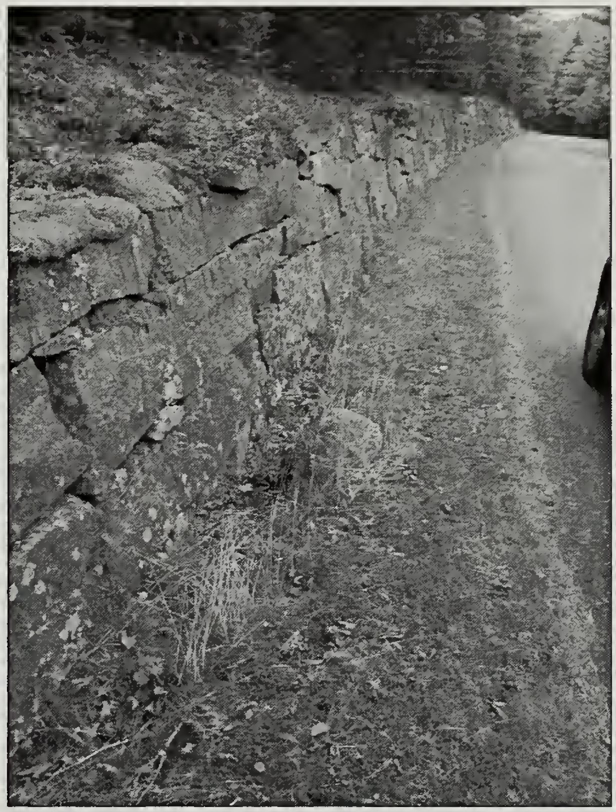

Figure 2.72. Most of the retaining walls along the road are built with dry-laid stones. (Acad0300_12.349_In, OCLP 2005)

Figure 2.73. Parking management stones at the carriage road crossing on the Day Mountain Road Extension. (Acad0012_0.459, OCLP 2005)

Figure 2.74. Numerous panoramic views can be found along the Jordan Pond/Eagle Lake Road. (IMG 0117, OCLP 2005)

Figure 2.75. Not all of the pullouts on Jordan Pond/Eagle Lake Road are at overlooks, such as this one at Bubble Rock. (Acad0012_2.179, OCLP 2005)

Figure 2.76. Some of the motor road system's most impressive culvert headwalls are on the Jordan Pond/Eagle Lake Road. (Acad0012_3.920_Out(1), OCLP 2005)

Figure 2.77. Many culvert inlets are marked by large coping stones because of the road's narrow shoulders. Most inlets and waterways are on the east side of the road while most guardwalls are on the west side. (Acad0012_1.077, OCLP 2005)

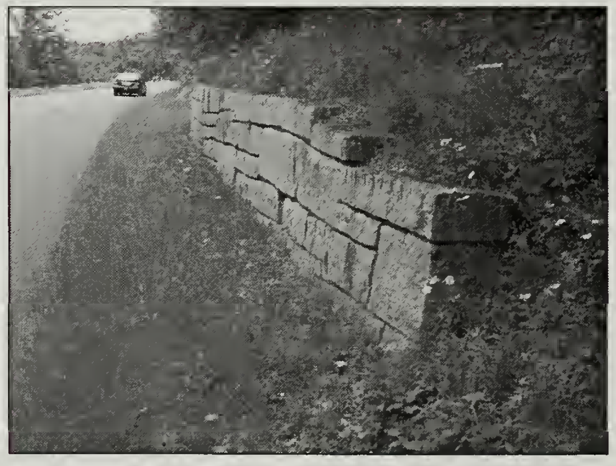

Figure 2.78. Several mortared stone retaining walls can be found along the road. (Acad0012_1.879, OCLP 2005)

Figure 2.79. Mortared rubble waterways along the Jordan Pond/ Eagle Lake Road can be found in the section that was completed in 1924. (Acad0012_4.801, OCLP 2005)

Figure 2.80. Stanley Brook Road passes under the Stanley Brook Bridge, a three portal structure built in 1933 to accommodate, the road, stream, a carriage road, and a trail. (IMG0010, OCLP 2005)

Figure 2.81. The views along much Stanley Brook Road are limited by vegetation except at the southern end, at Seal Cove. (Acad0014_1.215, OCLP 2005)

Figure 2.82. One of several unpaved pullouts alongside Stanley Brook. (Acad0014_0.841, OCLP 2005)

Figure 2.83. Of the six bridges on Stanley Brook Road, this is the only one that features an arched opening. (Acad0014_0.628(4), OCLP 2005)

Figure 2.84. Four of the bridges on Stanley Brook Road feature wood guardrails supported by stone piers. (Acad0014_0.940(4), OCLP 2005)

Figure 2.85. There are fifteen stone box culverts along Stanley Brook Road, and some feature stone-lined gutters. (Acad0014_0.162_In, OCLP 2005)

Figure 2.86. The retaining walls along Stanley Brook Road feature dry-laid uncoursed stone. (Acad0014_0.711(3), OCLP 2005)

Figure 2.87. Low retaining walls north of the Stanley Brook Bridge form several pools on a perennial stream that empties into Stanley Brook. (Acad0014_0.189_Out(2), OCLP 2005)

Figure 2.88. Panoramic view from Cadillac Mountain Road looking west at Eagle Lake, and Sargent and Penobscot Mountains. (Acad0013_1.780p, OCLP 2005)

Figure 2.89. The summit of Cadillac Mountain is a popular destination to view the sunrise. (IMG0002, OCLP 2005)

Figure 2.90. Outlet headwalls of a dry-laid stone box culvert at the bottom of the road. (Acad0013_0.160_Out(2), OCLP 2005)

Figure 2.91. Interesting dry-laid stone inlet headwall with two colors of granite. (Acad0013_1.563_In(1), OCLP 2005)

Figure 2.92. View of an old loose stone waterway perpendicular to the road. (Acad0013_0.138, OCLP 2005)

Figure 2.93. There are 25 waterways along Cadillac Mountain Road, and all but two are paved. (Acad0013_2.246, OCLP 2005)

Figure 2.94. The guardwalls along Cadillac Mountain Road feature massive angular stones of pink granite. (Acad0013_1.864(2), OCLP 2005)

Figure 2.95. View of a guardwall and riprap embankment near the summit. (Acad0013_3.272, OCLP 2005)

Figure 2.96. View of Frenchman Bay from the upper level of the grade separation on Paradise Hill Road. (Acad0010_0.596, OCLP 2005)

Figure 2.97. Paved pullout prior to Duck Brook Bridge. (Acad0010_0.969(1), OCLP 2005)

Figure 2.98. The single-arched New Eagle Lake Bridge on Paradise Hill Road was completed in 1952. (Acad0010_1.743(2), OCLP 2005)

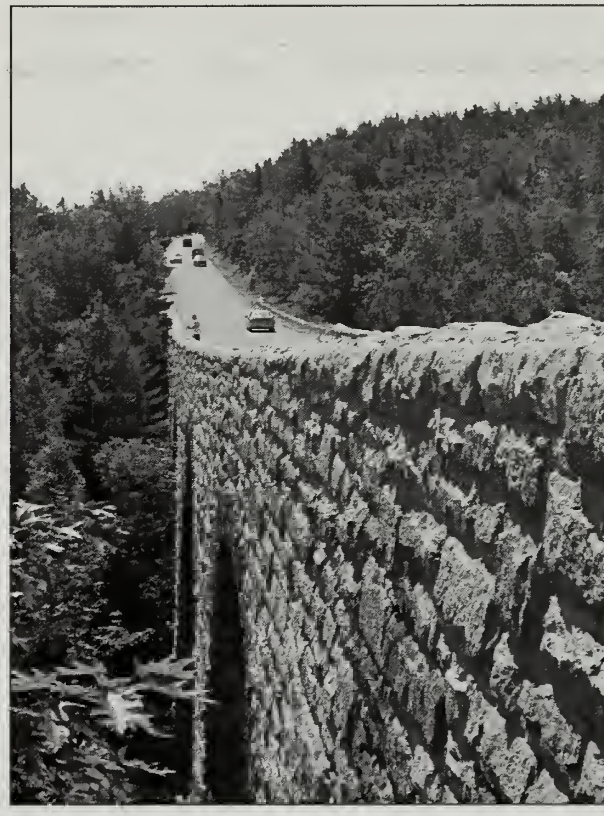

Figure 2.99. The impressive three-arched Duck Brook Bridge on Paradise Hill Road is the longest bridge in the park. (Acad0010_1.070(4), OCLP 2005)

Figure 2.100. Dry-laid stone headwalls are the most common type of inlet on the road's culverts. (Acad0010_1.512_In, OCLP 2005)

Figure 2.101. On Paradise Hill Road, all of the guardwalls are made of rectilinear quarried block and all of the retaining walls are dry-laid stones. (Acad0010_2.018, OCLP 2005)

Figure 2.102. Some of the culvert pipe outlets are incorporated into retaining walls. (Acad0010_0.616, OCLP 2005)

Figure 2.103. This stone wall branches off the roadside and was likely part of an old road bed. (Acad0010_1.415(1), OCLP 2005)

Figure 2.104. Panoramic view from Schoodic Loop Road. (Acad0301_PanoramicViewTYP, OCLP 2005)

Figure 2.105. Framed and filtered view from Schoodic Loop Road. (Acad0301_FramedfilteredViewTYP, OCLP 2005)

Figure 2.106. This paved pullout includes a grass median. (Acad0301_3.939, OCLP 2005)

Figure 2.107. Schoodic Loop Road begins as a causeway and bridge. Unlike other guardwalls on the road, these feature rectilinear quarried blocks. (Acad0301_0.008, OCLP 2005)

Figure 2.108. The concrete bridge is the only one in the park without a masonry facing. (Acad0301_0.044(1), OCLP 2005)

Figure 2.109. View of a large dry-laid stone drop-inlet headwall structure. (Acad0301_4.787_In, OCLP 2005)

Figure 2.110. The outlet of this 48" pipe features an impressive dry-laid stone headwall. (Acad0301_2.360_Out, OCLP 2005)

Figure 2.111. This culvert features a mortared stone inlet headwall that drains a perennial stream to West Pond. (Acad0301_2.808_In, OCLP 2005)

Figure 2.112. Most of the guardwalls along Schoodic Loop Road feature angular ledge stones. (Acad0301_3.333, OCLP 2005)

Figure 2.113. Many of the eighteen riprap embankments found along the road are alongside guardwalls. (Acad0301_0.826, OCLP 2005)

Figure 2.114. The park's largest wayside sign is located near the beginning of the Schoodic Loop Road. (Acad0301_0.085(2), OCLP 2005)

Figure 2.115. Panoramic view from the paved pullout on Schoodic Point Road. (Acad0249_0.140, OCLP 2005)

Figure 2.116. One of six sets of tooled stone steps that connect the three parking levels at the end of Schoodic Point Road. (Acad0249_0.513, OCLP 2005)

Figure 2.117. Mortared stone inlet headwall on Schoodic Point Road. (Acad0249_0.176_In, OCLP 2005)

Figure 2.118 Many culvert pipes outlet into the embankment on Schoodic Point Road. (Acad0249_0.176_Out, OCLP 2005)

Figure 2.119. View of the embankment and an angular ledge stone guardwall. (Acad0249_0.367, OCLP 2005)

Figure 2.120. Entrance sign at the former Naval Radio Station. (Acad0249_0.180, OCLP 2005)

Figure 2.121. Boulder monument and plaque in the parking lot at Schoodic Point Road. (Acad0249_0.515, OCLP 2005)

Figure 2.122. The Access Road to State Route 233 connects the highway to Paradise Hill Road. (Acad0101_0.055, OCLP 2005)

Figure 2.123. The Sieur de Monts Entrance Road directs traffic to the park loop road and the Wild Gardens of Acadia, the Nature Center, and Abbe Museum. (Acad0016_0.106, OCLP 2005)

Figure 2.124. View of the rustic wood gate and wood park sign on Schooner Head Overlook Access Road. (Acad0222_0.019, OCLP 2005)

Figure 2.125. Detail of the wood park sign on Schooner Head Overlook Access Road. (Acad0222_0.026(1), OCLP 2005)

Figure 2.126. View east at rectilinear quarried block guardwalls on the West Street Extension off of Paradise Hill Road. (Acad0100_0.113, OCLP 2005)

CHAPTER 3
ANALYSIS OF LANDSCAPE SIGNIFICANCE AND INTEGRITY

This chapter of the cultural landscape report provides an evaluation of the historical significance and integrity of the historic motor road system at Acadia National Park. The analysis is based on criteria developed by the National Register of Historic Places, which lists properties significant to our country's history and prehistory. The evaluation reviews the current National Register status, provides a statement of significance, evaluates the physical integrity of the extant landscape characteristics and features, and identifies which characteristics and features contribute or do not contribute to the historical significance of the historic motor road system. An awareness of the contributing and non-contributing features informs the development of treatment recommendations in the next chapter.

REVIEW OF NATIONAL REGISTER STATUS

The significance of the historic motor road system at Acadia National Park has been researched and evaluated in a variety of National Register projects. They include the "Evaluation of Eligibility of the Historic Motor Road System," the National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park," and the National Register Registration Form for "Schoodic Peninsula Historic District." The Multiple Property Documentation Form encompasses all segments of the historic motor road system, while the other two reports discuss specific segments on Mount Desert Island and the Schoodic Peninsula, respectively.

The significance in American history is determined through an identification and evaluation program defined by the National Register of Historic Places. According to the National Register, significance may be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, or association and which meet one or more of the following criteria for evaluation:[1]

> A. Associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. Associated with the lives of persons significant to our past; or
>
> C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that posses high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. Have yielded, or may likely yield, information important in prehistory or history.

EVALUATION OF ELIGIBILITY – MOTOR ROAD SEGMENTS ON MOUNT DESERT ISLAND

The segments of the historic motor road system on Mount Desert Island are currently not listed on the National Register of Historic Places. However, in consultation with the Maine State Historic Preservation Office, the historic motor road system was determined eligible for listing on the National Register on March 26, 1993, through a report, "Evaluation of Eligibility of the Historic Motor Road System, Acadia National Park, for the National Register of Historic Places." The report was completed by Landscape Architect Catherine Evans in March 1993. The report does not specifically address the segments of the historic motor road system located on the Schoodic Peninsula.

The statement of significance section discusses the historic motor road system as 1), part of a larger effort to develop tourism in the 1930s and 1940s, both nationally and in the state of Maine, as 2), for the important roles of John D. Rockefeller, Jr. and Frederick Law Olmsted, Jr. in the development of the National Park Service as a whole, and as 3), a collaboration between the Bureau of Public Roads engineers, National Park Service landscape architects, and the Olmsted firm in developing plans and design standards in the Rustic Design style. However, Criterion B is not specifically noted in the statement of significance:

> The association of John D. Rockefeller, Jr. and Frederick Law Olmsted, Jr. and the Olmsted Brothers firm with the historic motor road system of Acadia National Park warrants National Register nomination based on Criteria C. The importance of this resource on the development of tourism in the state of Maine warrants nomination based on Criteria A. These associations give the historic motor road system significance at both national and state levels.

The Evaluation of Eligibility report defines the period of significance as its period of construction, 1921-1958. The report also cites Exception G for road segments and structures built after World War II, which are the Paradise Hill Road bridges, Day Mountain Road Extension, and Bureau of Public Roads Project 4A2. It states that they were planned and designed prior to the war as part of a larger, integrated system, and that construction standards did not vary from previous motor road projects in the park.

MULTIPLE PROPERTY DOCUMENTATION FORM – HISTORIC MOTOR ROAD SYSTEM

The National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park" was listed on June 29, 2007. It was prepared by Lauren G. Meier, Historical Landscape Architect, and Lee Terzis, Historian, in June 2001, and revised by Nancy J. Brown, Historical Landscape Architect, in June 2005. The Documentation Form provides a framework for a comprehensive group of historic contexts related to the park's history and physical evolution. Two of the seven contexts are related to the historic motor road system:

John D. Rockefeller, Jr. and the National Park Service (1913-1958)
Rustic Design (1890-1958)

The Rustic Design context includes two subthemes: the Picturesque Style (1890-1958) and Rustic Design in the National Park Service (1916-1958). The Multiple Property Documentation Form defines the historic motor road system as being comprised of automobile tour roads on both Mount Desert Island and the Schoodic Peninsula.

Properties associated with John D. Rockefeller, Jr. and the National Park Service are nationally significant according to Criterion B, which begins in 1913 with Rockefeller's first work on the carriage road system and ends in 1958 with the completion of the final segment of the historic motor road system. Areas of significance include conservation, recreation, and philanthropy.

Properties eligible under the Rustic Design context may be locally or nationally significant as representative of the Picturesque or National Park Service styles under Criteria A and C. The period of significance for the Picturesque Style subtheme is 1890-1958 and includes hiking trails developed by the village associations, carriage roads and motor roads funded by John D. Rockefeller Jr., and the work of the Olmsted Brothers. The period of significance for the National Park Service Rustic Design subtheme is 1916-1958 for park facilities constructed according to the design standards developed by National Park Service landscape architects and the New Deal programs prior to 1942. Areas of significance for this theme are architecture, conservation, engineering, landscape architecture, recreation, and transportation.

The Multiple Property Documentation Form does not provide a specific period of significance for the historic motor road system. The Documentation Form notes that although the last segment of the historic motor road system, Bureau of Public Roads Project 4A2, was not completed until 1958, Criteria Consideration G, Properties that Have Achieved Significance Within the Last Fifty Years, does not need to be applied because the road segment was an integral component of a road network and therefore contributes to the overall significance of the historic motor road system.

NATIONAL REGISTER LISTING – MOTOR ROAD SEGMENTS ON THE SCHOODIC PENINSULA

The National Register Registration Form for "Schoodic Peninsula Historic District" was listed on June 29, 2007. It was prepared by Lee Terzis, Historian, in September 2001, and revised by Nancy J. Brown, Historical Landscape Architect, in July 2005. The two segments of the historic motor road system on Schoodic

Peninsula, Schoodic Loop Road and Schoodic Point Road, were entered into the National Register as part of the Schoodic Point Historic District.

According to the National Register listing, the two motor road segments on the Schoodic Peninsula are significant under the same contexts as the road segments listed on the Multiple Property Documentation Form: John D. Rockefeller, Jr. and the National Park Service (1913-1958) and Rustic Design (1890-1958). Specifically, the two roads relate to one of the Rustic Design subthemes – Rustic Design in the National Park Service (1916-1958).

Properties associated with John D. Rockefeller, Jr. and the National Park Service are significant according to Criterion B for the period 1930-1935. The period begins with Rockefeller's lobbying efforts to relocate the naval radio station from Otter Cliffs on Mount Desert Island to Schoodic Peninsula, and ends with the completion of the park road and the new naval radio station on Big Moose Island. Properties eligible under the Rustic Design context are significant as representative of the National Park Service style under criteria A or C for the period 1930-1941. The period includes projects completed on the peninsula according to the design standards developed by National Park Service landscape architects and implemented by the New Deal programs. The areas of significance include conservation, recreation, and other (philanthropy). Areas of significance for this theme are architecture, conservation, engineering, landscape architecture, recreation.

The period of significance for Schoodic Peninsula Historic District is 1929-1941, which begins when the Schoodic Peninsula lands were acquired by the park and ends when the last park-related structures were built in the Rustic Design style. The National Register listing does not provide a specific period of significance for the two historic motor road segments.

STATEMENT OF SIGNIFICANCE

The historic motor road system at Acadia National Park is associated with two historic contexts. They are Rustic Design (both the Picturesque and National Park Service Rustic Design subthemes) and John D. Rockefeller, Jr. – in the areas of architecture, conservation, engineering, landscape architecture, recreation, transportation, and philanthropy (other). The historic motor road system is significant at the national level and eligible for the National Register under Criteria A, B, and C. As stated in the National Register Multiple Property Documentation Form:

> Under Criterion A, the Motor Roads are illustrative of the NPS system-wide goal of providing public access while seeking to conserve the natural beauty of the parks. Under Criterion B, this resource is also significant as an example of Rockefeller's interest in the construction

> and beautification of roads in national parks, his collaborative efforts with the NPS, and his philanthropic contributions. Under Criterion C, the Motor Roads are excellent examples of Rustic Design, a harmonious combination of the Picturesque Style and the Rustic Design standards developed by the NPS.

For the purposes of this report, the period of significance for the entire historic motor road system should span the period 1922-1958. The period begins with the planning and construction of the first segment of the historic motor road system in 1922, originally called Mountain Road and later known as Jordan Pond/Eagle Lake Road. The period ends with the completion of the last segment of the historic motor road system in 1958, Bureau of Public Roads Project 4A2. This period of significance spans thirty-six years.

ANALYSIS OF INTEGRITY

The historic motor road system at Acadia National Park possesses integrity of location, design, setting, materials, workmanship, feeling, and association. It has not entirely escaped alterations over its eighty-year history, however, as a few features have diminished integrity of design and materials.
In the early 1960s, the first segment of the historic motor road system, Jordan Pond/Eagle Lake Road, was redesigned to increase the design speed and eliminate the dangerous tight curves at Bubble Pond. However, the design and materials used in this reconstruction were consistent with the earlier historic motor road segments built by the Bureau of Public Roads at Acadia. Most of the historic vegetated shoulders remain intact despite the development of informal pullouts at some of the more popular developed areas and trailheads, where the vegetated cover has been damaged, leaving an exposed and erodible gravel surface. A limited number of shoulder sections have been also paved with asphalt to accommodate bicyclists.

Non-historic parking management stones continue to be used along some of the vegetated shoulders, but in most cases their rounded shape and smaller size make them compatible with the historic rustic character of the roadway and distinguishable from the historic angular-shaped and rectilinear-shaped guardwall stones. However, some of the stones now used are more angular in shape, making them appear more like the historic angular-shaped guardwall stones. In the past, the park has been able to remove some of these stones. The application of bituminous paving over rubble waterways and in formerly vegetated ditches has been greatly reduced since rehabilitation guidelines were developed and implemented for part of the historic motor road system in 1994.

The experience of driving on the historic motor road system continues to be one of diverse scenery and spectacular views. The views and vistas remain intact for the most part. However, on Mount Desert Island, the Jackson Laboratory at the end of the Kebo Mountain Road Extension segment is visually intrusive to the motor road experience, as are several massive private homes at Schooner Head and Ingraham Point. The presence of parked cars in the right lane of the one-way portion of the park loop road also diminishes the motor road experience. This parking accommodation is a result of the dramatic increase in park visitation, and although it is not an ideal situation, it is fortunately limited to the major developed areas during the peak hours of the busy summer months. The introduction of the Mount Desert Island shuttle system has helped with this problem somewhat. Historic signs and entrance gates have been replaced with contemporary versions that comply with modern highway standards and park needs, but recent efforts have been made to gesture to these historic details, resulting in designs that are compatible with the historic character.

Most of the changes to the 33-mile historic motor road system, taken as a whole, are minor, and it retains a high degree of integrity in its original layout, construction techniques, and rustic characteristics.

ANALYSIS OF MOTOR ROAD CHARACTERISTICS AND FEATURES

The following analysis identifies and evaluates characteristics and features that describe Acadia National Park's historic motor road system. The characteristics and features are organized into three groups that extend outward from the centerline of the motor road: the traveled way, the road prism, and the road corridor. The traveled way concerns the alignment, geometry, and the surface of the motor roads. The road prism includes the shoulders, drainage features, vehicular barriers, retaining walls and embankments, and site details that define the typical cross-section of the motor roads. The road corridor concerns the viewsheds and vegetation that integrate the motor roads with the surrounding landscape.

Each feature analysis includes a historical overview, description of existing conditions, and an evaluation as to whether the feature contributes or does not contribute to the significance of the historic motor road system. Features evaluated as "Non-contributing – Compatible" are consistent with the historic character of Acadia National Park's historic motor road system. Features evaluated as "Undetermined" require additional research. Evaluations of all characteristics and features are also summarized in Appendix C.

THE TRAVELED WAY

The traveled way of the historic motor road system includes the characteristics associated with road alignment and geometry (horizontal and vertical alignment, cross-section, major structures) and road surface (wearing course, striping, markings). These features represent the design intent of the motor roads and its presence in the landscape.

Road Alignment and Geometry: Horizontal and Vertical Alignment

Historic Condition:

Horizontal alignment concerns the design and relationships of straight road sections, called tangents, connected to curved road sections, named horizontal curves. Vertical alignment, or "profile," speaks to how the line of the road in a plan view fits in the three dimensional aspects of topography. The road's profile is also designed geometrically through a series of tangents connected by vertical curves, also known as "summit" or "sag" curves, depending on their orientation.

The horizontal and vertical alignments of the historic motor road system were intended to expose visitors to the variety of landscapes in the park, from the rugged coastlines to the rocky mountaintops. This resulted in a meandering route that followed the land's natural contours. Two distinct approaches to horizontal and vertical alignment of curvilinear roads were used in achieving this characteristic of the historic motor road system.
Engineers Walters Hill and Paul Simpson, in their early work on Jordan Pond/Eagle Lake Road, Stanley Brook Road, Otter Cliffs Road, and the reconstruction of Ocean Drive, designed the motor roads with a series of arcs and tangents. At the curves, this basic approach was refined by widening the pavement to provide a vehicle more space to comfortably negotiate through the curve. The road design that resulted from the collaboration of Hill, Simpson, and landscape architect Frederick Law Olmsted, Jr. resulted in motor roads with a lower design speed (Olmsted was not involved the Jordan Pond/Eagle Lake Road project). Although the historic design speed is not known, the posted speed limit was 18 mph.

Motor road projects involving the Bureau of Public Roads introduced lengths of spiral curves that transitioned between the tangent segments and the arc segments. Spiral transition curves, adapted from nineteenth-century railroad engineering, eliminated the lurch in acceleration at the point where the tangent meets a curve. This segment allowed drivers to negotiate the curve while maintaining their speed and acceleration within the travel lane (Figure 3.1). Superelevation was used in conjunction with spiral transition curves, which rotated the road surface into the curve, much like banking an airplane into a turn. Spiral transition curves were used extensively on the Bureau of Public Road's first project, Cadillac Mountain Road, which was a predominantly curving route (Figure 3.2). When the Bureau of Public Roads again became involved in road design and construction at Acadia during the "New Deal," spiral transition curves were again used and featured larger radius curves based on higher design speeds.

Vertical alignments of all road segments were designed with gradients of no more than seven percent (Figure 3.3). In one area, at Otter Cliff, the Olmsted Brothers adapted the road profile to separate the traffic into two levels, with a third level devoted to a pedestrian trail. This feature solved the topographic challenges at the site, safely separated two circulation systems, and preserved panoramic views to the ocean. The vertical alignment of the motor roads also utilized causeways/bridges that allowed for the passage of tidal flows between streams and the sea and bridges to cross streams and eliminate "at grade" intersections with state and county roads as well as the existing carriage road system (Figure 3.4). These structures are discussed in more detail under "Major Structures."

Existing Conditions:
In 1962-1964, Jordan Pond/Eagle Lake Road, the park's first motor road segment, was widened and redesigned with spiral transitional and superelevated curves. The resulting higher design speed did not change the original alignment except at the Jordan Pond House, where the former S-curve was reversed, moving the motor road farther way from the building, and at Bubble Pond, where the tight radius curve alongside the shoreline of the pond was eliminated. As a result, the portion of the motor road passing under the Bubble Pond Bridge that carried the Bubble Pond Carriage Road was abandoned. On Paradise Hill Road, a second grade separation was constructed in 1964 to eliminate traffic hazards at the first major overlook south of the Hulls Cove. The new road for southbound traffic was built uphill from the original motor road, which was converted to northbound traffic. The design of these projects was consistent with previous motor road segments built by the Bureau of Public Roads during the historic period.

Evaluation:
Horizontal alignments with arcs and tangents and with spiral transition curves and superelevated curves contribute to the significance of the historic motor road system. Both alignment designs were present during the historic period and retain their integrity. Alterations to the horizontal alignment of Jordan Pond/Eagle Lake Road did not considerably alter the character of the motor road. The seven percent maximum vertical alignment of all motor road segments also contributes to the significance of the historic motor road system. This characteristic was present during the historic period and retains its integrity. The grade separation at Otter Cliffs is a contributing feature. The grade separation at Paradise Hill Road is a non-contributing feature because it was built after the historic period, but is compatible in its design and materials.

Road Alignment and Geometry: Cross-section

Historic Condition:

Cross-sectional attributes of the road – including width and crown of the traveled way and width and grade of shoulders in cut and fill – varied throughout the historic motor road system. All of the roads were constructed with a paved traveled way between 18-20 feet wide except for the Ocean Drive Demonstration segment, which was 24 feet wide to allow room for parking at the Thunder Hole area. As noted earlier, the four road segments originally engineered by Hill and Simpson relied on tangents and arcs with wider pavement widths at curves and pavement crowns pitched at 1/3" per foot. These shoulders, in both cut and fill, were generally 2 feet wide. The motor road segments designed by the Bureau of Public Roads were designed with spiral transitions and superelevated curves and featured pavement crowns pitched at ¼-inch per foot. These cross-sections were generally more variable, with shoulder widths in cut areas 1-3 feet and in fill areas 3-6 feet (Figure 3.5 a-j).

Existing Conditions:

Widening the traveled way and redesigning the curves with superelevation and spiral transitions road sections on Jordan Pond/Eagle Lake Road was completed in 1964. On the other motor roads, all of the other cross-sectional elements – width of the traveled way, road crown, and shoulder widths – have remained relatively consistent since the end of the historic period. The major exceptions are along portions of Cadillac Mountain Road and Jordan Pond/Eagle Lake Road, bituminous pavement has been applied atop historic waterways, along previously vegetated ditches, or on the vegetated shoulders. These actions have essentially increased the width of the traveled way. Repaving projects over time have begun to alter some of the cross-sectional relationships of the traveled way to the shoulders. See the "Road Surface: Wearing Course" section below.

Evaluation:

Road cross-sections with an 18-20'-wide traveled way, crown of 1/3" per foot, and shoulders in cut and fill equal in width contribute to the significance of the historic motor road system. Road cross-sections with an 18-20'-wide traveled way, crown of 1/4" per foot, and shoulders in fill wider than shoulders in cut also contribute to the significance of the historic motor road system. Both cross-section types were present during the historic period and retain their integrity. The realignment of Jordan Pond/Eagle Lake Road increased the cross-section but did not considerably alter the character of the motor road.

Road Alignment and Geometry: Major Structures

Historic Condition:

The vertical alignment of the historic motor road system originally utilized twenty-one bridges to cross streams and to eliminate "at grade" intersections with state and county roads as well as the existing carriage road system. Twelve of the bridges were designed to carry motor roads over streams, three bridges carried the motor road over public highways or local roads, and one bridge carried the motor road over a carriage road. Four bridges carried carriage roads or highways over the historic motor road system.

The Olmsted landscape architectural firm designed the six small bridges along Stanley Brook Road and provided the preliminary design for the Otter Creek Cove Bridge and Causeway, while the National Park Service and Bureau of Public Roads designed most of the others. Following the principles of the Rustic Design style, the bridges were faced with locally quarried granite ashlar to gracefully blend with the surroundings and complement the character of the older carriage road bridges (Figures 3.6, 3.7). With exception of the Otter Creek Cove Bridge, all of the motor road bridges were constructed with reinforced concrete. Additional detail on the bridges can be found in Acadia National Park's List of Classified Structures.

The historic motor road system also featured two causeways, one at Otter Creek Cove and another at Frazer Creek on the Schoodic Peninsula. These were designed to allow the passage of tidal flows between streams and the sea and were faced with locally quarried flat granite stones to withstand the wave action (Figures 3.8, 3.9).

Existing Conditions:
The realignment of the portion of Jordan Pond/Eagle Lake Road at Bubble Pond in 1962 subsequently abandoned the roadbed under the Bubble Pond Bridge. On Schoodic Loop Road, the bridge in the causeway structure at Frazer Creek was repaired and altered in the 1970s and again in the 1990s. Unlike the bridge in built here in the 1950s, this bridge is not faced with stone masonry. In the last ten years, all of the other motor road bridges have been rehabilitated.

Evaluation:
Bridges and causeways contribute to the significance of the historic motor road system. These structures were present during the historic period and retain their integrity. The lone exception is Frazer Creek bridge, which unlike the other bridges, is not faced with stone and does not contribute to the rustic character of the motor road system.

Road Surface: Wearing Course
Historic Condition:
Just as the alignments and cross-sections were an indication of the date and designer of a particular motor road segment, so too were the surfacing materials. The first constructed section of Jordan Pond/Eagle Lake Road, from State Route

233 to Cadillac Mountain Road, utilized a water-bound macadam surface, which used clay in the final wearing course to hold the surface together. This surface treatment was also used on the Rockefeller's carriage road system. However, before the remainder of this motor road was completed in 1927, it was given a bituminous surface treatment, where asphaltic material was used to bind the aggregate of the final wearing course. The texture of this treatment was coarse due to the installation of a final "chip coat" of raw, uncoated aggregate to the surface (Figures 3.10, 3.11). Leo Grossman, the resident engineer for the Bureau of Public Roads at Acadia, kept meticulous records as to how these early pavements were typically constructed.[2]

> ...These surfaces were swept clean with hand brooms, using the road machine (grader) at the shoulders where necessary to push back the plant growth and excessive accumulations of dirt...
>
> ...In order that the old surface tar might be enlivened and the cracks and cheeks filled, a prime or tack coat of tar was first applied at the rate on one tenth of a gallon per square yard...
>
> ...Immediately after this tack coat was applied, the cover material, consisting of crushed stone chips, was spread from the tail gate of the truck at the rate of thirty five pounds per square yard.
>
> After the chips were uniformly spread, the mulch application of tar was applied at the rate of 0.27 gallon per square yard over the entire surface.
>
> As soon as practicable after this tar application had been made, the road machine passed over the surface, throwing all of the loose material into a windrow. This windrow was worked back and forth across the road until all particles were thoroughly coated...
>
> ...When the materials had been thoroughly mulched in the windrow, the coated chips were redistributed by the road machine over the entire surface so that it presented a uniform cross section. When the appearance of the surface was satisfactory, it was compacted with a road roller until all of the stone particles had been set.
>
> After the surface had been exposed to traffic for several days to give the tar time to "break" or set, the seal application was made at the rate of one eighth of a gallon per square yard to half of the width of the road.
>
> Immediately after the seal application had been made, an application of chips at the rate of five pounds per square yard was distributed from the tail board of the truck travelling at high speed. The other half of the pavement was then similarly treated.
>
> To insure uniform distribution of the chips, a heavy brush drag and a section of highway wire fencing were drawn over the road behind a truck travelling at high speed. Bare spots were touched up with additional chips spread with hand shovels from a truck. When the surface was satisfactorily covered it was thoroughly rolled. This operation completed the surface treatment of the road.

Aggregate material was typically obtained from small quarries scattered within the park, which helped reduce the cost of the material by minimizing transportation. This also gave the historic motor roads the hue of the local stone, allowing it to blend in with the landscape. The wide range of color in the granite throughout the park resulted in a variety of surface colors, but the only documented color was for Cadillac Mountain Road, which featured a pink granite surface. The material for this surfacing came out of the cuts in the mountain made for the road itself (Figure 3.12).

Techniques in maintaining the road surface wearing course evolved as the historic motor road system was built, and beginning in the mid-1950s the older bituminous surface treatments on the motor roads were replaced with plant-mixed, hot asphalt bituminous concrete surface treatments, called Type I-1. The primary difference between the two was the plant mix featured smaller-sized aggregates, which resulted in a finer surface texture.

Existing Conditions:
All surfaces throughout the historic motor road system today feature plant-mixed, hot-asphalt bituminous concretes. Most of the road segments have been resurfaced twice since they were constructed. Over the years, these projects have added material to the road surfaces and in some instances have altered cross-sectional relationships of the road surface to other character-defining features, such as the vegetated shoulders.

Evaluation:
Road surface wearing courses that feature plant-mixed, hot-asphalt bituminous concretes contribute to the significance of the historic motor road system. This surface treatment was present during the historic period and retains its integrity. Although road surfacing techniques have evolved over time, the consistent appearance of the pavements throughout the historic motor road system is consistent with the original design intent.

Road Surface: Striping and Markings

Historic Condition:
During the early years of the historic motor road system, there were few pavement markings. This was due in part to slower speeds, less traffic, and deference to the rustic characteristics of the historic motor road system. Another reason was that the chip seal surface treatment made the painting of lines impractical and difficult to maintain.

Existing Conditions:
The plant-mix bituminous concrete affords a smoother surface to accept the painted markings. However, the park has chosen to minimize their use. Most of the roads feature a painted centerline, but are without painted fog lines, instead allowing the vegetated shoulders to define the edges of the roadway. However,

fog lines are present on Cadillac Mountain Road due to its heavy use, especially at dawn and dusk, and often foggy conditions. At major developed areas, several painted crosswalks can be found, and at some of the busier paved pullouts on the one-way portion of the park loop road, there are painted "No parking" stripes in the right lane.

Evaluation:
Centerline and fog line striping, and painted crosswalks and parking lines do not contribute to the significance of the historic motor road system. However, due to increased traffic on the motor roads, the use of such features is warranted for public safety reasons.

THE ROAD PRISM

The road prism is the graded area of the historic motor road system that includes the characteristics associated with the road shoulders (vegetated and paved shoulders), drainage features (ditches, waterways, underdrains, culverts, inlet structures, outlet structures), vehicular barriers (guardwalls, parking management stones), retaining walls and embankments, and site details (access gates, fences and pedestrian barriers, signage, medians, walkways, trails, steps, curbing, monuments). Many of these features are historic and exhibit the characteristics of the Rustic Design style.

Road Shoulders: Vegetated, Gravel, and Paved Shoulders

Historic Condition:
Vegetated shoulders were part of the original design of the historic motor road system. In addition to their function of moving stormwater runoff from the traveled way and toward the ditches, the vegetated shoulders were also intended to aesthetically blur the line between the paved road and the surrounding landscape and to provide a softer and more rustic edge than would a typical shoulder surfaced in gravel or pavement. To provide the support necessary for a vehicle to pull on and off without leaving ruts, the vegetated shoulders were originally constructed by using equal parts of gravel to soil, although some were some road segments, and later repair work, featured a mixture with more gravel than soil. They were originally seeded with commonplace mixtures of grass to provide quick cover, but the eventual succession of native plants was intended and encouraged.

Existing Conditions:
Vegetated shoulders continue to define a majority of the road margins of the historic motor road system. The width of the vegetated shoulders varies, and during a typical growing season, they are mowed once a year. A mix of red fescues, annual ryes, and forbs are currently used to revegetate shoulders. In some areas, however, repeated traffic pulling on and off the shoulders has

damaged the vegetative cover, leaving a bare gravel surface that has created erosion problems. The park's installation of parking management stones has helped matters in some areas.

In some areas, especially approaching Cadillac Mountain Road, some shoulders have been paved with bituminous asphalt. They were installed to accommodate a bicycle lane. A section of loose rubble shoulder is present on one of the tight curves on Cadillac Mountain Road. It was installed because tour buses were continually damaging this particular shoulder as they rounded the curve.

Evaluation:
Vegetated shoulders contribute to the significance of the historic motor road system. They were present during the historic period and retain their integrity. Gravel, bituminous, and loose rubble shoulders do not contribute because such types of shoulders were not known to have been present during the historic period. They are indicative of larger issues related to erosion, shoulder revegetation, parking, and increased traffic. The loose rubble shoulders, however, are compatible because their materials gesture to the Rustic Design style.

Road Shoulders: Pullouts and Parking Lots
Historic Condition:
For the purposes of this project, pullouts are defined as parking areas directly alongside the road, while parking lots are generally set back from the road and accessed by one or more short access roads and separated from the road by a raised median planted with grass, shrubs, or trees. During the construction of the Ocean Drive segments, Rockefeller was adamant that parking along the shoulder should be discouraged and instead should be "...off the road under the trees at various convenient and available intervals."[3] The 1941 Master Plan shows the locations of parking lots and pullouts along the completed motor roads and those motor roads that were under construction at the time (see Figure 1.47). Not surprisingly, the highest density of parking areas was along the popular Ocean Drive segments where visitors had easy access to the Ocean Path and the scenic shoreline.[4] Some parking lots were designed in multiple levels to take advantage of the views, such as Schoodic Pont Road, or local topographic conditions, like Sand Beach (Figure 3.13).

For the motor road segments in more mountainous terrain, pullouts rather than parking lots were more common due to limited space along the road corridor (Figure 3.14). Their locations were generally determined in the field during construction and dependent on the amount of excess material associated with cut and fill sections. Some of these pullouts are also indicated on the 1941 Master Plan.

To date, no documentation has been found to determine if unpaved pullouts were present along the motor roads during the historic period. However, in considering Rockefeller's well-known desire to control the access and movement of motor vehicles and motorists, and his insistence on restricting parking along Ocean Drive, it would seem unlikely that unpaved pullouts would have been tolerated.

Existing Conditions:

There are currently 115 pullouts on the historic motor road system, and although there are less paved pullouts than unpaved (47 to 68), the paved pullouts have a total linear footage greater than the unpaved pullouts (9174 linear feet versus 7607 linear feet). Most of the unpaved pullouts are shorter in length and are typically located just before or after paved pullouts, at the major developed areas, at trail junctions, or other locations where there are views. Other unpaved pullouts exist throughout the historic motor road system for reasons that are not well understood.

The introduction of one-way traffic circulation along much of the park loop road in the 1980s opened up the right lane for parking, but there still appears to be a physiological resistance to doing so despite the encouragement of signs. As a result, visitors continue to pull off well into the vegetated shoulders. Many of the unpaved pullouts were created before the switch to one-way traffic, however, probably beginning in the 1970s when park visitation numbers increased dramatically.

There are fifteen paved parking lots within a short distance of the historic motor road system. The largest parking lots correspond to the most popular destinations – Sand Beach, Thunder Hole, Jordan Pond House, the summit of Cadillac Mountain, and the Hulls Cove Visitor Center – while smaller lots are scattered along the motor roads at popular trailheads and scenic views.

Evaluation:

Paved pullouts and parking lots contribute to the significance of the historic motor road system. Both features were present during the historic period and retain their integrity. Although not all of the pullouts can be documented as present prior to 1958, most would have been developed at the time when the motor roads were built because their locations were dependent on cut and fill quantities. The status of unpaved pullouts is undetermined due to the lack of reliable historical documentation.

Drainage Features: Ditches, Waterways, and Underdrains

Historic Condition:

Ditches, waterways, and underdrains were designed to collect and move streamwater, stormwater, and groundwater away from the road prism as quickly and efficiently as possible. A majority of the historic motor road system featured vegetated ditches. This simple type of ditch treatment fit perfectly in the Rustic Design style and required little maintenance (Figure 3.15). In areas where the amount of flowing water in vegetated ditches was likely to cause erosion, the ditch was stabilized with a run of mortared rubble, a material that complemented the rustic character of the other built structures throughout the historic motor road system. These waterways often terminated at culvert inlets. Variations in the materials later appeared in project drawings from the 1950s including waterways with loose rubble, stabilized gravel cement, and bituminous pavement (Figure 3.16 a-d). It should be noted that the bituminous paved waterway detail was developed in 1957 for the Schooner Head Access Road project, but according to park records, this type of waterway construction was not installed until the early 1960s.

Several motor road segments made use of underdrains in areas where the soil was of high clay content. The pipes were typically constructed with corrugated sheet metal and coated with asphalt (Figure 3.17 a-c). They were installed below the ditches, although in some cases they were also placed under culvert pipes and retaining walls.

Existing Conditions:

Vegetated ditches remain the most common type of ditch treatment throughout the historic motor road system. Mortared rubble waterways are also still functioning, although some are partially obscured by vegetation. Since the end of the historic period, however, and soon after Rockefeller's death in 1960, waterways paved with bituminous asphalt were introduced, beginning with the redesign of Jordan Pond/Eagle Lake Motor Road in 1962. The paved waterways were installed in situations where existing vegetated ditches were eroding and as a solution for deteriorated historic rubble waterways. By the late 1980s, bituminous waterways were the typical detail for ditches and were installed along many of the ditches on Cadillac Mountain Road. Loose rubble waterways have also been introduced in several locations as a way to minimize erosion in some of the ditches.

In the early 1990s, a new detail for a mortared rubble waterway was developed and installed in two test sections off of Schooner Head Overlook Access Road. In keeping with the rustic character of the historic motor road system, the new waterway made use of large granite stones with split surfaces.

Today, bituminous waterways outnumber mortared and loose stone waterways combined. There are currently fifty-seven bituminous waterways (13021 linear feet), seventeen mortared rubble waterways (3923 linear feet), and eleven loose rubble waterways (1020 linear feet). Due to their subterranean location, underdrains were not observed in the field.

Evaluation:
Vegetated ditches and mortared rubble waterways contribute to the significance of the historic motor road system. Both features were present during the historic period and retain their integrity. Loose rubble waterways do not contribute because they do not represent the two types of water conveyance features used historically, but are a compatible feature because they employ materials that evoke the characteristics of the Rustic Design style. Bituminous waterways, however, do not contribute and are not compatible. Bituminous material was purposely not installed in the waterways during the historic period because it conflicted with the rustic appearance of the historic motor road system.

Drainage Features: Culverts, Inlet Structures, and Outlet Structures
Historic Condition:
A culvert is the structure that connects an inlet and an outlet and conveys water from one side of the road to another. Some of the older segments of the historic motor road system featured beautifully constructed dry-laid stone box culverts. Many were built along Stanley Brook Road, but larger and more impressive structures were constructed along Jordan Pond/Eagle Lake Road and Cadillac Mountain Road. Concrete box culverts were also constructed during the historic period, as were corrugated metal pipes and reinforced concrete pipes with diameters ranging from 18 inches up to 60 inches. However, by far the most common type of culvert installed throughout the historic motor road system was the 18" diameter reinforced concrete pipe (Figures 3.18-3.20).

The type of inlet or outlet selected for a particular culvert assembly was determined by the shape of the shoulders, ditches, and embankments. However, as these structures were often visible from the traveled way, their treatment was carefully considered. Many segments of the historic motor road system featured inlets and outlets constructed with local stone, typically as loose stones set around the pipe or as part of a headwall structure. In situations where the road corridor was narrow, more elaborate structures in the form of drop-inlets were installed. Most of the headwalls and drop-inlets featured dry-laid construction although some were mortared (Figures 3.21, 3.22, 3.23 a-e). With the completion of Kebo Mountain Road in 1938, the Bureau of Public Roads introduced two modern drop-inlets: brick or concrete curb types, and precast concrete boxes with steel grate covers. In highly visible locations, the Bureau of Public Roads continued to use stone headwalls so as not to compromise the rustic character of the historic motor road system (Figure 3.24 a-c). Some of these headwalls were massive curved structures.

Many of the project drawings after 1950 included boiler plate culvert detail sheets produced by the Bureau of Public Roads office in Arlington, Virginia, from 1946-1948. Other project drawings indicate that in the late 1950s, variations in the treatment of headwalls and types of inlets and outlets were proposed, such as concrete and brick headwalls and concrete and galvanized inlet and outlet structures (Figure 3.25 a-b).

Existing Conditions:
The current number of culverts identified in the historic motor road system is impressive. There are twenty-six stone box culverts, five concrete box culverts, seventeen corrugated metal pipe culverts, and 389 reinforced concrete pipe culverts. There are also two combination corrugated metal pipe/reinforced concrete pipe culverts, one clay pipe culvert, one plastic pipe culvert, and nine culverts where the type of assembly could not be determined.

The most common inlet treatment on the historic motor road system is a headwall constructed with native stone. There are 224 such structures (150 dry-laid stone and 74 mortared stone). There are also 181 drop-inlet structures (53 dry-laid stone, 52 pre-cast concrete with grate, 65 curb type concrete, and 11 curb type brick), 19 inlets stabilized with loose stones, and 15 inlets that are simply the pipe itself. Two combination structures (one curb type concrete/pre-cast concrete with grate and one dry-laid stone headwall/dry-laid stone drop inlet) were identified, but seven inlets could not be located. The most common outlet treatment is simply a pipe by itself. There are 165 pipe-only inlets, 29 of which are part of an embankment or wall structure. There are also 122 outlets stabilized with loose stones, 109 stone headwall structures (59 dry-laid stone and 50 mortared stone), and 51 outlets where the type of structure could not be determined.

The field work in 2005/2006 included a general condition assessment regarding pipes, inlet structures, and outlet structures, specifically noting serous maintenance and structural problems.

Evaluation:
Culverts, inlet structures, and outlet structures contribute to the significance of the historic motor road system. These features were present during the historic period and retain their integrity. They have been replaced in-kind as needed. The inlet and outlet structures that could not be located during field inventory efforts are likely the same as those that were documented.

Vehicular Barriers: Guardwalls and Berms

Historic Condition:

Prior to the development of the historic motor road system, large stones were placed alongside the local roads of Mount Desert Island to better define the edges and serve as a guardrail. This vernacular approach was present along Ocean Drive prior to its reconstruction in the late 1920s and was also used earlier on portions of Rockefeller's carriage road system. Such guardwalls were also used on the carriage road system at Rockefeller's boyhood home in Cleveland.[5] Their use throughout Acadia's historic motor road system at is a distinctive thumbprint of Rockefeller's involvement, so much so that locally the stone guardwalls became known as "Rockefeller's teeth."

The guardwall stones were typically used in sections where fills were greater than three feet with a slope greater than 1.5 to 1. The stones themselves were distinctive in that the style of stones varied from one motor road segment to another (Figure 3.26 a-g). The earlier motor roads such as Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and the Ocean Drive segments made use of angular-shaped stones, which were made available during construction. The first use of rectilinear-shaped stones was on Otter Cliffs Road in 1936, and was a product of Olmsted Brothers drawings that showed the stones as rectilinear forms on the shoulder. This detail evolved into the more rigidly rectilinear quarried blocks installed on Kebo Mountain Road. In subsequent motor road segments constructed by the Bureau of Public Roads, the length of the stones and widths of the gaps between the stones varied. Despite these variations, the guardwalls stones were consistent with the Rustic Design style and evoked the character of guardwall stones illustrated on a drawing produced in the 1920s by Thomas Vint, Chief Landscape Architect of the National Park Service (Figure 3.27).

Another guardwall style on the historic motor road system was a low earthen berm on the edge of the shoulder. Planted with grass, they were primarily used along Otter Cove Causeway and Blackwoods Road.

Existing Conditions:

The historic motor road system currently features 118 guardwalls with angular ledge stones (49091 linear feet) and fifty-two guardwalls with rectilinear quarried stones (27601 linear feet). Most of the historic guardwalls are intact and in good condition, although some individual stones need to be replaced or reset. Grass around the stones is mowed annually.

There are six earthen berms (2202 linear feet) along the historic motor road system, primarily along the Otter Cove Causeway and Blackwoods Road. The berms are currently maintained with grass cover and are mowed at the same time as the shoulders. Field work completed in 2005 noted guardwalls with skewed or missing stones and parking management stones obscured by grass.

Evaluation:
Guardwalls constructed with angular ledge stones and rectilinear ledge stones contribute to the significance of the historic motor road system. Both guardwall types were present during the historic period and retain their integrity. The guardwalls are one of the most distinctive features of Acadia's motor road system and illustrate its planning and design. Earthen berms, although used sparingly, are another type of guardwall protection and also contribute to the historic significance.

Vehicular Barriers: Parking Management Stones
Historic Condition:
Parking management stones were not used on the historic motor roads during this period.

Existing Conditions:
In the 1970s, with visitation numbers dramatically increasing, the park installed small boulders, called parking management stones, along portions of the historic motor road system to manage informal pullouts and protect the historic vegetated shoulders. Though non-historic, the stones were compatible with the rustic character of the motor roads, and were clearly distinguishable from the historic guardwall stones because of their smaller size and rounded shapes.

There are currently fifty-two parking management stone walls (12973 linear feet) along the historic motor road system. In several instances, parking management stones are also used as an extension of the historic guardwalls. The conversion of the park loop road to one-way traffic in the 1980s, from Kebo Mountain Road to Day Mountain Road, made possible parking in the right lane. This allowed some sections of parking management stones to be removed, but stones have been added elsewhere as the volume of cars on the historic motor road system continues to climb and additional informal parking areas develop. Recent installations of parking management stones have featured stones that are more angular in shape, which are somewhat indistinguishable from the historic guardwalls constructed with angular ledge rock.

Evaluation:
The two types of parking management stones do not contribute to the significance of the historic motor road system. The type constructed with rounded stones, however, are compatible because their materials are consistent with the rustic character of the motor road system and the size and shape of the stones are distinguishable from the historic guardwall stones. More recent

installations of parking management stones constructed with angular ledge stone are not compatible because they are similar in appearance to the historic angular guardwall stones.

Embankments and Retaining Walls: Embankments

Historic Condition:

Roads are either in cut or in fill, and as such they require a transition from the edge of the shoulder to the existing grade that is typically achieved with a graded section of earth called an embankment. A majority of the embankments on the historic motor road system were constructed in this manner and were stabilized with grasses, much like the vegetated shoulders and ditches, and also with shrubs and trees.

In areas where vegetated embankments alone were not enough to stabilize the motor road, hand-laid rock embankments were constructed. These embankments were constructed with large angular stones evenly placed across the slope (Figure 3.28 a-b). In some situations, large trees were preserved and incorporated into the embankments (see Figure 1.32). In general, rock embankments were minimized throughout the historic motor road system because the motor roads were designed and constructed to have minimal impact on the landscape. At the same time, their use was not necessarily discouraged because they helped limit the width of slopes in fill and preserved the adjacent vegetation.

Existing Conditions:

Many of the vegetated embankments along the historic motor road system now feature a mix of grass, shrubs, and trees, further blending them into the surrounding landscape. Field work in 2005 inventoried thirty-seven rock embankments (11852 linear feet). Initially stark when constructed, the appearance of many of the rock embankments has softened over time as vegetation has established itself in the voids between the stones.

Evaluation:

Vegetated and rock embankments contribute to the significance of the historic motor road system. Both types of embankment were present during the historic period and retain their integrity. Vegetation has been encouraged to grow along many of the embankments, allowing them to blend in even more with the surrounding landscape, while others are managed to preserve views and vistas.

Retaining Walls and Embankments: Retaining Walls

Historic Condition:

In situations where a rock embankment was going to be too wide or tall, stone retaining walls were built. The use of such walls helped minimize the width of cut and fill sections, particularly in areas where the road corridor was narrow. Like the rock embankments, the use of retaining walls also helped preserve adjacent vegetation.

Some of the retaining walls were mortared, but most were dry-laid construction, which allowed water to seep through the joints (Figure 3.29 a-c). In the steepest areas, the retaining walls often included part of a longer guardwall feature. The guardwall stones, discussed in the previous section, were secured on top of the wall in a mortared trench (Figure 3.30 a-c). Locally quarried stones were used for the walls, which resulted in beautiful structures that evoked the Rustic Design style and blended well with adjacent rock outcroppings.

Existing Conditions:
The historic motor road system features forty-four dry-laid stone retaining walls (10504 linear feet) and nine mortared stone retaining walls (1708 linear feet). There are also seventeen guardwall/retaining wall structures (4430 linear feet), which feature dry-laid or mortared retaining walls topped by a guardwall comprised of individual stones or a low mortared parapet-type wall. For all of these stone structures, the patina of the stones lends a timeless quality and contributes to the rustic character of the roads. The field work also identified retaining walls that are leaning or beginning to fail.

Evaluation:
Retaining walls and guardwall/retaining walls constructed with dry-laid stone or mortared stone contribute to the significance of the historic motor road system. Both types of walls were present during the historic period and retain their integrity. These features share the same rustic qualities as the other built structures throughout the historic motor road system.

Site Details: Access Gates
Historic Condition:
Rockefeller's grand vision of an integrated historic motor road system included the smallest of details. In 1938 he wrote to Director Cammerer in reference to gates for the park:

> ...unless a definite decision has been reached to let the park be used indefinitely for twenty-four hours a day, the same as town highways, might it not be well to erect a simple gate on the highway at the park boundary near the cemetery so that the public would get accustomed to the idea that the road from that point on was park property and not a public highway? The gate might be left open continuously but its existence would mark the fact of ownership which, without such a reminder, I fear the public will completely overlook. This is merely a suggestion...[6]

Typical of the working relationship that Rockefeller enjoyed with the National Park Service, Director Cammerer responded with instructions to Assistant Superintendent Hadley one week later:

> Mr. Rockefeller made the suggestion that it would be desirable to erect a simple gate on the highway at various park entrances so that the public would get accustomed to the idea that the road from that point on was park property and not a public highway...I think this an excellent idea in connection with all such points as they develop, similar to the installation at both ends of the Jordan Pond Road, although entrance gates of simpler design should be devised. I pointed out one new set of gate posts that was attractive and discussed it with Mr. Breeze and you. Please arrange for such gates for immediate construction, where desirable...[7]

The result of these conversations was the development of a number of different gate details for different situations throughout the park (Figure 3.31). Gates were designed for the general access to the motor road, and for access to the carriage roads. Campground gates and fire trail gates were also designed and constructed with Civilian Conservation Corps labor.

Existing Conditions:
Only one of the original Civilian Conservation Corps gates remains today, off Schoodic Point Road at the entrance to the former naval base (Figure 3.32). The other rustic gates have fallen victim to decay or vandalism. They were not replaced due to the cost and skill required for the repair of intricate wood construction and because they were so heavy that a single person would have trouble opening them. Some of the rustic gates have been replaced with sixteen contemporary gates comprised of galvanized steel pipes, painted brown. However, one rustic gate was recently reconstructed on the Schooner Head Overlook Access Road, prior to the entrance fee station.

Evaluation:
The last remaining access gate, constructed by the Civilian Conservation Corps, contributes to the significance of the historic motor road system. This feature was present during the historic period and retains its integrity. The rustic wood gate at Schooner Head Overlook Access Road is not an original feature and therefore is not contributing. It is compatible however, because its design is a modification of the rustic Civilian Conservation Corps gate. The most prevalent type of gate in the park, those constructed with galvanized steel pipe, were not used historically and are also non-contributing features.

Site Details: Fences

Historic Condition:
One of the many tasks undertaken by the Civilian Conservation Corps at Acadia was the construction of fencing. The standard detail that was developed was

called the "Down East Bunk Rail Fence," a style commonly used throughout the region and one that could even be found fronting some of the wealthier residences on Schooner Head Road. The advantage of this fence style was that its design required limited use of post holes, which was an important consideration given the rocky soils of Mount Desert Island (Figure 3.33). Unfortunately, the exact locations of these fences along the historic motor road system are not known, but they were presumably used around the heavily visited areas such as Ocean Drive as a way to control pedestrian traffic and protect revegetated areas.

Existing Conditions:
There are no remaining examples of the Down East Bunk Rail Fence. There are only two sections of fence today directly adjacent to the motor roads, and they are contemporary post and rail fences. Such fences, as well as contemporary stainless steel railings, can also be found in some of the parking lots. The park has also erected rope fencing at some of the developed areas, such as the Jordan Pond House, where it is used to curtail parking along the shoulders and in the lawn areas.

Evaluation:
Post and rail fences do not contribute to the significance of the historic motor road system. This type of fence was not known to exist during the historic period, but the materials are compatible as they evoke a rustic character. Stainless steel railings and the temporary rope fencing are non-contributing and are not compatible. Such fence designs and materials were not used historically.

Site Details: Signage

Historic Condition:
Signs on the historic motor road system were historically a combination of regional traditions and the rustic values espoused by the National Park Service. In particular, directional signage was an interpretation of many of the vernacular sign posts commonly seen at intersections in the surrounding countryside. The signs were installed by the Civilian Conservation Corps and featured an overscaled sign post with a simple finial top, with individual sign boards giving place names, directional arrows, and distances fastened to the post (Figure 3.34 a-b). Text and numbers were painted yellow on a brown background. Regulatory signage also existed throughout the historic motor road system, but details regarding them are not known. There is no record of park entrance or wayside signs.

Existing Conditions:
Today, none of the rustic directional signs remain and have been replaced with modern UniCor designs and materials.[8] As with other units in the National Park system, these signs feature a brown background with white letters and generally

blend in with the surroundings, although some at Acadia are quite large. The regulatory signs throughout the historic motor road system are also contemporary in style. Most of the signs, however, are mounted on 4x4" square wood posts rather than typical metal posts.

There are currently four locations where park entrance signs have been installed. Two signs are metal, and one of them is framed in wood. The other two, at the Schooner Head Overlook Road entrance and the Sieur de Monts entrance, are wood with wood frames and represent a return to the rustic characteristics of the historic period. They were installed in the mid-1990s.

The six wayside signs found along the historic motor road system are contemporary additions but generally blend in with the landscape. Some are supported by mortared stone bases. The historic motor road system also intersects with twenty-two wood trailhead signs, which are wood posts with a cut at the top and etched writing in black describing the name of the trail and the names and mileage of upcoming trails.

Evaluation:
Contemporary regulatory and directional signs, metal park entrance signs, and wayside signs do not contribute to the significance of the historic motor road system. None of these features were present historically. The wood park entrance signs and the wood trailhead signs are also non-contributing features, but are compatible because their design and especially materials are consistent with the rustic character of the motor road system.

Site Details: Medians
Historic Condition:
Medians were an important part of the effort to isolate and screen parking areas from the traveled way of the historic motor road system. They also were used early on to direct traffic flow at intersections, such as Cadillac Mountain Road and Jordan Pond/Eagle Lake Road (Figure 3.35 a-e). The configuration of the parking lot or intersection and its setback from the motor road typically dictated the shape, width, and length of the medians. In general, smaller medians were simply areas of grass bounded by curbing while larger medians featured grass interspersed with trees and shrubs. The larger medians tended to be more natural in appearance and did not have any curbing material.

In the 1950s, at some of the larger and busier pullouts along the historic motor road system, mortared rubble medians were installed to accentuate the separation between the traveled way and the pullout (Figure 3.36). They also served as rumble strips that provided an auditory warning that the motorist had left the roadway. Their existence confirms that rustic values were not entirely abandoned during the Mission 66 program.

Existing Conditions:
Field work identified three types of medians along the historic motor road system: landscaped, mortared rubble, and bituminous paved. Given the variable size of landscaped medians, only the smaller grass medians were assessed during field work undertaken for this report. In all, there are fourteen landscaped medians, and all but one feature curbing. There are also three mortared rubble medians. There is one small paved median with curbing at the Access Road to State Route 233.

Evaluation:
Vegetated and mortared rubble medians contribute to the significance of the historic motor road system. Both types of medians were present during the historic period and retain their integrity. Bituminous medians do not contribute because this type of material is inconsistent with the rustic character of the historic motor road system.

Site Details: Walkways, Trails, and Steps

Historic Condition:
Walkways were typically installed at major developed areas, parking areas, and overlooks to allow visitors to access nearby scenic areas. Like other features of the historic motor road system, they were designed in the Rustic Design style. Historically, the walkways were constructed with the same bituminous surface treatment as used on the roadways, meaning they featured a gravel "chip coat" as a final surface that was both durable and had the appearance of a gravel trail. Most of the walkways were bounded by curbs to provide a safe separation from vehicles. Except for the parking lot at the Cadillac Mountain summit, there are no drawings of walkway details because most project drawings did not indicate the locations of parking areas or pullouts along the motor roads. However, later drawings from pullouts and the parking lot on Bureau of Public Roads Project 4A2 as well as the Sand Beach parking area all show walkways surfaced in bituminous asphalt (Figure 3.37 a-c).

Several trails paralleled and intersected the historic motor road system, and the most prominent was the Ocean Path, a trail constructed by the Civilian Conservation Corps running alongside the Ocean Drive from Sand Beach to Otter Point. The trail was included in the lower level of the Olmsted-designed grade separation feature. Guardwalls and retaining walls separated the trail from the motor road in other areas. This trail, as with all trails in the park, were constructed with locally extruded gravel.

In several locations, granite steps were constructed to connect the motor road or parking lots to trails or provide access to the shoreline. Some were simple steps of rough-cut stones set into the vegetated embankments, while others featured wider treads and were constructed with carefully tooled stones (Figure 3.38 a-b).

Existing Conditions:
Since the historic period, many walkways have received overlays of plant-mixed, hot-asphalt bituminous concretes, the same surface treatments used on the roadway wearing courses. As a result, the appearance of most walkways is the same as the roadways, which was the case historically. Others have been replaced with Portland cement surfaces, such as some of the walkways at Thunder Hole. There are currently eleven paved walkways, all but one of which are asphalt and all but one of which include a curb edge.

Surface treatment of the Ocean Path still features a gray colored gravel surface, as does a small trail near the Blackwood Campground service road. A short trail at the Triad-Day Mountain Bridge features a gravel/pea gravel surface.

There are presently eleven sets of steps along the historic motor road system, six of which are constructed with tooled stones and three with rough-cut stones. There are also two sets of concrete steps with grey colored galvanized steel railings at the Thunder Hole developed area, connecting the parking area to the observation area at the shoreline. At Little Hunters Beach, a multi-landing wooden stairway takes visitors from the motor road to the shoreline.

Evaluation:
Asphalt walkways, gravel trails, tooled stone steps, and rough-cut stone steps contribute to the significance of the historic motor road system. These features were present during the historic period and retain their integrity. The concrete walkways do not contribute because this type of material does not match the surface material of the traveled way, which was the original design intent. Steps constructed with concrete and wood do not contribute because these materials are not consistent with the rustic character of the motor road system.

Site Details: Curbing

Historic Condition:
Curbing was used in association with parking areas, pullouts, walkways, and medians, and like many of the features of the historic motor road system, local granite was the material of choice. Reports from the Civilian Conservation Corps camp at McFarland Mountain suggest that splitting and tooling of granite curbing was a common work activity. The parking lots along the Ocean Drive segments feature granite curbs of very short lengths, which would be typical of the work of

unskilled labor. In contrast, the granite curbs at the parking area atop Cadillac Mountain Road were longer in length and of a much higher quality.

Regardless of length, the curbing had a rough-cut quality on the faces and edges, qualities that were consistent with the Rustic Design style (Figure 3.39 a-c). A granite curb with a sloped-face was introduced into the historic motor road system after World War II, and by the 1950s, concrete curbs were also in use. The concrete curbs, with their smoother faces and lighter colored hues, contrasted with the rustic character of the older granite curbs (Figure 3.40 a-b). However, the 1955 project drawings for the Champlain Mountain Overlook on Bureau of Public Roads Project 4A2 specified an admixture of carbon black into the concrete to render the finished curbing a tone of grey.

Existing Conditions:
In the 1980s, sawn-top granite curbing was introduced in the historic motor road system. Although it was intended to gesture to the rustic character of the historic rough-cut granite curbs, its sharp edges and smooth surfaces instead introduced yet another type of curbing to the historic motor road system. These new granite curbs were replacements for some sections of concrete curb, which were historic despite their inconsistently with the rough-cut granite curbs.

Field work revealed that the historic rough-cut granite curbs are associated with two landscaped medians, one paved pullout, five paved walkways, and three unpaved walkways. The historic slope-faced granite curbs can be found at six landscaped medians, and historic concrete curbs are associated with five landscaped medians, two paved pullouts, and two paved walkways. The non-historic sawn-top granite curbs are present at one landscaped median, five paved pullouts, and three paved walkways – three of the paved pullouts and the two of the paved walkways are at the Otter Point overlooks on Otter Cove Causeway and Blackwoods Road.

Evaluation:
Curbs constructed with rough-cut granite, slope-faced rough-cut granite, concrete, and slope-faced concrete contribute to the significance of the historic motor road system. These features were present during the historic period and retain their integrity. Curbs constructed with sections of sawn-top granite do not contribute because although it is an appropriate material, the design or cut of the granite is not. Additionally, this type of curb has been used to replace some of the historic concrete curbing.

Site Details: Monuments

Historic Condition:

Two significant monuments were installed along the historic motor road system. One is at the site of the former U.S. Naval Station on Otter Point, where Otter Cliffs Road ends and Otter Cove Causeway/Blackwoods Road begins. The monument was added in 1939 in memory of Alessandro Fabbri (1877-1922), who commanded the Otter Cliff Naval Radio Station from August 28, 1917 to December 12, 1919. Another monument was erected on the Schoodic Peninsula, at the parking area at the end of Schoodic Point Road. It honored John Godfrey Moore (1848-1899), who owned Schoodic Peninsula and in 1897 built the first public road on it. It was erected in 1929.

Existing Conditions:

The Fabbri monument is a rectangular bronze plaque mounted on a triangular shaped granite boulder on the west side of the road, at the Fabbri picnic area. The Moore monument is a rectangular bronze plaque attached to a granite boulder. Both monuments are in good condition.

Evaluation:

The Allesandro Fabbri Memorial Plaque and the John Godfrey Moore Memorial Plaque contribute to the significance of the historic motor road system. Both monuments were present during the historic period and retain their integrity.

THE ROAD CORRIDOR

The road corridor of Acadia's historic motor road system considers the characteristics associated with scenic views and roadside vegetation. Like the traveled way, these features also represent the design intent of the motor roads and their presence in the landscape.

Scenic Views

Historic Condition:

The historic motor road system was planned and designed to showcase the many scenic views on Mount Desert Island and the Schoodic Peninsula. Except for the Champlain Mountain overlook on Bureau of Public Roads Project 4A2, construction drawings did not indicate the development of formal overlooks. In most cases, overlooks and pullouts were created in the field in locations where the quantities of cut and fill did not balance and excess material was available. In such circumstances, the excess stone from dynamited ledge was used to create a wider cross-section that allowed level space for vehicles to pull off the road. Numerous pullouts and parking areas were shown on the 1941 Master Plan, at which time several motor road segments were under construction or had not yet been built (see Figure 1.47). These locations were presumably associated with scenic views.

That same year, Assistant Superintendent Hadley had been instructed to develop a plan to maintain the overlooks and manage the vegetation. From the outset, managing the vegetation below the scenic overlooks became an ongoing challenge. According to the correspondence, vegetation along the older road segments was beginning to obscure the views at this time.[9] The 1947 fire transformed much of the eastern half of Mount Desert Island into a barren landscape, and historic photographs indicate it was not until the early 1950s that new vegetation had begun to take root.

Thanks in large part to Rockefeller's sponsorship of reforestation efforts, by 1961 vegetation in burned areas was well on its way to reclaiming the barren slopes. At this time, the park prepared a Vista Plan of overlooks and scenic views on Mount Desert Island that were to be kept clear of the quickly growing young forest (Figure 3.41). Even though the 1961Vista Plan falls outside of the historic motor road system's period of significance, it was carried out at a time when the personnel involved in the survey likely had first hand knowledge of planned historic vistas. A comparison of the 1947 pullout/parking lot locations and the 1961vista locations shows that the pullout/parking lot locations on the 1947 plan correspond to nineteen of the sixty-seven vistas identified on the 1961Vista Plan.

According the 1961Vista Plan, the vistas were locations that had been cleared previously or were established because of the 1947 fire. A memorandum accompanying the plan outlined strategies of vista management and stated that the vistas were not to be maintained as total clear zones, but to be groomed to allow specimen trees to mature in the foreground. This technique was, and still is, well established in the traditions of landscape architecture, and provides a frame within which to view spectacular park scenery. The sheer number and scale of scenic views along the historic motor road system precluded the preparation of individual vegetation plans for each scenic vista. Instead, the views were to have been a long-term management proposition, which was to proceed under the direction of a sensitive eye, following well-established principles.[10] The Vista Plan and the memorandum are in Appendix D in the park's 1991 General Management Plan/Environmental Assessment.

Existing Conditions:

The 1991 public review draft of the General Management Plan/Environmental Assessment used the same numbering system for the vistas and continued the philosophy of the 1961 Vista Plan. It excerpted portions of Eckart Lange's "Vista Management in Acadia National Park," which promoted uneven-age management of the effected stands and the periodic removal of trees in several or all classes. According to Lange, trees were to be individually evaluated for cutting. Information regarding bearings and widths of viewsheds as well as observation position and condition was also provided. The General

Management Plan/Environmental Assessment also noted lost vistas, and of the 67 located along the historic motor road system, six were identified (#s 10, 23, 26, 38, 40, 58).

Inventory work undertaken in 2005/2006 recorded the linear distance of views along the historic motor road system based on three categories: panoramic views (at least 200 feet in length, predominantly open, with a horizon line present), framed/filtered views (any length through trees to a distance, without a horizon line present), and blocked views. Including the historic motor roads on the Schoodic Peninsula, there are twenty-five panoramic views that total approximately 2.8 linear miles. There are fifty-seven framed/filtered views that total just over seven miles, and one blocked view. In several instances, a view mapped in the field corresponded to multiple historic vista points identified on the 1961 Vista Plan.

Evaluation:
Scenic views contribute to the significance of the historic motor road system. Many of the vistas documented in 1961 correspond to pullouts and parking lots shown on the 1941 Master Plan. Field work in 2005/2006 revealed twenty views from the 1961 plan were no longer present (#s 2, 6, 10, 12-14, 16-17, 20, 23, 25, 40-42, 48, 50, 53, 58-60).

Roadside Vegetation

Historic Condition:
The road prism can generally be defined as the top of the cut to the toe of the fill, or where the engineered road meets the original grade. John D. Rockefeller, the Olmsted firm, and the National Park Service desired that the size of this area be minimized through good road design and any scars created beyond it during construction were addressed and repaired. Great care was taken to protect and save trees along the sides of the historic motor roads. On Stanley Brook Road for example, some of the motor road's tight curves were a result of the preservation of larger specimen trees. In areas where landscape scars were inevitable, efforts were lavished on their repair, with much of the revegetation work accomplished by the Civilian Conservation Corps. As was the case throughout the National Park Service, native plants were used in the affected areas so that they would blend in with the surrounding landscapes. After the Great Fire of 1947, Rockefeller funded major reforestation efforts along the affected motor roads.

As discussed in previously, grass was the most widespread type of planting along the shoulders, ditches, and embankments. Unfortunately, there are few historical records of specific plantings along the historic motor road system mainly because most landscaping work was completed after construction ended and after the "Final Construction Report" and Progress Views" were submitted. Scattered correspondence, however, does speak of using grasses and native shrubs and trees to repair landscape scars and clearings, stabilize slopes, frame scenic views, and screen roadside parking areas and undesirable views (Figures 3.42, 3.43). Such landscaping was undoubtedly designed by Frederick Law Olmsted, Jr., Henry Hubbard, and others in the Olmsted firm, which planned and designed several motor road segments and consulted on many others at the request of Rockefeller and the park. Landscape plans were also likely developed by Benjamin Breeze, the park's resident landscape architect from 1933-1942 and by the talented pool of landscape architects within the National Park Service who worked at various times on projects at Acadia, chief among them Charles E. Peterson. Additionally, some of the plantings designed by landscape architect Beatrix Farrand, who worked closely with Rockefeller on the carriage roads, may have also been installed in areas where the motor road and carriage road systems intersected.

Some of the views described in the 1961 Vista Plan referenced specific views of vegetation (#23, view into mixed-growth forest and #25, view into spruce-fir forest) as well as different types of vegetation (#s 53-55 look out across the Great Meadow).

Existing Conditions:
Today, vegetation along the historic motor road system ranges from deciduous and coniferous forests to open meadows and wetlands. In the more densely forested areas the road corridor is bordered by trees but still opens to the sky above. The type of plants either limits or allows views beyond the road, and in some areas, large specimen trees grow just beyond the shoulder, creating a primeval effect. As noted above, it is likely many of these were intentionally saved when the motor roads were built.

Evaluation:
Vegetation in and along the road corridors contributes to the significance of the historic motor road system. The preservation of existing vegetation and new plantings were an integral part of the design and construction of the motor roads. Vegetation framed views, blocked unwanted views, and allowed the motor roads to harmonize with the surrounding landscape.

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[1] Robert R. Page, Cathy Gilbert, and Susan Dolan. *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques.* Washington D.C: U.S. Department of the Interior, National Park Service, Cultural Resource and Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 1998: 71

[2] Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Repair and Bituminous

Surface Treatment of Bubble Pond and Kebo Mountain Roads, Project 3A3-6A4," Bar Harbor, Maine, 1940.

[3] John D. Rockefeller, Jr. to Walters Hill, 26 June 1933, Rockefeller Family Archives, Homes, box 127, folder 123.

[4] According to the 1941 Master Plan and drawings for Bureau of Public Roads Project 4A2, the following existing pullouts as inventoried on the 2006 Existing Conditions Maps were not present during the historic period: Paradise Hill Road – PP 1.146; Jordan Pond/Eagle Lake Road – PP 0.946, PP 2.176, PP 4.293; Bureau of Public Roads Project 4A2 – PP 3.543; and Cadillac Mountain Road – none. A paved pullout on Day Mountain Road, near RW 11.977, apparently was not built.

[5] Ann Rockefeller Roberts, Mr. Rockefeller's Roads: The Untold Story of Acadia's Carriage Roads & Their Creator, Camden, Maine: Down East Books, 1990: 15.

[6] John D. Rockefeller, Jr. to Arno Cammerer, 16 August 1938, Rockefeller Family Archives, Homes, box 121, folder 59.

[7] Arno Cammerer to Benjamin Hadley, 22 August 1938, Rockefeller Family Archives, Homes, box 121, folder 59.

[8] UniCor is a Government Services Administration procurement program with the Federal Prison Industries.

[9] Newton Drury to Acting Superintendent, 11 June 1941, Rockefeller Family Archives, Homes, box 117, folder 1.

[10] "General Management Plan and Environmental Assessment, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, Denver Service Center, Pubic Review Draft, August 1991: Appendix D, 230-239.

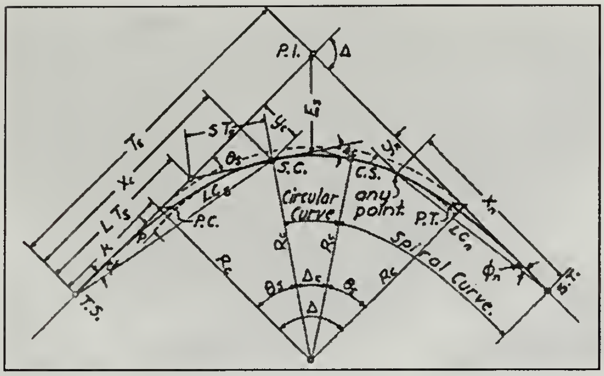

Figure 3.1. Spiral transition curves were inserted for comfort and safety. (Seelye, Elwyn E. *Design: Data Book for Civil Engineers.* 3rd ed. New York: John Wiley & Sons, 1945)

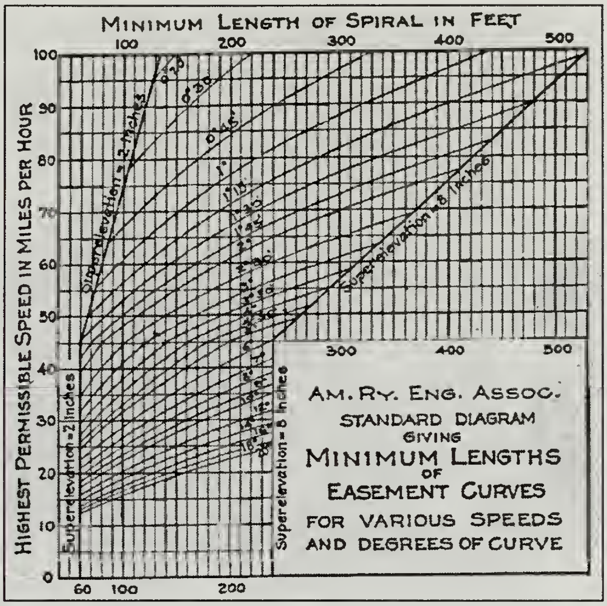

Figure 3.2. A page from Leo Grossman's field book. (Allen, C. Frank. *Field and Office Tables: Specially Applicable to Railroads.* 3rd ed. New York: McGraw-Hill, 1920)

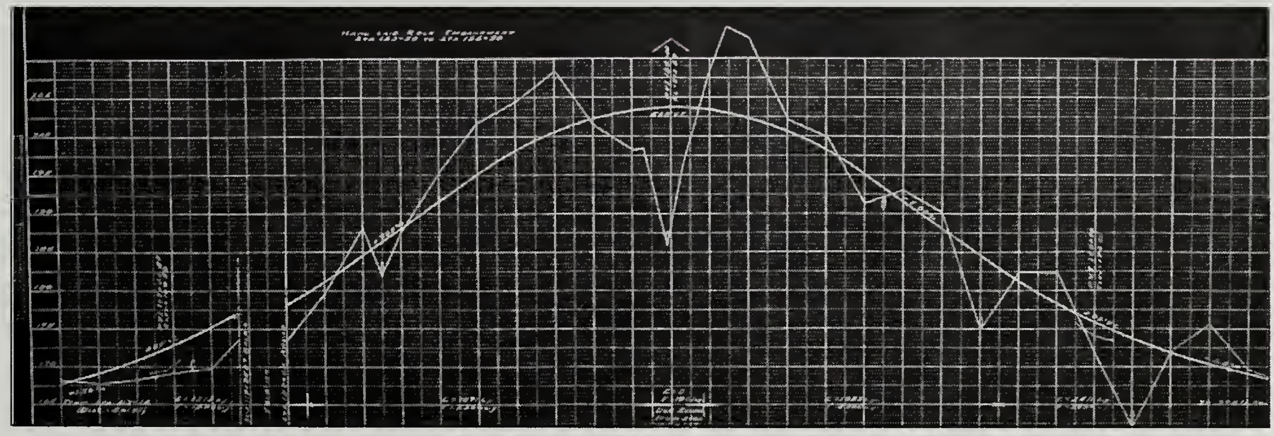

Figure 3.3. A "summit curve" on Paradise Hill Road. (Federal Works Agency, Public Roads Administration, Project 10A1, April 1940)

Figure 3.4. A sheet from the Paradise Hill Road drawings, at the bridge over New Eagle Lake Road, showing alignments and grades. (Federal Works Agency, Public Roads Administration, Project 10A1, Sheet 8 of 77, April 1940)

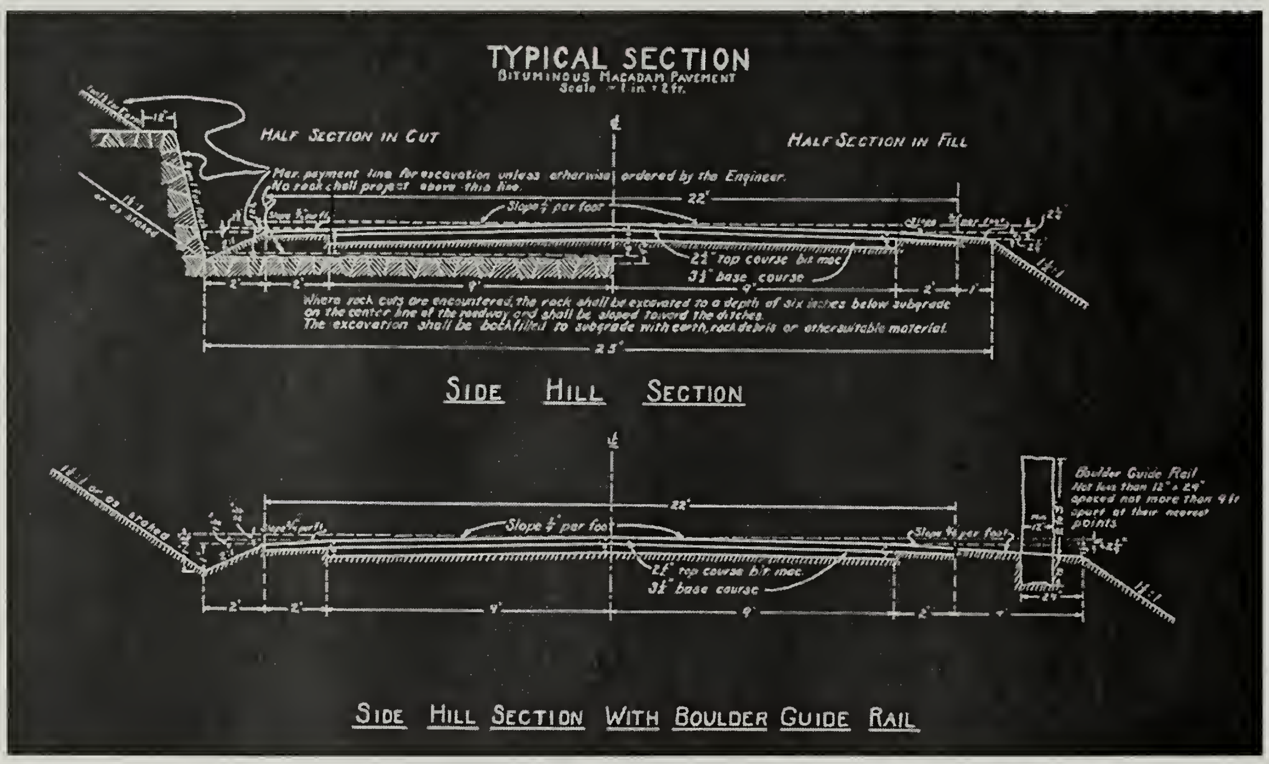

Figure 3.5a. Cross-section diagram for Cadillac Mountain Road, 1931, showing a 22-foot cross-section that includes an 18-foot traveled way, 2-foot shoulder in cut, and 3-foot shoulder in fill (4 feet if guardwall present). (U.S. Department of Agriculture, Bureau of Public Roads, Project 1, Sheet 4 of 11, 1931)

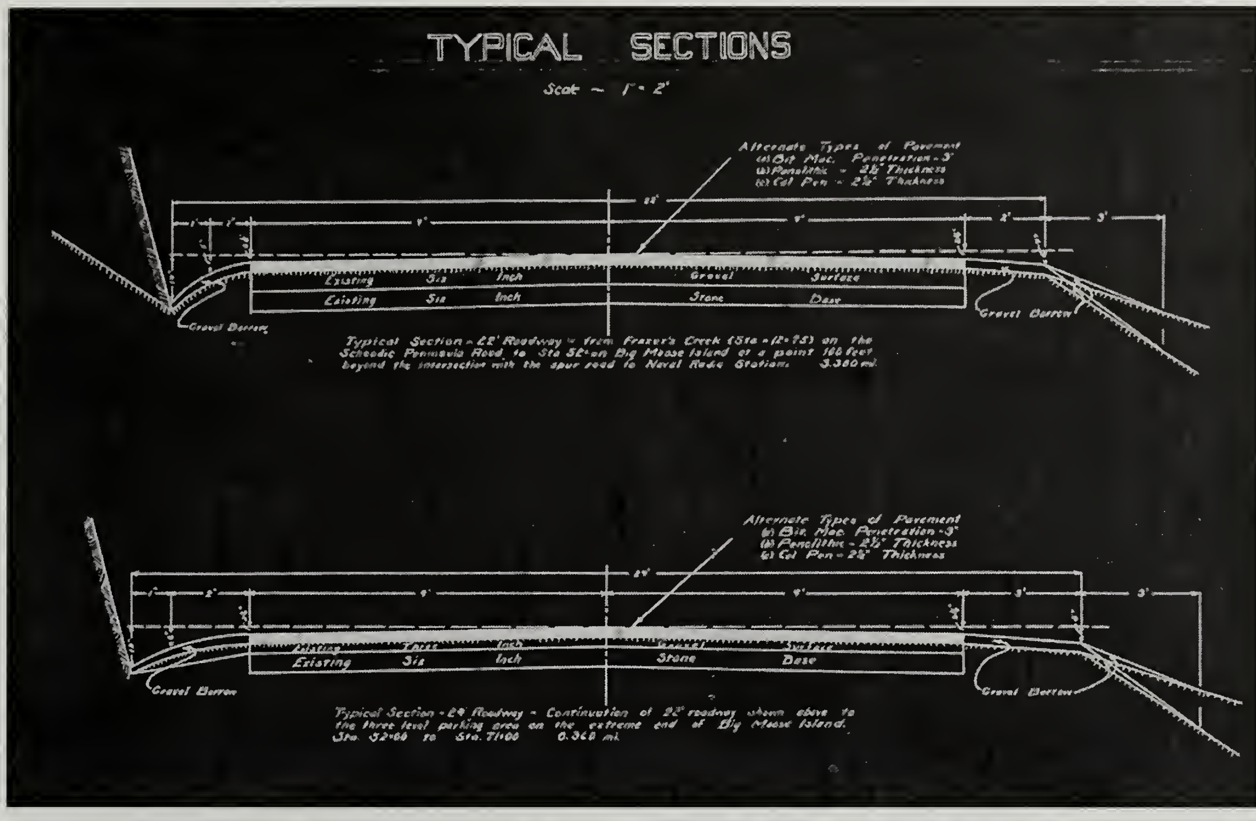

Figure 3.5b. Cross-section diagram for Schoodic Loop Road and Schoodic Point Road, 1934. The top diagram represents a 22-foot cross-section for Schoodic Loop Road from Frazer Creek to the entrance to the radio station on Schoodic Point Road. The section includes an 18-foot traveled way, 1-foot shoulder in cut, and 2-foot shoulder in fill. The bottom diagram represents a 24-foot cross-section of Schoodic Point Road from the radio station entrance to the parking lot. The section includes an 18-foot traveled way, 2-foot shoulder in cut and 3' shoulder in fill. (U.S. Department of Agriculture, Bureau of Public Roads, Project 2A4, 1934)

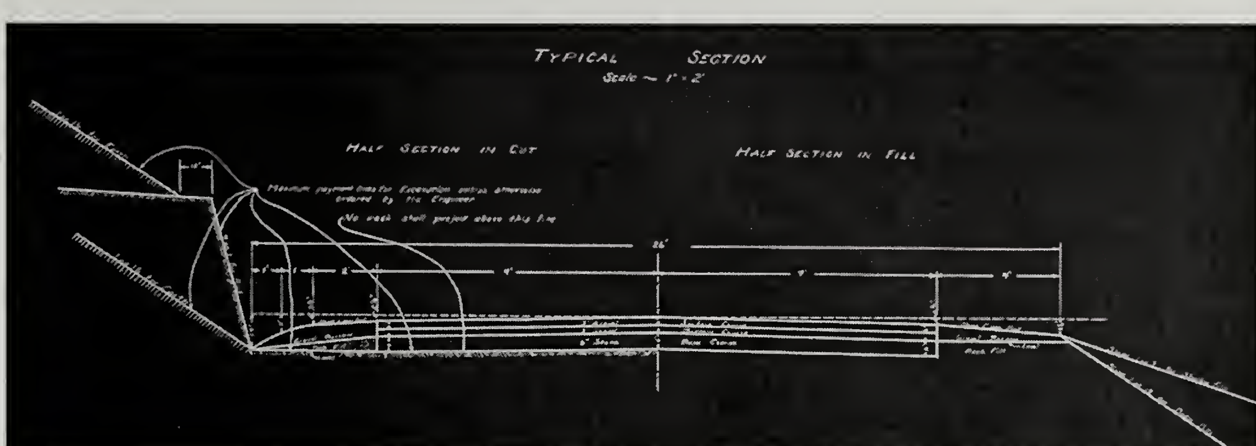

Figure 3.5c. Cross-section diagram for Schoodic Loop Road, from Big Moose Island to Wonsqueak Harbor, 1934. The 26-foot cross-section includes an 18-foot traveled way, 2-foot shoulder in cut, and 4-foot shoulder in fill. (U.S. Department of Agriculture, Bureau of Public Roads, Project 5A1, Sheet 2 of 11, 1934)

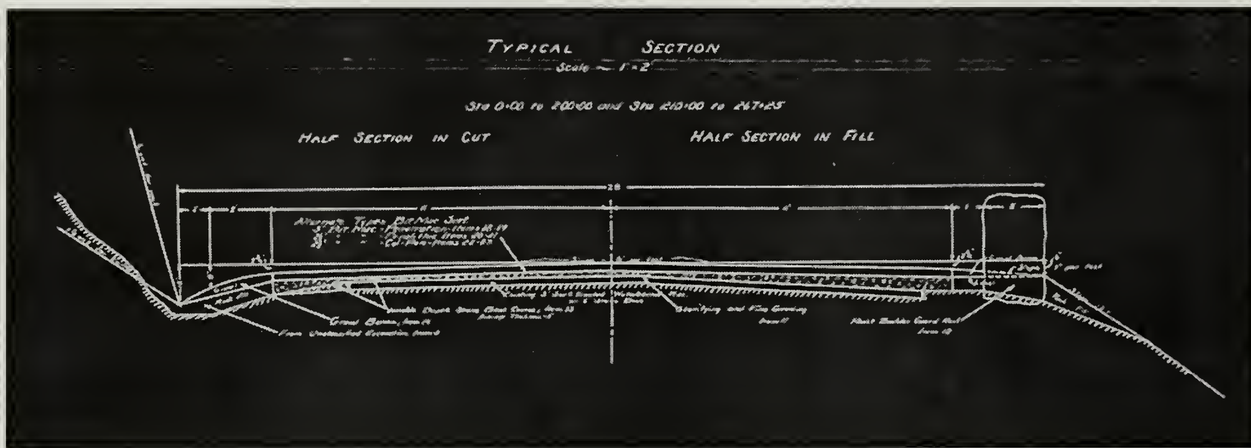

Figure 3.5d. Cross-section diagram for Jordan Pond/Eagle Lake Road, 1935, showing a 28-foot cross-section that includes a 22-foot traveled way, 2-foot shoulder in cut, and 3-foot shoulder in fill (1-foot if guardwall present). (U.S. Department of Agriculture, Bureau of Public Roads, Project 3A1, Sheet 2 of 22, 1935)

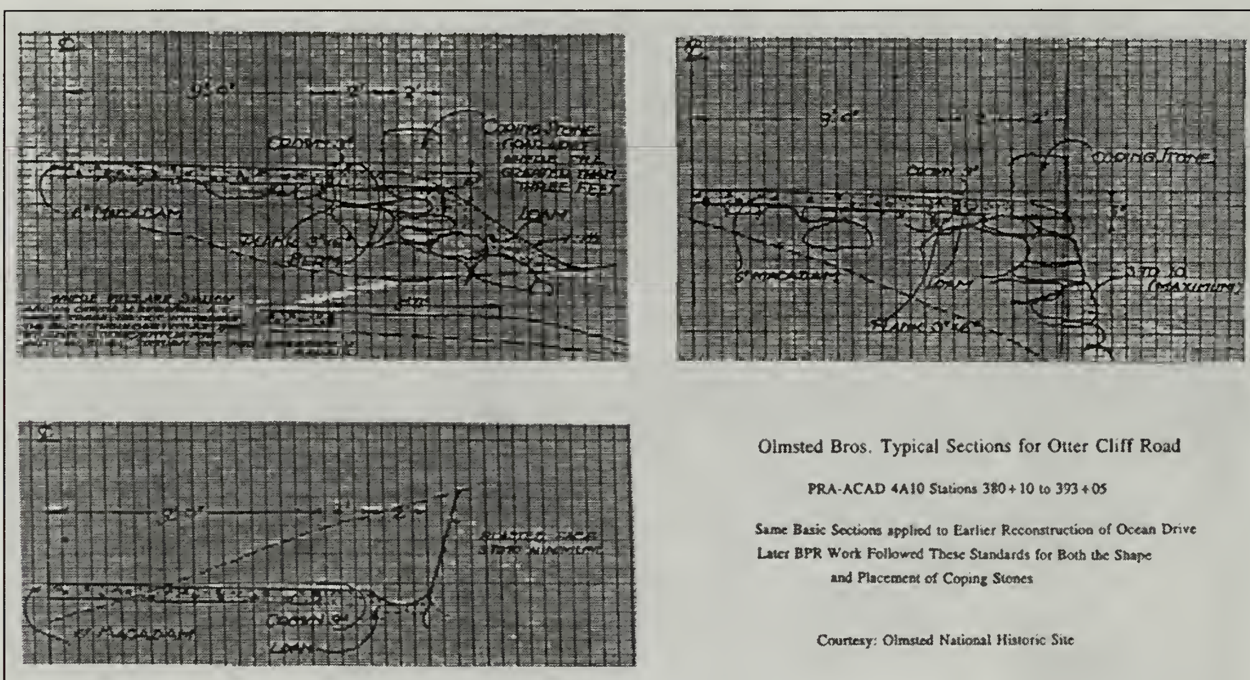

Figure 3.5e. Cross-section diagram for Otter Cliffs Road, 1936, showing a 9-foot traveled way and 2-foot shoulders in cut and fill. (Olmsted National Historic Site)

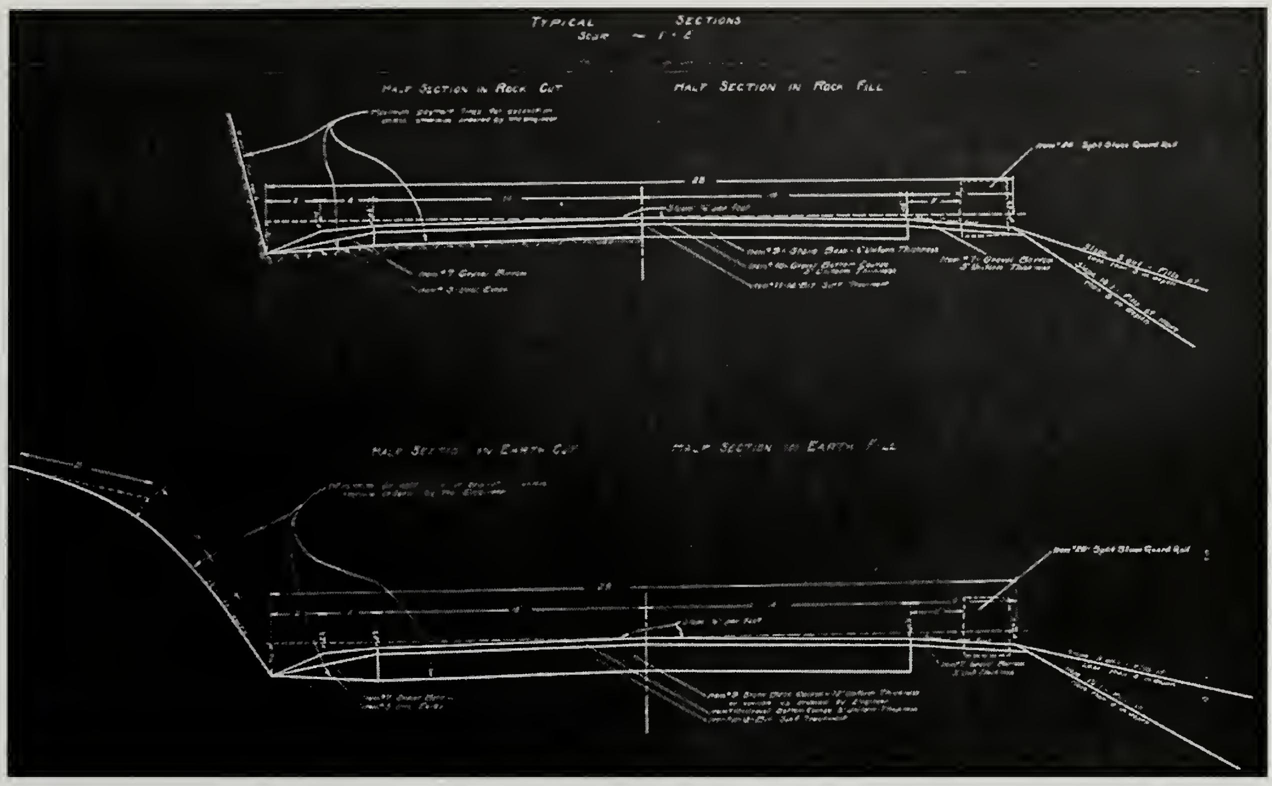

Figure 3.5f. Cross-section diagram for Kebo Mountain Road, 1936, showing a 28-foot cross-section that includes a 20-foot traveled way, 2-foot shoulder in cut, and 4-foot shoulder in fill (2 feet if guardwall present). (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 2 of 14, 1936)

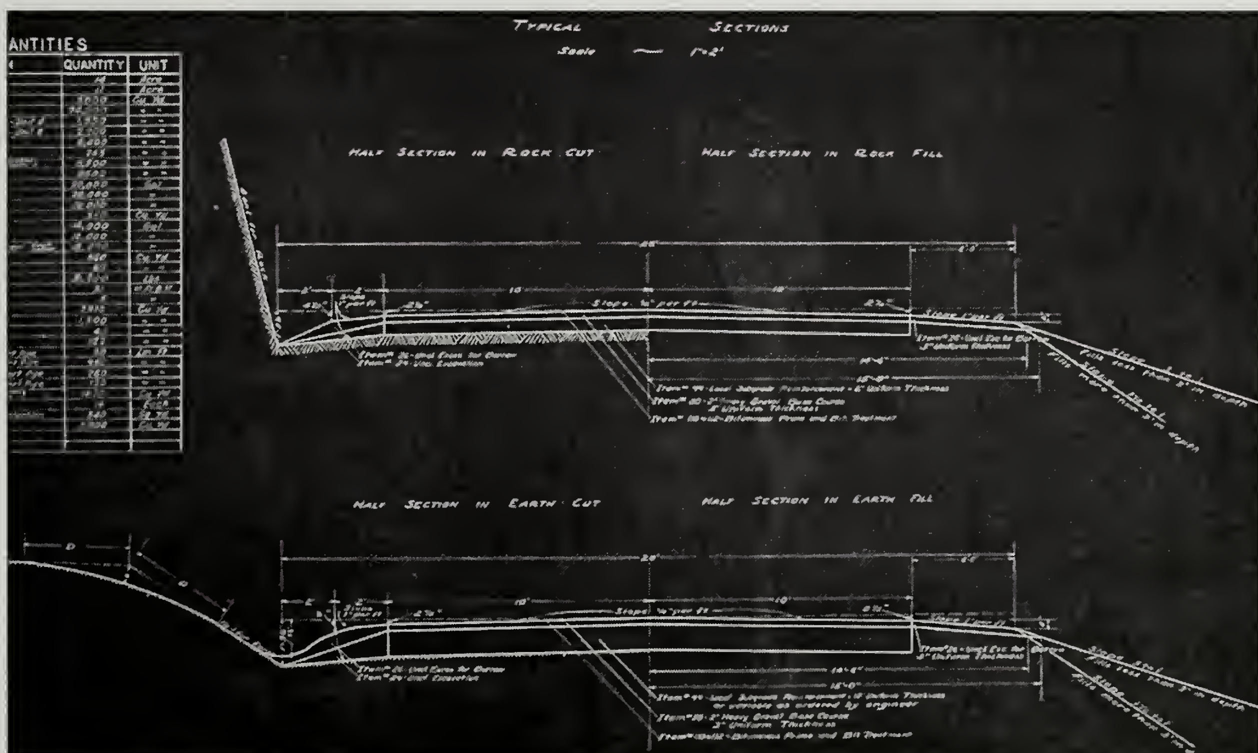

Figure 3.5g. Cross-section diagram for Otter Cove Causeway and Blackwoods Road, 1937, showing a 28-foot cross-section that includes a 20-foot traveled way, 2-foot shoulder in cut, and a 4-foot shoulder in fill. The motor road was slightly wider at the causeway. (U.S. Department of Agriculture, Bureau of Public Roads, Project 7A1, Sheet 2 of 79, 1937)

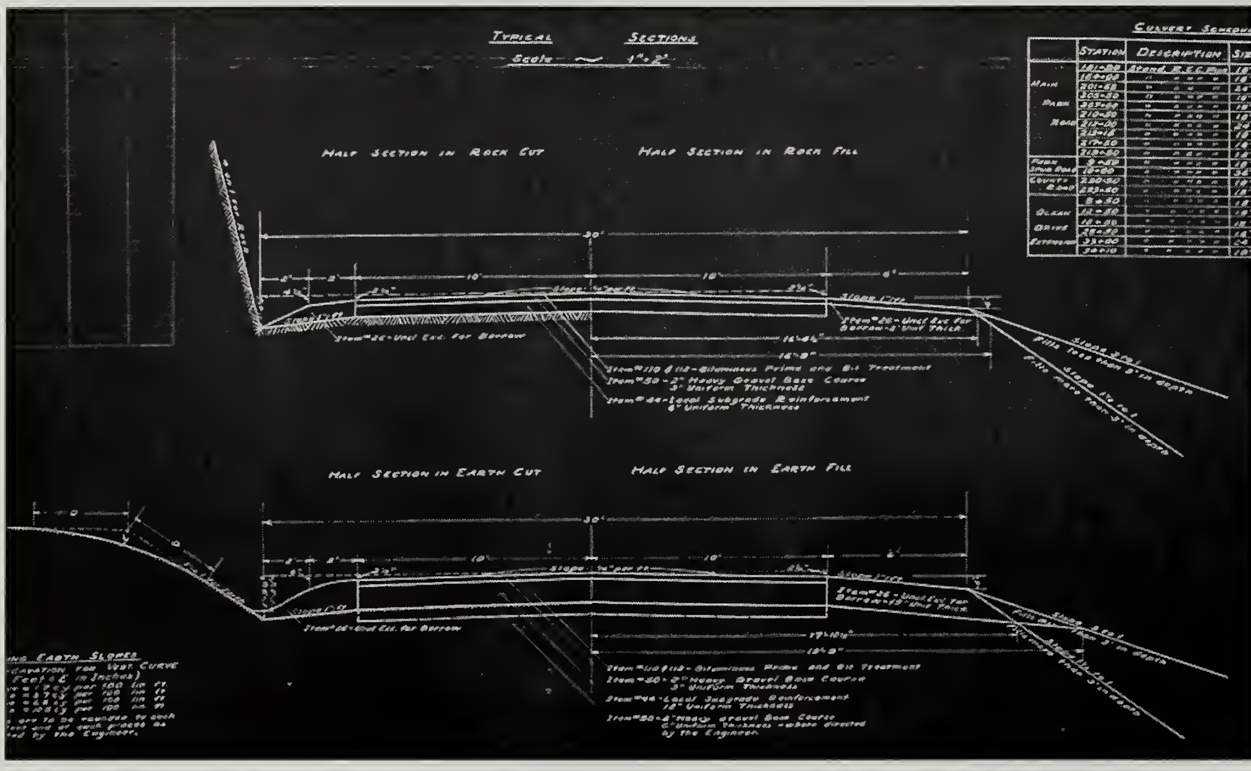

Figure 3.5h. Cross-section diagrams for Day Mountain Road, Kebo Mountain Road Extension, and Champlain Mountain Road, 1939. The 30-foot cross-section includes a 20-foot traveled way, a 2-foot shoulder in cut, and a 6-foot shoulder in fill. (U.S. Department of Agriculture, Bureau of Public Roads, Project 9A1, Sheet 2 of x, June 1939. Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 2 of x, September 1939)

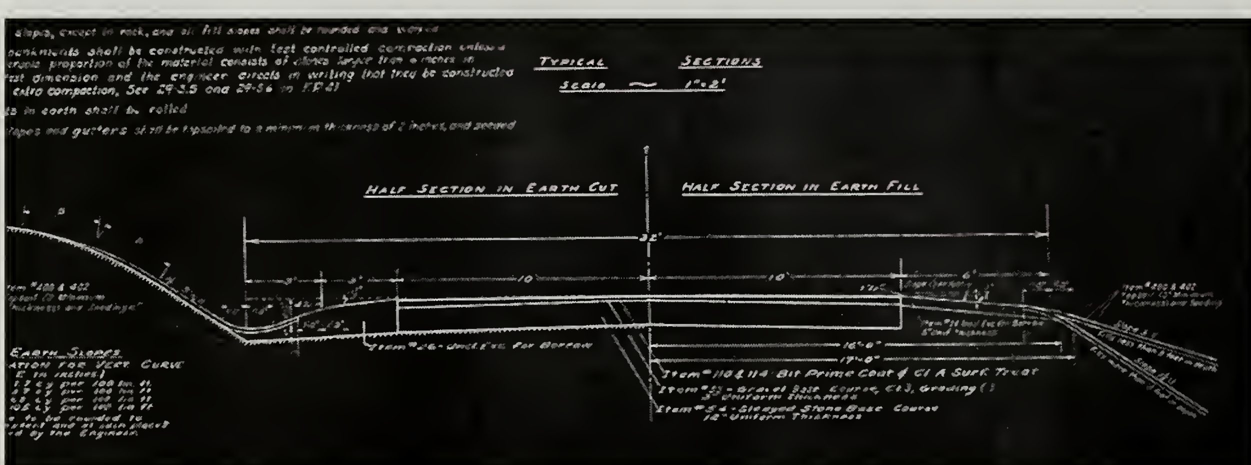

Figure 3.5i. Cross-section diagram for Day Mountain Road Extension,1950, showing a 32-foot cross-section that includes a 20-foot traveled way, a 3-foot shoulder in cut, and a 6-foot shoulder in fill. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 2 of 11, November 1950)

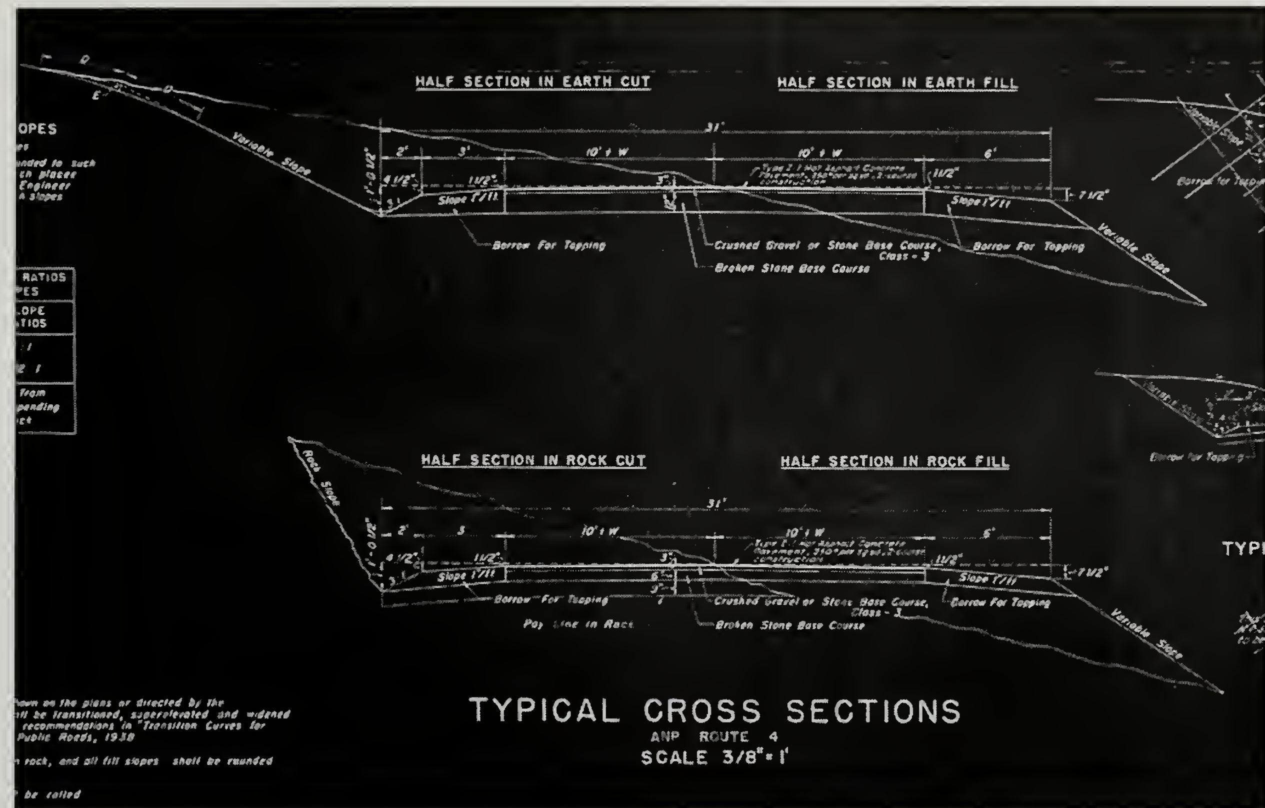

Figure 3.5j. Cross-section diagram for Bureau of Public Roads Project 4A2, 1956, showing a 31-foot cross-section that includes a 20-foot traveled way, a 3-foot shoulder in cut, and a 6-foot shoulder in fill. (U.S. Department of Commerce, Bureau of Public Roads, Project 4A2, Sheet 2 of 24, April 1956)

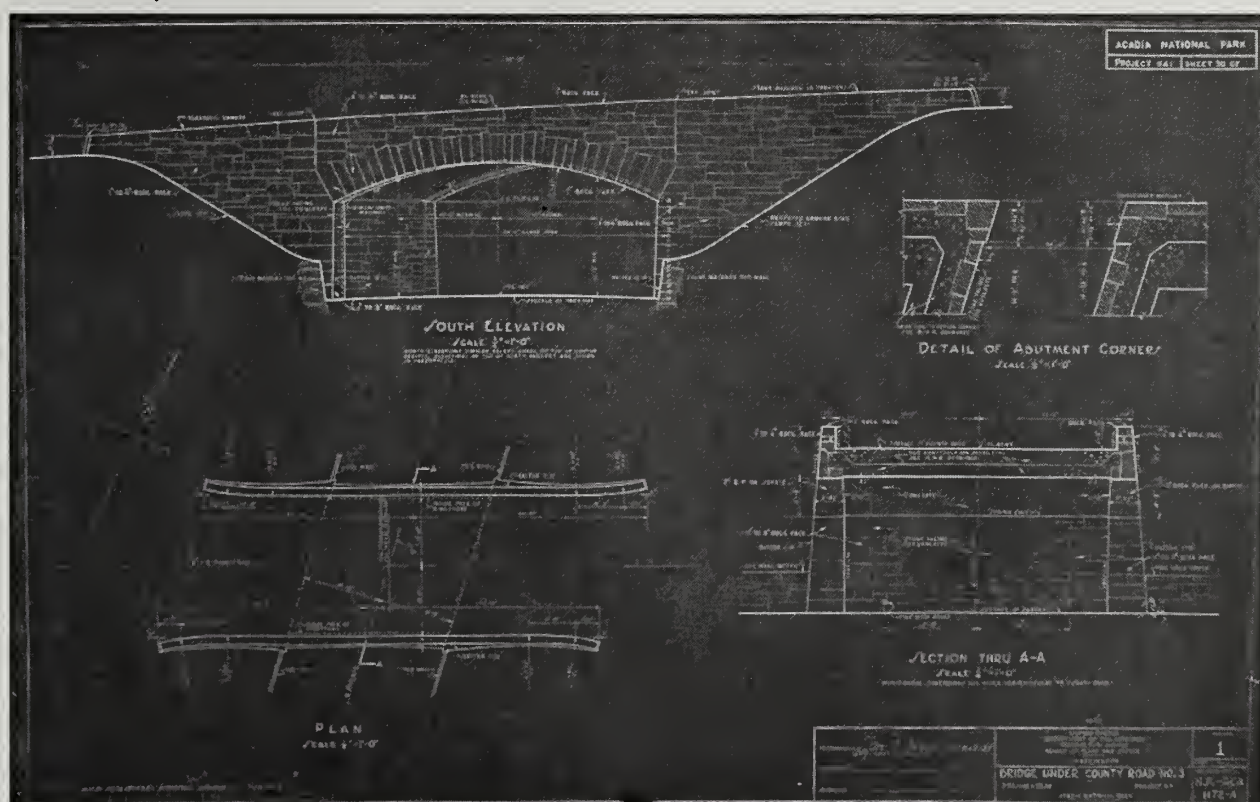

Figure 3.6. Drawing of the Blackwoods Bridge on Day Mountain Road, designed and built by the BPR from 1939-1941. The bridge is also called the "Floating Bridge" because of its unique timber pilings. (U.S. Department of Agriculture, Bureau of Public Roads, Project 9A1, Sheet 30 of x, June 1939)

Figure 3.7. Blackwoods Bridge on Day Mountain Road, soon after construction. (Federal Works Agency, Public Roads Administration, "Progress Views: Structures, Black Woods Project 7A1.")

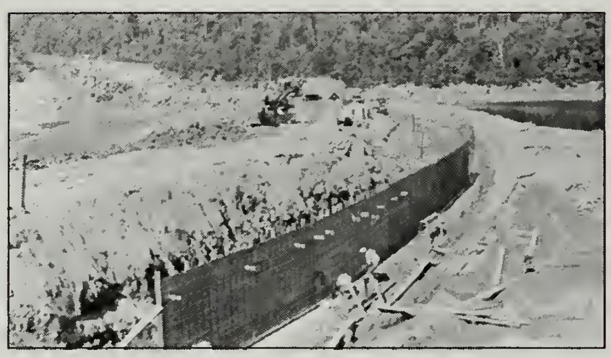

Figure 3.8. Construction of the causeway concrete core wall on the Otter Cove Causeway and Blackwoods Road. (Federal Works Agency, Public Roads Administration, "Progress Views: Structures, Black Woods Project 7A1.")

Figure 3.9. Finished grading, bridge, and roadway on Otter Cove Causeway and Blackwoods Road. (Federal Works Agency, Public Roads Administration, "Progress Views: Structures, Black Woods Project 7A1.")

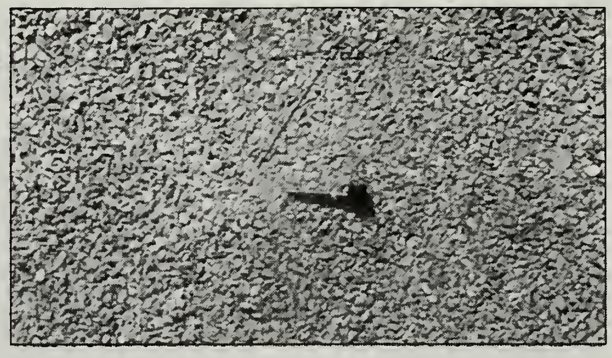

Figure 3.10. Texture of early bituminous treatment, 1935. (U.S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report: National Park Service, Acadia National Park, Bear Brook Road, Project 4A1.")

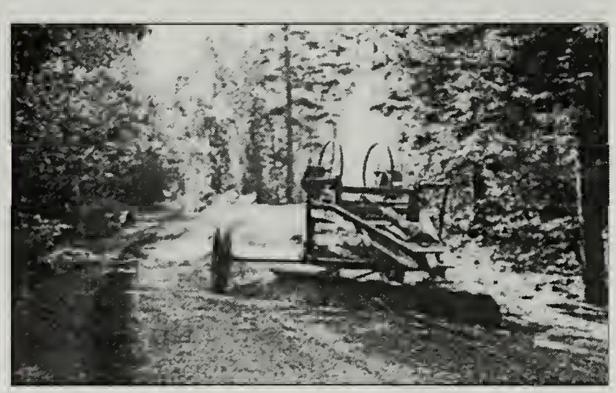

Figure 3.11. Grader on Jordan Pond/Eagle Lake Road, 1940. (Federal Works Agency, Public Roads Administration, "Final Construction Report: National Park Service, Acadia National Park, Repair and Bituminous Surface Treatment of Bubble Pond and Kebo Mountain Roads, Project 3A3-6A4.")

Figure 3.12. Crushing plant and bins used on the construction of Cadillac Mountain Road, July 1931. (Courtesy Leo Grossman Personal Collection, #62-2)

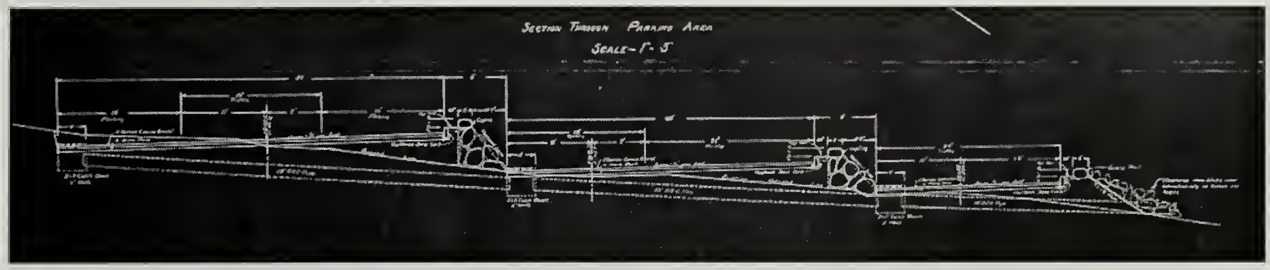

Figure 3.13. Cross-section of the tiered parking lot at the end of Schoodic Point Road on the Schoodic Peninsula, 1933. (U.S. Department of Agriculture, Bureau of Public Roads, Project 2A2, Sheet 2 of x, 1933-1934)

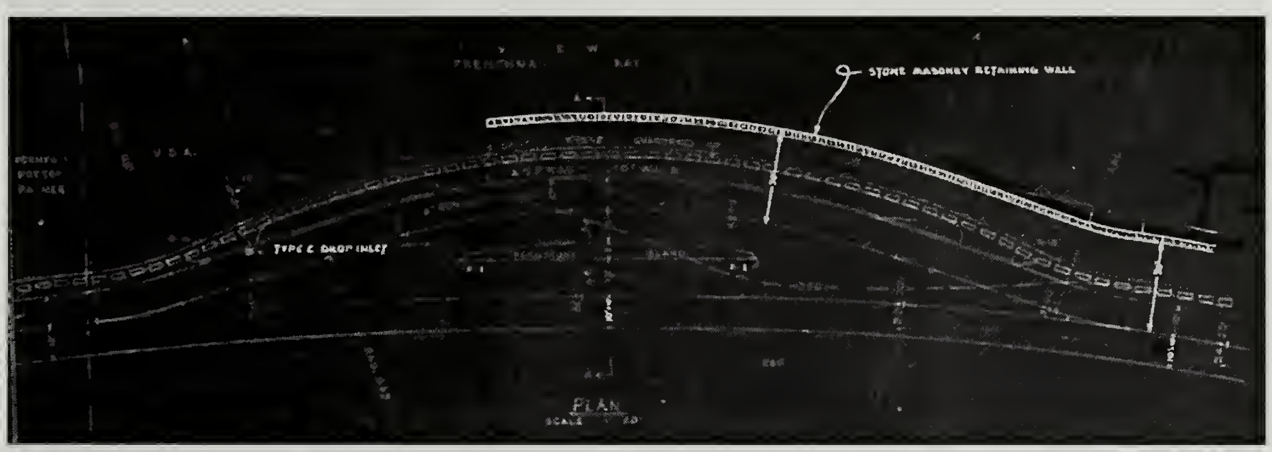

Figure 3.14. Plan of the Champlain Mountain overlook on Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 4A2, Sheet 16 of 64, April 1956)

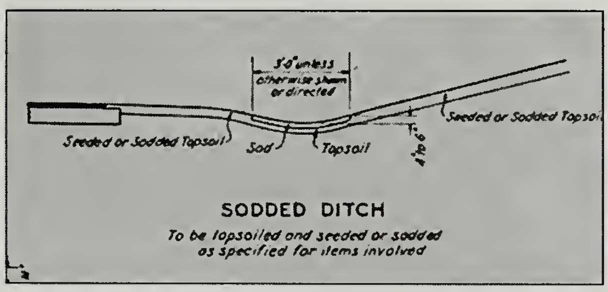

Figure 3.15. Detail of vegetated ditch, 1957. (U.S. Department of Commerce, Bureau of Public Roads, Project 22A1, Sheet 6 of 12, May 1957)

Figure 3.16a. Cross-section of a mortared rubble waterway on the following projects: Day Mountain Road Extension, Bureau of Public Roads Project 4A2, Schooner Head Access Road, and repavement of Cadillac Mountain Road, Jordan Pond/Eagle Lake Road, and Stanley Brook Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 5 of 11, November 1950; Project 4A2, Sheet 18 of 64, April 1956; Project 1A7-4A3-7A2-33A1, Sheet 15 of x, November 1955; and Project 22A1, Sheet 6 of 12, May 1957)

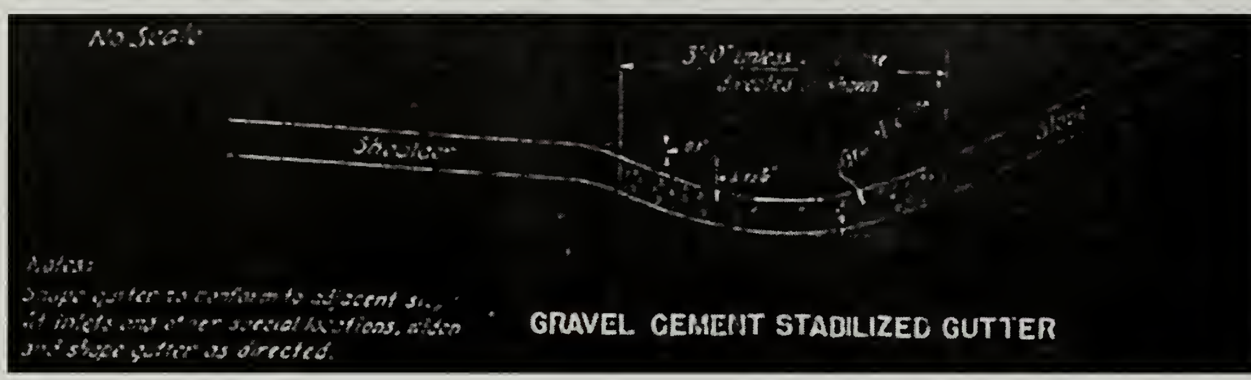

Figure 3.16b. Cross-section of a gravel cement waterway for Day Mountain Road Extension. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 5 of 11, November 1950)

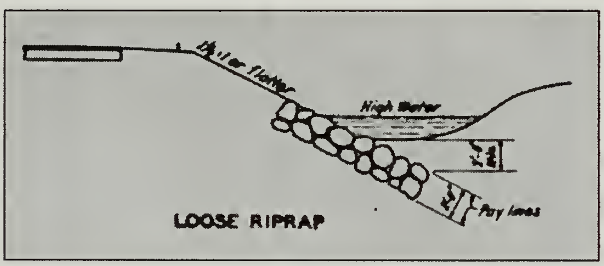

Figure 3.16c. Cross-section of a loose rip rap waterway for Day Mountain Road Extension and the Schooner Head Overlook Access Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 5 of 11, November 1950 and Project 22A1, Sheet 10 of 12, May 1957)

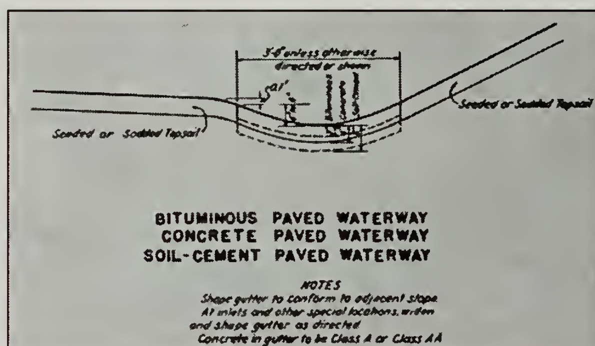

Figure 3.16d. Cross-section of a paved waterway from proposed plans for Schooner Head Overlook Access Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 22A1, Sheet 6 of 12, May 1957)

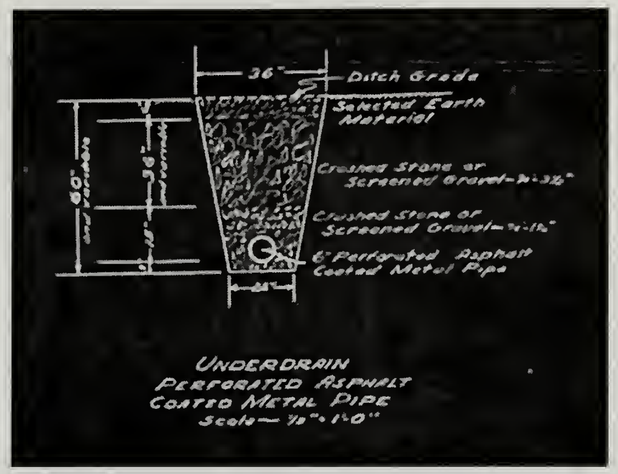

Figure 3.17a. Detail of an underdrain from Kebo Mountain Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 13 of 14, 1936)

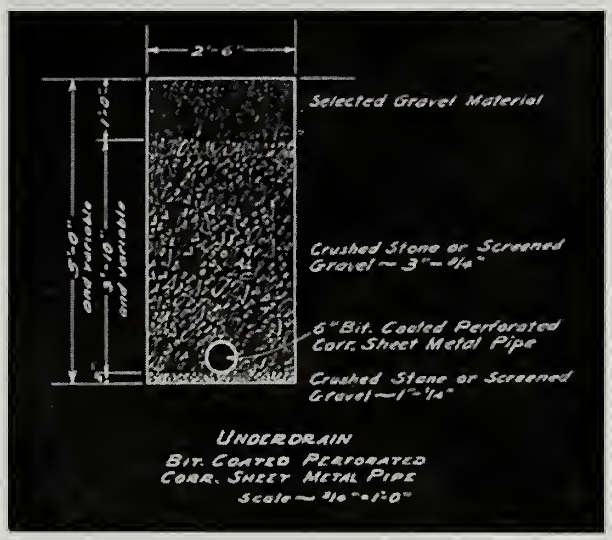

Figure 3.17b. Detail of an underdrain from Kebo Mountain Road Extension and Champlain Mountain Road, 1939. (Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 13 of x, September 1939)

Figure 3.17c. Detail of an underdrain from Day Mountain Road Extension and Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 5 of 11, November 1950 and Project 4A2, Sheet 18 of 64, April 1956)

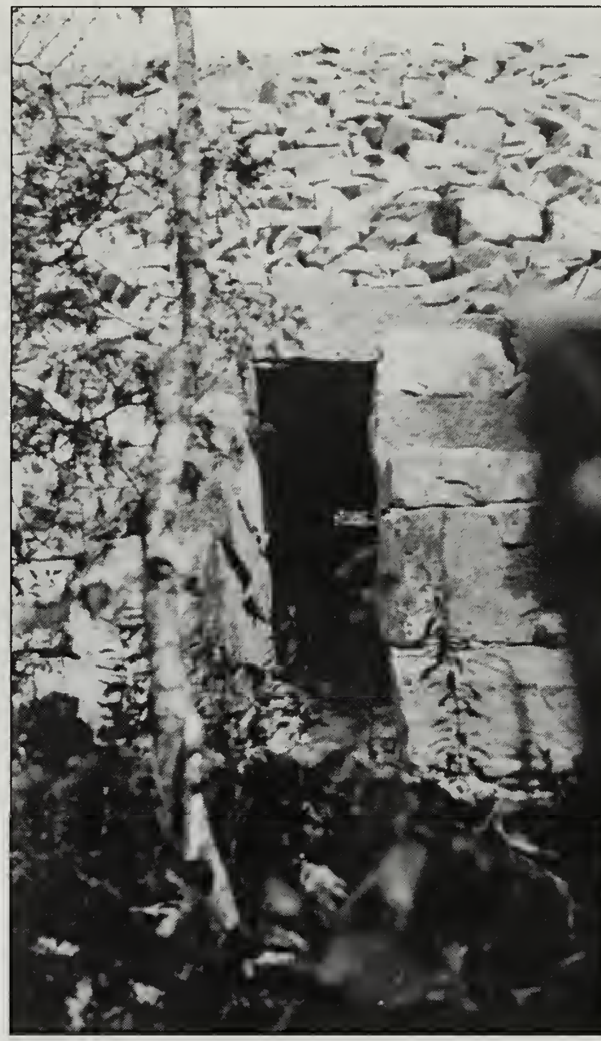

Figure 3.18. Dry-laid stone box culvert on Cadillac Mountain Road, Station 81+55, July 1930. (Courtesy Leo Grossman Personal Collection, #46-3)

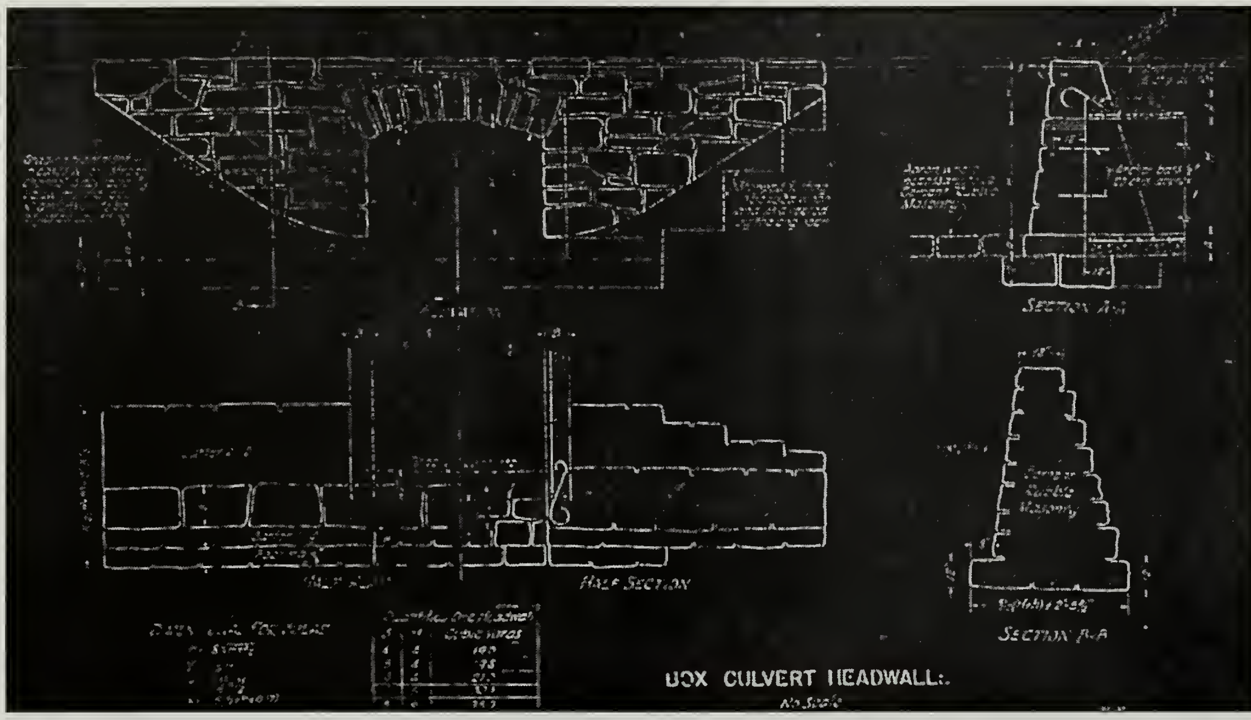

Figure 3.19. Details for a concrete box culvert on Day Mountain Road Extension, 1950. (U.S. Department of Commerce, Bureau of Public Roads, Project 9A2, Sheet 5 of 11, November 1950)

Figure 3.20. Placement of an 18-inch reinforced concrete pipe on Cadillac Mountain Road at Station 66, September 1929. (Courtesy Leo Grossman Personal Collection, #27-1)

Figure 3.21. View of a dry-laid stone headwall on Cadillac Mountain Road, c.1930. (Courtesy Leo Grossman Personal Collection, #60-1)

Figure 3.22. View of a headwall under construction on Day Mountain Road, 1941. Notice the tracks used to haul materials through the culvert. (Federal Works Agency, Public Roads Administration, "Progress Views of Structures: Day Mountain Road, Project 9A1.")

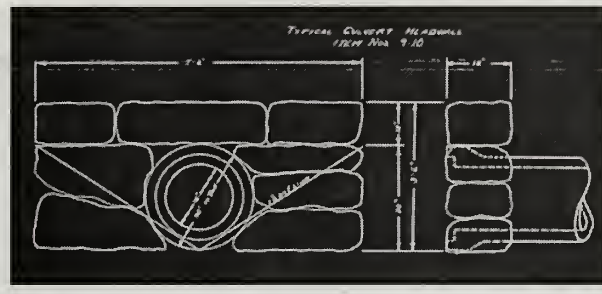

Figure 3.23a. Culvert detail for an 18-inch RCP with a headwall, from Jordan Pond/Eagle Lake Road, 1935. (U.S. Department of Agriculture, Bureau of Public Roads, Project 3A1, Sheet 3 of 22, 1935)

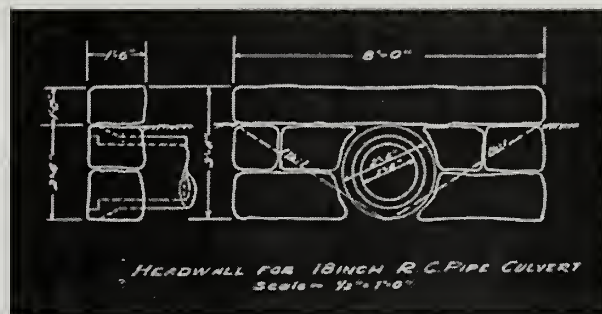

Figure 3.23b. Culvert detail for an 18-inch RCP with a dry-laid stone headwall, from the following projects: Kebo Mountain Road, Otter Cove Causeway and Blackwoods Road, Kebo Mountain Road Extension and Champlain Mountain Road, and Paradise Hill Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 13 of 14, 1936; Project 7A1, Sheet 18 of 79, 1937; and Project 9A1, Sheet 12 of x, June 1939. Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 13 of x, September 1939 and Project 10A1, Sheet 3 of 77, April 1940)

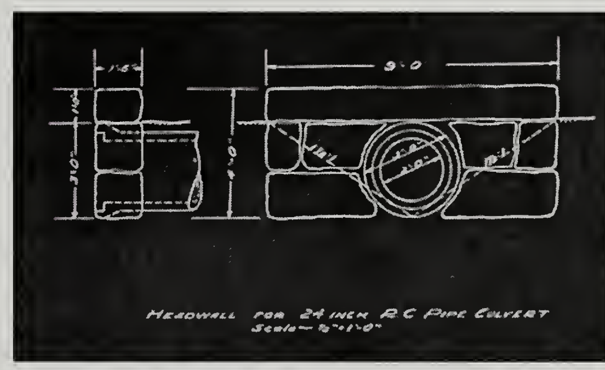

Figure 3.23c. Culvert detail for an 24-inch RCP with a dry-laid stone headwall from the following projects: Kebo Mountain Road, Otter Cove Causeway and Blackwoods Road, Kebo Mountain Road Extension and Champlain Mountain Road, and Paradise Hill Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 13 of 14, 1936 and Project 7A1, Sheet 18 of 79, 1937. Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 13 of x, September 1939 and Project 10A1, Sheet 3 of 77, April 1940)

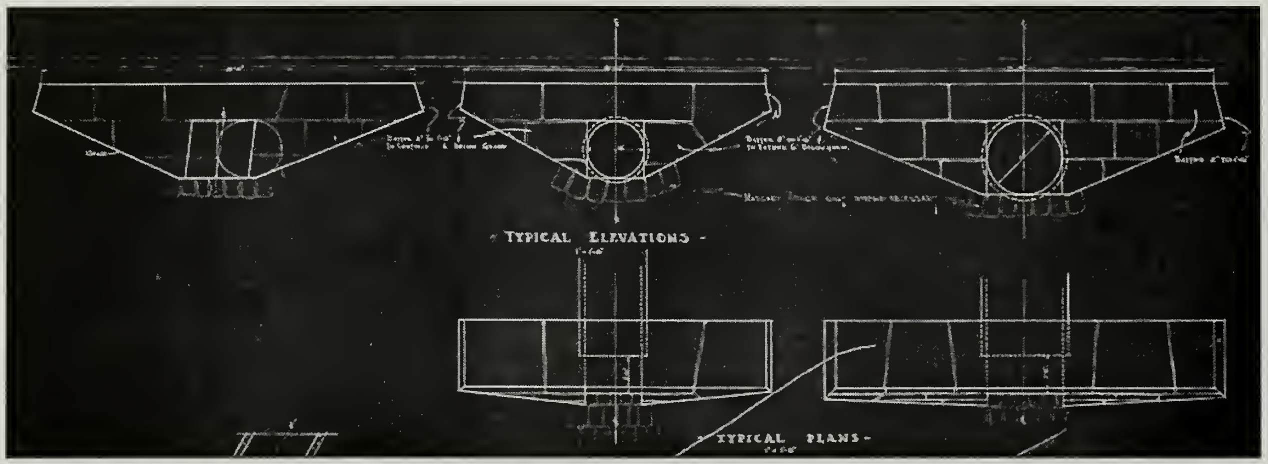

Figure 3.23d. Culvert detail for an 18-inch RCP with a dry-laid stone headwall, from Schoodic Loop Road, 1934. (U.S. Department of Agriculture, Bureau of Public Roads, Project 5A1, 1934)

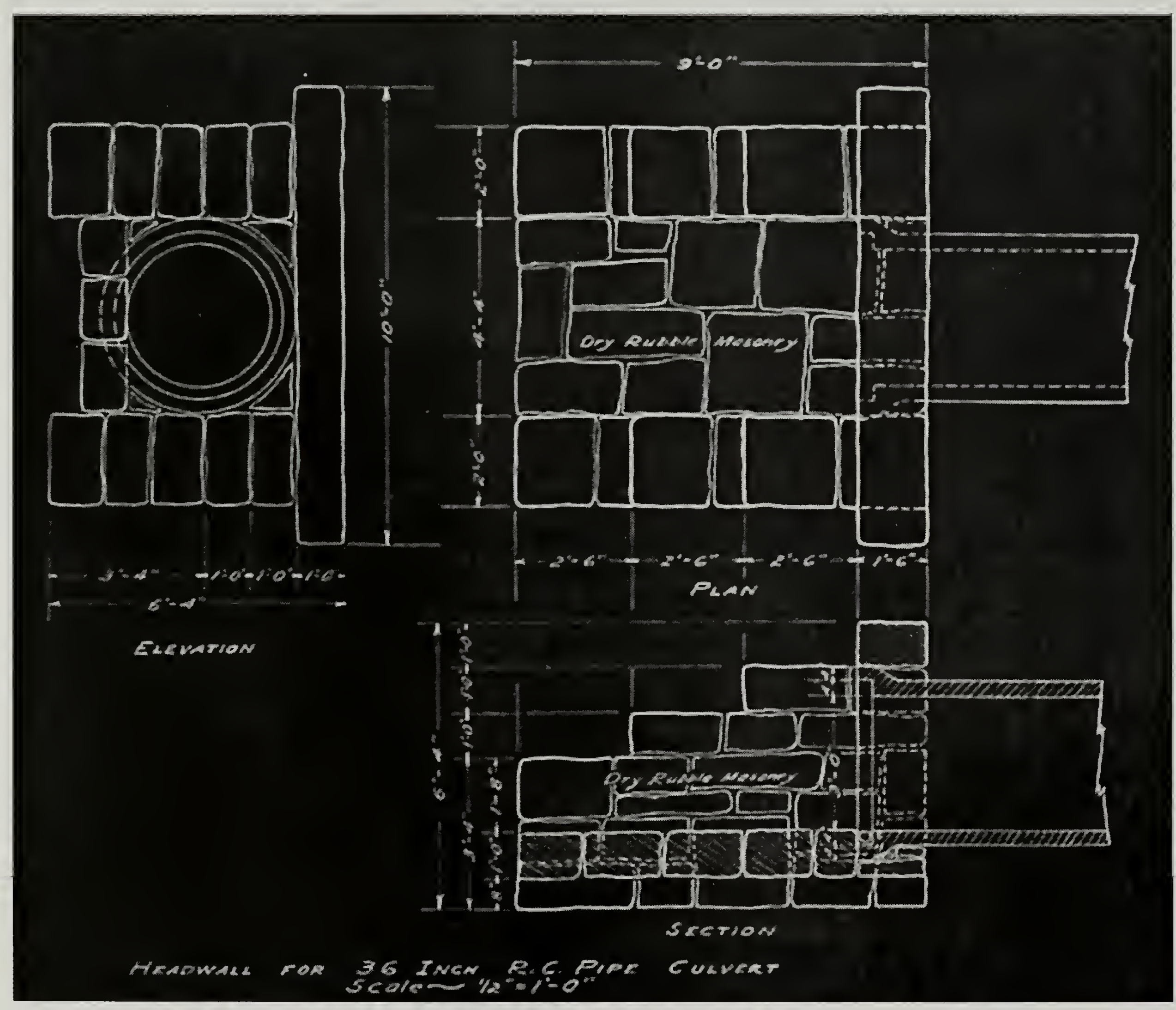

Figure 3.23e. Culvert detail for an 36-inch RCP with a dry-laid stone headwall from Kebo Mountain Road Extension and Champlain Mountain Road. (Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 13 of x, September 1939)

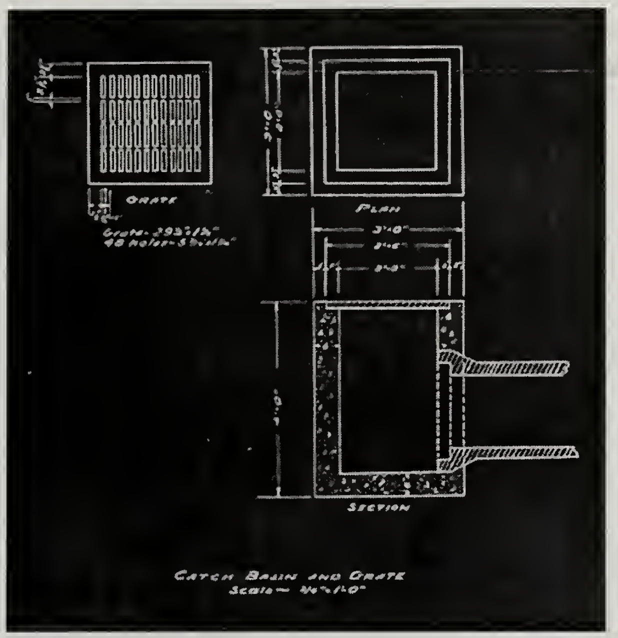

Figure 3.24a. Detail for a concrete drop-inlet with steel square grate used on Kebo Mountain Road, Otter Cove Causeway and Blackwoods Road, Kebo Mountain Road Extension and Champlain Mountain Road, Day Mountain Road, and Paradise Hill Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 13 of 14, 1936; Project 7A1, Sheet 3 of 79, 1937; and Project 9A1, Sheet 12 of x, June 1939. Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 13 of x, September 1939 and Project 10A1, Sheet 3 of 77, April 1940)

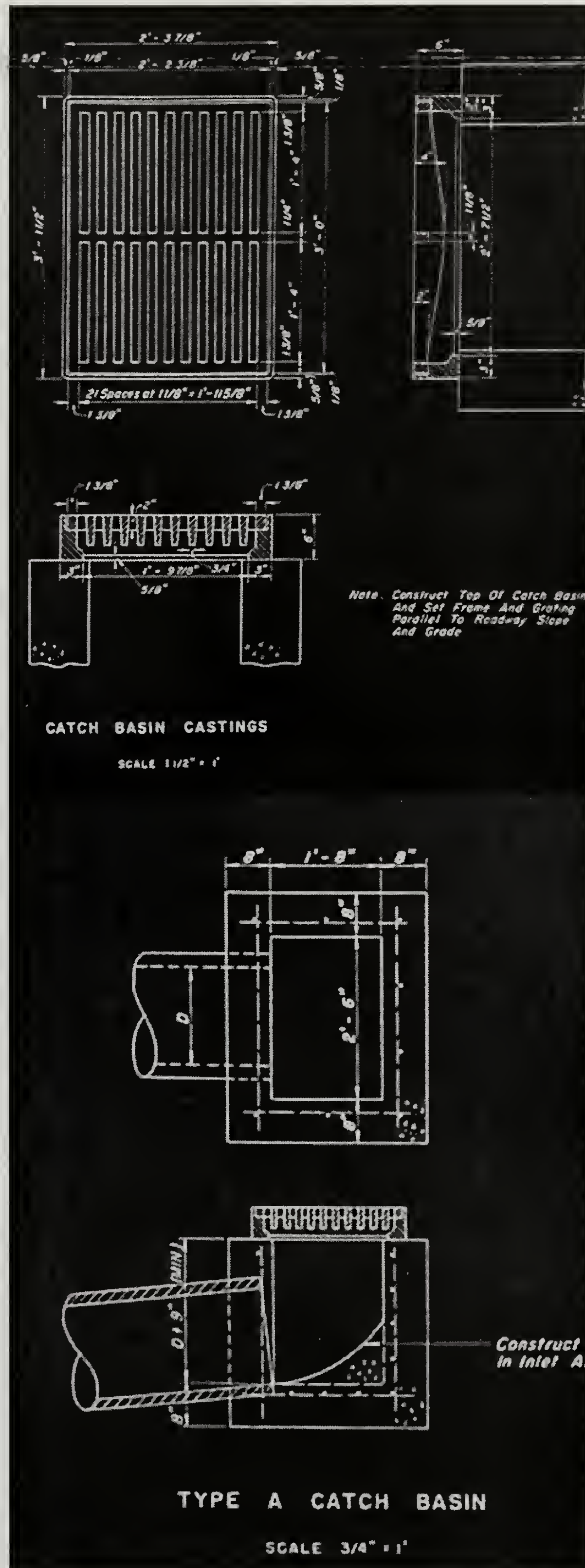

Figure 3.24b. Detail for a concrete drop-inlet with a steel rectangular grate for West Street Extension, Repaving Project, and Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 6A5, Sheet 7 of 24, July 1952; Project 1A7-4A3-7A2-33A1, Sheet 15 of x, November 1955; and Project 4A2, Sheet 18 of 64, April 1956)

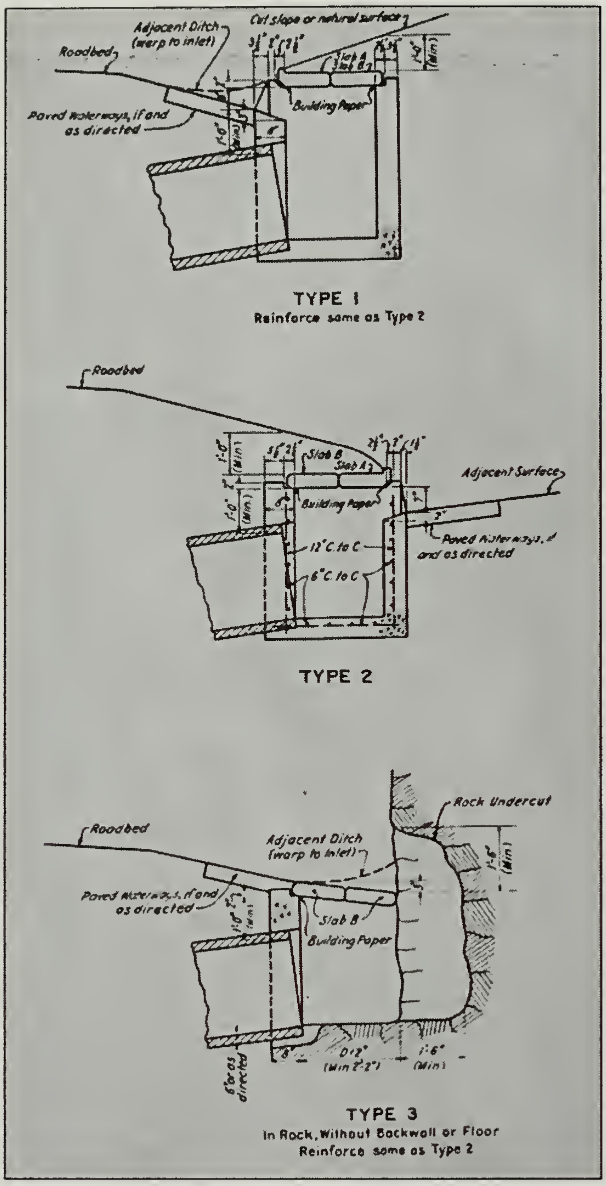

Figure 3.24c. Three types of curb type drop-inlets from West Street Extension project and Schooner Head Road project. (U.S. Department of Commerce, Bureau of Public Roads, Project 6A5, Sheet 9 of 24, July 1952 and Project 22A1, Sheet 8 of 12, May 1957)

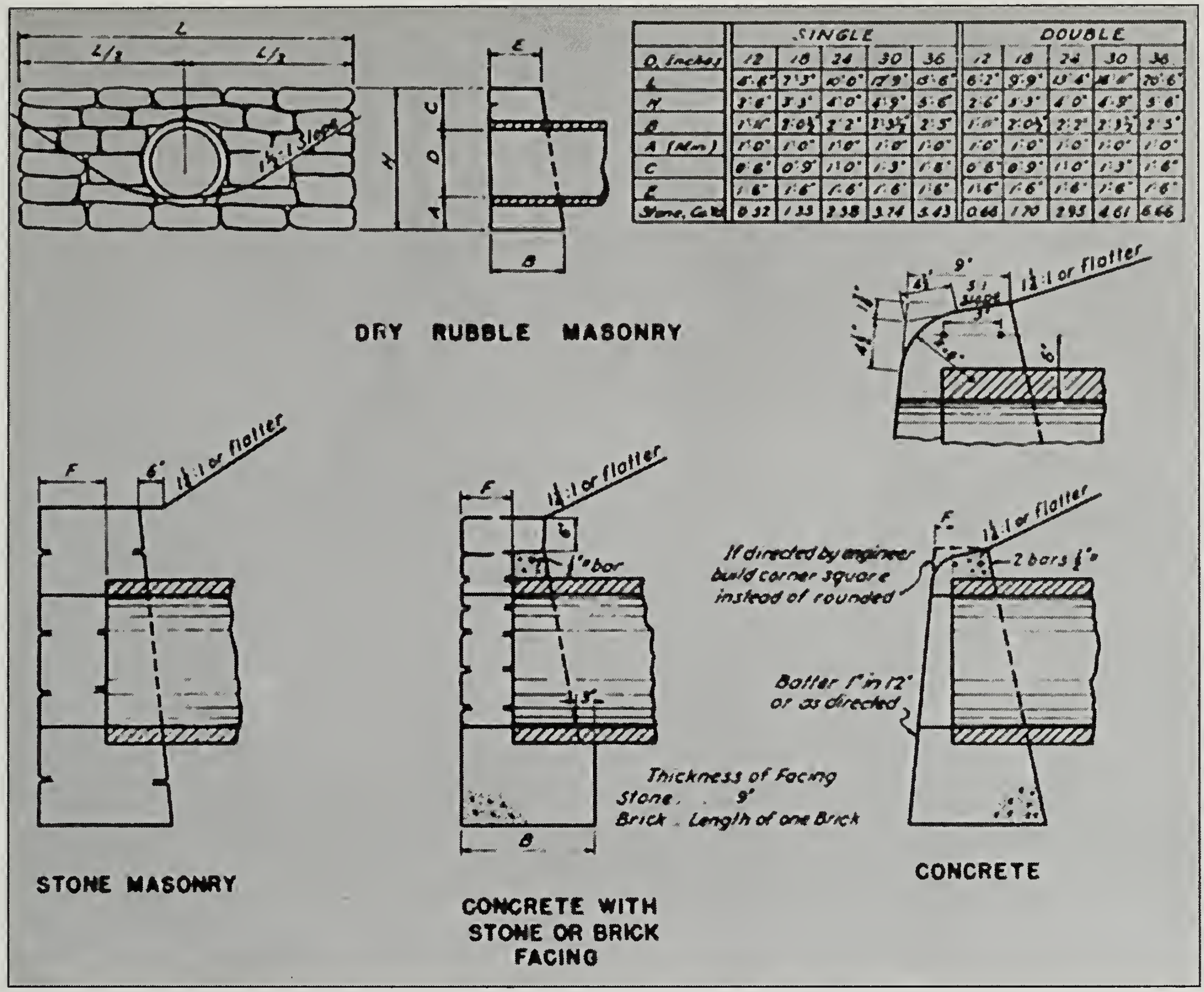

Figure 3.25a. This drawing shows headwalls constructed with stone, brick, or concrete. From the West Street Extension project; repavement of Cadillac Mountain Road, Jordan Pond/Eagle Lake Road, and Stanley Brook Road; and the Schooner Head Overlook Access Road project. (U.S. Department of Commerce, Bureau of Public Roads, Project 6A5, Sheet 8 of 24, July 1952; Project 1A7-4A3-7A2-33A1, Sheet 9 of 69, November 1955; and Project 22A1, Sheet 7 of 12, May 1957)

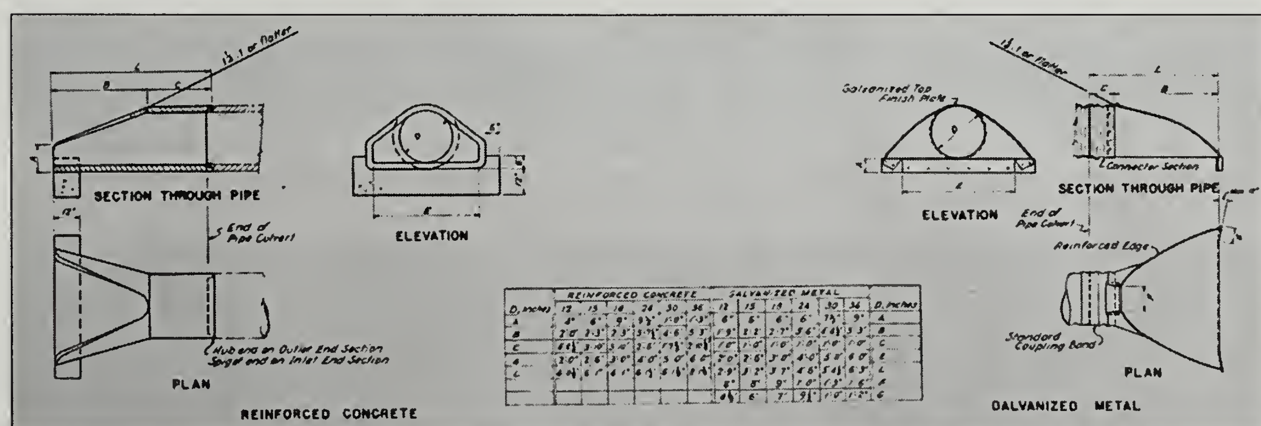

Figure 3.25b. Portion of drawing showing concrete and galvanized metal inlets and outlets from the Schooner Head Overlook Access Road project. (U.S. Department of Commerce, Bureau of Public Roads, Project 22A1, Sheet 7 of 12, May 1957)

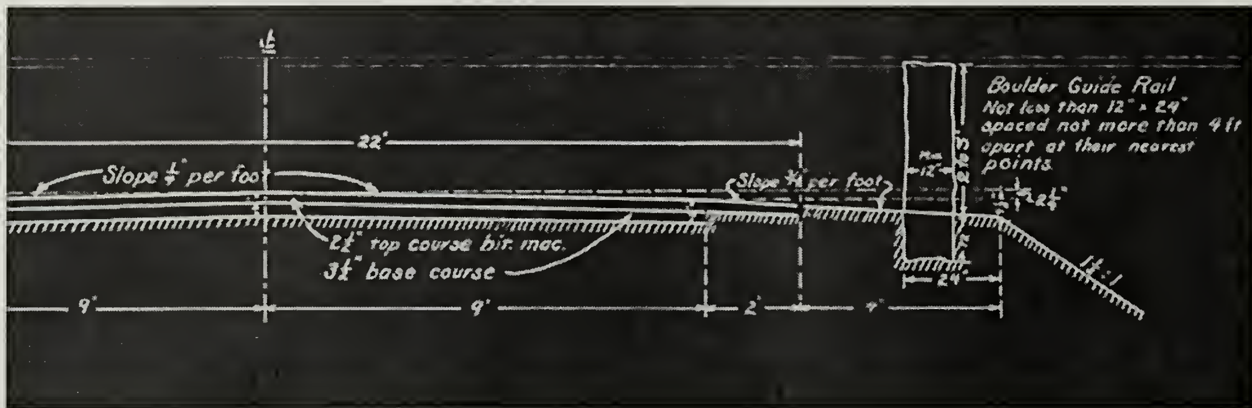

Figure 3.26a. Cross-section for an angular stone guardwall on Cadillac Mountain Road, 1931. (U.S. Department of Agriculture, Bureau of Public Roads, Project 1, Sheet 4 of 11, 1931)

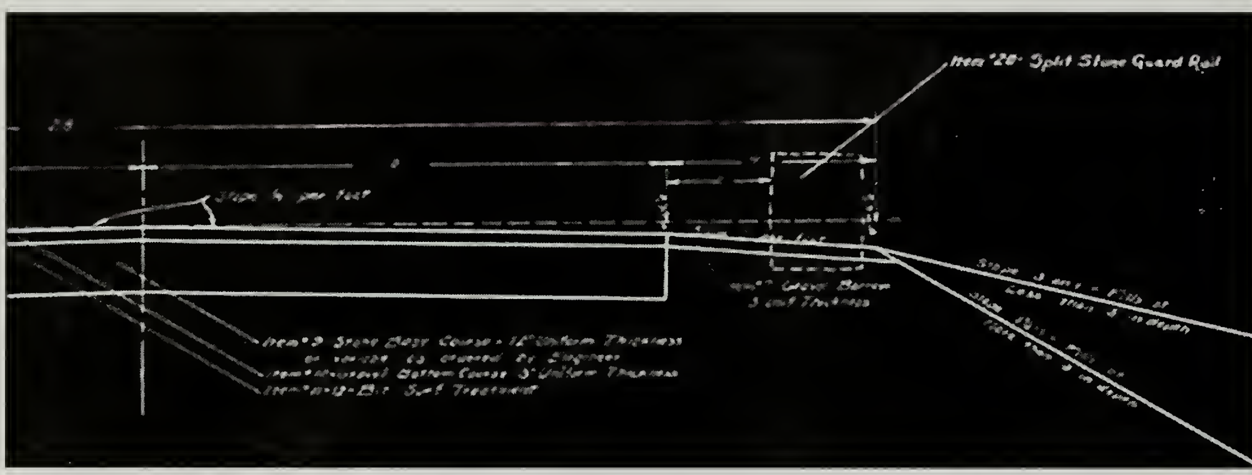

Figure 3.26b. Cross-section for a rectilinear quarried block guardwall on Kebo Mountain Road, 1936. These types of guardwall stones were used on subsequent Bureau of Public Works projects. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 2 of 14, 1936)

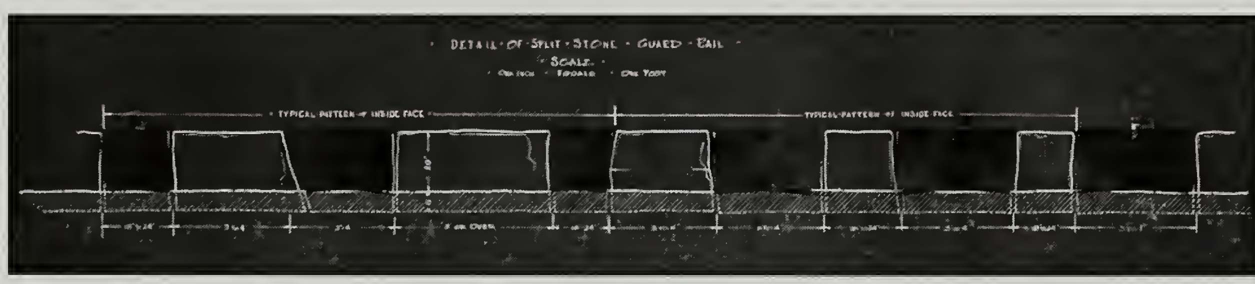

Figure 3.26c. Detail for a rectilinear quarried block guardwall on Kebo Mountain Road, 1936. Note the variations in the length of stones and the widths of the gaps. The taped pieces of blueprint were on the drawing in the National Archives. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 14 of 14, 1936)

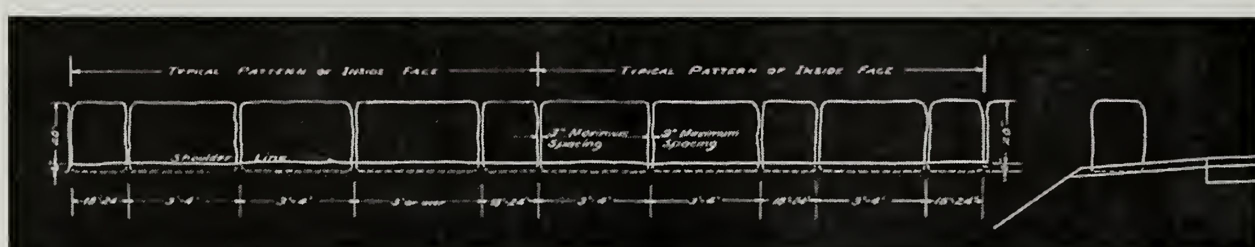

Figure 3.26d. Cross-section and detail for a rectilinear quarried block guardwall on Otter Cove Causeway and Blackwoods Road, 1937. The length of stones and widths of gaps are similar to Kebo Mountain Road, but stones now appear in the gaps, suggesting this detail may have been intended for the bridges. (U.S. Department of Agriculture, Bureau of Public Roads, Project 7A1, Sheet 18 of 79, 1937)

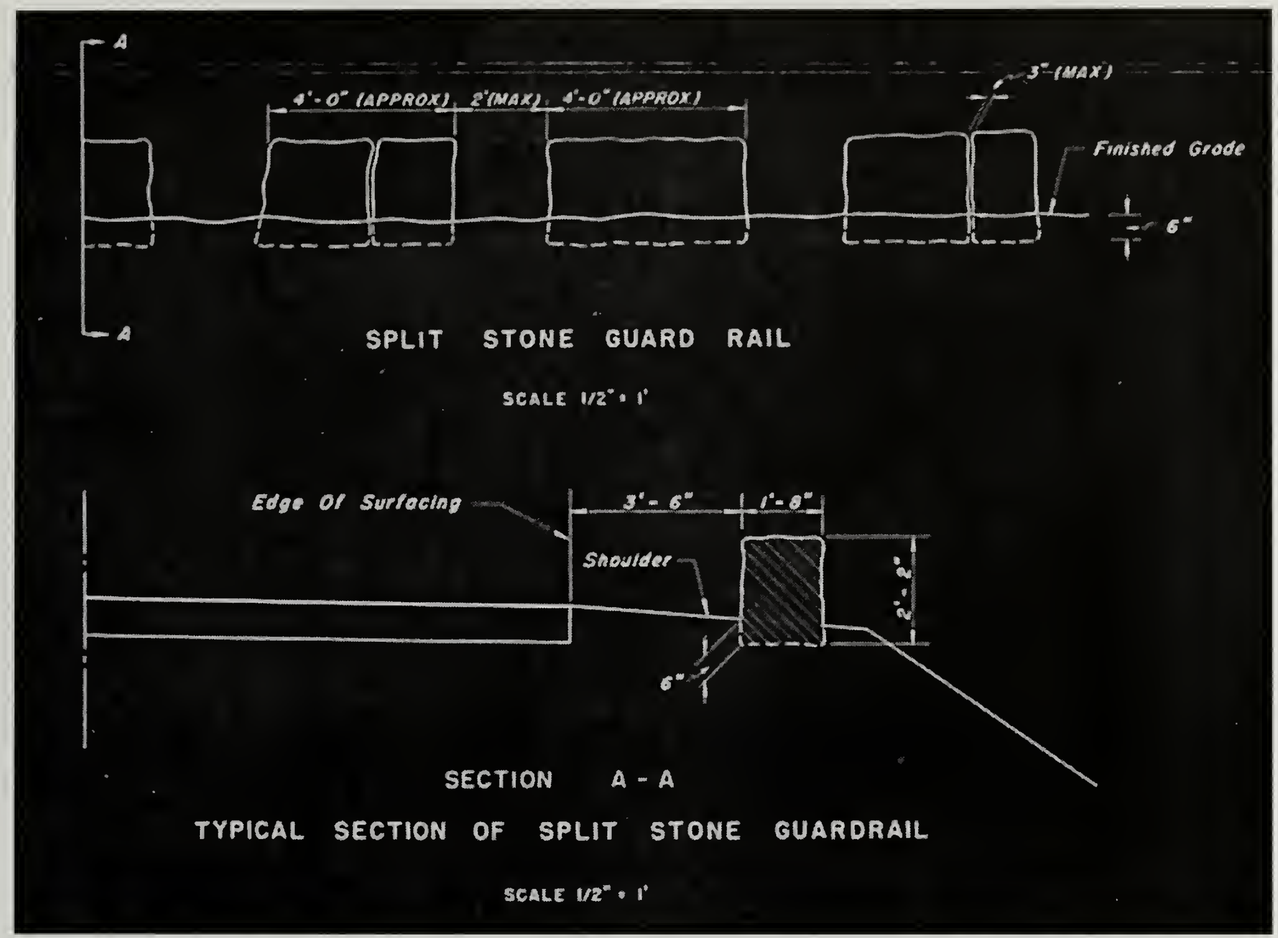

Figure 3.26e. Cross-section and detail for a rectilinear quarried block guardwall on Paradise Hill Road, 1952. Length of stones and width of gaps appear to be more consistent. (U.S. Department of Commerce, Bureau of Public Roads, Project 6A5, Sheet 7 of 24, July 1952 and Project 10A6, Sheet 26 of 49, 1952)

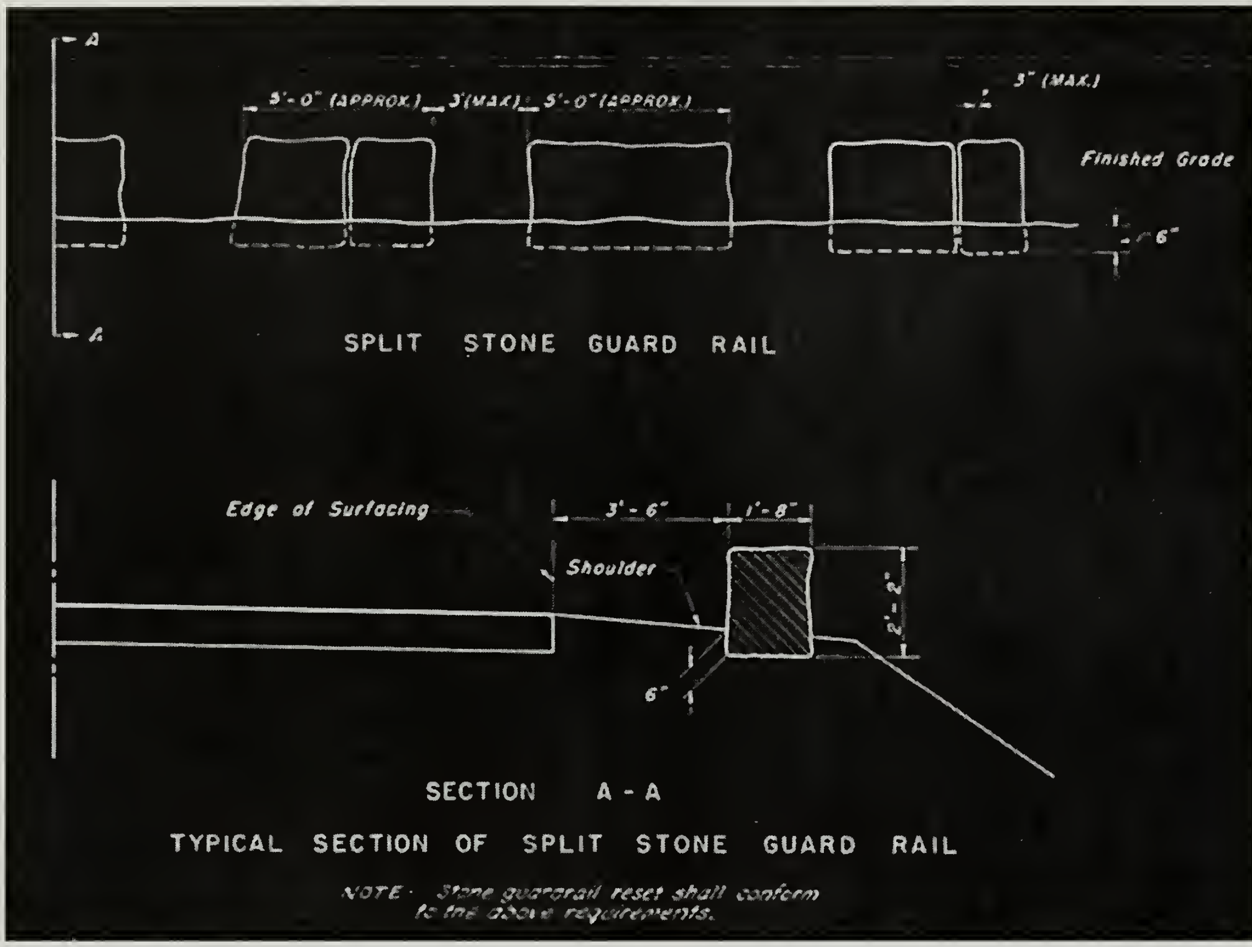

Figure 3.26f. Detail of a guardwall from Bureau of Public Roads Project 4A2 and a resurfacing project on Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and Stanley Brook Road. This detail features slightly longer stones and wider gaps than the stones on Paradise Hill Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 15 of x, November 1955 and Project 4A2, Sheet 18 of 64, April 19S6)

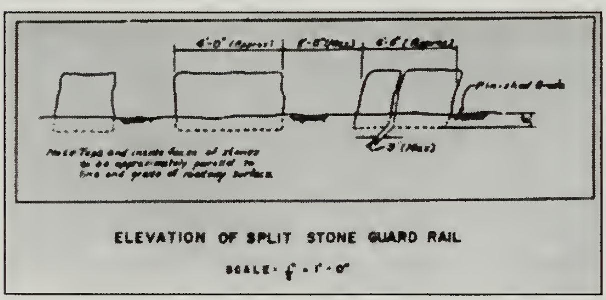

Figure 3.26g. Detail of a guardwall on causeway and bridge at Frazer Creek, on the Schoodic Loop Road, 19S7. (U.S. Department of Commerce, Bureau of Public Roads, Project 2A3, Sheet 2 of x, June 1957)

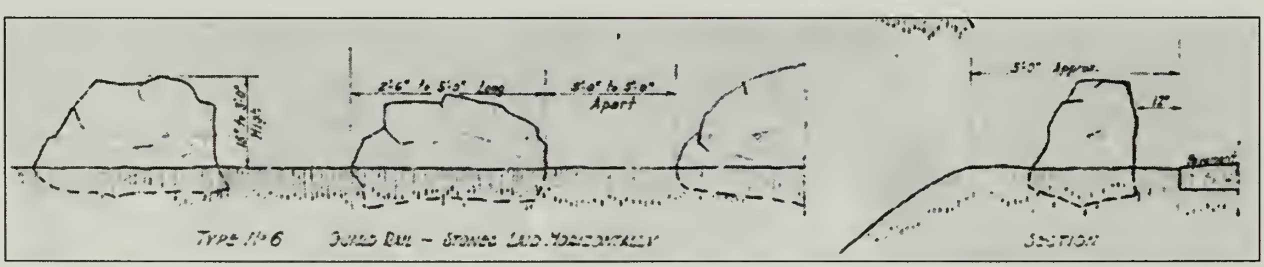

Figure 3.27. Guardwall detail from Thomas Vint. (Denver Service Center, Guard Rail Types, National Park Road Projects, PG-AP-3)

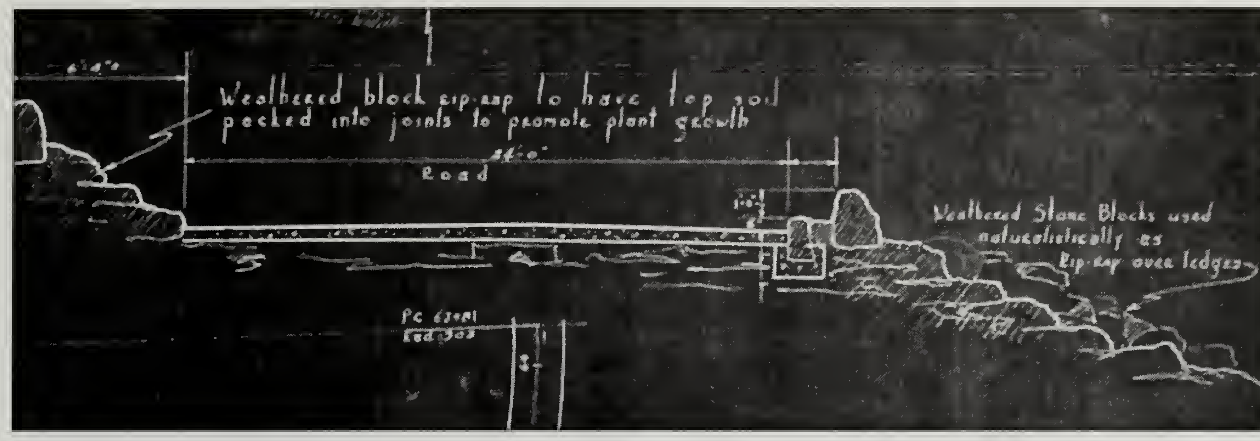

Figure 3.28a. Detail of hand-laid rock embankments at the parking lot at the terminus of Schoodic Point Road, 1933. (U.S. Department of Agriculture, Bureau of Public Roads, Project 2A2, Sheet 1 of 1, 1933-1934)

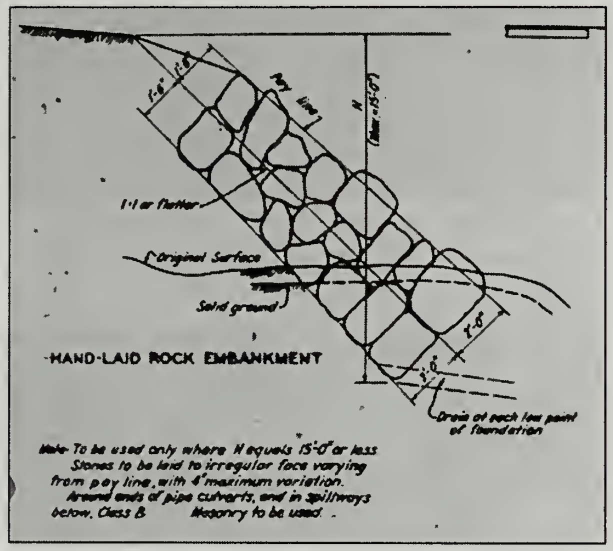

Figure 3.28b. Detail of hand-laid rock embankment from Schooner Head Overlook Access Road, 1957. (U.S. Department of Commerce, Bureau of Public Roads, Project 22A1, Sheet 10 of 12, May 1957)

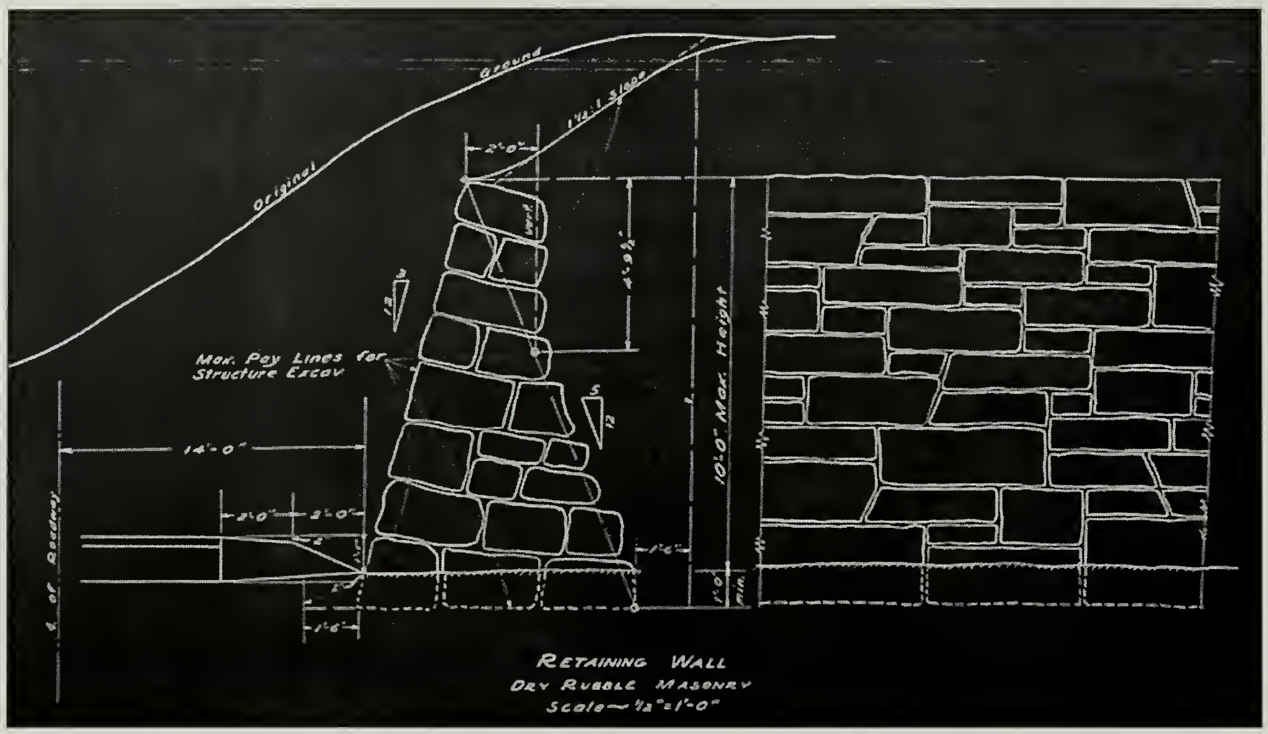

Figure 3.29a. Detail of a dry-laid stone retaining wall from Day Mountain Road, Kebo Mountain Road Extension, and Champlain Mountain Road, 1939. (U.S. Department of Agriculture, Bureau of Public Roads, Project 9A1, Sheet 12 of x, June 1939 and Federal Works Agency, Public Roads Administration, Project 6A3-8A1, Sheet 13 of x, September 1939)

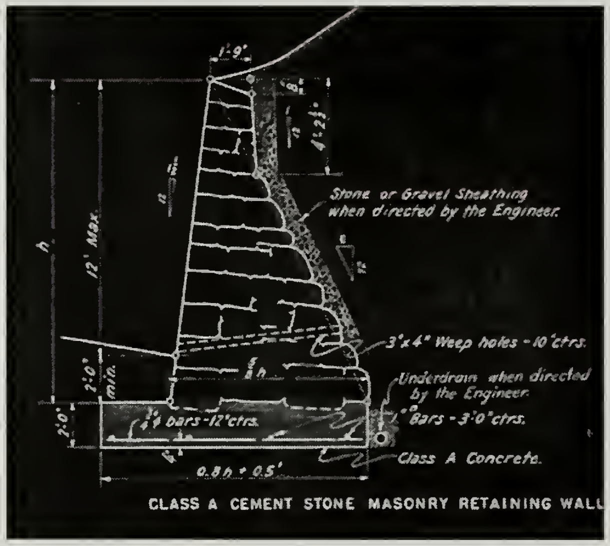

Figure 3.29b. Detail of a mortared stone retaining wall from Day Mountain Road, 1939. (U.S. Department of Agriculture, Bureau of Public Roads, Project 9A1, Sheet 32 of x, June 1939)

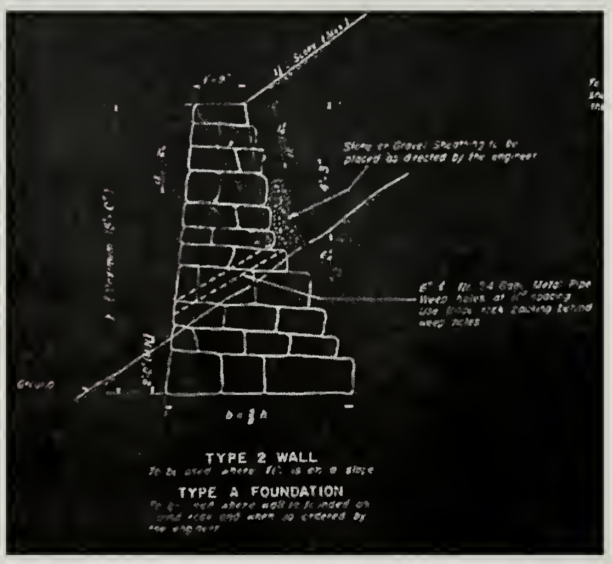

Figure 3.29c. Detail of a retaining wall for use in areas where fill is on a slope. From Bureau of Public Roads Project 4A2 and a resurfacing project on Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and Stanley Brook Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 16 of x, November 1955 and Project 4A2, Sheet 19 of 64, April 1956)

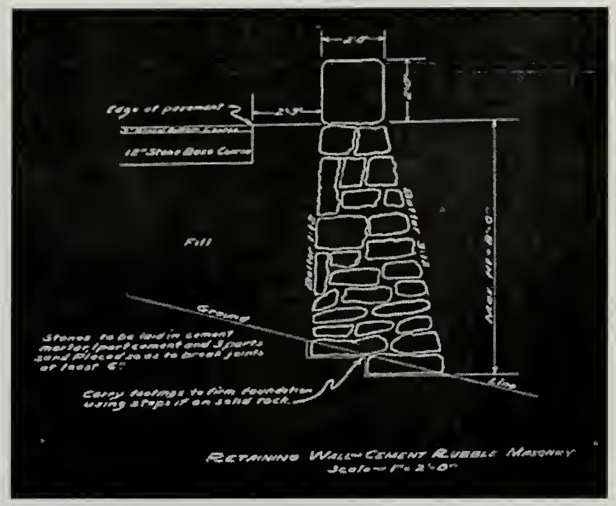

Figure 3.30a. Detail of a guardwall/retaining wall from Kebo Mountain Road, 1936. (U.S. Department of Agriculture, Bureau of Public Roads, Project 6A1, Sheet 13 of 14, 1936)

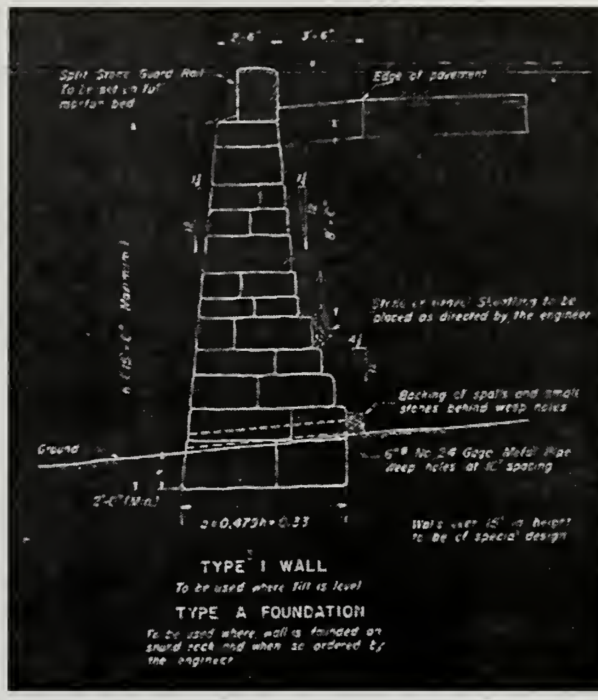

Figure 3.30c. Detail of a guardwall/retaining wall from Bureau of Public Roads Project 4A2 and a resurfacing project on Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and Stanley Brook Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 16 of x, November 1955 and Project 4A2, Sheet 19 of 64, April 1956)

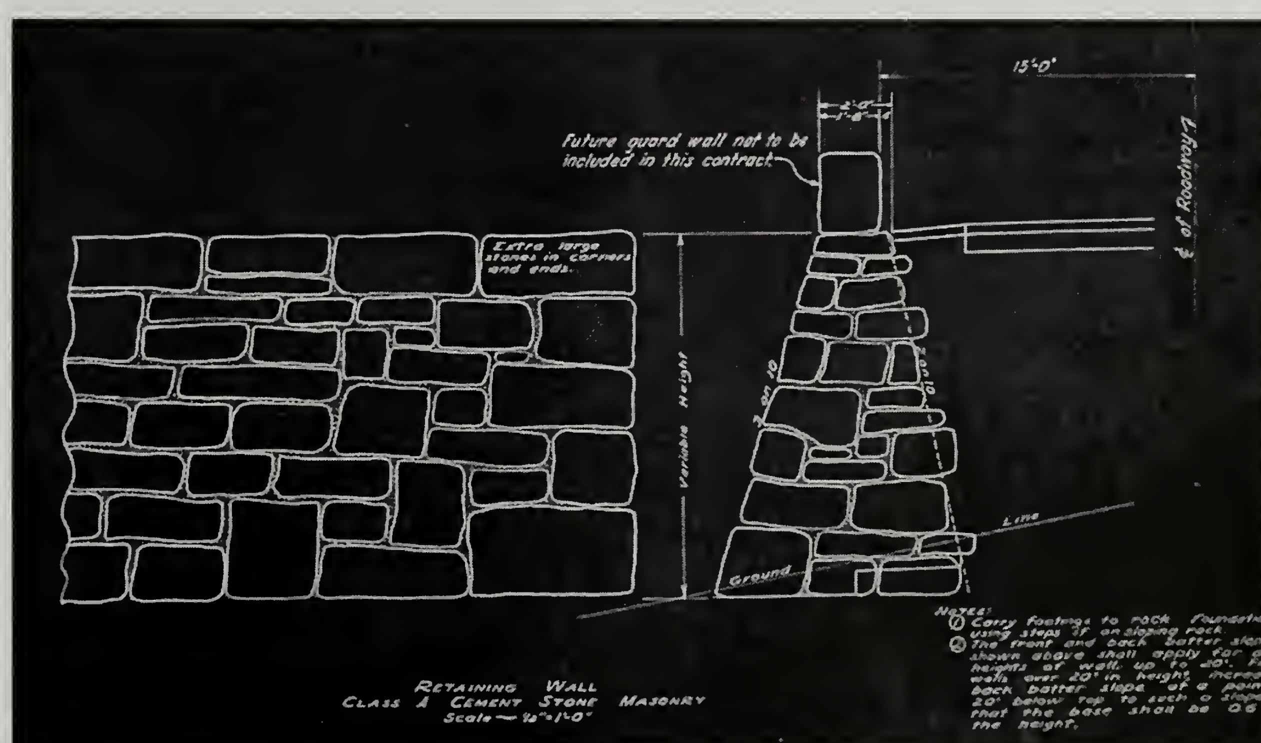

Figure 3.30b. Detail of a guardwall/retaining wall from Otter Cove Causeway and Blackwoods Road, 1937. (U.S. Department of Agriculture, Bureau of Public Roads, Project 7A1, Sheet 18 of 79, 1937)

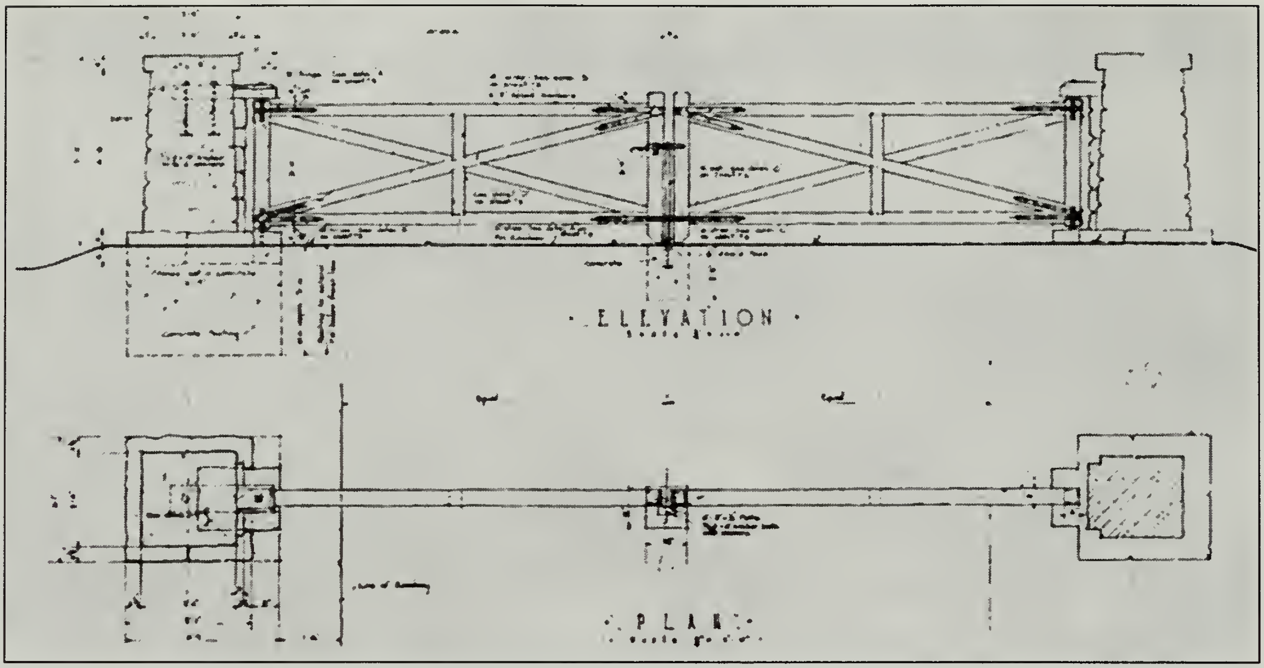

Figure 3.31. Detail of a rustic gate designed for the historic motor road system, 1941. (National Park Service, Denver Service Center Microfilm Collection)

Figure 3.32. View of extant Civilian Conservation Corps gate at the entrance to the Schoodic Education and Research Center, off of Schoodic Point Road. (OCLP, 2005)

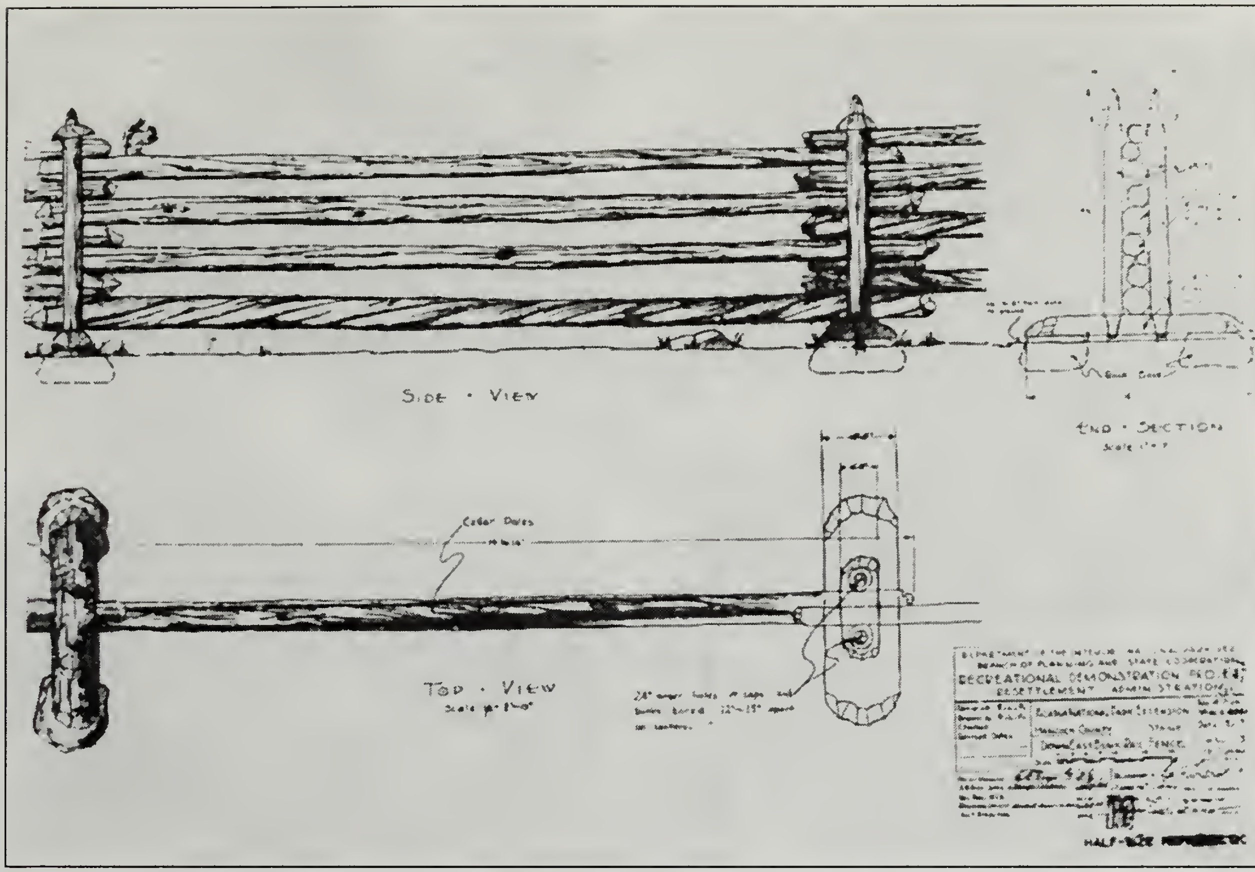

Figure 3.33. Detail of the "Down East Bunk Rail Fence," built with Civilian Conservation Corps labor, 1936. (National Park Service, Denver Service Center Microfilm Collection)

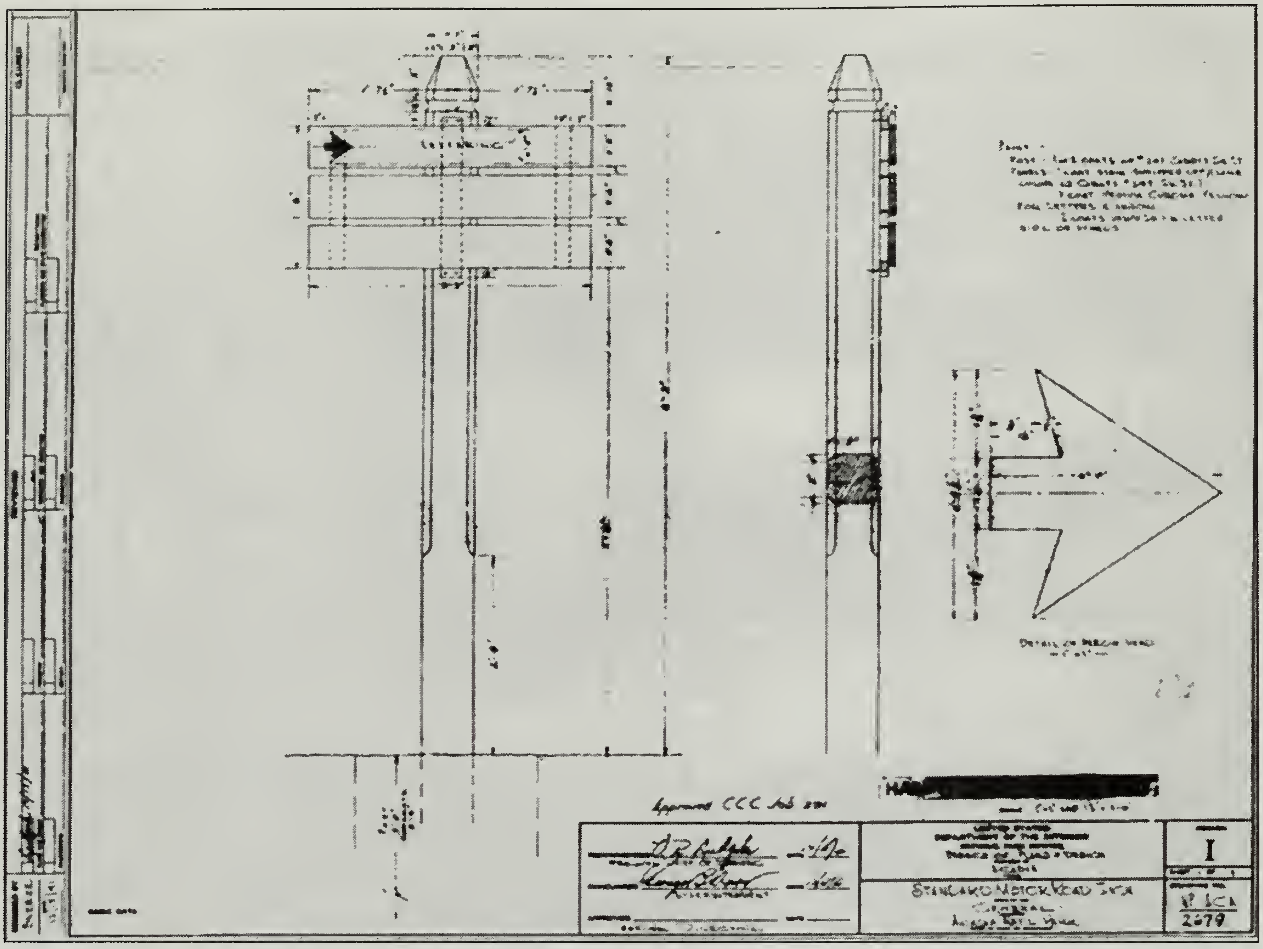

Figure 3.34a. Historic directional sign detail designed for the historic motor road system, 1941. (National Park Service, Denver Service Center Microfilm Collection)

Figure 3.34b. View looking north at a sign post at the intersection of Jordan Pond/Eagle Lake Road, Kebo Mountain Road, and Paradise Hill Road, August 1951. (Acadia National Park archives)

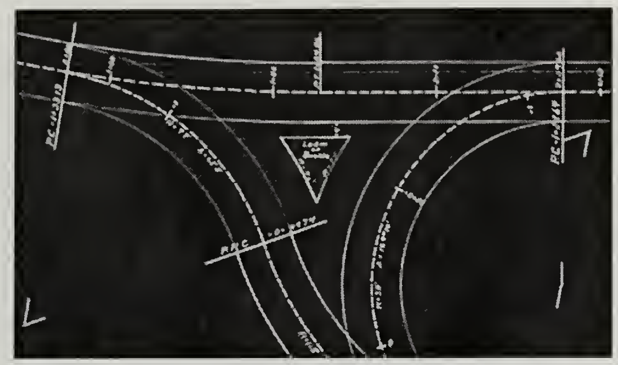

Figure 3.35a. Plan of vegetated median at the beginning of Cadillac Mountain Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 1, Sheet 11 of 11, 1931)

Figure 3.35b. View of vegetated median at the beginning of Cadillac Mountain Road, 26 November 1930. (Courtesy Leo Grossman Personal Collection, #58-1)

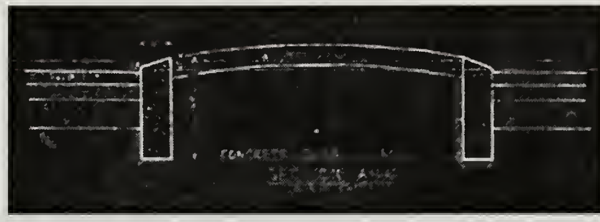

Figure 3.35c. Vegetated median with slope-faced concrete curbs. When the intersection of Cadillac Mountain Road and Jordan Pond/Eagle Lake Road was reconfigured in the 1950s, this median was installed on Jordan Pond/Eagle Lake Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 13 of 49, November 1955)

Figure 3.35d. Vegetated median with granite curbs. When the intersection of Cadillac Mountain Road and Jordan Pond/Eagle Lake Road was reconfigured in the 1950s, this median was installed on Cadillac Mountain Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 13 of 49, November 1955)

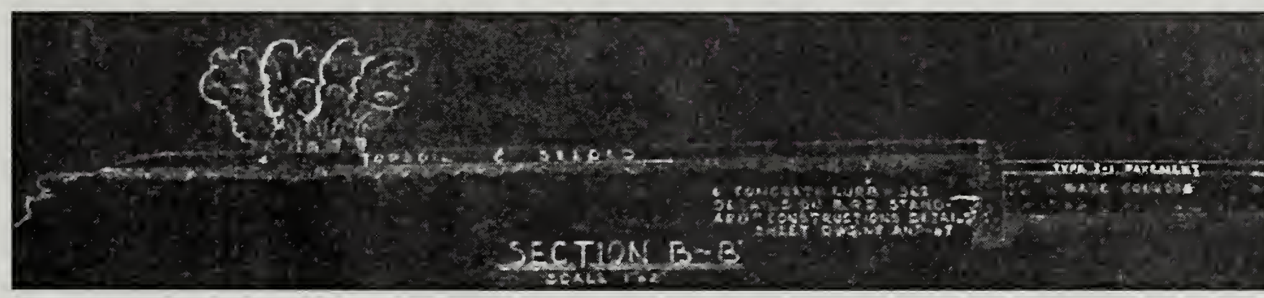

Figure 3.35e. Vegetated median with proposed planting at the Precipice parking lot, Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 4A2, Sheet 17 of 64, April 1956)

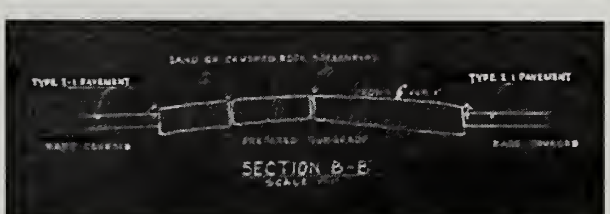

Figure 3.36. Mortared rubble median used on pullouts on Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 4A2, Sheet 16 of 64, April 1956)

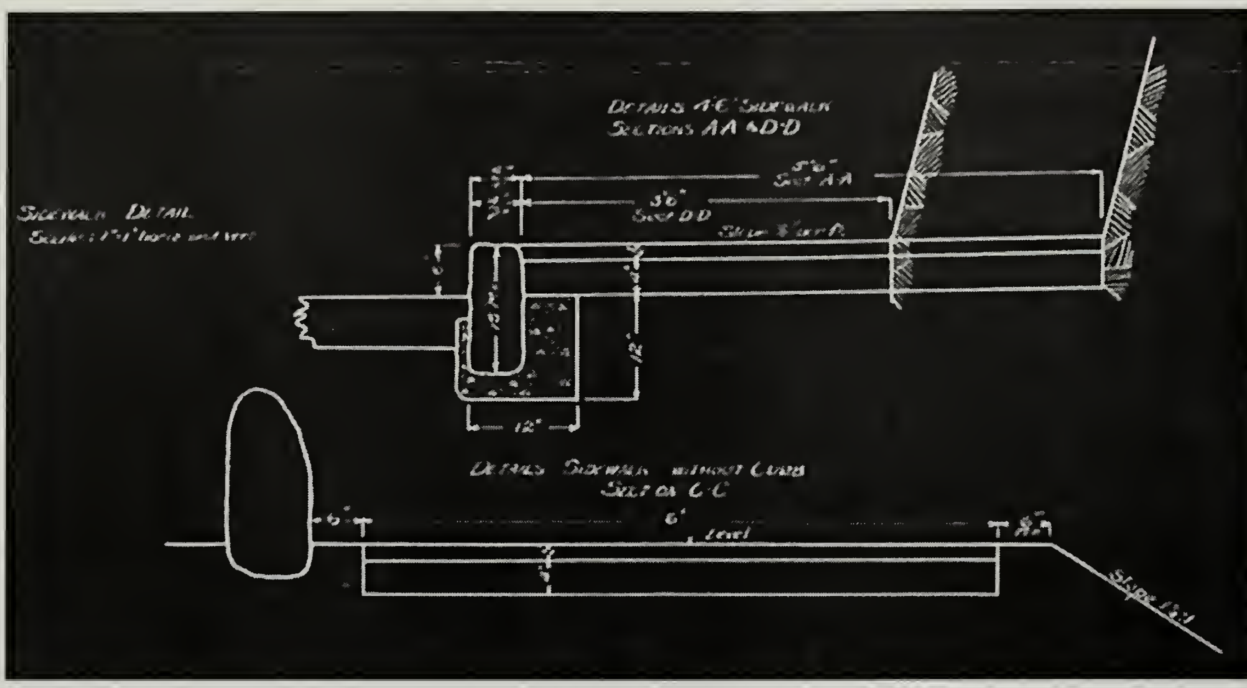

Figure 3.37a. Detail of paved walkways, with and without curbs, at the parking lot on Cadillac Mountain summit. (U.S. Department of Agriculture, Bureau of Public Roads, Project 1A, 1931)

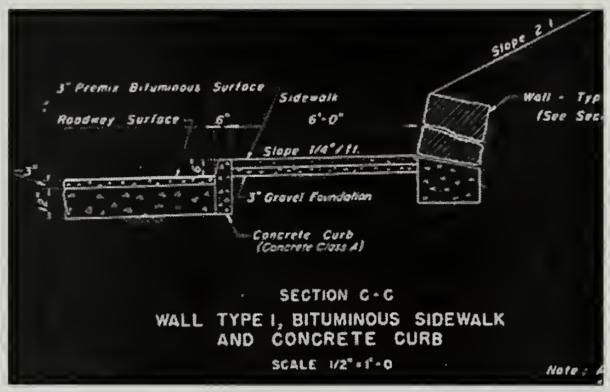

Figure 3.37b. Detail of paved walkways with curbs at the Sand Beach parking area. (U.S. Department of Commerce, Bureau of Public Roads, Project 43A1, Sheet 6 of 23, February 1953)

Figure 3.37c. Detail of paved walkways with curbs at the Sand Beach parking area. (U.S. Department of Commerce, Bureau of Public Roads, Project 43A1, Sheet 6 of 23, February 1953)

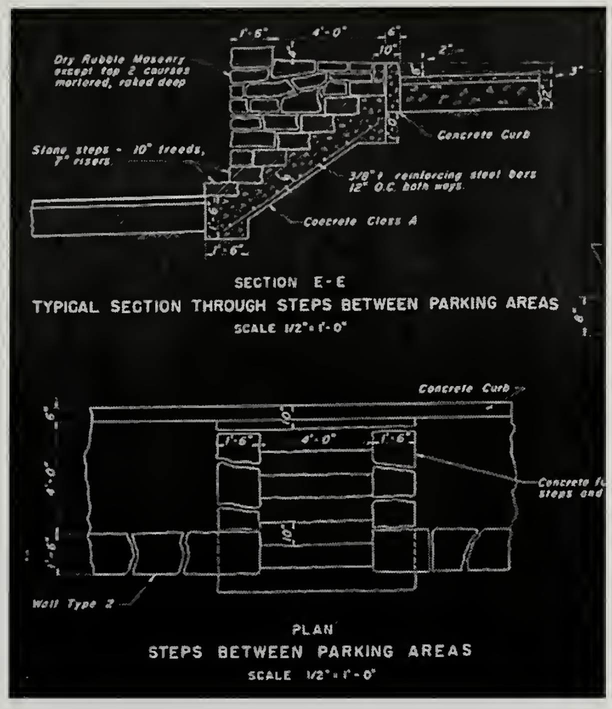

Figure 3.38a. Stone steps at the Sand Beach parking lot. (U.S. Department of Commerce, Bureau of Public Roads, Project 43A1, Sheet 6 of 23, February 1953)

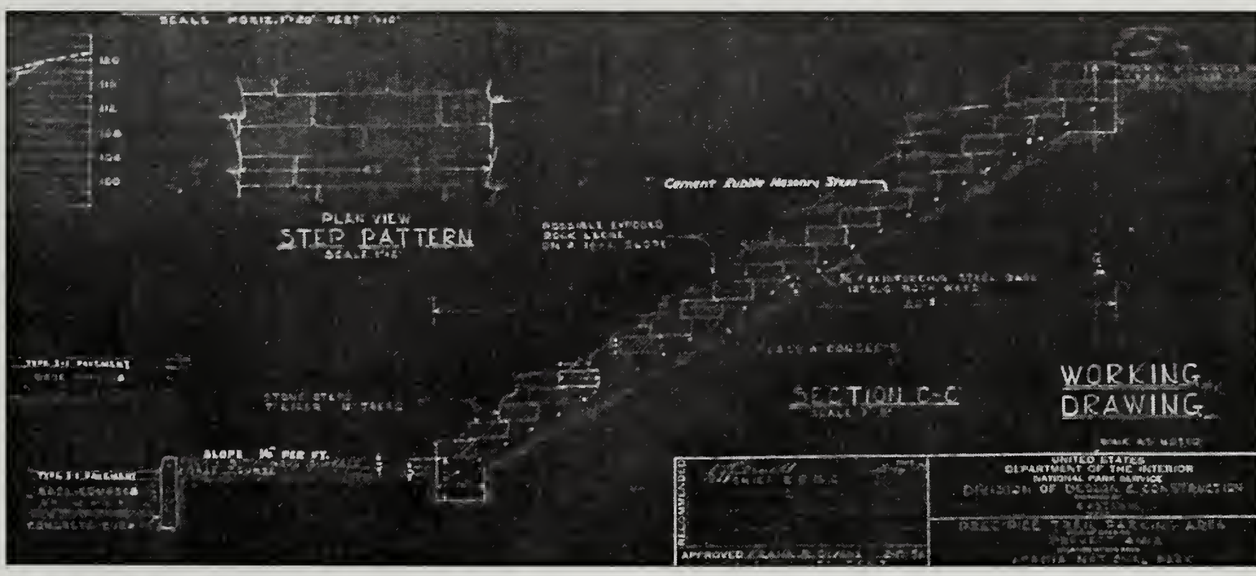

Figure 3.38b. Stone steps at the Precipice parking lot, Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 4A2, Sheet 17 of 64, April 1956)

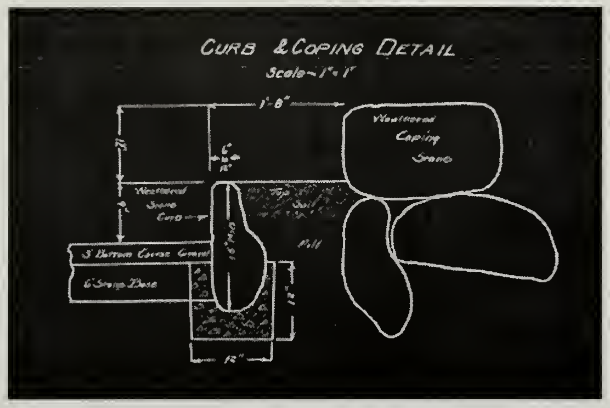

Figure 3.39a. Granite curb detail from the parking lot at the end of Schoodic Point Road. (U.S. Department of Agriculture, Bureau of Public Roads, Project 2A2, Sheet 2,1933-1934)

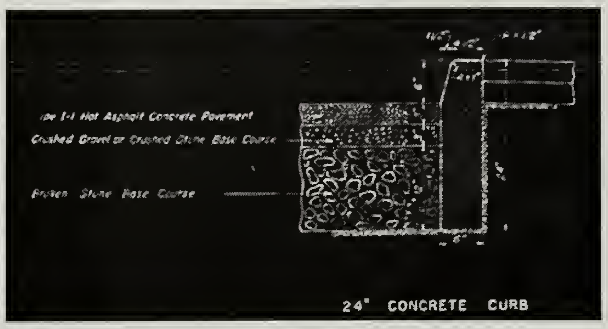

Figure 3.40a. Concrete curb from resurfacing project on Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and Stanley Brook Road and Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 16 of x, November 1955 and Project 4A2, Sheet 19 of 64, April 1956)

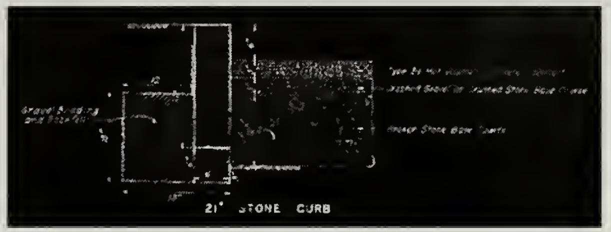

Figure 3.39b. Granite curb from a resurfacing project on Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and Stanley Brook Road and Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 16 of x, November 1955 and Project 4A2, Sheet 19 of 64, April 1956)

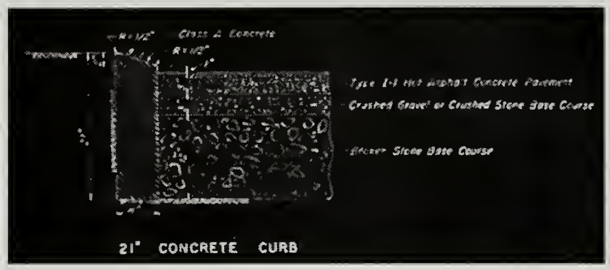

Figure 3.40b. Concrete curb with sloped face from resurfacing project on Jordan Pond/Eagle Lake Road, Cadillac Mountain Road, and Stanley Brook Road and Bureau of Public Roads Project 4A2. (U.S. Department of Commerce, Bureau of Public Roads, Project 1A7-4A3-7A2-33A1, Sheet 16 of x, November 1955 and Project 4A2, Sheet 19 of 64, April 1956)

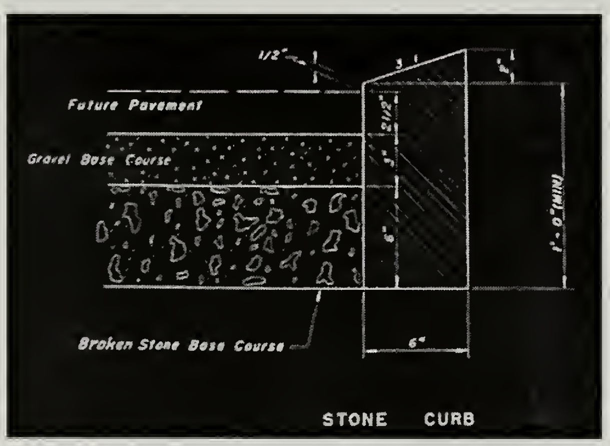

Figure 3.39c. Granite curb with sloped face, from Paradise Hill Road. (U.S. Department of Commerce, Bureau of Public Roads, Project 6A5, Sheet 7 of 24, July 1952)

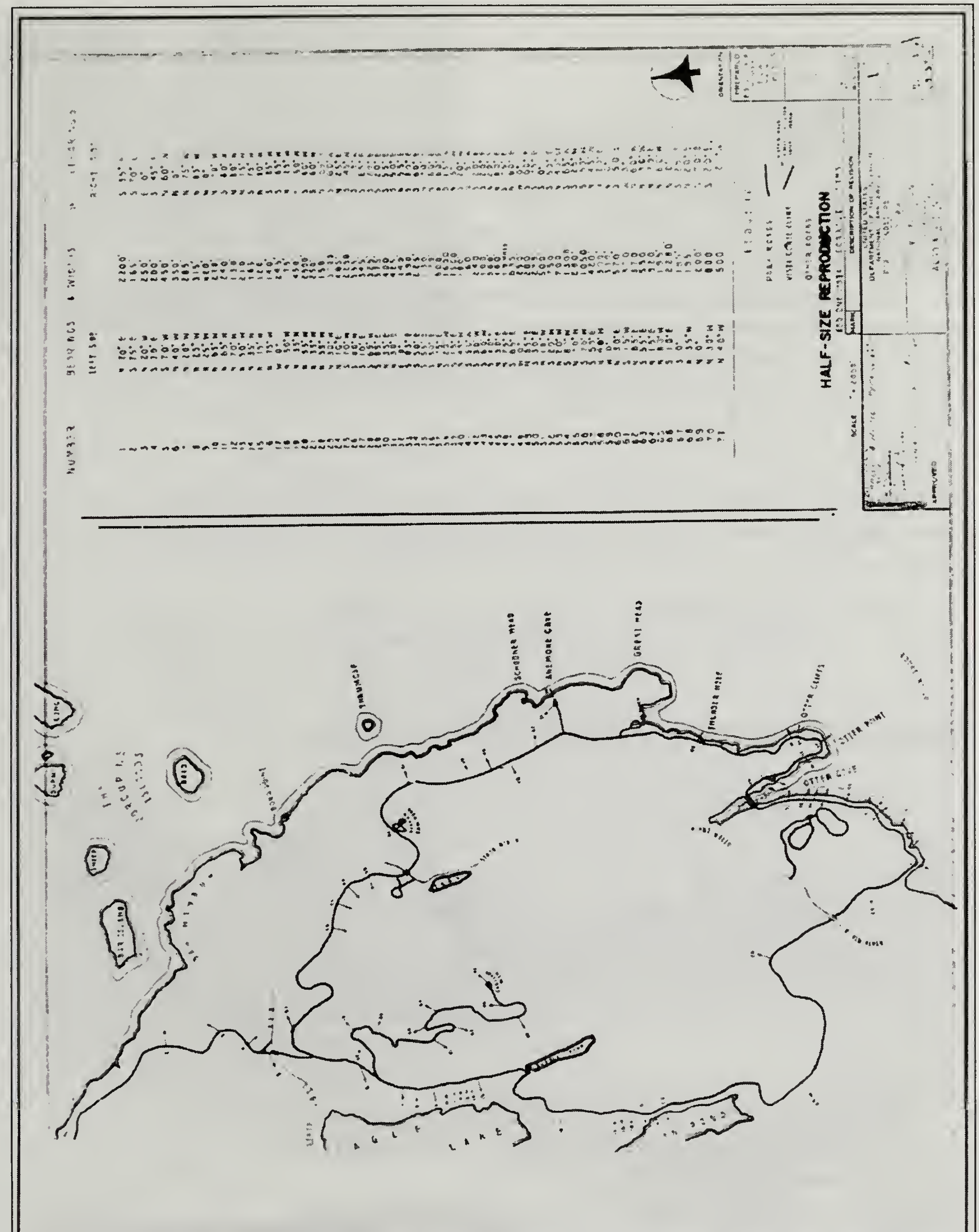

Figure 3.41. Vista Plan from 1961. (National Park Service, Denver Service Center Microfilm Collection, #NP-ACA2857A)

Figure 3.42. View looking south at the bare fill slopes around the Sieur de Monts Bridge that carries State Route 233 over the Kebo Mountain Road Extension. (Acadia National Park archives)

Figure 3.43. Contemporary view of the vegetated slopes today. (Acad0300_2.790, OCLP 2005)

CHAPTER 4
LANDSCAPE TREATMENT

According to National Park Service policy, the cultural landscape report serves as the primary supporting document guiding the treatment of a cultural landscape, and is required before major intervention. This chapter articulates a preservation strategy for long-term management of the historic motor road system at Acadia National Park based on its significance, existing conditions, and use. The overall goal is to reinforce the National Park Service's traditions, policies, and philosophical basis for sound stewardship of cultural landscapes as outlined in *The Secretary of Interior's Standards for Treatment of Historic Properties* (1996), *Director's Order 28,* and the *Cultural Resources Management Guidelines* (1997).

This chapter begins with a review of the rustic characteristics of Acadia National Park's historic motor road system. This is followed by an outline of the park's management philosophy for preservation and use of the motor roads, a summary of treatment issues, and the proposed treatment approach and mission statement for the historic motor road system. The final section presents general and specific treatment strategies that aim to preserve the integrity of the historic motor road system.

PRESERVING ACADIA'S HISTORIC MOTOR ROAD SYSTEM

ORIGINS OF THE PICTURESQUE AND RUSTIC IDEAL IN PARK SCENERY

According to the Organic Act of August 25, 1916, the National Park Service was directed to "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment for the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."[1] The physical development of the parks was therefore intended to attract and accommodate people. This was to be accomplished, in part, through park roads and related visitor facilities.

The planning and construction of the Acadia's first motor road segment, Jordan Pond/Eagle Lake Road, from 1922-1927, coincided with a larger program of road construction projects underway throughout the National Park Service. Director Stephen Mather's request in 1922 for park superintendents to submit road proposals was a response to the rapidly increasing number of visitors arriving at parks by automobile. Park roads were considered a necessity to lead visitors to scenic points and developed areas.[2]

National park roads were viewed as an important part of the park experience. The philosophy of park roads taking shape at that time was influenced by the nineteenth century pleasure grounds described by Andrew Jackson Downing and his classification of approach, circuit, and service roads. In particular, the concept of a circuit, or loop, road was seen as an ideal fit for the automobile experience and was proposed in many national parks. The idea of separating automobile and pedestrian circulation systems was pioneered by Frederick Law Olmsted, Sr. in his designs for the urban parks of New York, Boston, and other cities.[3]

National park road planning in the 1920s was primarily advanced by Daniel Hull and Thomas Vint, landscape engineers with the National Park Service. Where earlier park roads included dangerous hairpin curves and steep grades or had otherwise marred the natural scenery, Hull and Vint aimed to build safer park roads and protect scenery from damage. They sought to design all built features in harmony with and subordinate to the surrounding landscape. The careful alignment of motor routes provided convenient access to major attractions while offering the best views of scenery.[4]

Identifying scenic routes was paramount, and recommendations in Hull and Vint's approach to road design drew heavily on Downing's principles toward creating a sequential experience, one in which the visitor would pass through landscape spaces of varying character and past picturesque features en route to a scenic vista. According to Frank Waugh, who designed roads for the U.S. Forest Service, it was the natural scenery and views that should be fully utilized. Vistas, he wrote in 1917, should be open with a clear focal point and should be framed. Inferior views were to be blocked or minimized. Henry Hubbard, a principal with the Olmsted Brothers landscape architectural firm, also advised on park road design, suggesting that roads lay lightly on the land and interrupt the natural topography as little as possible. Hubbard added that the roads should be surfaced with gravel or broken stone, and that if asphalt was to be used, the edges of the road should be softened so that the final appearance was similar to macadam. He also recommended that roadside ditches and waterways be constructed with cobblestones or grass as part of the rustic park aesthetic.[5]

As discussed previously, beginning in 1924, Director Mather successfully secured substantial appropriations for construction of park roads. To ensure that the parks obtained the highest quality results from this investment, the National Park Service formalized a working relationship with the Department of Agriculture's Bureau of Public Roads through an interbureau agreement in January 1926. The agreement enabled landscape architects with the National Park Service to focus on the aesthetic and scenic aspects of the park roads and civil engineers with the Bureau to take the lead in the technical and practical details.

By this time, the protection of natural features and scenic beauty dominated the planning, design, and construction of National Park Service tour roads.

Alignments were carefully laid out in curving lines in sympathy with the topographic contours. Overlooks were located to take advantage of scenic views and provide access to outstanding natural features without impairing them. Park roads were designed to minimize cut and fill, steep grades, and sharp turns or switchbacks. When viewed from a distance, the appearance of entire road was to blend into the surrounding scenery.[6]

The construction process was also strictly managed. National Park Service landscape architects spelled out rules on the burning of debris cleared from the right-of-way. Locations of borrow pits, quarries, and stone crushing plants were chosen for minimal impact, and cleanup of stones and stumps was required throughout and just beyond the road corridor. The appearance of the roadway and its major structures was also carefully designed. Roads were surfaced with macadam using local stone to harmonize with soil and surrounding rock outcrops, and where possible, local stones were used in guardwalls, culvert headwalls, and bridge side walls and arch rings.[7]

By the late 1920s, the National Park Service had settled on a consistent design style for park structures and facilities, including park roads. The Rustic Design style, as it became known, was derived from the Picturesque Style, born of the English landscape gardening and urban park traditions where natural elements and materials were used to create scenic effects appearing naturalistic rather than artificial. Rustic Design was also influenced by the "wilderness" qualities of the early national parks and the Prairie Style and its philosophical penchant for native plants. Features constructed in the Rustic Design style evoked a rugged and wilderness character that fit well into many park settings. While general design standards remained the same throughout the national parks, features were customized with local materials such as stone or timber to fit the unique natural and cultural setting of a particular park.[8]

RUSTIC DESIGN AT ACADIA NATIONAL PARK

The idea of park roads both protecting and providing access to natural features and breathtaking scenery was well-suited to the rugged landscapes of Mount Desert Island and the Schoodic Peninsula. The picturesque scenery had, after all, attracted the rusticators, cottagers, and tourists in the mid- to late-nineteenth century and encouraged the land preservation and conservation efforts that ultimately established Acadia National Park.

The park's diverse landscape of barren mountains, lush forests, and rocky shorelines also shaped the routes of trails developed by the local village improvement societies and the extravagant carriage road system constructed by John D. Rockefeller, Jr. Both the hiking trails and carriage roads were intended to provide access to what was widely considered as the restorative powers of the out-of-doors. The romantic character of these features and the variations in their designs, depending on the site conditions and idiosyncrasies of the designers, is evocative of the Picturesque Style.

Rockefeller's self-financed carriage road system bode great influence on park development projects. The ranger stations at Thunder Hole and the summit of Cadillac Mountain, for example, harmonized with Rockefeller's structures on the carriage roads through a consistent rustic architectural style sharing characteristics with park buildings nationwide. Likewise, the Apartment Building at the naval station on Schoodic Peninsula was designed by the same architect and in the same style as the carriage road gatehouses at the Jordan Pond House and Brown Mountain. As for the historic motor road system, designs for bridges, guardwalls, retaining walls, culvert headwalls, and other features was meant to complement those same features on Rockefeller's previous projects. The Rustic Design style, as implemented at Acadia, continued design traditions established in prior development projects.

Because of the lengthy period of construction, from 1922 to 1958, Acadia National Park's historic motor road system represents characteristics of the Picturesque Style and Rustic Design in the National Park Service. The Picturesque Style is most evident in the park's early motor roads and in the motor road segments designed in consultation with the Olmsted landscape architectural firm:

> Jordan Pond/Eagle Lake Road (completed 1927), Ocean Drive: Thunder Hole Demonstration Segment (1929), Ocean Drive: Thunder Hole to Otter Cliffs (1933), Ocean Drive: Sand Beach to Thunder Hole (1934), Otter Cliffs Road (1936), Stanley Brook Road (1936), and Otter Creek Causeway and Blackwoods Road (1939)

These segments have variations in their designs; the low bridges and rounded-stone retaining walls on Stanley Brook Road, for example, differ from the same structures on the other segments. The majority of the guardwalls found lining the sides of these motor roads are constructed with angular-shaped stones.

The Rustic Design style is best observed in the motor road segments designed and constructed by the National Park Service and the Bureau of Public Roads:

> Cadillac Mountain Road (completed 1932), Schoodic Loop Road and Schoodic Point Road (1935), Kebo Mountain Road (1938), Kebo Mountain Road Extension and Champlain Mountain Road (1940), Paradise Hill Road and Day Mountain Road (1941), Day Mountain Road Extension (1951), Paradise Hill Road bridges (1952), and Bureau of Public Roads Project 4A2 (1958)

These segments feature more standardized designs and uniform appearances in the treatment of structures. Most of the guardwalls utilize rectilinear-shaped stones (the notable exception is Cadillac Mountain Road).

Beyond these general differences, there are many more similarities between the two design styles. All of the motor roads were planned and designed to conform to the local topography, highlight scenic views, and preserve large trees and unique natural features wherever possible. Guardwalls, retaining walls, drainage features, and structures such as bridges were constructed or faced with locally quarried granite to blend in with the surrounding landscape.

THE THREATENED CHARACTER OF ACADIA'S MOTOR ROAD SYSTEM

Acadia National Park's historic motor road system evokes a rustic character that is in harmony with the existing network of carriage roads and hiking trails, and is distinctly different from an ordinary state or county highway. Elements common to all roads – bridges, shoulders, guardwalls, retaining walls, culverts, and waterways – were purposely designed in the Rustic Design style to blend with the surrounding landscape. The final result fulfilled John D. Rockefeller's original proposal for a park motor road system of extraordinary scenic beauty and grandeur to take visitors from the mountaintops, past lakes and meadows, and to the coastlines.

The 33-mile long historic motor road system continues to serve Rockefeller's vision and is the primary means by which most visitors experience the park's resources. As such, the condition and functionality of the motor roads and the adjacent landscape are inextricably linked to visitors' impressions of the park. However, the ever-increasing number of visitors driving the historic motor road system has begun to threaten the historic characteristics that make Acadia's motor roads unique. These management issues are summarized below.

KEY MANAGEMENT ISSUES AND FINDINGS

A wide variety of management issues relevant to the historic motor road system were identified at a treatment workshop with park managers and staff held in November 2006. Much of the discussion revisited issues identified in the 1993 report, "Compliance Documentation and Rehabilitation Guidelines for FHWA Project #PRA-ACAD-4A10, Historic Motor Road System, Acadia National Park." As the prior report focused only on half of the motor road segments on Mount Desert Island, the workshop provided an opportunity to evaluate past decisions and to refine the treatment recommendations for application throughout the entire historic motor road system.

The current management issues primarily concern the preservation of the aesthetic qualities of the historic motor road system and its carrying capacity. These topics are best discussed in terms of the directives stated in the park's 1992 General Management Plan, and in their relationship to the 1916 National Park Service Organic Act, which specifies the dual mission of both conservation and public enjoyment.

GENERAL MANAGEMENT PLAN DIRECTIVES

Acadia National Park's General Management Plan designates four park management zones, three of which are relevant to the historic motor road system. The park's Cultural Zone "manages areas to preserve, protect, and interpret cultural resources and their settings, and for their use and enjoyment by the public."[9] Development in the Cultural Zone must be compatible with the preservation and interpretation of cultural values. While new construction should be avoided if possible, new structures, landscape features, and utilities can be constructed in the cultural zone only if existing structures and improvements do not meet essential management needs, and new construction is designed and located to preserve the integrity and character of the area.[10] All segments of the historic motor road system on Mount Desert Island are identified as components of the cultural zone, as are the Abbe Museum site, Sieur de Monts springhouse and environs, and the Thunder Hole ranger station.[11] However, Schoodic Loop Road and Schoodic Point Road are omitted from the designated Cultural Zone, possibly because other planning directives in the General Management Plan state that resources on Schoodic Peninsula will not be actively promoted so that low visitation levels in this remote area of the park can be retained and the existing natural solitude can be preserved.[12]

The park's Developed Zone is drawn to best provide and maintain facilities for educational and interpretive facilities; for recreational activities, such as campgrounds; for other visitor activities, such as restaurants and maintenance of park resources; and for vehicular circulation within the park.[13] Elements of the park's Development Zone proximate to the historic motor road system include Sieur de Monts Nature Center and the Wild Gardens of Acadia, the Bear Brook, Fabbri, and Frazer Creek picnic areas, and the Sand Beach, Jordan Pond House, Wildwood Stables, and Cadillac Mountain summit developed areas.[14]

A third management zone, and by far the largest is the park, is the Natural Zone, which "manages land and waters to conserve and protect natural resources and ecological processes and provide for their use and enjoyment by the public."[15] The road corridor that defines the historic motor road system is bounded by the Natural Zone.

All segments of the historic motor road system on Mount Desert Island and the Schoodic Peninsula are identified in the General Management Plan as the "park loop road" and are considered a key historic property.[16] One of the numerous resource planning directives articulated in the General Management Plan is to "Protect the Aesthetic and Historic Values of the Park Loop Road and Other Auto Roads." Specifically, the General Management Plan states that the park will "protect and enhance the original design intent of the historic park loop road" and develop and implement guidelines "for the management of the road and its landscape corridor to protect the overall design and such character-defining features as vistas, road width, roadside mowing, granite coping stones, retaining walls, and gutters."[17] The General Management Plan also states that:

> New construction will be minimized and will use materials harmonious with those already used;
> Existing additions or alterations to the system will be evaluated for compatibility and possible removal; and
> No new parking will be added except at Wildwood Stables.

THE ORGANIC ACT: CONSERVING THE SCENERY

Acadia's historic motor roads were carefully designed to lie lightly on the land. Management of the inherent aesthetic values that made this possible is articulated in the General Management Plan. However, the park is now faced with some important management issues regarding those aesthetic qualities.

Managing views and vistas

The historic motor road system was designed to highlight the dramatic views and vistas, from the mountaintops to the coastlines. An ongoing challenge has been the park's ability to properly maintain the vistas that currently exist. In some cases, vegetation has filled in a vista, while in others the focal point of the vista has degraded due to development outside park boundaries or the scenic values have otherwise been compromised

There have also been many visitor requests to open additional views, which have created some unforeseen management issues. For example, the clearing and pruning of trees along the Kebo Mountain Road Extension for a new vista of Great Meadow has allowed more sunlight to penetrate to the road shoulder and has encouraged the growth of non-native lupine plants. The spectacular display of blooms at the roadside has resulted in motorists pulling off the motor road, damaging the vegetated shoulder, and creating a new unpaved pullout (Figure 4.1).

Chapters 2 and 3 of this report document, evaluate, and number the existing views and vistas throughout the historic motor road system. Over a great number of years, the park has prepared several vista plans with different numbering systems, and as such there is a need to consolidate and organize all of the available information so that in the future an updated vista management plan can be created. This cultural landscape report offers a preliminary list of topics to include in a new vista management plan.

Managing the road corridor vegetation

Throughout the design and construction of the historic motor road system, the preservation and care of existing vegetation was a key priority. Management of vegetation along the road corridor today is given similar attention but has become much more difficult as the surrounding forests have matured and in some cases overgrown (Figure 4.2).

The management boundaries of the road corridor is commonly defined from ditch to ditch, but for practical purposes, management must often extend beyond these limits to address hazardous and storm-damaged trees, viewshed maintenance, and access to parking areas, trails, and other attractions. Although this cultural landscape report offers more specific boundaries of the road corridor and guidelines for management of vegetation within it, a separate and more extensive vegetation management planning effort will be needed to address issues beyond the road corridor.

Managing for natural systems and wildlife

Although every effort was made to minimize damage to the landscape during design and construction, the presence of the historic motor roads has inevitably changed some drainage patterns and redirected some stream flows. Research conducted by park staff has revealed that the design of some of the culvert assemblies serving perennial streams are inhibiting fish migration patterns and may need to be modified (Figure 4.3). More studies are planned to further identify problem culverts and to recommend possible solutions. The use of "beaver foolers" at culverts is also on the increase, and discussions at the treatment workshop focused on regularly inspecting culverts near beaver activity (Figure 4.4). Wildlife breeding periods and wildlife mortality rates are also issues along the motor roads.

Regarding the historic culvert assemblies, in some cases, culvert pipes appear to be undersized such as the structure that drains Great Meadow (Figure 4.5). In other instances, some culvert pipes, inlet structures, and outlet structures are in poor condition due to failing or blocked pipes and deteriorating headwalls. These problems combine to alter or impede the flow of water and are a potential threat to the structural integrity of the motor roads. Inventory work completed for this cultural landscape report includes general condition assessments of culverts, and will serve as a useful first step in repairing or replacing these structures.

Managing roadside aesthetics

The historic motor roads at Acadia National Park were designed with Rustic Design principles emphasizing the use of natural materials and integrating the motor roads with the surrounding landscape. In some cases, this rustic character has been compromised. The most obvious are the informal, unpaved pullouts at the major developed areas, paved pullouts and parking lots, and around trailheads and bridges. The unpaved pullouts have worn away the original grass shoulders, leaving behind rutted earthen and gravel areas. Some unpaved pullouts have been successfully revegetated through the installation of parking management stones, temporary fencing, and signs. In other cases, some of the more well-used unpaved pullouts have been kept open and formalized with the addition of parking management stones. Recommendations for unpaved, informal pullouts will be similar to those in the 1993 report, which encourages the park to monitor visitor use patterns to determine which unpaved pullouts can be closed so that the historic shoulder can be rehabilitated.

Bituminous paving on some of the roadside shoulders and especially in waterways has also altered the historic character of the motor roads. Historically there were no bituminous paved ditches on the motor roads, but these now outnumber the historic rubble waterways. In the late 1980s on Cadillac Mountain Road, bituminous waterways were installed to solve drainage problems caused by the steep and narrow shoulders, and in some cases the ditch pavement was extended to meet the edge of the paved traveled way. This has created a continuous cross-section of asphalt from ditch to ditch and has visually widened the motor road (Figure 4.6). Recommendations for paved waterways on the historic motor road system will aim to eliminate construction of additional bituminous waterways and replace existing bituminous waterways with mortared rubble waterways when the existing pavement fails.

The park has successfully reintroduced some of the rustic details of the historic motor road system, such as signs and gates, which have been lost over time. The historic directional and informational signposts have been replaced with the UniCor system of signs, but the park is close to completing the replacement of the typical metal sign posts with 4x4-inch wooden sign posts evoking a more rustic appearance. The rustic motor road access gates were historically one of the most visible fixtures along the historic motor road system and were intended to identify the entrances. Due to vandalism or deterioration only one remains, and most have been replaced with simple galvanized steep pipe gates. A simplified rustic wood gate design proposed in the 1993 report was installed at the Schooner Head Overlook Access Road and has been considered a successful substitute for the historic gates (Figure 4.7). The treatment recommendations in this report will reiterate the 1993 report, that rustic style signs and gates should only be installed at major access points or in highly visible areas of the historic motor road system.

THE ORGANIC ACT: PROVIDING ENJOYMENT

Soon after the first segment was completed in 1927, Acadia's motor roads became the means by which most visitors experienced the park. This remains true today, but the envisioned pleasure of slowly weaving through the forests and meadows and tracking along rugged mountainsides and shorelines is threatened by the increasing number of visitors.

Managing limited capacity

According to park managers, the availability of parking has a direct effect on the perceived quality of the visitor experience. At the summit of Cadillac Mountain, Sand Beach, and the Jordan Pond House, parking areas are regularly filled to capacity during the busy summer months. This lack of capacity causes motorists to utilize parking in the right lane where permitted, or on the vegetated shoulder, as is the case at the Jordan Pond area. The shortage of parking spaces is a cause of visitor frustration and results in longer walks to their destinations, while the presence of parked cars on the road greatly diminishes the driving experience on the historic motor road system as well as its rustic character (Figure 4.8).

Park planning documents recognize parking incapacities, yet forbid the construction of additional parking along the historic motor road system. The three developed areas described above, however, are part of the park's Developed Zone where such uses are allowed. Although comprehensive parking management strategies and recommendations are beyond the scope of this report, the park may be able to develop and pursue parking alternatives in these areas so that parking can be eliminated from the traveled way and shoulders.

The visitor experience is also affected by the perceived width of the motor road. In some segments, paved shoulders and bituminous waterways that abut the traveled way have created a wider road cross-section (see Figure 4.6). This is important because driving speed is often determined by the perceived width of the road, and a wider road has been documented to result in higher speed traffic.

The placement of parking management stones to regulate parking and access has occurred since the 1970s when traffic volumes in the park increased. Some stones were removed from the shoulders in the 1980s when portions of the park loop road were changed to one-way traffic and the right lane was converted to parking. Since 1993, however, additional parking management stones have been added as the volume of traffic on the historic motor road system continues to increase. More recently, park rangers have requested additional sections of parking management stones at Bubble Rock, and such stones may be needed in the future in the vicinity of the Jordan Pond House. Although the parking management stones are compatible with the rustic character of the historic motor road system, they are nonetheless a non-historic intrusion into the historic vegetated road shoulder, and excessive reliance on them may cumulatively diminish the integrity of the historic resource (Figure 4.9). The park has had success in managing parking and access with post and rail fencing, rope fencing, signs, and pavement striping.

Where not overused, parking management stones have successfully prevented shoulder parking in congested areas and have allowed previously damaged sections of shoulder to revegetate. However, in some cases, visitors simply pull off the road after a section of parking management stones has ended, essentially displacing the problem elsewhere. Park managers have found that if the run of parking management stones is long enough, shoulder parking is not an issue because people typically do not wish to backtrack very far. The main disadvantage of parking management stones cited by the park maintenance staff is the added task of mowing around and between them.

The 1993 report specified the use of rounded parking management stones that would be easily distinguishable from the angular-shaped stones used in some of the historic guardwalls. Since that time, however, some of the installed stones have been more angular in shape.[18] Recommendations in this cultural landscape report will reiterate the 1993 guidelines regarding design and character of the stones themselves so that they are distinguishable from historic guardwall stones (Figure 4.10).

Automobiles account for most of the traffic on the historic motor road system today. The number of vehicles on the Mount Desert Island motor road segments has successfully been reduced somewhat by the introduction of an island bus system connecting the park's major developed areas with Bar Harbor and other towns. Tour buses have also reduced traffic, but have spawned a unique set of problems. Because of their height and wheel base, the larger buses must often utilize both lanes of the one-way park loop road in order to pass under some of the rustic bridges. The larger buses also tend to drift into the shoulders or into the opposing lanes when negotiating the hairpin turns on Cadillac Mountain Road. Recommendations regarding vehicle restrictions and size limitations are beyond the scope of this cultural landscape report. However, these issues, and their effect on the typical visitor's experience on the historic motor road system, should be considered in the future. The characteristics and features of the historic motor road system should be preserved, even if this requires the exclusion of large vehicles from the system.

Managing for safety

The stone guardwalls found throughout the historic motor road system were in place on Ocean Drive prior to its reconstruction in the 1930s, are now perhaps the most distinctive and admired characteristic of the historic motor road system. The native stones were a vernacular approach intended to define the road margin and provide some measure of guardwall protection. Locally, they have earned the nickname "Rockefeller's Teeth" and serve as the rustic foreground to the spectacular scenery throughout the historic motor road system.

As noted in the 1993 report, the historic spacing between some of the guardwall stones has been unintentionally altered because some stones have become skewed or have rolled down the hillsides due to vandalism or deterioration of the narrow shoulder. The recommendations in this report will closely follow those found in the 1993 report, outlining a methodology for removing and resetting longer lengths of stones. Additional guidance will be provided for the replacement and resetting of missing and skewed stones (Figure 4.11).

The 1993 report also discouraged the use of edge striping on the historic motor road system, noting that doing so would run counter to the original design intent of harmonizing the motor road with the surrounding landscape. Since that time, the park has resisted the addition of edge striping except on Cadillac Mountain Road, where weather conditions merit the use of painted fog lines. There is also some use of striping as a parking management tool and for crosswalks at major developed areas (Figure 4.12).

Managing pavement

Regarding the road wearing course, the 1993 report recommended using the Maine Department of Transportation's "C" classification of aggregate mix because this would better approximate the rustic texture and appearance achieved by the historic chip seal surfaces than would the Federal Highway Administration's "D" specification. With the passage of time following the installation of the Maine pavement mixture, it has been determined that the "C" was not significantly different. The 1993 report noted that except for Bureau of Public Roads Project 4A2, all of the motor roads historically featured a chip coat surface treatment, but because of high maintenance costs, product longevity issues, and difficulty in finding a local contractor to do the work, a reintroduction of the historic road surface was unlikely.

Documents researched for this cultural landscape report, however, discovered that in the 1950s all of the motor roads were repaved with the modern plant-mixed, hot-asphalt bituminous concretes. All of the motor roads have received at least one overlay since 1958, and many are due for another (Figure 4.13). This practice will likely continue as the current accepted road maintenance practice is to apply overlays more frequently rather than waiting for the road to fail structurally and then having to undertake expensive reconstruction work. The recommendations will support this approach, and support future advances in road maintenance techniques that will result in durable and well-maintained motor roads at Acadia National Park.

An issue in applying pavement overlays is how such actions may alter the historic cross-sectional relationship between the width and crown of the paved traveled way and width and grade of the shoulders in cut and fill. In some areas, stormwater runoff and siltation have created a gap between the pavement and the shoulder. The grades of some of the historic shoulders themselves have risen due to an accumulation of road sand and organic material, which impedes the flow of stormwater off the road surface and alters the historic relationship between the pavement and the shoulder. Recommendations in this report will provide considerations for repairing shoulder grades and reiterate prior 1993 recommendations that a uniform road cross-section should be avoided to preserve the original design of each road segment as the system evolved over thirty-four years.

REHABILITATION AS THE RECOMMENDED TREATMENT APPROACH

The Secretary of Interior has approved standards, policies, and guidelines for four distinct, but interrelated, approaches to the treatment of historic properties: preservation, rehabilitation, restoration, and reconstruction. Collectively, these standards serve as the philosophical basis for achieving long-term landscape preservation. In general, the amount of physical intervention in a landscape increases from preservation to reconstruction.[19]

Based on the recommendations of Acadia National Park's General Management Plan and the treatment workshop held at the park in November 2006, Rehabilitation is the recommended treatment for the Acadia National Park's historic motor road system. Of the four treatment philosophies, rehabilitation will best allow for sound stewardship of the historic motor road system through repairs, alterations, and additions while preserving those existing historic features that convey the historical, cultural, and architectural values. The preservation treatment approach would retain and protect the extant historic resources but would discourage the addition of new features or techniques that could be used to maintain the roadway. A restoration approach would depict the motor road system at a particular time in its history and would provide latitude for new management approaches. A reconstruction approach is unnecessary, as the historic motor road system is intact. The rehabilitation treatment acknowledges the reality that periodic work will be needed to maintain the integrity of the road surfaces, shoulders, and associated engineering structures, and to ensure that the historic motor roads contribute to a positive and memorable visitor experience.

TREATMENT PRINCIPLES AND MISSION STATEMENT

According to the National Register of Historic Places Multiple Property Documentation Form, all segments of the historic motor road system are associated with two contexts: Rustic Design (both the Picturesque Style and Rustic Design in the National Park Service sub-themes) and John D. Rockefeller. The historic motor road system is significant at the national level and eligible for the National Register under Criteria A, B, and C.

Under Criterion A, the park's historic motor roads illustrate the National Park Service system-wide goal of providing public access to national parks while conserving natural beauty. Under Criterion B, Acadia's historic motor road system is significant as an example of John D. Rockefeller, Jr's interest in the construction and beautification of roads in the national parks and his collaboration with the National Park Service. Under Criterion C, the historic motor roads are excellent examples of the Rustic Design, a harmonious combination of the Picturesque Style and the Rustic Design standards developed by the National Park Service.[20] The rehabilitation treatment approach for the historic motor road system aims to preserve its significant characteristics and features.

The rustic character of the historic motor road system was maintained throughout its lengthy period of construction, despite subtle variations in each historic segment, such as the cross-sections and in the types of guardwall stones, drainage structures, and curb material that were used. The history of Acadia's motor roads also reflected improvements and innovations in road designs such as, superelevated curves and spiral transitions that replaced arcs and tangents, and pavement wearing courses using plant-mixed, hot-asphalt bituminous concrete that replaced water-bound macadam and blade-mixed bituminous surfaces. For the designers of the historic motor road system, the intent was always to design and construct the best possible motor road. The rehabilitation treatment approach continues this philosophy and makes the preservation of the significant characteristics and features possible by employing advances in road maintenance technology and systems.

Mission Statement for the Historic Motor Road System

The historic motor road system at Acadia National Park is a cultural resource. Operations and maintenance shall preserve its rustic character and significant characteristics and features, while considering potential adverse effects on natural resources and make all reasonable efforts to avoid or mitigate these effects whenever possible and practicable.

Visitors using the historic motor road system should have an experience consistent with the goals of the park. This experience may contrast with the experience of traveling on a typical public road or public highway and may differ from the initial expectations of the visitor.

Before any modifications are made to the historic motor road system, changes should be carefully evaluated for their impact on the historical integrity of the significant characteristics and features. In carrying out individual actions or routine maintenance, the overall or cumulative effect of each change will be evaluated to ensure that the historical integrity is not diminished.

During motor road construction projects, impacts on the park and its visitors will be reduced as quickly as possible. Major projects should consider potential environmental, social, and economic impacts, and include a construction sequencing strategy that minimizes road congestion and delays. Whenever possible, the motor roads will remain open during construction projects.

The following goals are intended to maintain the significant characteristics and features of Acadia's historic motor road system while protecting Acadia's natural resources and high quality visitor experiences:

- Preserve the historic vertical and horizontal alignment and cross-sections that are unique to each motor road segment as a testament to its designers and dates of construction.
- Preserve the natural features associated with the construction of the motor roads, such as roadside rock outcrops and rock cuts.
- Preserve the historic vistas and associated paved pullouts and parking areas.
- Preserve the diversity of vegetation adjacent to the road corridors.
- Preserve the rustic character of built features designed in the Rustic Design style (stone-faced bridges and causeways; vegetated shoulders and ditches; stone embankments, retaining walls, guardwalls, culvert headwalls, drop-inlets, waterways, medians, curbs; asphalt walkways).
- Preserve historic features designed by the Bureau of Public Roads (concrete and brick drop-inlets, concrete curbs).
- Manage visitor parking that is consistent with the carrying capacity of the historic motor road system. This will include the management of informal pullouts, right lane parking, and the use of parking management stones. Historic features should not be modified solely to accommodate larger automobiles, recreational vehicles, or buses.
- Minimize use of standard regulatory signs and pavement striping.
- Protect perennial and intermittent streams that intersect the road corridor.
- Preserve habitats that utilize the road corridor.
- Preserve for future generations the historic character of the historic motor road system.

PRESERVATION GUIDELINES

The treatment recommendations that follow are intended to guide future rehabilitation of the historic motor road system at Acadia National Park. These guidelines apply the principles of rehabilitation to landscape characteristics and features. They are intended to provide a philosophical basis for sound stewardship with the goal of preserving the historic rustic character and integrity of the park's historic motor roads.

The following guidelines generally correspond to the three groups of characteristics and features outlined in the "Analysis of Motor Road Characteristics and Features" section found in Chapter 3. The groups correspond to the physical elements of the motor roads, and are organized outward from the centerline: the traveled way, the road prism, and the road corridor. Technically, the road corridor can be defined as where the cut and fill slopes of the engineered road meets the undisturbed existing topography. However, for the more practical purposes of management, the management boundary of the road corridor should be generally defined as extending 30 feet from either side of the centerline. In places where the engineered slopes are either beyond or well within this 60-foot corridor, or where there are managed vistas, paved pullouts, or parking lots, the boundary can be adjusted inward or outward as conditions require.

A summary analysis of each feature is included here, but a more detailed inventory and analysis (historic condition, existing condition, and significance) can be found in Chapter 3. Only features that require treatment beyond straightforward preservation maintenance are included in this section.

MANAGING THE TRAVELED WAY

Road Alignment and Geometry: Cross-section

Road cross-sections – the width and crown of the traveled way and width and grade of the shoulders in cut and fill – contribute to the significance of the historic motor road system. As the motor road system was constructed over a period of thirty-five years, each segment retains its own unique qualities and features that represent a stage in the evolution of system as a whole. As a result, there is no "typical" section for the entire system.

Recommendations:

The historic cross-sections of each motor road segment belonging to the historic motor road system should be preserved wherever possible. This includes maintaining the original crown and shoulder where feasible. Application of a single contemporary "typical" cross-section throughout all segments of the historic motor road system should be avoided in future projects.

Where the grade of the shoulder is higher than the road pavement or where the shoulder is pitched toward the pavement, the shoulder should be bladed to restore the proper relationship with the edge of the traveled way. Historic cross-section diagrams for the road segment should be consulted, as should the recommendations regarding historic guardwall stones or parking management stones if such features are present in these areas.

Where the pavement is noticeably higher than the adjacent shoulder, the excess pavement should be milled away to restore the original geometry of the cross-section. This work should be done in conjunction with treatment of the road wearing coarse.

Road Surface: Wearing Course

The road surface wearing course contributes to the significance of the historic motor road system. Up until the 1950s, the motor roads were surfaced with a final layer of chip coat, giving the road surface a coarse texture and the color of the raw stone. The surface of each road segment consequently had a slight variation in color. Beginning in the 1950s, all of the motor roads were paved with modern plant-mixed, hot-asphalt bituminous concretes that resulted in a smoother surface texture and a more consistent color from pavement edge to pavement edge. Most of the historic motor road segments now feature several layers of this type of wearing course.

Recommendations:

The application of plant-mixed, hot-asphalt bituminous concrete overlays near the end of the historic period represented the latest in road maintenance techniques available at the time. As such, exploring the latest techniques to maintain the historic motor road system today is wholly justified, especially because some of the motor road segments were completed almost eighty years ago. Such improvements, however, should be carefully considered so as not to impair the historical integrity of the historic motor road system.

A return to using the historic chip seal surfaces is not recommended because of high maintenance requirements and the likelihood that the existing 35 mph speed limit and heavy traffic would essentially create two black stripes down the traveled way caused by the seepage of the asphaltic prime coat into the surface.

On some motor road segments, the maintenance overlays have altered the original shape of the cross-section. Ideally, excessively thick pavement depths should be removed in future resurfacing projects in order to restore the historic cross-sections and the relationship between the road surface and the edge features. At a minimum, pavement milling should be undertaken in situations where the slope of the shoulder to meet the new edge of pavement exceeds eight percent or where the historic reveal of edge materials has been obscured. Under no circumstances should the addition of an overlay raise the road surface flush or above the top of a curb.

Road Surface: Striping and Markings

Pavement striping does not contribute to the significance of the historic motor road system. During the early part of the historic period, low driving speeds and traffic volumes did not warrant their use, and the chip seal wearing course was not suitable for painted lines. More recently, increases in traffic have resulted in the addition of yellow or white painted centerlines, which adhere well to the plant-mixed, hot-asphalt bituminous concrete overlays. Increased traffic on Cadillac Mountain Road, along with changeable weather conditions, has prompted the park to paint white fog lines along the edges of the traveled way. However, no other motor road segment features edge striping. White pavement striping can also be found at crosswalks at the major developed areas and as a parking management tool near some of the more popular paved pullouts.

Recommendations:
As originally envisioned, the vegetated shoulders were intended to provide a softer and more rustic edge to the pavement surface. Therefore, except for Cadillac Mountain Road, pavement edge striping should be avoided on the historic motor road system. Striping for parking management or pedestrian safety purposes should be minimized to avoid visually cluttering the pavement surfaces. The technique of painting lines on the pavement should be continued as they have performed well. If new marking techniques and materials are identified, they should first be evaluated and tested for their durability to the area's harsh winter environment.

MANAGING THE ROAD PRISM

Road Shoulders: Vegetated, Gravel, and Paved Shoulders

Vegetated shoulders contribute to the historic significance of the historic motor road system, but gravel, loose rubble, and bituminous shoulders do not contribute. The vegetated shoulders were intended to provide an aesthetic transition between the paved traveled way and the surrounding landscape. The treatment was purposely chosen to communicate the rustic character of the historic motor road system.

During the historic period, a mixture of topsoil and aggregate was used in the construction of the shoulders so that they would support growth of vegetation and at the same time be stable enough to support the weight of a vehicle should it pull off the traveled way. The historic mixture was typically 50 percent aggregate and 50 percent topsoil, although there was some variation depending on site conditions. Common grass seed mixes were applied as a quick cover until a diverse mix of native grasses and wildflowers colonized the shoulders.

A mix of red fescues, annual ryes, and forbs are currently used to revegetate shoulders but this has been slow to germinate, leaving newly graded areas vulnerable to the elements and seasons. Another issue is that shoulder rehabilitation projects are often completed during non-growing seasons, again leaving the rehabilitation work unprotected. Stabilization with hay, straw bales, hydroseeding, and doubling the application amounts of seed have been unsuccessful, and there is a concern that fast growing seed mixes will introduce invasive or non-native species.

In some areas of the motor road system, shoulders are simply bare gravel (Figure 4.14). More recently, a few sections of shoulder have been paved with hot-mix bituminous concrete, primarily to accommodate a bicycle lane, or have been stabilized with rectangular-shaped loose stones to accommodate the turning-radius of buses. The General Management Plan/Environmental Assessment recommended removal of the "dangerous paved bike lanes on the approach to Cadillac Mountain Road."[21]

Recommendations:
Bare gravel and bituminous shoulders should be replaced with vegetated shoulders. The loose rubble shoulder on Cadillac Mountain can remain, as it will better support the weight of buses than will a vegetated shoulder. However, future use of this type of shoulder should be limited.

For shoulder rehabilitation and revegetation projects, the aggregate topsoil mix should be repaired and replaced where needed. The proportion of gravel to soil should fit the local site conditions. Sample tests should be undertaken on the existing mix to determine the optimum pH and presence or absence of toxins and salts, which would affect healthy vegetative growth. Fertilizer may be incorporated into the mix before placement to facilitate re-establishment of vegetation.

Shoulder reconditioning projects should consist of two steps:

> Seed. The current mix of red fescues, annual ryes, and forbs developed by the Natural Resource Conservation Service should be supplemented with a fast-growing, commercially available grass seed to quickly stabilize the shoulders until native grasses and wildflowers become established. A possible choice that is considered by many as a native species is creeping red fescue (Festuca rubra).
>
> Mulch. To speed the re-introduction of native species, a layer of mulch comprised of local vegetative cover, organic matter, and the duff layer should be used. This technique will preserve a pool of native vegetative material and the seeds associated with it, and stabilize the new surfaces. Only a thin layer of mulch should be applied, enough that will reasonably protect the new seeds from stormwater runoff.

The shoulders should be temporarily protected using fixed object markers as well as signage that describe the rehabilitation project to visitors. Acadia's short growing season, which typically ends in mid-September, warrants additional guidelines:

> During the growing season, the seed should be applied, followed by the layer of mulch.
>
> During the non-growing season, the layer of mulch should be applied first. At the start of the next growing season, remove the mulch layer, seed the shoulder, and then apply another layer of the mulch.

Shoulders are currently mowed once during a growing season, between July and September. This is consistent with the recommendation in the General Management Plan that mowing should be infrequent, but often enough that guardwall stones can be seen by motorists.[22] Grasses around the guardwall stones are currently weed-whipped once a year. Additionally, some segments of the historic motor road system are treated with a sand/salt mixture in the winter. This mixture should be swept up from the shoulders in the spring so that it does not accumulate over time and impede surface drainage.

Existing bituminous shoulders, loose rubble shoulders, and raw gravel should be removed if possible and the historic vegetated shoulder should be restored. Future construction of these types of shoulders should be discouraged, and installed only if warranted by safety issues.

Road Shoulders: Pullouts and Parking Lots

Paved pullouts contribute to the significance of the historic motor road system, while the significance of unpaved pullouts is undetermined. Paved pullouts are formalized stopping points and overlooks along the historic motor road system. They are built on the vegetated shoulder and typically correspond to scenic vistas or major trailheads.

Informal, unpaved pullouts have developed over time and are also found in the vegetated shoulder. They are created by vehicles pulling off onto the vegetated shoulder at the same location, which in time destroys and pollutes the grass, compacts tree roots, and leaves a bare gravel surface susceptible to erosion (see Figure 4.13). The unpaved pullouts are often found before and after major intersections and paved pullouts, and at popular trailheads and vistas.

Recommendations:

Paved pullouts should be maintained as part of future road surfacing projects. The park should continue to monitor and evaluate the unpaved pullouts. The Existing Conditions data in this cultural landscape report can be queried to determine the complex relationship between unpaved pullouts and vistas, intersections, roadside attractions, and trailheads.

The number of unpaved pullouts in the historic motor road system should be minimized because their bare gravel surfaces are counter to the original intent of the vegetated shoulders, which were designed to provide a softer and more rustic edge than gravel or paved shoulders.

Unpaved pullouts identified for closure should be scarified to destroy any potential slip-plane, covered with an aggregate topsoil mixture, then reseeded with the Natural Resource Conservation Service seed mixture supplemented with a fast-growing grass seed mix. The recommendations for "Shoulders and Ditches" provide additional details for such rehabilitation.

Drainage Features: Ditches and Waterways

Vegetated ditches and mortared rubble waterways contribute to the significance of the historic motor road system. Loose rubble and bituminous waterways do not contribute, although loose rubble waterways are a compatible feature. Like the vegetated shoulders, vegetated ditches were intended to communicate the rustic character of the historic motor road system. Ditches that required hardened surfaces were constructed with rubble masonry. This material gave the waterways the same rustic appearance as other structures throughout the historic motor road system.

In the early 1960s, bituminous waterways were introduced in some road sections and in the 1980s their use became more prevalent, especially on Cadillac Mountain Road. The historic masonry rubble waterways have been shown to be more difficult to maintain because they tend to trap seeds and soil in the joints and promote weed growth, whereas bituminous waterways do not have that problem and have proven to be easier to clean. While some of the bituminous waterways have become partially obscured by moss, they do not evoke the rustic characteristics of the historic motor road system.

The 1991 General Management Plan/Environmental Assessment recommended removal of the bituminous waterways. A new detail for a hardened waterway was developed soon after and was installed in two test sections on the historic motor road system as a possible replacement.[23] Large flat rectangular-shaped stones were selected to reduce the overall joint area of the waterway's construction in hopes of minimizing future weed removal, and the stones themselves featured a rustic split surface. Park staff reports that the waterways function well, but the shape and color of the stones appear as too engineered and should be reconsidered and refined further (Figure 4.15).

Recommendations:

Vegetated ditches should be cleaned annually. Reconditioning work on vegetated ditches should only be undertaken if erosion is present or if the ditch is no longer functioning. For rehabilitation guidelines regarding vegetated ditches, see the "Vegetated, Gravel, and Paved Shoulders" section above.

Waterways created through the hardening of the surfaces of roadside ditches are typically used where it is known that velocities of water will, or have in the past, erode the soil. Generally, wherever water flows at speeds greater than four feet per second, soil erosion will occur. Guidelines regarding existing and new waterways are as follows:

Existing mortared rubble waterways:
Repair and clean annually and use non-destructive methods.
Replacement of damaged portions of masonry rubble accomplished with in-kind materials.

Existing bituminous waterways:
Routine maintenance, such as minor patching, is acceptable. Bituminous waterways in poor condition shall be replaced with masonry rubble waterways.

Construction of new mortared rubble waterways:
New waterways should be constructed according to the historic waterway details illustrated in Chapter 3 and the new waterway detail developed in 1993 (see Figure 4.15). The date of construction should be included in the structure to aid future park resource and maintenance managers.

Construction of loose rubble waterways:
An alternative to the more engineered mortared rubble waterway is the use of loose rubble waterways. Local angular stones shall be used. However, large size angular aggregate typically used in Class II riprap should not be used. In keeping with the rustic character of historic motor road system, they should be placed individually in a naturalistic manner.

Replacement of bituminous waterways on Cadillac Mountain Road will likely require more complex modifications to the design and cross-section of the entire motor road. A possible solution may be to chip seal the area from the original edge of pavement to the backslope of the paved ditch with pink granite that matches the surrounding stone.

Drainage Features: Culverts, Inlet Structures, and Outlet Structures

Culverts contribute to the significance of the historic motor road system. Although the culvert structures themselves were unseen by motorists, the inlet and outlet structures that were visible were purposely designed and constructed with local natural stone so that they would blend in with other stone features on the historic motor road system and with the surrounding landforms.

The oldest sections of the historic motor road system were built using stone box culverts as the primary type of culvert. However, most of the historic road segments were designed with reinforced concrete pipe. There were also several reinforced concrete box culverts, and a few culverts that utilized corrugated metal pipe. Prior to 1940, headwalls and catch basins for inlets and outlets were made exclusively of local stone. After 1940, a variety of structures – stone headwalls (dry-laid, mortared), drop-inlets (dry-laid stone, pre-cast concrete with grate, curb type concrete, curb type brick), or simply loose stones – were used depending upon the localized topography of the road corridor. In these later segments, it is not uncommon to observe original brick, concrete, or stone inlet and outlet structures used within yards of one another. A new culvert headwall detail was developed as part of the 1993 report that was both compatible with the rustic character and distinguishable from the historic culverts.

Recommendations:
Culverts and their inlet and outlet structures should be regularly inspected. Frequent inspections should be directed toward the stone box culverts, some of which are approaching eighty years in age, as well as culverts prone to blockage in beaver habitat areas. Repairs should be made as needed to preserve these historic features. Trees encroaching on culvert headwalls should be removed; condition assessments compiled in 2005/2006 in the Access database can be referenced to determine these locations.

If necessary, culvert/headwall assemblies should be replaced in-kind. However, in some cases, the original choice of a particular inlet and outlet design was poorly suited to the localized topography of the shoulder and ditch and may need to be replaced with a structure that is more functionally appropriate. The type of materials (stone, brick, or concrete) used on the new structure should be consistent with those historically used on the particular road segment. Guidelines regarding existing and new headwalls and the areas that surrounding them are as follows:

> Repair of existing headwalls:
> Existing headwalls removed and reset due to culvert work, or merely reset due to slippage of the stones, shall be replaced using the same stones found in the original feature. Experienced stone masons shall be employed for this work. Mortared headwalls shall be remortared, and dry-laid headwalls shall be re-laid without mortar. The stones removed from the headwall shall be laid out on a tarpaulin near the work site, with no mixing of stones from other headwalls taking place.
>
> Construction of new stone headwalls:
> Where headwalls have been found to be necessary where none has existed previously, these headwalls should be constructed according to the historic culvert details illustrated in Chapter 3 and a the new headwall detail from 1993 (Figure 4.16). The date of construction should be included in the structure to aid future park resource managers.
>
> Stabilization of areas adjacent to culverts:
> Local angular stones can be used to stabilize erodible soils or steep banks at culvert inlets and outlets. Such stones should be placed individually in a naturalistic manner, which is in keeping with the rustic design intent of the historic motor road system. Large size angular aggregate typically used in Class II riprap should not be used.

In the future, the park may identify some inlet structures and outlet structures for design modifications to improve perennial stream flows for fish migration. Such alterations may also involve changes to the culvert structure itself, such as narrowing and deepening the channel within the culvert. These changes should be made in consultation with appropriate experts. Additions to the culvert structure, such as concrete wedges, to achieve this effect are preferred because they can be removed at a later date if necessary. However, removal of material from the original structure may compromise its function and is not recommended. Portions of streams near the culverts may also require installation of check dams to create pools. In order to remain consistent with existing stones in the stream, the check dams should be constructed with stones that are similar in character to other stones found in and along the streambeds.[24]

Vehicular Barriers: Guardwalls

Stone guardwalls contribute to the significance of the historic motor road system. Large stones were present on Ocean Drive prior to its reconstruction by John D. Rockefeller, Jr. and the National Park Service in the 1930s as a vernacular approach to visually define the road margin for motorists and to provide a measure of guardwall protection. Rockefeller utilized this type of edge treatment on his carriage roads and advocated for their use on the motor roads so that the two systems would be consistent. The types of stones range from angular ledge stones to rectilinear quarried blocks, depending on the history of each road segment and the phase of construction. These distinctive stones and the narrow spaces between them are locally known as "Rockefeller's teeth," and perhaps more than any other feature contribute to the rustic character and identity of the historic motor road system.

Recommendations:

Historic guardwall stones that are skewed out of place should be reset, and stones that have tumbled down an embankment or off of a retaining wall should be retrieved and replaced. If the stones are not reachable or if they are broken, they should be replaced with in-kind materials. The Access database of Existing Conditions produced as part of this cultural landscape report can be queried to determine the locations of guardwalls in poor condition, based on field work completed in 2005/2006.

In instances where an entire length of a guardwall needs to be removed to accomplish road rehabilitation, the following steps should be followed to ensure that the historic relationship between the stones and the road surface is retained:

Mark the road surface to indicate the beginning and end of the stones to be reset.

Measure each gap between stones; divide the total of gap dimensions by the number of gaps to obtain an average spacing.

Number the stones so that they can be reset in their original order, and note which side faces the traveled way. This will ensure that their original character is preserved.

Lift the stones with industrial webbing so that the surface of the stone is not scratched and unweathered granite is exposed.

Prepare the shoulder for resetting stones. Stones should be replaced into a 6-inch deep channel.

Replace stones into the channel using the average spacing. Make note of the beginning and ending marks on the road surface. According to park staff, the stones can be spaced a rake width away from the pavement and a rake width apart. This will allows for efficient maintenance.

Hand grade between stones.

Where feasible, the historic guardwall stones should not be removed to a staging area while the shoulder is prepared. Doing so may risk losing the relationship between groups of stones and specific road segments.

Vehicular Barriers: Parking Management Stones

Parking management stones do not contribute to the significance of the historic motor road system. These stones were first used in the 1970s as a response to increased vehicular traffic in the park and were placed along portions of the motor roads to preserve the vegetated shoulders. Parking management stones are typically encountered at vistas, trailheads, intersections, and before and/or after paved pullouts. Compared to the historic guardwall stones, which are angular or rectilinear in shape, a majority of parking management stones are smaller and typically rounded, making them a compatible with the rustic character of the historic motor road system. However, recent installations have featured more angular-shaped stones, which are similar in appearance to the historic angular-shaped guardwall stones.

Recommendations:

The use of parking management stones should be minimized as much as possible. The park should determine where the stones are no longer needed and then remove them to stockpile areas for future use elsewhere. The angular-shaped parking management stones installed in recent years should be removed and replaced with round-shaped stones. In the short term, the locations of the angular-shaped parking management stones should be inventoried, and then when feasible removed and replaced with round-shaped stones.[25]

The design specifications for parking management stones below will ensure that they are compatible with the rustic character of the historic motor road system, and at the same time be clearly distinguishable from the angular- and rectilinear-shaped stones used in the historic guardwalls.

Type: Stones shall be rounded “field stones” of a mineral type similar to those found in surrounding rock formations. Stones shall have no visible side worked (a single worked face is acceptable if on the bottom). Stones should be set such that the weathered face, if any, is visible from the road.

Size: Stones shall be between 2 cubic feet and 5 cubic feet in volume. In road sections where the shoulder is narrow, up to 50 percent of the stones may be a minimum volume of 1cubic foot.

Location: Stones shall be set at approximately 7 feet on center. Dimensions from the edge of pavement may vary from section to section dependent on relationship of pavement, shoulder, and ditch, but shall be uniform within each section. Stones should be set approximately 3 inches below grade.

Embankments and Retaining Walls

Vegetated embankments, rock embankments, and stone retaining walls contribute to the significance of the historic motor road system. The use of embankments and walls was minimized because the historic motor road system was carefully designed along routes that would have the least impact on the surrounding landscape. In some cases, however, they were installed to preserve adjacent vegetation.

Most of the embankments were simply earthen slopes planted in the same manner as the vegetated shoulders and ditches. In areas where this solution was inadequate due to steep slopes, hand-laid rock embankments and stone retaining walls constructed with local stones were utilized, in keeping with the rustic values of the historic motor road system. Over time, some of the stone embankments filled in with trees and shrubs, allowing them to further blend into the natural landscape.

Recommendations:

Like the vegetated shoulders and ditches, the vegetated embankments were reseeded with common grass species to serve as a nurse crop until the native vegetation became established. They were not intended to be managed as a monocultural stand of grasses. A diversity of native grasses, wildflowers, and shrubs were encouraged. The seeding and mulching recommendations described in the "Vegetated, Gravel, and Paved Shoulders" section can also be applied to vegetated embankments. Additional guidance regarding vegetation clear zones around embankments and retaining walls can be found in the "Roadside Vegetation" section below.

Site Details: Access Gates

The original Civilian Conservation Corps access gate contributes to the significance of the historic motor road system, but the contemporary galvanized steel gates and the reconstructed rustic gate do not contribute. In the late 1930s and early 1940s, a collection of rustic wood gates was designed for both the historic motor road and carriage road systems. The motor road gates, constructed by the Civilian Conservation Corps, featured rough adzed lumber stained grey and heavy iron hinges and fasteners. Rockefeller felt such gates would distinguish the historic motor road system from the public highway and serve as a visual cue to motorists that they had entered a park road that was managed for different values than an ordinary road. Only one of the historic gates remains, off Schoodic Point Road at the entrance to the former naval base.

The most common type of gate in use along the historic motor road system today is a contemporary brown-painted galvanized steel gate. In the 1990s a new rustic gate detail with simplified wood construction was installed on the Schooner Head Overlook Access Road, near the historic motor road system's entrance fee station. The design is a contemporary interpretation of the rustic gates of the historic period, and is both compatible with the historic character of the road and distinguishable as a new feature. The original rustic design was not used because of the cost and skill required for the repair of the intricate wood construction and because they were so heavy that a single person had trouble opening them. In addition, the bottom rail blocked operation of the gate when the ground was covered with snow.

Recommendations:
Though desirable, the replacement of all existing galvanized steel pipe gates with the historic gate detail is impractical due to considerations of funding and maintenance. However, the new gate detail would be appropriately installed in highly visible locations and major intersections to reinforce the intended gateway effect as well as the rustic character and the historic motor road system (Figure 4.17).

Site Details: Fences
The contemporary post and rail fences and stainless steel railings do not contribute to the historic significance of the historic motor road system. Post and rail fencing can be found along portions of the Otter Cove Causeway and Blackwood Road, while stainless steel railings are prominent along the walkways at Thunder Hole. The locations of the historic fencing constructed by the Civilian Conservation Corps, called the "Down East Bunk Rail Fence," are not known.

Recommendations:
The post and rail fencing should be replaced with fencing that is similar in character to the historic "Down East Bunk Rail Fence," the details of which are presented in Chapter 3. There are several options for the stainless steel railings. The preferred alternative is to replace the railings with a rail fence constructed with treated wood. Such a material would be more consistent with the rustic character of the historic motor road system. A second alternative may be to apply a dark brown or black industrial coating to the existing stainless steel railings so that they have a less conspicuous appearance in the landscape.[26]

Site Details: Signage
Although necessary for safe use of the motor roads, contemporary directional, informational, and regulatory signs do not contribute to the significance of the historic motor road system. The historic directional signs of the historic motor

road system are well documented both in archival drawings and in photographs. At least two variations of a similar design were carried out by the Civilian Conservation Corps in the late 1930s and early 1940s. The early directional signs were reminiscent of the vernacular crossroads signage common to the region, featuring an overscaled signpost with a simple finial top. Individual signboards were fastened to the post giving place names, directional arrows, and distances. Text and numbers were painted yellow on a brown background. None of these signs remains along the historic motor road system, although one of the individual signboards is preserved at the park's sign shop.

The UniCor system of directional signs is currently used along the historic motor road system. The signs effectively convey information, are easy to fabricate, and meet the service-wide National Park Service road sign specifications. Although such signs are familiar in national parks, they do not communicate the rustic aesthetic of the historic motor road system. In recent years, the park has reduced the size of the lettering on some signs to achieve a smaller sign size.

Like the park's directional signs, the design of informational signage throughout the Civilian Conservation Corps period made reference to the regional vernacular traditions. This signage was intended to convey useful information or place names, yet harmonize with the landscape. The signs were often of smaller scale and placed at a lower height than is common today. Informational signage present along the historic motor road system today includes park entrance signs, wayside signs, and trailhead markers (Figure 4.18). None of the historic signs remain today.

Documentation of historic regulatory signs has not been obtained for the historic motor road system. The current collection of regulatory signage such as "Stop," "Wrong Way," "Speed Limit," etc. are not historic features. However, the park is close to completing the replacement of metal sign posts with 4" x 4" wooden sign posts. Most of these signs are typical of those found on other roads and highways.

Recommendations:
A study of the entire inventory of signs throughout the historic motor road system should be undertaken. Once complete, the park should consult with the Office of National Park Service Identity, at the Harpers Ferry Center, to create new sign plan that captures the unique qualities of the park's historic signs and the rustic character of the historic motor road system. Historic research of Acadia's signs should be conducted to inform this effort. As the quantity of signage associated with the historic motor road system is significant, it is possible that costs may limit the new signs to highly visible areas, much like the recommended treatment approach for the rustic gates.

Except for larger park entrance signs, all existing and proposed signs should be mounted on 4x4" wooden posts so that the signs gesture to the rustic character of the historic motor road system. Proposals for additional signs should be evaluated carefully to determine the compliance effect on the character of the historic motor road system. While no sign can be made completely vandal proof, new rustic signs can be adapted to be vandal resistant. Modern pressure treated lumber can also be used to give the signs resistance to decay, a marked improvement over the original historic signs.

Site Details: Medians

Mortared rubble medians and vegetated medians contribute to the significance of the historic motor road system, but the paved bituminous median does not contribute. Most of the vegetated medians were installed during the historic period at pullouts and parking areas to visually and physically separate traffic from parked cars and pedestrians. The General Management Plan/Environmental Assessment recommended that medians at Bubble Pond and the Precipice parking areas "should be planted with woody vegetation to obscure parking and add a sense of naturalness."[27]

Mortared rubble medians were first installed during the 1950s to serve as a psychological separation between the traveled way and some of the paved pullouts. The use of native granite was consistent with the rustic character of the historic motor road system. The medians were designed with a one-inch reveal between the pavement surface and the median stones, and originally set to provide a crown of one inch per foot of median width. The subsequent application of asphalt overlays has eliminated the original reveal between the pavement surface and the stones, and in some localized instances, the edge of the median is actually below the surface of the pavement.

Recommendations:

The park should evaluate the necessity and feasibility of establishing trees and shrubs at the vegetated medians referenced above as well as all other vegetated medians throughout the historic motor road system. Historically, smaller medians were simply areas of grass bounded by curbing while larger medians featured grass interspersed with trees and shrubs and were more natural in appearance. In situations where the view of parked cars from the motor road is a distraction to the driving experience, then such plantings would be appropriate and encouraged.

Future projects involving the application of maintenance overlays near mortared rubble medians should include milling to re-establish the historic one-inch reveal. Median stones that have heaved or settled should be reset as a part of the scope of work. The lone paved median in the park, at the Access Road to State Route 233, should be replaced with mortared rubble.

Site Details: Walkways, Trails, and Steps

Asphalt walkways contribute to the significance of the historic motor road system, but concrete walkways do not contribute. The walkways serving the many parking lots throughout the historic motor road system were historically a bituminous surface treatment with a final chip coat of untreated aggregate, like the adjacent roadways. This treatment was deliberate so that the walkways would have the same rustic character of the roadway itself.

Walkways constructed during the 1950s, after the development of plant-mixed, hot-asphalt bituminous concrete, were paved with the same material used on the road surfaces, parking areas, and pullouts. Since the historic period, some asphalt walkways have been replaced with Portland cement.

Recommendations:

The design intent for the walkways was that their appearance was the same as the adjacent roadway, pullout, or parking area. Therefore, it is recommended that the walkways continue to be surfaced with the same material that is applied on the roadways, pullouts, and parking lots. New walkways should also be paved the same way, as should the concrete walkways when they are in need of resurfacing.

Site Details: Curbing

All granite and concrete curbs contribute to the significance of the historic motor road system, except for the sawn-top granite curbs. Prior to World War II, curbing material was of split and hammered granite. As was the case throughout the historic motor road system, materials were derived from local sources, which allowed the curbs to blend in with the surrounding landscape and contribute to the rustic character. Curbing installed in the 1950s was typically of Portland cement concrete. In some cases the concrete was tinted grey to mimic the appearance of the locally extracted granite.

After 1958, some of the concrete curbing was replaced with sawn-top granite curbs so that a consistency of materials could be achieved throughout the historic motor road system. However, these newer curbs are now viewed as inappropriate in the rustic setting of the historic motor road system due to their highly finished and smooth top surfaces and edges. The color of these materials is a white or light grey, and visually incongruent with both the adjacent landscape and with earlier construction.

Recommendations:
The extant sections of rough-cut granite, slope-faced rough-cut granite, concrete, and slope-faced concrete curbing allow the historic motor road system to be understood as a series of segments constructed over many years. It also illustrates the evolution of construction methods and materials. Therefore, the variety of curbing material should be retained since they are original historic fabric. The curbs should be replaced in-kind when needed.

Sawn-top granite curbs that replaced historic concrete curbs should be replaced with concrete curbs (tinted grey if historically appropriate). New curbs should not be of a white or light grey color; rather they should be of a darker color so that it can complement the color of the historic granite curbing. It is recommended that the contractor provide product samples for approval prior to construction. Additionally, as curbing adds a degree of formalization, future projects should not include curbing treatments if the particular area is intended to be informal in nature.

MANAGING THE ROAD CORRIDOR

Scenic Views

Views and vistas contribute to the significance of the historic motor road system. An analysis of pullouts and parking lots illustrated on a 1941 Master Plan and numbered vistas shown on a 1961 Vista Plan revealed that nineteen of the numbered vistas corresponded to the pullouts and parking lots on the 1941 Master Plan. Field work accomplished during 2005/2006 inventoried two types of views for the entire historic motor road system, a) panoramic and b) framed/filtered. Each view was described as a linear feature with specific numbered beginning and ending points. A detailed methodology of the inventory project can be found at the beginning of Chapter 2.

Most of the vistas in the 1961Vista Plan were described as views of meadows, mountains, bays, and the ocean, but some descriptions of the vistas were more specific, such as a view into a mixed growth forest or of a glacial feature. Additionally, descriptions of some of the vistas on the eastern segments of the one-way (southbound) portion of the park loop road are no longer completely accurate because they were written from the perspective of a northbound driver. Drawing on excerpts from Vista Management at Acadia National Park by Eckart Lange, the 1991 General Management Plan/Environmental Assessment provided additional information on each view from the 1961 Vista Plan such as bearings and widths of the viewshed, condition assessments, and general recommendations regarding vegetation management, the shape of the vista area, and edge treatments.

Recommendations:

The park should undertake new efforts to prepare an updated vista management plan. The plan should include the following information:

Summarize all previous plans, recommendations, and maintenance work related to views and vistas, as well as past management philosophies.
Identify current issues regarding and related to views and vistas and Describe the connection of this plan with other park planning documents (i.e. vegetation and forest management plans)
Prepare a mission statement and management philosophy.
Prepare a detailed comparative analysis of pullouts and parking areas on the 1941 Master Plan, vistas on 1961 Vista Plan, and the views documented in 2005/2006 for this report. For each, report on access and parking (paved pullout, unpaved pullout, or vegetated shoulder); past, current, and projected visitation patterns; impacts and issues related to continued use/future development of the vista; and short-term and long-term maintenance issues.
Describe the vistas with narratives, graphics, and photographs.
Based on the analysis, outline which vistas will be managed and which will not.
Prepare specific guidelines, procedures, and practices for monitoring and maintaining vistas. Identify who can do the work (i.e. park staff, contractors, volunteers, etc.). Develop design criteria for opening up new vistas and blocked vistas.
Present recommendations that prioritize and implement the new plan.

Roadside Vegetation

As discussed in Chapter 3, Rockefeller, the Olmsted firm, and the National Park Service effectively minimized the size of the road prism through superior road design and adherence to Rustic Design style principles, which attempted to harmonize built features with the surrounding landscape. Earthen shoulders, ditches, and embankments were blended into the surrounding topography. The edges of the motor road corridor were essentially defined by where the cut and fill slopes of the engineered road met the undisturbed existing topography.

Earthen slopes were planted with grasses, specimen trees were preserved along the roadside wherever possible, and road construction scars were healed with plantings of native vegetation. After 1947, Rockefeller funded major reforestation efforts along motor roads affected by the Great Fire. The overarching intent of the replanting projects was that the new plantings would thrive and eventually blend in with the surrounding vegetation. Today, visitors traveling the historic motor road system can judge the effectiveness of these past efforts as they pass by a wide variety of vegetation that alternately frames and restricts views into the surrounding landscape.

The historic motor road system is situated amongst a much larger natural resource area made up of forests, lakes, meadows, and coastline. The variety of vegetation that makes up this immense area also defines the edge of the historic motor road system corridor. Treatment of vegetation that borders the historic motor road system should be consistent with the park's long-term natural resource goals and management practices.

Recommendations:

For practical reasons, the vegetation management boundary of the historic motor road system should be generally defined as extending 30 feet from either side of the centerline. In places where the engineered slopes are either beyond or well within this 60-foot corridor, or at vista areas, paved pullouts, and parking areas, the management boundary can be shifted inward or outward as conditions require.

Within the corridor, woody trees and shrubs should be removed around the following structures so that their historic integrity and use are preserved and maintained:

Retaining walls:
Remove woody vegetation within two feet of the toe of the wall and three feet behind the wall.

Guardwalls:
Remove woody vegetation between the edge of pavement and the front of the wall and two feet behind the wall.

Culverts:
Remove woody vegetation within two feet of inlet and outlet structures.

Vegetation management activities such as hazardous tree inspection and removal, and cleanup of storm-damaged trees, may be undertaken within the road corridor at the discretion of park management if such trees are identified as a danger to visitors.

[1] National Park Service Organic Act, 16 U.S.C.1. U.S. Department of the Interior, *The National Parks: Shaping the System*, Harpers Ferry, West Virginia: National Park Service, Harpers Ferry Center, 2005: 21.
[2] Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 102-103.
[3] Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 102-104.
[4] Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 103, 106.
[5] Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 106-107.

[6] Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 111-112.
[7] Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942*, Washington D.C.: U.S. Department of the Interior, National Park Service, Cultural Resources, Interagency Resources Division, National Register of Historic Places, 1993: 110-111.
[8] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section E: 35, 62.
[9] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 58.
[10] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 55.
[11] Six segments of the historic motor road system – Paradise Hill Road, Kebo Mountain Road, Ocean Drive, Stanley Brook Road, Jordan Pond/Eagle Lake Road, and Cadillac Mountain Road – are identified as components of the cultural zone and preservation subzone. Although the other historic segments of the historic motor road system – Kebo Mountain Road Extension, Champlain Mountain Road, Bureau of Public Roads Project 4A2, Otter Cliffs Road, Otter Cove Causeway and Blackwoods Road, Day Mountain Road, and Day Mountain Road Extension – are not specifically called out in the text, according to the map they are included in the cultural management zone. "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 53, 58.
[12] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 35.
[13] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 59.
[14] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 53, 59.
[15] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 57.
[16] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 18, 25.
[17] "General Management Plan, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, North Atlantic Region, October 1992: 33, 36.
[18] The stones are currently extracted from a quarry near Bubble Pond, possibly from the same quarry that supplied material for the 1962 realignment of Jordan Pond/Eagle Lake Road.
[19] Robert Page, Cathy Gilbert, and Susan Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques,* Washington D.C: U.S. Department of the Interior, National Park Service, Cultural Resource and Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 1998: 82; U.S. Department of the Interior, *The Secretary of Interior's Guidelines for the Treatment of Historic Properties with Guidelines for Treatment of Historic Landscapes*, Washington DC: U.S. Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, Historic Landscape Initiative, 1996: 20, 50, 92, 130.

[20] National Register Multiple Property Documentation Form for "Historic Resources of Acadia National Park, 29 June 2007," Hancock County, Maine, NRIS # 0700614, Section F: 90.
[21] Alternative 1, Dispersed Use. "General Management Plan and Environmental Assessment, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, Denver Service Center, Pubic Review Draft, August 1991: 42.
[22] Alternative 1, Dispersed Use. "General Management Plan and Environmental Assessment, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, Denver Service Center, Pubic Review Draft, August 1991: 42.
[23] Alternative 1, Dispersed Use. "General Management Plan and Environmental Assessment, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, Denver Service Center, Pubic Review Draft, August 1991: 42.
[24] Text in this paragraph based on ACAD Staff comments on 95% Review Draft, compiled by Rebecca Cole-Will, Cultural Resources Specialist, June 8, 2007.
[25] The following guardwalls inventoried on Jordan Pond/Eagle Lake Road in 2005/2006 may be angular parking management stones: GW 3.032, GW 3.094, GW 3.244, GW 3.258, GW 3.260, GW 3.322, GW 3.393. If field investigation determines they are in fact non-historic walls, these angular stones should be replaced with rounded stones.
[26] The keyword phrase "paint stainless steel" yielded the following results on a web search on 3 March 2007:

http://www.superior-industries.com/index/products_view.php/id/33
http://www.kschimney.com/store/product.php?pid=110
http://www.northlineexpress.com/detail.asp?PRODUCT_ID=5CO-80010&source=shopping&kw=5CO-80010

[27] Alternative 1, Dispersed Use. "General Management Plan and Environmental Assessment, Acadia National Park, Maine," Washington D.C.: U.S. Department of the Interior, National Park Service, Denver Service Center, Pubic Review Draft, August 1991: 42.

Figure 4.1. This unpaved pullout on Kebo Mountain Road developed after the view to Great Meadow, which had overgrown, was opened up. (Acad0300_2.167, OCLP 2005)

Figure 4.2. Like this section of Kebo Mountain Road Extension, many segments of the motor road are bounded by mature forests. (Acad0300_2.875, OCLP 2005)

Figure 4.3. The culvert that conveys a perennial stream near the junction of Day Mountain Road Extension, Jordan Pond/Eagle Lake Road, and Stanley Brook Road has been identified by park staff as a possible impediment to fish. (Acad0300_13.227_Out(2), OCLP 2005)

Figure 4.4. View of a new "beaver fooler" along Bureau of Public Roads Project 4A2, after the Precipice parking area. (IMG 0028, OCLP 2006)

Figure 4.5. The culvert that drains Great Meadow is undersized and often blocked by debris from beaver dams. (Acad0300_2.159_In, OCLP 2005)

Figure 4.6. A wider cross-section, caused by paved shoulders or by paved waterways, as shown here on Cadillac Mountain Road, is a psychological cue for motorists to drive faster. (Acad0013_2.290, OCLP 2005)

Figure 4.7. View of the redesigned rustic gate at Schooner Head Overlook Access Road. (Acad0222_0.019, OCLP 2006)

Figure 4.8. On-road parking along Ocean Drive and other major developed areas negatively effects the motor road experience. (Acad0300_6.023(1), OCLP 2005)

Figure 4.9. View of round parking management stones installed after a run of historic guardwall stones on Kebo Mountain Road Extension. The parking management stones are compatible with the rustic character, yet distinguishable from the historic stones. (Acad0300_1.760, OCLP 2005)

Figure 4.10. A demonstration section of a new mortared rubble waterway was installed off of Schooner Head Overlook Access Road in the mid-1990s. (IMG 0237, OCLP 2005)

Figure 4.11. Some of the guardwall stones have fallen down the embankments or have become skewed, as seen in this photograph near Western Point on the Otter Cove Causeway and Blackwoods Road. (Acad0300_9.701(2), OCLP 2006)

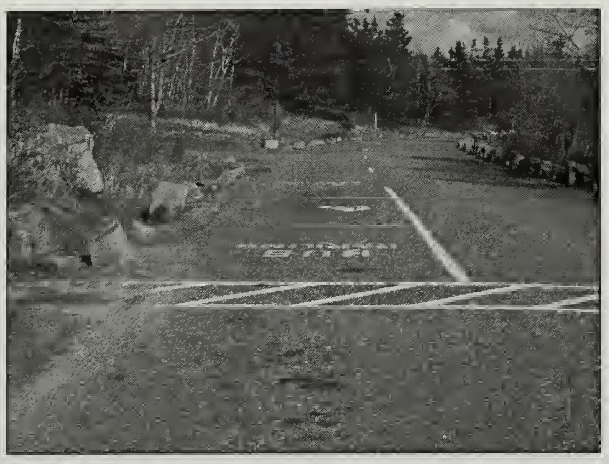

Figure 4.12. Painted crosswalks and parking lines have been installed at some of the major developed areas, like these at Thunder Hole. (IMG 0037, OCLP 2006)

Figure 4.14. View on Day Mountain Road, looking back at Blackwoods Bridge and a section of raw gravel shoulder. (IMG_001, OCLP 2006)

Figure 4.13. View of pavement overlays and pavement failure caused by poor drainage along the often shady section of Otter Cove Causeway and Blackwoods Road, just after the causeway. (Acad0300_8.931, OCLP 2005)

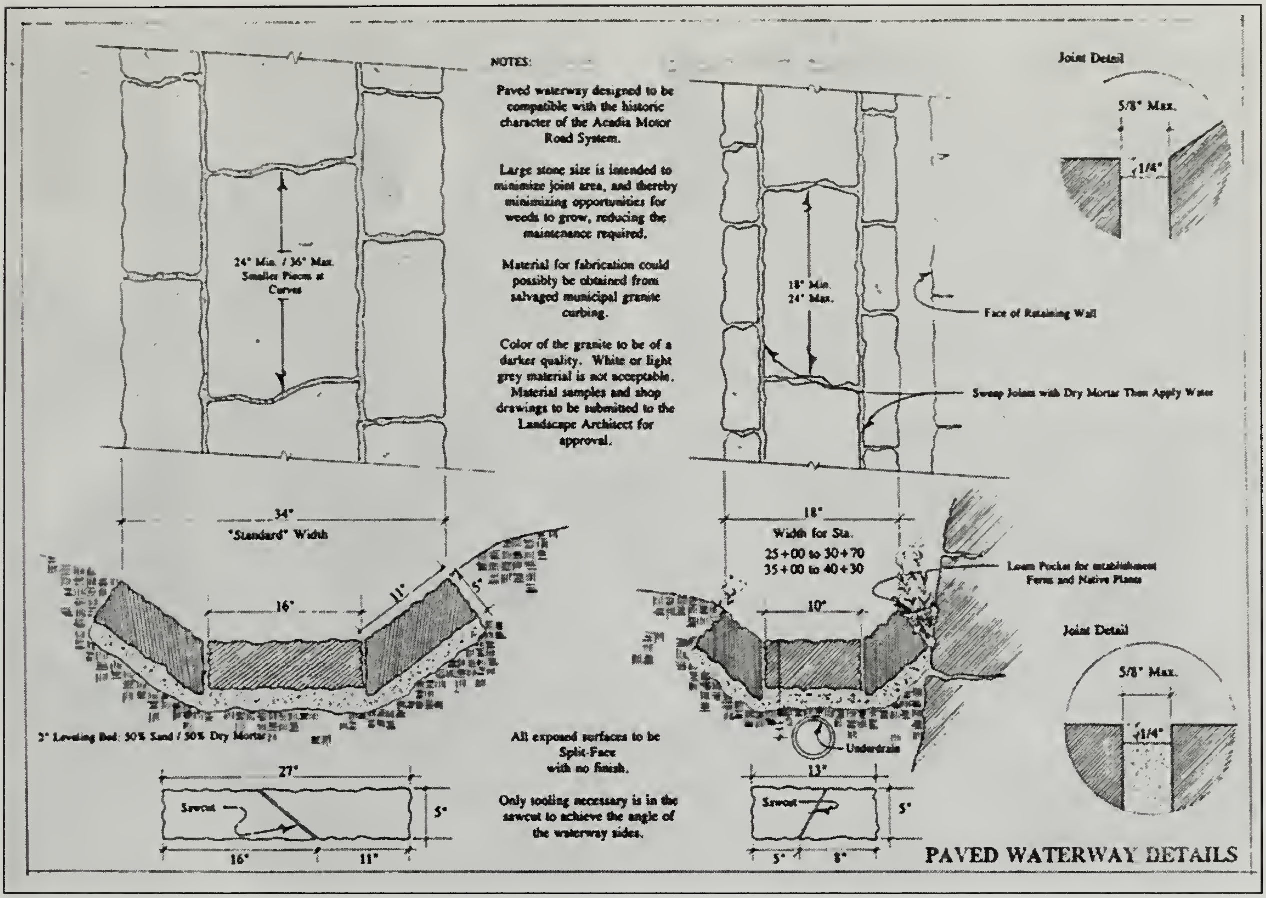

Figure 4.15. Mortared rubble waterway detail installed near Schooner Head Overlook Access Road. (OCLP 1993)

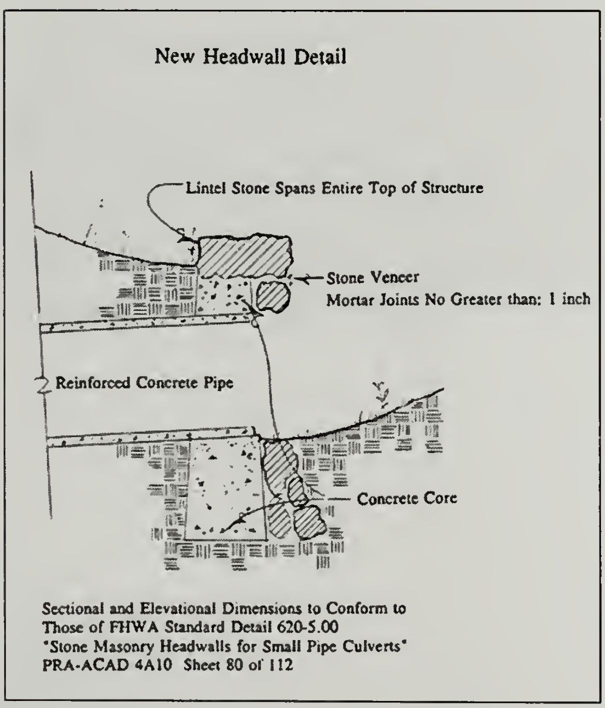

Figure 4.16. Detail for a culvert headwall that is compatible with the rustic character of the historic motor road system and distinguishable from the historic culverts. (OCLP 1993)

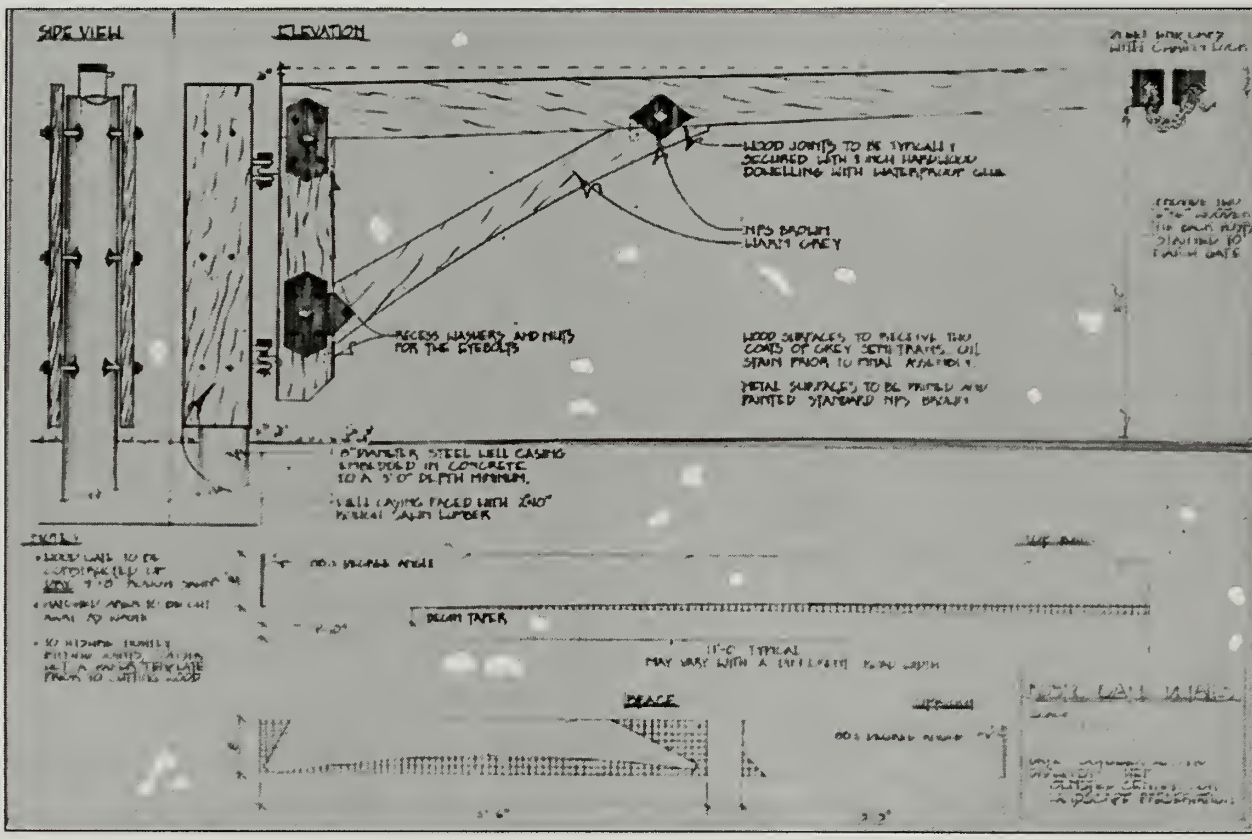

Figure 4.17. Sketch and detail for a new gate that is compatible with the rustic character of the historic motor road system and distinguishable from the historic gates. (OCLP 1993)

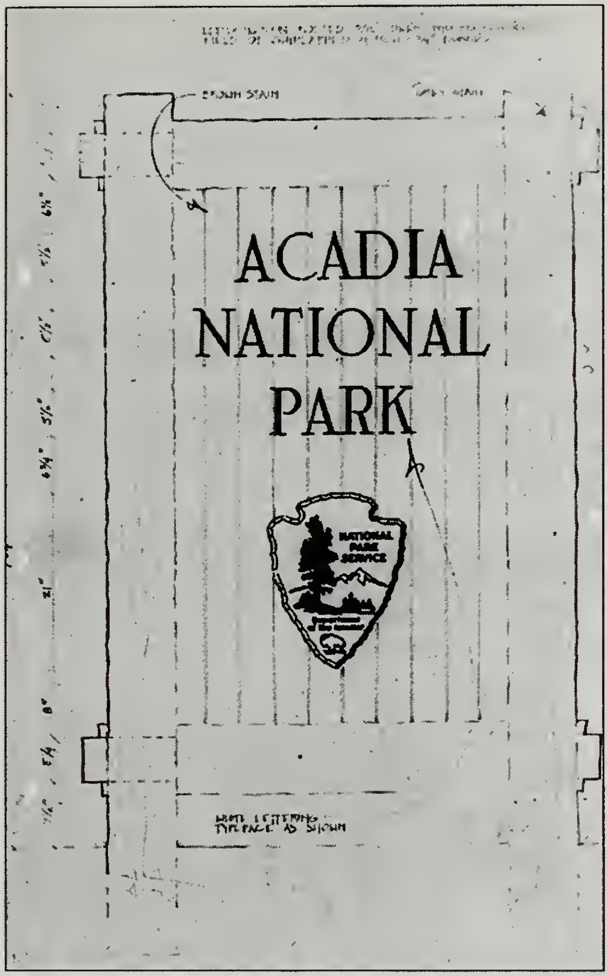

Figure 4.18. Detail for a park entrance sign that is compatible with the rustic character of the historic motor road system. (OCLP 1993)

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APPENDIX A
INVENTORY METHODOLOGY AND DATABASE TABLES

INVENTORY METHODOLOGY

Existing features and conditions of the historic motor road system at Acadia National Park were documented in April, July, August, September, and November of 2005 and in November 2006 by utilizing the Federal Highway Administration's Visi-Data inventory collected in May 2002. The Visi-Data consists of a database that is linked to photographs taken at specific mile points along the Federal Highway "Routes" for the various motor road segments. When viewed in sequence, this collection of photographs has the effect of a video, with the point of view of traveling down the roadway. Using a beginning point of 0.000 – features along the roadway can be given a unique identifying number that co-relates to where the features are found along the line of the roadway. The Visi-Data database records mileage to three decimal places, allowing features to be placed in a linear, sequential relationship to one another with the difference between 0.001 and 0.002 miles being 5.28 feet.

Features were identified with the four letter park alpha code, the four digit Federal Highways route number, and a unique four digit number describing the location of the feature along the line of the roadway, for example: "ACAD0300_3.143." Features were identified as either a point feature along the motor road, such as a culvert or gate, or as a linear feature, such as a retaining wall or view.

Running the Visi-Data software on a laptop computer connected to an automobile electrical system via a DC to AC power inverter, two staff from the Olmsted Center drove the Federal Highway routes, resetting the vehicle's trip odometer to zero at the beginning point of each Federal Highways Route shown in the Visi-Data. The vehicle trip odometer, however, served only as a crude cross-check and verification tool as the odometer only measures tenths of a mile, or 528 feet.

When features not on the Visi-Data were encountered, for example a culvert or embankment, a Roll-A-Tape wheel measuring device was used to locate the new feature according to the distance from a verified feature appearing in the Visi-Data. Then this linear measurement in feet was converted to decimal miles and added or subtracted from the closest feature verified in the Visi-Data. This same approach was used to record views, bridges, and other features outside of the Federal Highways Visi-Data scope. These features were also identified with the four letter park alpha code, the four digit Federal Highways route number, and a unique four digit feature number.

In many cases, the Federal Highways Visi-Data was expanded for the purposes of this cultural landscape report. For example, "guardwalls" recorded in the Visi-Data were further defined as "guardwalls, guard/retaining walls, retaining walls, and parking management stones" with additional details on the types and dimensions of stones used, methods of construction, and the types of materials.

Culverts were by far the most common type of feature inventoried along the historic motor road system. Other features included guardwalls, guard/retaining walls, retaining walls, embankments, parking management stones, waterways, pullouts, signs related to interpretation and trails, and gates. Viewsheds along the motor roads were also documented. Views at least 200 feet wide with a horizon line present were designated as "panoramic." Views through trees to a distance on either side of motor road and without a horizon line present were recorded as "framed/filtered."

In driving the motor road segments, features identified on the Visi-Data database, as well as new features identified by the Olmsted Center staff, were described and assessed using pen-and-paper field forms. Each feature was also photographed, often with more than one photo. In most cases, photographs were composed to point generally down the motor road in the direction of travel. This was done to be consistent with the Visi-Data and to avoid the requirement for time consuming note-taking as to the details of camera orientation and relationship to the motor road.

All of the information from the paper field forms was entered into a Microsoft Access database created especially for this cultural landscape report. The Access database was a modification of a database used in the inventory of motor roads at Mount Rainier National Park.

DYNAMIC LINEAR REFERENCING

With the expertise of Mr. Daniel W. Van Gilder, Engineering Software Support Team Leader at the Federal Highway Administration, the information in the Access database was transformed into unique shapefiles by utilizing a dynamic linear referencing method in ArcGIS version 9.0. This personal geodatabase data was then imported into the park's Geographic Information System. The Existing Conditions maps located in Appendix B of this report are a product of these shapefiles and the park's existing Geographic Information System data.

ACCESS DATABASE TABLES

The Access database is essentially a spreadsheet of all of the information collected in the field. The information in this database can be queried in a variety of ways, such as by the Federal Highways Route number, or by Landscape Feature, etc. Other queries can be created to facilitate particular management and maintenance tasks. As this database is a modification of the Mount Rainier project, not all database fields are used. The database fields are described from left to right as they as appear in the Access table.

Most, but not all, of the columns in the database are shown on the printed tables that follow. The data has been queried by Federal Highways Route number and by the Mile Point/Feature ID number so it can be used to easily locate features on the Existing Conditions maps in Appendix B.

Access Database Fields for the Historic Motor Road System	
Name of Column	**Description**
ID	Automatically created in Access for each data entry
FHWA Route	The number assigned by Federal Highways for each route. The number consists of four letter park alpha code and four digit route number. ACAD0010: Paradise Hill Road ACAD0012: Day Mountain Road Extension, Jordan Pond/Eagle Lake Road ACAD0013: Cadillac Mountain Road ACAD0014: Stanley Brook Road ACAD0016: Access Road (Sieur de Monts Entrance Road) ACAD0100: Access Road (West Street Extension) ACAD0101: Access Road (Access to State Route 233) ACAD 0222: Access Road (Schooner Head Overlook Access Road) ACAD 0249: Schoodic Point Road ACAD 0300: Kebo Mountain Road, Kebo Mountain Road Extension, Bureau of Public Roads Project 4A2, Champlain Mountain Road, Ocean Drive (consists of three segments), Otter Cliffs Road, Otter Cove Causeway and Blackwoods Road, Day Mountain Road ACAD 0301: Schoodic Loop Road
Mile Point/Feature ID	Unique identification number assigned based on the decimal mileage distance from a predetermined beginning point of each FHWA route. This number is ALWAYS the same as the MP Begin number.
MP Matches RIP Data	Checked yes if MP (mileage point) recorded in the field for the feature is the same as the existing RIP data. The box is not checked for new feature s recorded by the OCLP team.
MP Begin	Numerical beginning point of the feature. This number is ALWAYS the same as the Mile Point/Feature ID number.
MP End	Numerical ending point of the feature. Linear features such as a wall or vista always have an endpoint, while point features such as a culvert, gate , or sign do not.
Length	Length of feature in feet.
Pavement Width at Feature	Pavement widths were recorded at some, bur not all, features.
Height	Height of feature in feet.
Depth	Depth of feature in feet.

Access Database Fields for the Historic Motor Road System

Name of Column	Description
Left Offset Right Offset	These fields indicate the location of the feature in relation to the road centerline , based on the direction of travel. Point features such as culverts or gates were considered as located along the "center" of the road. This number does not represent the actual distance from the road centerline; rather, the number assigned was chosen to graphically represent the feature on a printed out map. number assigned was chosen to graphically represent the feature on a printed out map.
Landscape Characteristic	Landscape characteristics are categories under which features are grouped. For this cultural landscape report, they include buildings and structures, circulation, small-scale features, views and vistas, and land use.

Name of Column	Feature	Type	Materials
Feature Type Materials	**Buildings and structures**		
	Bridge	Arch	concrete
			mortared stone, concrete
		Box	concrete
	Causeway	x	x
	Guardwall	Rock barrier	angular ledge stones
			rectilinear quarried blocks
			rounded stones
		Mortared stone	stone, mortar
		Earthen berm	grass
	Guardwall/retaining wall (stones extend above grade)	Dry laid stone	coursed stones
			uncoursed stones
		Mortared stone	coursed stones
			uncoursed stones
		Mortared/dry laid stone	coursed stones
			uncoursed stones
	Retaining wall (batter < 45 deg)	Dry laid stone	coursed stones
			uncoursed stones
		Mortared stone	coursed stones
			uncoursed stones
	Feature	**Type**	**Materials**
	Embankment (batter > 45 deg)	Rip rap	stones/boulders
	Parking management stones	Rock barrier	rounded stones
			angular ledge stones
	Culvert	RCP	concrete
		CMP	metal
		Box culvert	stones
			concrete
		PVC	plastic
		Clay pipe	clay
	Free-standing wall	Stone wall	stones
	Waterway	Paved	bituminous asphalt
		Mortared rubble	stone, concrete
		Loose rubble	stones
	Other	Shoulder	rubble

Access Database Fields for the Historic Motor Road System			
Name of Column	**Description**		
	Circulation		
	Pullout	Paved (curb, no curb)	asphalt
		Unpaved	gravel
	Median	Paved (curb, no curb)	asphalt
		Mortared rubble	stones
		Landscaped (curb, no curb)	grass
			vegetation
	Walkway	Paved (curb, no curb)	asphalt
			concrete
			cobbles
		Unpaved (curb, no curb)	gravel
	Steps	Tooled stone	stones
		Concrete	concrete
		Wood	wood
	Junction	Fire road/trail	gravel
		Paved walkway	X
	Other	Shoulder	Mortared rubble
	Small-scale features		
	Sign	Trailhead	X
		Informational	X
		Wayside	X
		Park	Metal, metal with wood, wood with wood
	Monument	Boulder	stones
	Gate	Metal	galvanized iron pipe
		Rustic	rough sawn lumber
		Cable	cable
	Bench	Cut stones	stones
	Feature	Type	Materials
	Fence	Split rail	wood
		Post and rail	wood
	Other	Well	X
		Utility pipe	X
		Utility line	X
	Views and vistas		
	Panoramic view	X	X
	Framed/filtered view	X	X
	Land use		
	(Name of route)	Historic road segment	X
Inlet Type Outlet Type	Details regarding the design and construction of the culvert inlet and outlet structures: <u>Inlets types</u>: Pipe only; Loose stones; Headwall: (dry laid stone, mortared stone); Drop-inlet: (dry laid stone, concrete); Drop-inlet with grate: (brick, concrete); Curb type: (brick, concrete); Box: (dry laid stone, concrete) <u>Outlet types</u>: Pipe only; Loose stones; Headwall: (dry laid stone, mortared stone); Box: (dry laid stone, concrete); * within Guardwall/retaining wall, Retaining wall, or Embankment.		

Access Database Fields for the Historic Motor Road System	
Name of Column	**Description**
Diameter	The diameter of culvert pipes in inches.
Condition	Features in fair "F" or poor "P" condition are noted in this column. Conditions are described in more detail in the Notes column.
Year Constructed Circa Source	These fields were not completed for this project.
NR Contributing	This field was not completed for this project. Instead, this column was used to flag the more interesting and unusual features on the historic motor road system.
Notes	This column includes additional details for each feature not captured in the other fields.
Digital Photo(s)	Photographs are named by FHWA Route number and Mile Point/Feature ID number. Most features include one or more digital photographs; numbers in parentheses indicate if there is more than one photograph.
Entered by (Initials) Entered Date	Initials of persons who entered information on the field forms into the database is as follows: HEF (Eliot Foulds), JTK (Jeff Killion), EAM (Erica Max)

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
1201	ACAD-0010	0.001	☑	0.001	3.034	0	x	x	0	0	Land use	Paradise Hill Road	Historic road segment	x	x	x	0		☐	Paradise Hill Road; completed 1941, bridges completed 1952	none
1046	ACAD-0010	0.067	☐	0.067	0	0	x	x	0	30	Small-scale features	Sign	Park	metal - no frame	x	x	0		☐	Park sign on R; metal only	none
334	ACAD-0010	0.075	☑	0.075	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	drop-inlet with grate	loose stones	18		☐	Culvert; 27" square grate on concrete	Acad0010_0.075_In-Out
335	ACAD-0010	0.077	☐	0.077	0.097	107	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 7' wide at max	Acad0010_0.077
337	ACAD-0010	0.113	☑	0.113	0.127	80	1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 8'-10' gaps	Acad0010_0.113
336	ACAD-0010	0.128	☑	0.128	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0010_0.128_In-Out
338	ACAD-0010	0.133	☐	0.133	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Metal gates; 24' span	Acad0010_0.133
340	ACAD-0010	0.156	☑	0.156	0.164	42	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullouton R; 8' wide at max; located 30' before Culvert 0.170	Acad0010_0.156
339	ACAD-0010	0.17	☑	0.17	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0010_0.170_In-Out
341	ACAD-0010	0.208	☑	0.208	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0010_0.208_In-Out
343	ACAD-0010	0.267	☐	0.267	0.318	270	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 9-10' gaps; 14' from CL	Acad0010_0.267
342	ACAD-0010	0.29	☑	0.29	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete; outlet loose stones	Acad0010_0.290_In-Out
345	ACAD-0010	0.294	☐	0.294	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	24		☐	Culvert; long lintel stone spans inlet headwall	Acad0010_0.294_In-Out
347	ACAD-0010	0.302	☐	0.302	0.324	116	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 7' wide max	Acad0010_0.302
344	ACAD-0010	0.327	☑	0.327	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert;	Acad0010_0.327_In-Out
348	ACAD-0010	0.328	☐	0.328	0.359	165	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.328
349	ACAD-0010	0.36	☐	0.36	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete, drop-	loose stones	18		☐	Culvert; inlet (1) curb type concrete; inlet (2) drop-inlet with grate - spans grade separation	Acad0010_0.360_In(2)-Out
350	ACAD-0010	0.361	☐	0.361	0.365	21	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.361
351	ACAD-0010	0.38	☐	0.38	0.777	2096	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 4' gaps	Acad0010_0.380
352	ACAD-0010	0.391	☐	0.391	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	F	☐	Culvert; two inlets span grade separation; outlet pipe - partially clogged	Acad0010_0.391_In(2)-Out
353	ACAD-0010	0.392	☑	0.392	0.43	200	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.392
354	ACAD-0010	0.432	☑	0.432	0.574	749	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 4' gaps	Acad0010_0.432
355	ACAD-0010	0.435	☑	0.435	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert;	Acad0010_0.435_In-Out
356	ACAD-0010	0.485	☑	0.485	0.507	116	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.485
357	ACAD-0010	0.486	☑	0.486	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; outlet pipe in median	Acad0010_0.486_In-Out
358	ACAD-0010	0.524	☑	0.524	0.556	168	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.524
359	ACAD-0010	0.53	☑	0.53	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	Not found	0		☐	Culvert;	Acad0010_0.530_In
364	ACAD-0010	0.573	☑	0.573	0.616	227	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; concrete curbs; 6' wide	Acad0010_0.573(2)
361	ACAD-0010	0.574	☑	0.574	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert;	Acad0010_0.574_In-Out
360	ACAD-0010	0.575	☑	0.575	0.616	216	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; concrete curbs; 1 HC, 10 striped spaces	Acad0010_0.575
362	ACAD-0010	0.576	☐	0.576	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert, long lintel stone spans inlet headwall; outlet pipe - rebar visible	Acad0010_0.576_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
363	ACAD-0010	0.577	☐	0.577	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	Not found	0		☐	Culvert; 24x36" rectangular grate on concrete	Acad0010_0.577_In
459	ACAD-0010	0.578	☐	0.578	0.614	190	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☑	Panoramic view on L; from upper portion of grade separator	Acad0010_0.578(4)
371	ACAD-0010	0.586	☐	0.586	0.679	495	x	x	150	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb	Acad0010_0.586
365	ACAD-0010	0.596	☑	0.596	0	0	x	x	30	0	Small-scale features	Sign	Wayside	stone, metal, plastic	x	x	0		☐	Wayside signs (2) on L; at Pullout 0.575; mortared stone base; also garbage can	Acad0010_.0596
460	ACAD-0010	0.614	☐	0.614	0.666	274	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; on grade separator; after Panoramic view 0.578	none
370	ACAD-0010	0.616	☐	0.616	0.649	180	30+	x	150	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0010_0.616
366	ACAD-0010	0.62	☑	0.62	0.651	163	1	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 2-3' gaps; 13' from CL	Acad0010_0.620
369	ACAD-0010	0.625	☐	0.625	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; outlet within Retaining wall 0.616	Acad0010_0.625_In-Out
367	ACAD-0010	0.626	☑	0.626	0.639	68	1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 2-3' gaps; 13' ofrom CL	Acad0010_0.626
368	ACAD-0010	0.627	☑	0.627	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert; recent rehab at outlet	Acad0010_0.627_In-Out
372	ACAD-0010	0.643	☑	0.643	0.685	221	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.643
374	ACAD-0010	0.67	☐	0.67	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; long lintel stone spans inlet headwall; inlet pipe - rebar visible; outlet pipe - half clogged	Acad0010_0.670_In-Out
373	ACAD-0010	0.686	☑	0.686	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	mortared stone headwall	18	P	☐	Culvert; long lintel stone spans outlet headwall; outlet headwall - leaning	Acad0010_0.686_In-Out
375	ACAD-0010	0.688	☐	0.688	0.719	533	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0010_0.688
376	ACAD-0010	0.727	☑	0.727	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall; drop-	loose stones	18	F	☐	Culvert; inlet (1) mortared stone headwall; inlet (2) drop-inlet with 18" square grate; outlet pipe - clogged	Acad0010_0.727_In(2)-Out
377	ACAD-0010	0.769	☑	0.769	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18	F	☐	Culvert; outlet pipe - clogged	Acad0010_0.769_In-Out
378	ACAD-0010	0.774	☐	0.774	0.818	232	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 13' wide at max	Acad0010_0.774
379	ACAD-0010	0.788	☐	0.788	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; located 105' after Culvert 0.769	none
380	ACAD-0010	0.819	☑	0.819	0.879	316	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3' gaps	Acad0010_0.819
381	ACAD-0010	0.828	☑	0.828	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; long lintel stone spans inlet headwall; inlet pipe - rebar visible	Acad0010_0.828_In-Out
382	ACAD-0010	0.866	☑	0.866	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; long lintel stone spans inlet headwall; recent rehab at inlet; outlet structure - tree encroaching	Acad0010_0.866_In-Out
384	ACAD-0010	0.869	☐	0.869	0.886	90	x	x	0	50	Buildings/structures	Free-standing wall	Stone wall	stones	x	x	0		☐	Stone wall on R; likely pre-dates road	Acad0010_0.869(2)
383	ACAD-0010	0.951	☑	0.951	1.068	617	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps	Acad0010_0.951
385	ACAD-0010	0.953	☐	0.953	1.067	601	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 12' wide at max	Acad0010_0.953
461	ACAD-0010	0.969	☐	0.969	1.127	834	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L; at pullout prior to Bridge 1.070	Acad0010_0.969(2)
386	ACAD-0010	0.983	☐	0.983	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 24" square grate on concrete	Acad0010_0.983_In-Out
387	ACAD-0010	1.07	☑	1.07	1.145	396	x	x	0	0	Buildings/structures	Bridge	Arch (3)	mortared stone, concrete	x	x	0		☑	Bridge; no shoulders; guardwalls 30" high; walkways 30" wide; "Duck Brook Bridge"	Acad0010_1.070(4)
462	ACAD-0010	1.128	☐	1.128	1.196	359	x	x	100	0	Views/vistas	Blocked	x	x	x	x	0		☐	Blocked view on L; at pullout after Bridge 1.070	Acad0010_1.128
388	ACAD-0010	1.146	☐	1.146	1.196	265	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 29' wide at max	Acad0010_1.146
389	ACAD-0010	1.147	☐	1.147	1.189	223	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3-5' gaps	Acad0010_1.147
390	ACAD-0010	1.148	☐	1.148	1.17	220	1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 2-3' gaps	Acad0010_1.148

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left (	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
391	ACAD-0010	1.152	☐	1.152	1.179	145	x	x	15	0	Circulation	Median	Mortared rubble	stones	x	x	0		☐	Mortared rubble median on L; 5' wide at max	Acad0010_1.152
392	ACAD-0010	1.24	☑	1.24	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert;	Acad0010_1.240_In-Out
393	ACAD-0010	1.262	☑	1.262	1.408	770	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 12' from CL	Acad0010_1.262
395	ACAD-0010	1.265	☐	1.265	1.399	710	30+	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L; impressive structure on curve	Acad0010_1.265
394	ACAD-0010	1.271	☐	1.271	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; outlet within Retaining wall 1.265	Acad0010_1.271_In-Out
463	ACAD-0010	1.28	☐	1.28	1.337	300	x	x	100	0	Views/vistas	Framed/filtere d	x	x	x	x	0		☐	Framed/filtered view on L;	none
396	ACAD-0010	1.3	☐	1.3	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only*	18		☐	Culvert; 30" square grate on concrete; outlet within Retaining wall 1.265	Acad0010_1.300_In
397	ACAD-0010	1.344	☐	1.344	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only*	18		☐	Culvert; 30" square grate on concrete; outlet within Retaining wall 1.265	Acad0010_1.344_In
399	ACAD-0010	1.415	☐	1.415	1.424	47	x	x	0	50	Buildings/structures	Free-standing wall	Stone wall	stones	x	x	0		☐	Stone wall on R; 47' long; part of old road bed	Acad0010_1.415(2)
400	ACAD-0010	1.447	☐	1.447	1.5	279	1.5	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 5-9' gaps	Acad0010_1.447
402	ACAD-0010	1.453	☐	1.453	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0010_1.453_In-Out
401	ACAD-0010	1.455	☐	1.455	1.477	116	1.5	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 5-9' gaps	Acad0010_1.455
403	ACAD-0010	1.512	☑	1.512	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0010_1.512_In-Out
404	ACAD-0010	1.545	☑	1.545	1.67	660	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps	Acad0010_1.545
405	ACAD-0010	1.565	☑	1.565	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0010_1.565_In-Out
464	ACAD-0010	1.607	☐	1.607	1.652	237	x	x	100	0	Views/vistas	Framed/filtere d	x	x	x	x	0		☐	Framed/filtered view L; at curve at retaining wall	none
406	ACAD-0010	1.611	☐	1.611	1.656	237	20-25	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0010_1.611
424	ACAD-0010	1.717	☐	1.717	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	Not found	18		☐	Culvert; 30" square grate on concrete	Acad0010_1.717_In
407	ACAD-0010	1.718	☑	1.718	1.742	126	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps	Acad0010_1.718
408	ACAD-0010	1.733	☑	1.733	1.742	47	1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 1-2' gaps	Acad0010_1.733
409	ACAD-0010	1.743	☑	1.743	1.762	100	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☐	Bridge, grass shoulders; parapet walls 30" high; New Eagle Lake Bridge"	Acad0010_1.743(2)
410	ACAD-0010	1.768	☑	1.768	1.783	79	1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 1-2' gaps	Acad0010_1.768
411	ACAD-0010	1.769	☑	1.769	1.793	126	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0010_1.769
414	ACAD-0010	1.814	☐	1.814	1.849	184	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 6-9' gaps	Acad0010_1.814
412	ACAD-0010	1.816	☑	1.816	1.849	174	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; concrete curbs; 8' wide at max	Acad0010_1.816
413	ACAD-0010	1.819	☑	1.819	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 24x36" rectangular grate on concrete	Acad0010_1.819_In-Out
415	ACAD-0010	1.833	☐	1.833	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert;	Acad0010_1.833_In-Out
416	ACAD-0010	1.834	☐	1.834	1.879	237	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R; includes an underdrain	Acad0010_1.834(2)
417	ACAD-0010	1.868	☑	1.868	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	Not found	0		☐	Culvert; 24x36" rectangular grate on concrete	Acad0010_1.868_In
419	ACAD-0010	1.869	☐	1.869	1.883	74	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0010_1.869
418	ACAD-0010	1.871	☑	1.871	1.893	116	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; concrete curbs, 4' wide at max	Acad0010_1.871

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420	ACAD-0010	1.93	☑	1.93	2.486	2935	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps	Acad0010_1.930
421	ACAD-0010	1.939	☑	1.939	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0010_1.939_In-Out
422	ACAD-0010	1.972	☑	1.972	2.022	264	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 10' wide at max; bounded by Guardwall 1.930	Acad0010_1.972
465	ACAD-0010	1.975	☐	1.975	2.079	549	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; at pullout	Acad0010_1.975
423	ACAD-0010	1.979	☐	1.979	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0010_1.979_In-Out
425	ACAD-0010	2.018	☐	2.018	2.118	528	x	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0010_2.018
426	ACAD-0010	2.147	☐	2.147	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18	F	☐	Culvert; 30" square grate on concrete; Inlet pipe - partially clogged	Acad0010_2.147_In-Out
428	ACAD-0010	2.239	☐	2.239	2.257	90	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; ends at Culvert 2.256	Acad0010_2.239
427	ACAD-0010	2.256	☑	2.256	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0010_2.256_In-Out
430	ACAD-0010	2.266	☐	2.266	2.338	380	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R;	Acad0010_2.266
429	ACAD-0010	2.294	☑	2.294	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall; outlet likely within Embankment 2.266	Acad0010_2.294_In
431	ACAD-0010	2.33	☑	2.33	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; long lintel stone spans inlet headwall; outlet within Embankment 2.266	Acad0010_2.330_In-Out
432	ACAD-0010	2.34	☑	2.34	2.394	345	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 25' wide at max; bounded by Guardwall 1.930; interp sign on mortared base	Acad0010_2.340
433	ACAD-0010	2.353	☐	2.353	2.393	212	x	x	15	0	Circulation	Median	Mortared rubble	stones	x	x	0		☐	Mortared rubble median on L; 5' wide	Acad0010_2.353
466	ACAD-0010	2.359	☐	2.359	2.398	206	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L; at pullout; wayside sign talks of fire	Acad0010_2.359(4)
435	ACAD-0010	2.437	☑	2.437	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	24	P	☐	Culvert; long lintel stone spans inlet headwall; inlet structure - tree encroaching	Acad0010_2.437_In-Out
436	ACAD-0010	2.522	☐	2.522	2.565	227	1.5-2	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 4-5' gaps; straddles intersection 2.521, 2.565	Acad0010_2.522
467	ACAD-0010	2.527	☐	2.527	2.669	749	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; at 233 intersection and bridge	Acad0010_2.527(2)
437	ACAD-0010	2.587	☐	2.587	2.626	205	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide at max	Acad0010_2.587
438	ACAD-0010	2.615	☐	2.615	2.63	79	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 8' wide at max	Acad0010_2.615
440	ACAD-0010	2.637	☐	2.637	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; spans 32'	Acad0010_2.637
442	ACAD-0010	2.641	☐	2.641	2.645	23	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 5-6' gaps	Acad0010_2.641
441	ACAD-0010	2.642	☐	2.642	2.646	23	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 5-6' gaps	Acad0010_2.642
468	ACAD-0010	2.646	☐	2.646	2.667	110	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; at 233 bridge	Acad0010_2.646(2)
439	ACAD-0010	2.647	☑	2.647	2.667	105	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; 105' long; parapet walls 30" high; "Route 233 Bridge"	Acad0010_2.647(2)
443	ACAD-0010	2.668	☐	2.668	2.68	64	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 4-6' gaps	Acad0010_2.668
444	ACAD-0010	2.669	☐	2.669	2.673	22	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 4-6' gaps	Acad0010_2.669
449	ACAD-0010	2.81	☐	2.81	2.826	87	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 3-4' gaps; at fire road and under power lines	Acad0010_2.810
450	ACAD-0010	2.811	☐	2.811	2.826	80	1-2	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 3-6' gaps; at fire road and under power lines	Acad0010_2.811
446	ACAD-0010	2.824	☐	2.824	2.86	190	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 14' wide at max	Acad0010_2.824
447	ACAD-0010	2.837	☑	2.837	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	dry laid stone headwall	18		☐	Culvert; 30" square grate on concrete; long lintel stone spans outlet headwall; 2 large stones at outlet to keep cars on Pullout L 2.838	Acad0010_2.837_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
448	ACAD-0010	2.838	☐	2.838	2.85	67	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 7' wide at max	Acad0010_2.838
445	ACAD-0010	2.877	☑	2.877	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	dry laid stone headwall	18		☐	Culvert; 30" square grate on concrete	Acad0010_2.877_In-Out
452	ACAD-0010	2.883	☐	2.883	2.902	100	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 100' long; 9' wide at max	Acad0010_2.883
454	ACAD-0010	2.974	☐	2.974	3.016	221	1-1.5	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 4-5' gaps	Acad0010_2.974
453	ACAD-0010	2.975	☐	2.975	3.035	316	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 316' long; 9' wide at max	Acad0010_2.975
455	ACAD-0010	2.985	☐	2.985	2.996	58	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 8-9' wide at max	Acad0010_2.985
456	ACAD-0010	3.033	☑	3.033	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; gets some runoff from Route 300	Acad0010_3.033_In-Out
458	ACAD-0010	3.046	☑	3.046	3.053	36	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; slope-faced granite curbs; forms triangle at Route 300	Acad0010_3.046
1195	ACAD-0012	0.001	☐	0.001	0.474	0	x	x	0	0	Land use	Day Mountain Road	Historic road segment	x	x	x	0		☐	Day Mountain Road Extension; realigned 1951	none
168	ACAD-0012	0.152	☑	0.152	0	0	x	x	0	0	Buildings/structures	Culvert	PVC	plastic	Not found	loose stones	4		☐	Culvert;	Acad0012_0.152_Out
169	ACAD-0012	0.21	☑	0.21	0	0	x	x	0	0	Buildings/structures	Culvert	RCP (2)	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert; 2 pipes	Acad0012_0.210_In-Out
170	ACAD-0012	0.459	☐	0.459	0.54	427	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 3-6' gaps; gaps allow access to gatehouse	Acad0012_0.459
1209	ACAD-0012	0.476	☐	0.476	5.156	0	x	x	0	0	Land use	Jordan Pond/Eagle	Historic road segment	x	x	x	0		☐	Jordan Pond/Eagle Lake Road; completed 1927	none
171	ACAD-0012	0.488	☐	0.488	0.501	100	1.5-2	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 3-6' gaps	Acad0012_0.488
174	ACAD-0012	0.675	☐	0.675	0.705	158	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_0.675
172	ACAD-0012	0.7	☐	0.7	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; spans 27'	Acad0012_0.700
173	ACAD-0012	0.701	☑	0.701	0.787	454	1-1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-4' gaps	Acad0012_0.701
175	ACAD-0012	0.758	☑	0.758	0.818	316	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_0.758
176	ACAD-0012	0.813	☑	0.813	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_0.813_In-Out
177	ACAD-0012	0.855	☑	0.855	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert;	Acad0012_0.855_In-Out
178	ACAD-0012	0.903	☑	0.903	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	24		☐	Culvert; 3 coping stones at inlet/outlet	Acad0012_0.903_In-Out
179	ACAD-0012	0.938	☑	0.938	1.633	3669	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_0.938(2)
180	ACAD-0012	0.946	☑	0.946	0.978	168	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 18' wide at max	Acad0012_0.946
181	ACAD-0012	0.948	☑	0.948	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert; 3 coping stones mark inlet	Acad0012_0.948_In-Out
183	ACAD-0012	0.949	☐	0.949	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; wood post; "Pond trail, Permetic Mtn."	none
182	ACAD-0012	0.982	☑	0.982	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; 3 coping stones mark inlet; inlet structure - failing	Acad0012_0.982_In-Out
184	ACAD-0012	1.039	☑	1.039	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_1.039_In-Out
185	ACAD-0012	1.076	☑	1.076	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_1.076_In-Out
186	ACAD-0012	1.077	☑	1.077	1.118	216	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R,	Acad0012_1.077
187	ACAD-0012	1.118	☑	1.118	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_1.118_In-Out
189	ACAD-0012	1.119	☑	1.119	1.157	200	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R,	Acad0012_1.119

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
188	ACAD-0012	1.157	☑	1.157	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_1.157_In-Out
190	ACAD-0012	1.226	☑	1.226	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	24		☐	Culvert; 3 coping stones mark inlet; outlet pipe sits unusually high above stones	Acad0012_1.226_In-Out
191	ACAD-0012	1.227	☑	1.227	1.283	295	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.227
192	ACAD-0012	1.285	☑	1.285	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_1.285_In-Out
193	ACAD-0012	1.286	☑	1.286	1.306	105	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.286
194	ACAD-0012	1.334	☑	1.334	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert. 3 coping stones mark inlet	Acad0012_1.334_In-Out
195	ACAD-0012	1.335	☑	1.335	1.363	150	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.335
196	ACAD-0012	1.437	☑	1.437	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_1.437_In-Out
199	ACAD-0012	1.438	☐	1.438	1.624	982	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L;	Acad0012_1.438(2)
197	ACAD-0012	1.44	☐	1.44	1.491	269	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.440
198	ACAD-0012	1.492	☑	1.492	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	Not found	0		☐	Culvert; 3 coping stones mark inlet; outlet likely within Embankment 1.438	Acad0012_1.492_In
200	ACAD-0012	1.494	☐	1.494	1.551	300	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.494
201	ACAD-0012	1.552	☑	1.552	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only*	18		☐	Culvert; 3 coping stones mark inlet; outlet within Embankment 1.438	Acad0012_1.552_In-Out
207	ACAD-0012	1.553	☐	1.553	1.581	150	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.553
202	ACAD-0012	1.625	☑	1.625	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert.	Acad0012_1.625_In-Out
203	ACAD-0012	1.634	☐	1.634	1.738	549	1.5	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	uncoursed stones	x	x	0		☐	Guardwall/retaining wall on L; mortared guardwall; dry laid retaining wall; 2' wide	Acad0012_1.634
204	ACAD-0012	1.733	☑	1.733	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	Not found	0		☐	Culvert.	Acad0012_1.733_In
208	ACAD-0012	1.734	☐	1.734	1.777	227	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.734
205	ACAD-0012	1.739	☐	1.739	2.054	1689	3-4	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_1.739
206	ACAD-0012	1.794	☑	1.794	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert;	Acad0012_1.794_In
209	ACAD-0012	1.795	☐	1.795	1.871	401	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_1.795
210	ACAD-0012	1.872	☑	1.872	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; inlet structure - failing	Acad0012_1.872_In-Out
211	ACAD-0012	1.879	☑	1.879	1.892	69	5	x	0	50	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on R; 5' high max	Acad0012_1.879
212	ACAD-0012	1.926	☑	1.926	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert;	Acad0012_1.926_In-Out
213	ACAD-0012	1.975	☐	1.975	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert.	Acad0012_1.975_In
214	ACAD-0012	1.977	☑	1.977	2.002	132	4.5	x	0	50	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on R; weep holes	Acad0012_1.977
215	ACAD-0012	1.985	☑	1.985	2.01	132	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 20' wide at max	Acad0012_1.985
216	ACAD-0012	2	☐	2	0	0	x	x	30	0	Small-scale features	Sign	Wayside	wood, plastic	x	x	0		☐	Wayside signs on L; to trailhead and steps	Acad0012_2.000(2)
217	ACAD-0012	2.012	☑	2.012	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.012_In-Out
218	ACAD-0012	2.024	☑	2.024	2.065	216	6	x	0	50	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on R; 6' high max; weep holes	Acad0012_2.024
219	ACAD-0012	2.045	☑	2.045	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.045_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
220	ACAD-0012	2.093	☑	2.093	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet and outlet	Acad0012_2.093_In-Out
221	ACAD-0012	2.126	☑	2.126	2.3	918	2-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_2.126
222	ACAD-0012	2.142	☑	2.142	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.126_In-Out
223	ACAD-0012	2.171	☑	2.171	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	F	☐	Culvert; 3 coping stones mark inlet; outlet pipe - partially clogged	Acad0012_2.171_In-Out
224	ACAD-0012	2.176	☐	2.176	2.215	205	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 47' wide; 23 striped spaces; guardwall wraps around pullout; "Bubble Rock"	Acad0012_2.176
225	ACAD-0012	2.179	☑	2.179	2.212	174	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; sawn-top granite curbs; 9' wide	Acad0012_2.179
226	ACAD-0012	2.196	☐	2.196	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Bubble Trail"	Acad0012_2.196
227	ACAD-0012	2.211	☑	2.211	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	Not found	18		☐	Culvert; 3 coping stones mark inlet; culvert passes under parking lot	Acad0012_2.211_In
228	ACAD-0012	2.252	☑	2.252	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	24		☐	Culvert; 3 coping stones mark inlet; perennial stream	Acad0012_2.252_In-Out
229	ACAD-0012	2.268	☑	2.268	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; 1 coping stone marks inlet; inlet structure - coping stones damaged; perennial stream	Acad0012_2.268_In-Out
230	ACAD-0012	2.305	☑	2.305	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	24		☐	Culvert; 5 coping stones mark inlet	Acad0012_2.305_In-Out
231	ACAD-0012	2.314	☑	2.314	2.75	2302	2-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_2.314
232	ACAD-0012	2.34	☑	2.34	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	36		☑	Culvert; 4 enormous coping stones mark inlet	Acad0012_2.340_In-Out
233	ACAD-0012	2.403	☑	2.403	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.403_In-Out
234	ACAD-0012	2.453	☑	2.453	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	loose stones	24		☐	Culvert; 4 coping stones mark inlet	Acad0012_2.453_In-Out
235	ACAD-0012	2.463	☑	2.463	2.542	417	4	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☑	Retaining wall on R; 4' high max, 8' from edge of pavement; very handsome	Acad0012_2.463
236	ACAD-0012	2.503	☑	2.503	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert; 4 coping stones mark inlet	Acad0012_2.503_In-Out
237	ACAD-0012	2.543	☑	2.543	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	24		☐	Culvert; 3 coping stones mark inlet; ditch wet	Acad0012_2.543_In
238	ACAD-0012	2.598	☑	2.598	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	loose stones	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.598_In-Out
239	ACAD-0012	2.636	☑	2.636	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.636_In-Out
240	ACAD-0012	2.675	☑	2.675	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.675_In-Out
241	ACAD-0012	2.716	☑	2.716	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	loose stones	18		☐	Culvert; 4 coping stones mark inlet	Acad0012_2.716_In-Out
242	ACAD-0012	2.746	☑	2.746	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert; 4 coping stones mark inlet; interesting grade drop at outlet	Acad0012_2.746_In-Out
243	ACAD-0012	2.769	☐	2.769	3.255	2566	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 4-5' gaps	Acad0012_2.769
244	ACAD-0012	2.77	☑	2.77	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert;	Acad0012_2.770_In-Out
245	ACAD-0012	2.789	☑	2.789	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert; 4 coping stones mark inlet; underdrain at outlet; perennial stream	Acad0012_2.789_In-Out
246	ACAD-0012	2.842	☑	2.842	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; 3 coping stones mark inlet; outlet pipe - collapsed	Acad0012_2.842_In-Out
247	ACAD-0012	2.882	☑	2.882	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.882_In-Out
611	ACAD-0012	2.926	☑	2.926	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_2.926_In-Out
248	ACAD-0012	2.984	☑	2.984	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18	P	☐	Culvert; 3 coping stones mark inlet; outlet structure - tree encroaching	Acad0012_2.984_In-Out
249	ACAD-0012	2.986	☐	2.986	3.03	232	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-6' gaps	Acad0012_2.986

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left C	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
250	ACAD-0012	2.987	☐	2.987	0	0	x	x	25	0	Circulation	Junction	Fire road/trail	gravel	x	x	0		☐	Fire road/trail on L	Acad0012_2.987
252	ACAD-0012	3.032	☐	3.032	3.058	137	2-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 4-5' gaps	Acad0012_3.032
251	ACAD-0012	3.033	☑	3.033	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	loose stones	18		☐	Culvert;	Acad0012_3.033_In-Out
253	ACAD-0012	3.073	☑	3.073	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	dry laid stone headwall	18	P	☐	Culvert; 3 coping stones mark inlet; inlet pipe - rebar visible	Acad0012_3.073_In-Out
254	ACAD-0012	3.094	☑	3.094	3.234	739	2-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-4' gaps	Acad0012_3.094
255	ACAD-0012	3.126	☐	3.126	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18		☐	Culvert;	Acad0012_3.126_In-Out
256	ACAD-0012	3.164	☐	3.164	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18	F	☐	Culvert; outlet pipe - clogged	Acad0012_3.164_In-Out
257	ACAD-0012	3.225	☐	3.225	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert; at intersection to "Bubble Pond Parking Lot"	Acad0012_3.225_In-Out
259	ACAD-0012	3.244	☑	3.244	3.257	68	2-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 4-5' gaps	Acad0012_3.244
261	ACAD-0012	3.258	☐	3.258	3.279	111	2-2.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 4-5' gaps	Acad0012_3.258
260	ACAD-0012	3.26	☑	3.26	3.33	369	2-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 4-5' gaps	Acad0012_3.260
262	ACAD-0012	3.261	☐	3.261	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwalls	mortared stone headwalls	60		☑	Culvert; impressive and massive structure	Acad0012_3.261_In-Out(2)
264	ACAD-0012	3.298	☑	3.298	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert;	Acad0012_3.298_In-Out
265	ACAD-0012	3.299	☐	3.299	3.332	174	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.299
263	ACAD-0012	3.322	☑	3.322	3.428	559	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_3.322
266	ACAD-0012	3.335	☑	3.335	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☑	Culvert; 3 coping stones mark inlet; 6" terrocotta underdrain below outlet	Acad0012_3.335_In-Out
267	ACAD-0012	3.336	☐	3.336	3.368	173	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.336
277	ACAD-0012	3.372	☑	3.372	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet; terra cotta underdrain at outlet	Acad0012_3.372_In-Out
278	ACAD-0012	3.373	☑	3.373	3.407	179	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.373
279	ACAD-0012	3.393	☑	3.393	3.424	163	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 4-5' gaps	Acad0012_3.393
280	ACAD-0012	3.431	☑	3.431	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	36		☑	Culvert; outlet very impressive; perennial stream	Acad0012_3.431_In-Out
281	ACAD-0012	3.432	☑	3.432	3.455	121	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.432
282	ACAD-0012	3.445	☑	3.445	4.292	4472	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps	Acad0012_3.445(2)
269	ACAD-0012	3.457	☑	3.457	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; 3 coping stones mark inlet; pipe failing - buckling pavement	Acad0012_3.457_In-Out
270	ACAD-0012	3.458	☐	3.458	3.491	174	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.458
271	ACAD-0012	3.492	☑	3.492	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_3.492_In-Out
272	ACAD-0012	3.493	☑	3.493	3.522	153	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.493
273	ACAD-0012	3.533	☑	3.533	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_3.533_In-Out
274	ACAD-0012	3.596	☑	3.596	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; 3 coping stones mark inlet; outlet pipe - splitting	Acad0012_3.596_In-Out
275	ACAD-0012	3.653	☑	3.653	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18		☐	Culvert; 3 coping stones mark inlet	Acad0012_3.653_In-Out
612	ACAD-0012	3.654	☐	3.654	3.725	374	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0012_3.654

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
283	ACAD-0012	3.726	✓	3.726	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18			Culvert; 3 coping stones mark inlet	Acad0012_3.726_In-Out
284	ACAD-0012	3.727		3.727	3.793	342	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0			Paved waterway on R;	Acad0012_3.727
285	ACAD-0012	3.796	✓	3.796	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P		Culvert; 3 coping stones mark inlet; outlet pipe - rebar visible	Acad0012_3.796_In-Out
286	ACAD-0012	3.859	✓	3.859	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18			Culvert; 3 coping stones mark inlet	Acad0012_3.859_In-Out
287	ACAD-0012	3.86		3.86	3.889	153	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0			Paved waterway on R;	Acad0012_3.860
288	ACAD-0012	3.88	✓	3.88	3.897	102	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0			Paved pullout on L; no curb; 20' wide at max; bounded by Guardwall 3.445	Acad0012_3.880
289	ACAD-0012	3.919	✓	3.919	3.976	300	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0			Guardwall on R, 4-5' gaps	Acad0012_3.919
290	ACAD-0012	3.92	✓	3.92	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	60	P	✓	Culvert; pipe failing - buckling pavement; unique curved outlet wall; perennial stream	Acad0012_3.920_In-Out(2)
291	ACAD-0012	3.942		3.942	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18			Culvert;	Acad0012_3.942_In-Out
292	ACAD-0012	3.958		3.958	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	48		✓	Culvert; unique curved inlet and outlet walls; perennial stream	Acad0012_3.958_In-Out
293	ACAD-0012	3.99	✓	3.99	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18	P		Culvert; 3 coping stones mark inlet; pipe failing - buckling pavement	Acad0012_3.990_In-Out
294	ACAD-0012	4.025	✓	4.025	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18	P		Culvert; 3 coping stones mark inlet; pipe failing - buckling pavement	Acad0012_4.025_In-Out
295	ACAD-0012	4.063	✓	4.063	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18			Culvert; 3 coping stones mark inlet	Acad0012_4.063_In-Out
296	ACAD-0012	4.1	✓	4.1	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P		Culvert; 3 coping stones mark inlet; outlet pipe - splitting; pipe failing - buckling pavement	Acad0012_4.100_In-Out
297	ACAD-0012	4.16	✓	4.16	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	24			Culvert; 3 coping stones mark inlet	Acad0012_4.160_In-Out
298	ACAD-0012	4.222	✓	4.222	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18			Culvert; 3 coping stones mark inlet	Acad0012_4.222_In-Out
299	ACAD-0012	4.223		4.223	4.278	290	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0			Paved waterway on R;	Acad0012_4.223
300	ACAD-0012	4.282	✓	4.282	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	loose stones	18	P		Culvert; 1 coping stone marks inlet; inlet structure - coping stone damaged	Acad0012_4.282_In-Out
301	ACAD-0012	4.283	✓	4.283	4.3	90	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0			Paved waterway on R;	Acad0012_4.283
302	ACAD-0012	4.293	✓	4.293	4.315	116	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0			Paved pullout on L; no curb; 12' wide at max	Acad0012_4.293
303	ACAD-0012	4.294		4.294	4.314	105	1.5	x	40	0	Buildings/structures	Guard/ret wall	Mortared stone	coursed stones	x	x	0			Guardwall/retaining wall on L; both mortared; 1.5' high road side; 11' high sea side; 18" wide	Acad0012_4.294(2)
304	ACAD-0012	4.316		4.316	4.413	512	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0			Guardwall on L; 3-4' gaps	Acad0012_4.316
306	ACAD-0012	4.333		4.333	4.358	132	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0			Paved waterway on R;	Acad0012_4.333
305	ACAD-0012	4.359	✓	4.359	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P		Culvert; 1 coping stone marks inlet; inlet structure - failing. pipe failing - buckling pavement	Acad0012_4.359_In-Out
308	ACAD-0012	4.414		4.414	4.728	1657	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0			Guardwall on L; 2-3' gaps	Acad0012_4.414
307	ACAD-0012	4.418	✓	4.418	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	24	P		Culvert; 1 coping stone marks inlet; inlet structure - failing	Acad0012_4.418_In-Out
309	ACAD-0012	4.474	✓	4.474	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	36	P		Culvert; inlet headwall - leaning; outlet headwall - failing	Acad0012_4.474_In-Out
310	ACAD-0012	4.551		4.551	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0			Gate; spans 31'	Acad0012_4.551
314	ACAD-0012	4.57		4.57	4.589	100	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0			Unpaved pullout on R; 6' wide at max	Acad0012_4.57
312	ACAD-0012	4.583		4.583	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24			Culvert;	Acad0012_4.583_In-Out
311	ACAD-0012	4.584	✓	4.584	4.603	104	x	x	0	15	Circulation	Median	Landscaped - curb	grass	x	x	0			Landscaped median on R, concrete curbs; 12' wide at max; intersection to Cad. Mtn on R	Acad0012_4.584

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
313	ACAD-0012	4.614	☑	4.614	4.655	220	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; concrete curbs; 10' wide at max; intersection to Cad. Mtn. on R	Acad0012_4.614
315	ACAD-0012	4.633	☑	4.633	4.66	142	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 2-3' gaps	Acad0012_4.633
316	ACAD-0012	4.662	☐	4.662	4.687	132	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 12' wide	Acad0012_4.622
318	ACAD-0012	4.696	☐	4.696	4.72	125	x	x	20	0	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on L;	Acad0012_4.696
319	ACAD-0012	4.717	☑	4.717	4.728	58	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0012_4.717
317	ACAD-0012	4.721	☑	4.721	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	dry laid stone headwall	18		☐	Culvert;	Acad0012_4.721_In-Out
320	ACAD-0012	4.733	☑	4.733	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert;	Acad0012_4.733_In-Out
321	ACAD-0012	4.75	☐	4.75	4.76	54	1.5-2	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 8-10' gaps	Acad0012_4.750
322	ACAD-0012	4.784	☑	4.784	4.799	80	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 1-2' gaps	Acad0012_4.784
323	ACAD-0012	4.796	☑	4.796	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	48	P	☑	Culvert; unique curved walls; inlet structure - tree encroaching; outlet headwall - failing	Acad0012_4.796_In-Out
324	ACAD-0012	4.798	☑	4.798	4.896	517	x	x	20	0	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on L;	Acad0012_4.798
325	ACAD-0012	4.801	☐	4.801	4.902	533	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R; terra cotta pipes under drains at end of ditch	Acad0012_4.801
326	ACAD-0012	4.903	☑	4.903	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	48		☑	Culvert; unique curved walls; perennial stream	Acad0012_4.903_In-Out
327	ACAD-0012	4.957	☐	4,957	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert;	Acad0012_4.957_In-Out
328	ACAD-0012	4.997	☑	4.997	5.01	69	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0012_4.997
329	ACAD-0012	5.011	☑	5.011	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	30		☐	Culvert;	Acad0012_5.011_In-Out
331	ACAD-0012	5.019	☐	5.019	5.036	90	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 6' wide at max	Acad0012_5.019
330	ACAD-0012	5.038	☐	5.038	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; span 29'	Acad0012_5.038
332	ACAD-0012	5.079	☐	5.079	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert;	Acad0012_5.079_In-Out
457	ACAD-0012	5.125	☑	5.125	5.155	158	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps	Acad0012_5.125
333	ACAD-0012	5.126	☑	5.126	5.14	74	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; slope-faced granite curbs; approx. 75' wide at max; intersection of Paradise Hill Rd (0010), Jordan Pond Rd (0012), and Park Loop	Acad0012_5.126
1208	ACAD-0013	0.001	☐	0.001	3.35	0	x	x	0	0	Land use	Cadillac Mountain	Historic road segment	x	x	x	0		☐	Cadillac Mountain Road; completed 1932	none
1078	ACAD-0013	0.013	☑	0.013	0.021	42	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; rough-cut granite curbs; 8' wide at max; entrance to Cadillac Mountain	Acad0013_0.013(2)
1066	ACAD-0013	0.041	☐	0.041	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 28.5' span	Acad0013_0.041
1068	ACAD-0013	0.061	☐	0.061	0.072	58	.5-1	x	45	0	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on L; 2-4' gaps	Acad0013_0.061
1067	ACAD-0013	0.068	☑	0.068	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone drop-inlet	dry laid stone headwall	18	P	☐	Culvert; long lintel stone spans inlet; pipe failing - buckling pavement	Acad0013_0.068_In-Out
1083	ACAD-0013	0.069	☐	0.069	0.159	475	x	x	0	20	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on R;	Acad0013_0.069
1069	ACAD-0013	0.081	☐	0.081	0.159	411	1-3	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R;	Acad0013_0.081
1082	ACAD-0013	0.119	☑	0.119	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18	P	☐	Culvert; 1 coping stone marks inlet; pipe failing - buckling pavement	Acad0013_0.119_In-Out
1084	ACAD-0013	0.136	☑	0.136	0.154	95	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 16' wide at max	Acad0013_0.136
1081	ACAD-0013	0.138	☐	0.138	0	0	x	x	0	20	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on R; perpendicular to road	Acad0013_0.138

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR d	Notes	Digital Photo(s)
1063	ACAD-0013	0.16	☑	0.16	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	dry laid stone headwall	0		☑	Culvert, 40" square opening; 1 coping stone marks inlet; stone wingwalls at outlet; perennial stream	Acad0013_0.160_In-Out
1085	ACAD-0013	0.189	☑	0.189	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	dry laid stone headwall	0	P	☐	Culvert, inlet/outlet structure - coping stones damaged; structure failing - pavement buckling	Acad0013_0.189_In-Out
1044	ACAD-0013	0.242	☑	0.242	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert; outlet pipe - rebar visible	Acad0013_0.242_In-Out
1064	ACAD-0013	0.301	☑	0.301	0.318	90	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 17' wide at max	Acad0013_0.301
1054	ACAD-0013	0.319	☑	0.319	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert, pipe failing - pavement bucking; inlet headwall - damaged	Acad0013_0.317_In-Out
1056	ACAD-0013	0.359	☑	0.359	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	concrete	dry laid stone headwall	dry laid stone headwall	0	P	☐	Culvert; 2 coping stones mark inlet, stone wingwalls at inlet; inlet headwall - failing	Acad0013_0.359_In-Out
1057	ACAD-0013	0.361	☑	0.361	0.495	707	2-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-5' gaps	Acad0013_0.361
1055	ACAD-0013	0.362	☑	0.362	0.426	337	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0013_0.362
1065	ACAD-0013	0.431	☑	0.431	0.528	512	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0013_0.431
1058	ACAD-0013	0.432	☑	0.432	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert; long lintel stone spans inlet; inlet headwall - damaged	Acad0013_0.432_In-Out
1050	ACAD-0013	0.512	☐	0.512	0.513	10	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 20' wide at max	Acad0013_0.512
1060	ACAD-0013	0.545	☐	0.545	0.549	21	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L;	Acad0013_0.545
1061	ACAD-0013	0.547	☑	0.547	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone headwall	pipe only	18		☐	Culvert; outlet within Embankment 0.545	Acad0013_0.547_In-Out
1051	ACAD-0013	0.587	☑	0.587	0.645	306	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0013_0.587
1052	ACAD-0013	0.602	☑	0.602	0.684	432	1-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 3-4' gaps; 14' off CL	Acad0013_0.602(2)
1169	ACAD-0013	0.603	☐	0.603	0.678	396	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L;	Acad0013_0.603(2)
1048	ACAD-0013	0.658	☑	0.658	0.677	100	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 24' wide at max	Acad0013_0.658
1047	ACAD-0013	0.703	☑	0.703	0.759	295	1-2.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-5' gaps; 12' off CL	Acad0013_0.703
1053	ACAD-0013	0.79	☑	0.79	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone headwall	pipe only	18		☐	Culvert;	Acad0013_0.790_In-Out
1059	ACAD-0013	0.803	☑	0.803	0.911	570	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_0.803
1079	ACAD-0013	0.885	☑	0.885	0.978	491	1-4	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-5' gaps; 12.5' off CL	Acad0013_0.885
1062	ACAD-0013	0.92	☐	0.92	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☐	Culvert; 30"x30" opening; (#12)	Acad0013_0.920_In-Out
1080	ACAD-0013	0.97	☐	0.97	0.988	100	x	x	50	0	Buildings/structures	Other	Shoulder	rubble	x	x	0		☐	Other; rubble shoulder on L;	Acad0013_0.970
1070	ACAD-0013	0.981	☑	0.981	1.059	411	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0013_0.981
1170	ACAD-0013	0.989	☐	0.989	1.007	95	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L;	Acad0013_0.989
1071	ACAD-0013	1.061	☑	1.061	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet; (#13)	Acad0013_1.061_In-Out
1072	ACAD-0013	1.069	☐	1.069	1.131	332	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 10' wide at max	Acad0013_1.069
1073	ACAD-0013	1.157	☑	1.157	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet; (#14)	Acad0013_1.157_In-Out
1074	ACAD-0013	1.174	☐	1.174	1.189	80	x	x	0	45	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on R; .5-1' high; 15' off CL	Acad0013_1.174
1075	ACAD-0013	1.199	☑	1.199	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; (#15)	Acad0013_1.199_In-Out
1077	ACAD-0013	1.258	☑	1.258	1.419	1821	1-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☑	Guardwall on R; 2-4' gaps; 13.5' off CL	Acad0013_1.258(3)

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR	Notes	Digital Photo(s)
1089	ACAD-0013	1.265	☐	1.265	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert, inlet headwall - damaged; (#16)	Acad0013_1.265_In-Out
1171	ACAD-0013	1.317	☐	1.317	1.356	205	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R;	Acad0013_1.317(3)
1104	ACAD-0013	1.322	☑	1.322	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert, (#17)	Acad0013_1.322_In
1087	ACAD-0013	1.336	☑	1.336	1.355	100	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 22' wide at max	Acad0013_1.336
1093	ACAD-0013	1.35	☐	1.35	0	0	x	x	0	30	Small-scale features	Sign	Wayside	stone, metal, plastic	x	x	0		☐	Wayside sign on R; metal with mortared stone base; at Pullout 1.336	Acad0013_1.350
1172	ACAD-0013	1.357	☐	1.357	1.481	654	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R;	Acad0013_1.357
1091	ACAD-0013	1.362	☑	1.362	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone headwall	loose stones	18	P	☐	Culvert; inlet headwall - damaged; (#18)	Acad0013_1.362_In-Out
1092	ACAD-0013	1.392	☐	1.392	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall; (#19)	Acad0013_1.392_In-Out
1090	ACAD-0013	1.397	☐	1.397	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall; (#20)	Acad0013_1.397_In
1096	ACAD-0013	1.426	☐	1.426	1.435	48	1.5-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 13' off CL	Acad0013_1.426
1101	ACAD-0013	1.433	☑	1.433	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert, long lintel stone spans inlet headwall; (#21)	Acad0013_1.433_In-Out
1095	ACAD-0013	1.436	☐	1.436	1.449	70	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 5' wide at max	Acad0013_1.436
1102	ACAD-0013	1.45	☐	1.45	1.603	807	2-5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 13' off CL	Acad0013_1.450
1094	ACAD-0013	1.49	☑	1.49	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#22)	Acad0013_1.490_In-Out
1103	ACAD-0013	1.507	☑	1.507	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	x	x	18	P	☐	Culvert; long lintel stone spans inlet headwall; outlet pipe - collapsed; (#23)	Acad0013_1.507_In-Out
1086	ACAD-0013	1.529	☑	1.529	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone on end spans inlet headwall; (#24)	Acad0013_1.529_In-Out
1173	ACAD-0013	1.53	☐	1.53	1.572	221	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R;	Acad0013_1.530(3)
1088	ACAD-0013	1.542	☑	1.542	1.571	158	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☑	Guardwall on L; 2-3' gaps; 16.5' off CL	Acad0013_1.542
1076	ACAD-0013	1.547	☐	1.547	1.567	110	x	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 20' high at max	Acad0013_1.547(2)
1099	ACAD-0013	1.55	☐	1.55	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; outlet likely within Retaining wall 1.547; (#25)	Acad0013_1.550
1097	ACAD-0013	1.563	☑	1.563	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	Not found	0		☑	Culvert; 30x30" square opening; ; two colors of stone; outlet likely within Retaining wall 1.547; (#24)	Acad0013_1.563_In(3)
1100	ACAD-0013	1.634	☐	1.634	1.648	77	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 6' wide at max; at waterfall	Acad0013_1.634
1164	ACAD-0013	1.66	☐	1.66	1.779	628	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L;	Acad0013_
1098	ACAD-0013	1.661	☑	1.661	1.69	153	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 9' wide at max	Acad0013_1.661
1105	ACAD-0013	1.695	☑	1.695	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert, long lintel stone spans inlet headwall; inlet headwall - skewed; (#27)	Acad0013_1.695_In-Out
1119	ACAD-0013	1.699	☑	1.699	1.729	158	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0013_1.699
1118	ACAD-0013	1.703	☑	1.703	1.778	396	1.5-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☑	Guardwall on L; 2-3' gaps; 14' off CL	Acad0013_1.703
1106	ACAD-0013	1.736	☑	1.736	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#28)	Acad0013_1.736_In-Out
1189	ACAD-0013	1.78	☐	1.78	2.132	1858	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L;	Acad0013_
1116	ACAD-0013	1.782	☑	1.782	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#29)	Acad0013_1.782_In-Out
1108	ACAD-0013	1.788	☑	1.788	1.814	137	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 9' wide at max	Acad0013_1.788

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
1113	ACAD-0013	1.816	☑	1.816	1.837	110	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 9' wide at max	Acad0013_1.816
1110	ACAD-0013	1.854	☑	1.854	1.927	385	2-4	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-3' gaps; 15' off CL	Acad0013_1.854
1122	ACAD-0013	1.863	☐	1.863	1.889	137	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R;	Acad0013_1.863(2)
1111	ACAD-0013	1.864	☐	1.864	1.888	126	2-4	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☑	Guardwall on R; 2-3' gaps; 15' off CL	Acad0013_1.864(2)
1112	ACAD-0013	1.873	☑	1.873	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; outlet structure - failing; (#30)	Acad0013_1.873_In
1117	ACAD-0013	1.886	☐	1.886	2.006	638	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 12' wide at max	Acad0013_1.886
1114	ACAD-0013	1.934	☑	1.934	2.131	1040	2-4	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-3' gaps; 23' off CL	Acad0013_1.934
1107	ACAD-0013	1.952	☑	1.952	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall; (#31)	Acad0013_1.952_In
1129	ACAD-0013	1.999	☑	1.999	2.027	147	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on R; 2-4' gaps; 12' off CL	Acad0013_1.999
1127	ACAD-0013	2.035	☑	2.035	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18	P	☐	Culvert; outlet structure - failing; (#32)	Acad0013_2.035_In-Out(2)
1123	ACAD-0013	2.036	☑	2.036	2.064	147	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 14' wide at max	Acad0013_2.036
1124	ACAD-0013	2.065	☑	2.065	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#33)	Acad0013_2.065_In-Out
1126	ACAD-0013	2.066	☐	2.066	2.113	248	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0013_2.066
1125	ACAD-0013	2.115	☑	2.115	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#34)	Acad0013_2.115_In-Out
1115	ACAD-0013	2.125	☑	2.125	2.17	237	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.125
1128	ACAD-0013	2.177	☑	2.177	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	F	☐	Culvert, long lintel stone spans inlet headwall; outlet pipe - partially blocked; (#35)	Acad0013_2.177_In-Out
1133	ACAD-0013	2.179	☑	2.179	2.24	322	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.179
1140	ACAD-0013	2.211	☐	2.211	2.245	179	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on R; 1-7' gaps	Acad0013_2.211
1134	ACAD-0013	2.246	☑	2.246	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☑	Culvert; long lintel stone spans inlet headwall; (#36)	Acad0013_2.246_In-Out
1141	ACAD-0013	2.247	☐	2.247	2.485	1256	1-1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps	Acad0013_2.247(2)
1142	ACAD-0013	2.248	☐	2.248	2.285	195	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☑	Paved waterway on L;	Acad0013_2.248
1190	ACAD-0013	2.27	☐	2.27	2.396	665	x	x	0	100	Views/vistas	Framed/filtere d	x	x	x	x	0		☐	Framed/filtered view on R;	Acad0013_
1139	ACAD-0013	2.288	☑	2.288	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall; (#37)	Acad0013_2.288_In-Out
1138	ACAD-0013	2.29	☐	2.29	2.323	174	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.290
1137	ACAD-0013	2.325	☑	2.325	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; long lintel stone spans inlet headwall; outlet structure - tree encroaching; (#38)	Acad0013_2.325_In-Out
1143	ACAD-0013	2.327	☐	2.327	2.341	74	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.327
1135	ACAD-0013	2.348	☑	2.348	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert, long lintel stone spans inlet headwall; outlet pipe - blocked; (#39)	Acad0013_2.348_In-Out
1131	ACAD-0013	2.35	☐	2.35	2.393	227	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☑	Paved waterway on L;	Acad0013_2.350
1120	ACAD-0013	2.399	☑	2.399	2.414	80	1-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☑	Guardwall on L; 3-4' gaps; 20' off CL	Acad0013_2.399
1161	ACAD-0013	2.4	☐	2.4	2.413	68	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☑	Embankment on L;	Acad0013_2.400
1132	ACAD-0013	2.405	☑	2.405	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☑	Culvert; 40x50" opening; (#40)	Acad0013_2.405_In-Out(2)

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left (	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
1162	ACAD-0013	2.419	☑	2.419	2.468	258	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.419
1109	ACAD-0013	2.469	☐	2.469	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall; (#41)	Acad0013_2.469_In
1163	ACAD-0013	2.476	☑	2.476	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall; (#42)	Acad0013_2.476_In-Out
1136	ACAD-0013	2.478	☑	2.478	2.529	269	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.478(2)
1153	ACAD-0013	2.531	☑	2.531	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	F	☐	Culvert; long lintel stone spans inlet headwall; inlet pipe - partially blocked; (#43)	Acad0013_2.531_In-Out
1121	ACAD-0013	2.532	☑	2.532	2.549	89	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on R; 2-3' gaps; 14' off CL	Acad0013_2.532
1158	ACAD-0013	2.533	☐	2.533	2.558	133	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.533
1157	ACAD-0013	2.56	☑	2.56	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#44)	Acad0013_2.560_In-Out
1160	ACAD-0013	2.561	☐	2.561	2.6	205	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.561
1156	ACAD-0013	2.572	☑	2.572	2.945	1969	1.5-4	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☑	Guardwall on R; 2-3' gaps; 14' off CL	Acad0013_2.572(3)
1191	ACAD-0013	2.586	☐	2.586	3.022	2302	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R;	Acad0013_
1151	ACAD-0013	2.604	☑	2.604	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert, long lintel stone spans inlet headwall; (#45)	Acad0013_2.604_In
1155	ACAD-0013	2.605	☐	2.605	2,631	137	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.605
1159	ACAD-0013	2.632	☐	2.632	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall; (#46)	Acad0013_2.632_In(2)
1152	ACAD-0013	2.633	☐	2.633	2.692	311	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.633
1150	ACAD-0013	2.694	☑	2.694	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#47)	Acad0013_2.694_In-Out
1149	ACAD-0013	2.695	☐	2.695	2.72	132	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.695
1148	ACAD-0013	2.723	☑	2.723	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#48)	Acad0013_2.723_In(2)
1147	ACAD-0013	2.724	☐	2.724	2.766	221	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.724
1146	ACAD-0013	2.768	☑	2.768	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall; (#49)	Acad0013_2.768_In-Out
1145	ACAD-0013	2.769	☐	2.769	2.804	184	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L;	Acad0013_2.769
1154	ACAD-0013	2.844	☑	2.844	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	F	☐	Culvert, long lintel stone spans inlet headwall; outlet pipe - blocked; (#50)	Acad0013_2.844_In-Out
1177	ACAD-0013	2.891	☐	2.891	2.945	285	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R;	Acad0013_2.891(2)
1144	ACAD-0013	2.918	☑	2.918	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; inlet headwall - damaged; (#51)	Acad0013_2.918_In
1185	ACAD-0013	2.963	☑	2.963	2.97	36	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb: 15' wide at max	Acad0013_2.963
1182	ACAD-0013	2.974	☑	2.974	3.002	147	2-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps; 12' off CL	Acad0013_2.974
1178	ACAD-0013	2.981	☑	2.981	0	0	x	x	0	0	Buildings/structures	Culvert	RCP (2)	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert; long lintel stone spans inlet headwall; outlet within Embankment 2.891; pipes failing - buckling pavement	Acad0013_2.981_In-Out
1179	ACAD-0013	3.021	☑	3.021	3.032	59	1-1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps; 12' off CL	Acad0013_3.021
1183	ACAD-0013	3,027	☐	3.027	3.052	132	.5-1	x	45	0	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on L; 2-4' gaps; 12' off CL	Acad0013_3.027
1181	ACAD-0013	3.038	☑	3.038	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	F	☐	Culvert; long lintel stone spans inlet headwall; utility line passes through; inlet pipe - partially blocked	Acad0013_3.038_In-Out
1180	ACAD-0013	3.039	☐	3,039	3.079	211	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0	P	☐	Paved waterway on R; section missing	Acad0013_3.039

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR	Notes	Digital Photo(s)
1186	ACAD-0013	3.056	☐	3.056	3.141	448	1-3	x	45	0	Buildings/structures	PM stones	Rock barrier	angular ledge stones	x	x	0		☐	PM stones on L; 2-6' gaps, 12' off CL	Acad0013_3.056(2)
1188	ACAD-0013	3.089	☑	3.089	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	F	☐	Culvert; long lintel stone spans inlet headwall; inlet pipe - blocked	Acad0013_3.089_In-Out
1192	ACAD-0013	3.111	☐	3.111	3.184	385	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L	Acad0013_
1187	ACAD-0013	3.149	☐	3.149	3.183	179	2-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-4' gaps; 14' off CL	Acad0013_3.149
1176	ACAD-0013	3.159	☑	3.159	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0013_3.159_In
1174	ACAD-0013	3.241	☑	3.241	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18		☐	Culvert, long lintel stone spans inlet headwall	Acad0013_3.241_In-Out
1166	ACAD-0013	3.265	☑	3.265	0	0	x	x	0	25	Circulation	Junction	Fire road/trail	gravel	x	x	0		☐	Fire road on R;	Acad0013_3.265
1184	ACAD-0013	3.271	☑	3.271	3.328	300	1.5-2.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-3' gaps; 12' off CL	Acad0013_3.271
1167	ACAD-0013	3.272	☐	3.272	3.327	290	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L;	Acad0013_3.272
1175	ACAD-0013	3.275	☑	3.275	3.314	205	1.5-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps; 16' off CL	Acad0013_3.275
1165	ACAD-0013	3.299	☑	3.299	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; outlet likely within Embankment 3.272	Acad0013_3.299
1204	ACAD-0014	0.001	☐	0.001	1.259	0	x	x	0	0	Land use	Stanley Brook Road	Historic road segment	x	x	x	0		☐	Stanley Brook Road; completed 1936	none
970	ACAD-0014	0.008	☐	0.008	0.034	140	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R, 20' wide at max; entrance to stables	Acad0014_0.008
971	ACAD-0014	0.01	☐	0.01	0.015	27	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; slope-faced granite curbs; 3' wide; intersection with Park Loop Road	Acad0014_0.010
969	ACAD-0014	0.07	☐	0.07	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 29' span; 3.5' high	Acad0014_0.070(2)
968	ACAD-0014	0.099	☐	0.099	0.116	93	x	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 5' off CL	Acad0014_0.099
982	ACAD-0014	0.1	☐	0.1	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	Not found	dry laid stone headwall	18	F	☐	Culvert; inlet not found; long lintel stone spans outlet headwall; outlet pipe - blocked	Acad0014_0.100_Out
973	ACAD-0014	0.162	☑	0.162	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☑	Culvert; long lintel stone spans outlet headwall; stone-lined gutter prior to inlet	Acad0014_0.162_In-Out
972	ACAD-0014	0.189	☑	0.189	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☑	Culvert; stone-lined gutter prior to inlet; outlet drains to series of pools	Acad0014_0.189_In-Out(3)
961	ACAD-0014	0.19	☐	0.19	0.215	132	2	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L; defines pool on L	Acad0014_0.190
967	ACAD-0014	0.214	☑	0.214	0.25	190	3	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 16' of CL; associated with bridge	Acad0014_0.214
963	ACAD-0014	0.239	☐	0.239	0.247	45	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 10' wide at max	Acad0014_0.239
964	ACAD-0014	0.253	☐	0.253	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	dry laid stone headwall	0		☐	Culvert;	Acad0014_0.253_In-Out
965	ACAD-0014	0.254	☐	0.254	0.268	71	2	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R;	Acad0014_0.254
975	ACAD-0014	0.258	☐	0.258	0.272	76	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 10' wide at max	Acad0014_0.258
966	ACAD-0014	0.278	☑	0.278	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	x	x	0	F	☐	Culvert; inlet and outlet pipes - blocked	Acad0014_0.278_Out
978	ACAD-0014	0.335	☑	0.335	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☐	Culvert; opening 2x3'; stone-lined gutter prior to inlet	Acad0014_0.335_In-Out
983	ACAD-0014	0.352	☐	0.352	0.393	216	3.5	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R;	Acad0014_0.352
981	ACAD-0014	0.42	☑	0.42	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☐	Culvert; long lintel stone spans inlet headwall	Acad0014_0.428_In-Out
986	ACAD-0014	0.45	☐	0.45	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0	F	☐	Culvert; outlet - partially blocked	Acad0014_0.450_In-Out
985	ACAD-0014	0.451	☑	0.451	0.477	137	2	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 13' off CL	Acad0014_0.451

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left C	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
984	ACAD-0014	0.452	☐	0.452	0.471	79	2	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L; 13' off CL	Acad0014_0.452
976	ACAD-0014	0.503	☐	0.503	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0	F	☐	Culvert; outlet pipe - partially blocked	Acad0014_0.503_In-Out
962	ACAD-0014	0.524	☐	0.524	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☑	Culvert; interesting dual inlet points	Acad0014_0.524_In-Out
977	ACAD-0014	0.525	☑	0.525	0.57	237	x	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 13' off CL	Acad0014_0.525
974	ACAD-0014	0.571	☐	0.571	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0	P	☐	Culvert; dual inlets; stone-lined gutter prior to inlet; outlet headwall - damaged	Acad0014_0.571_In(2)-Out(
979	ACAD-0014	0.58	☐	0.58	0.593	68	x	x	0	0	Buildings/structures	Bridge	Box	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; parapet walls 1.5-2' high, 1' wide; 24' wall to wall	Acad0014_0.580(5)
980	ACAD-0014	0.628	☑	0.628	0.634	32	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; parapet walls 1.5' high, 1.5' wide; 22' wall to wall	Acad0014_0.628(4)
1005	ACAD-0014	0.642	☐	0.642	0.657	76	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 12' wide at max	Acad0014_0.642
992	ACAD-0014	0.651	☑	0.651	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☐	Culvert; outlet structure - trees encroaching	Acad0014_0.651_In-Out
993	ACAD-0014	0.656	☑	0.656	0.686	158	5	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 14.5' off CL	Acad0014_0.656
990	ACAD-0014	0.703	☐	0.703	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert;	Acad0014_0.703_In-Out(2)
989	ACAD-0014	0.711	☑	0.711	0.77	311	3	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☑	Retaining wall on R; 13.5' off CL	Acad0014_0.711(3)
991	ACAD-0014	0.731	☐	0.731	0.74	50	5	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 12.5' off CL	Acad0014_0.731(3)
1007	ACAD-0014	0.774	☑	0.774	0.839	343	1-3	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	incoursed stone	x	x	0		☐	Guardwall/retaining wall on L; both dry laid; 12' off CL	Acad0014_0.774
1010	ACAD-0014	0.786	☑	0.786	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	dry laid stone headwall	0		☐	Culvert;	Acad0014_0.786_In-Out
1009	ACAD-0014	0.819	☑	0.819	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	dry laid stone headwall	0		☐	Culvert;	Acad0014_0.819_In-Out
1008	ACAD-0014	0.841	☐	0.841	0.857	78	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 15' wide at max	Acad0014_0.841
1003	ACAD-0014	0.842	☐	0.842	0.858	78	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide at max	Acad0014_0.842
1006	ACAD-0014	0.867	☐	0.867	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0		☐	Culvert;	Acad0014_0.867_In-Out
1004	ACAD-0014	0.909	☐	0.909	0.922	68	x	x	0	0	Buildings/structures	Bridge	Box	mortared stone, concrete	x	x	0	P	☐	Bridge; grass shoulders; wood guardrails and 8" square stone piers atop walls; 1.5' high; 23' rail to rail; one railing missing	Acad0014_0.909(5)
996	ACAD-0014	0.94	☐	0.94	0.951	58	x	x	0	0	Buildings/structures	Bridge	Box	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; wood guardrails and 8" square stone piers atop walls; 1.5' high; 23' rail to rail	Acad0014_0.940(5)
994	ACAD-0014	0.977	☐	0.977	0.99	68	x	x	0	0	Buildings/structures	Bridge	Box	mortared stone, concrete	x	x	0	P	☐	Bridge; grass shoulders; wood guardrails and 8" square stone piers atop walls; 1.5' high; 23' rail to rail; one railing missing	Acad0014_0.977(4)
995	ACAD-0014	1.008	☐	1.008	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18	P	☐	Culvert; outlet pipe - splitting	Acad0014_1.008_In-Out(3)
1011	ACAD-0014	1.043	☐	1.043	1.059	84	x	x	0	0	Buildings/structures	Bridge	Box	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; wood guardrails and 8" square stone piers atop walls; 1.5' high; 23' rail to rail	Acad0014_1.043(4)
997	ACAD-0014	1.05	☐	1.05	0	0	x	x	0	20	Circulation	Steps	Tooled stone	stones	x	x	0		☐	Tooled stone steps on R; at end of Bridge 1.043; connects to trail in woods	Acad0014_1.050
998	ACAD-0014	1.071	☐	1.071	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	dry laid stone headwall	0	P	☐	Culvert; inlet structure - tree encroaching	Acad0014_1.071_In-Out
999	ACAD-0014	1.099	☑	1.099	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	Not found	0		☐	Culvert; outlet not found; inlet structure - tree encroaching	Acad0014_1.099_In-Out
1000	ACAD-0014	1.113	☐	1.113	1.126	69	2	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 12' off CL	Acad0014_1.113(2)
1002	ACAD-0014	1.131	☑	1.131	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	Not found	0		☐	Culvert; outlet not found	Acad0014_1.131_In-Out
1015	ACAD-0014	1.187	☑	1.187	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	Not found	0		☐	Culvert; outlet not found	Acad0014_1.187_In-Out
1016	ACAD-0014	1.215	☐	1.215	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 25' span	Acad0014_1.215(2)

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
1001	ACAD-0014	1.248	☐	1.248	1.259	59	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3-5' gaps; 11.5' off CL	Acad0014_1.248
1013	ACAD-0014	1.25	☐	1.25	1.258	46	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 3-5' gaps; 12' off CL	Acad0014_1.250
1029	ACAD-0016	0.053	☐	0.053	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 30' span	Acad0016_0.053(2)
1025	ACAD-0016	0.055	☐	0.055	0.076	110	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 14' wide at max	Acad0016_0.055
1024	ACAD-0016	0.065	☑	0.065	0.077	63	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; slope-faced granite curbs; 10' wide at max	Acad0016_0.065
1028	ACAD-0016	0.076	☐	0.076	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	mortared stone headwalls	mortared stone headwalls	24	P	☐	Culvert; outlet headwall - damaged	Acad0016_0.076_In-Out
1030	ACAD-0016	0.106	☑	0.106	0.119	68	x	x	15	0	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on L; slope-faced granite curbs; 10' wide at max	Acad0016_0.106
1026	ACAD-0016	0.175	☐	0.175	0.196	114	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 8' wide at max	Acad0016_0.175
1049	ACAD-0016	0.204	☑	0.204	0	0	x	x	0	30	Small-scale features	Sign	Park	wood - wood frame	x	x	0		☐	Park sign on R; wood with wood frame	none
1039	ACAD-0100	0.015	☑	0.015	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	loose stones	18		☐	Culvert; long lintel stone spand inlet headwall	Acad0100_0.015_In-Out
1038	ACAD-0100	0.022	☑	0.022	0.052	158	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps; 16' off CL	Acad0100_0.022
497	ACAD-0100	0.072	☑	0.072	0.101	153	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1' gaps; 15.5' off CL	Acad0100_0.072
1034	ACAD-0100	0.113	☑	0.113	0.156	227	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-2' gaps; 15.5' off CL	Acad0100_0.113
1037	ACAD-0100	0.128	☑	0.128	0.154	137	.5-1	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 1-2' gaps; 12.5' off CL	Acad0100_0.184
1035	ACAD-0100	0.144	☐	0.144	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 33' span	Acad0100_0.144(2)
1036	ACAD-0100	0.153	☐	0.153	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	24		☐	Culvert;	Acad0100_0.153_In-Out
1033	ACAD-0100	0.184	☑	0.184	0.319	712	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; .5-1' gaps; 14.5' off CL	Acad0100_0.184
1032	ACAD-0100	0.189	☑	0.189	0.313	654	1-1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; .5-1' gaps; 13.5' off CL	Acad0100_0.189
1031	ACAD-0100	0.322	☐	0.322	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 30' span	Acad0100_0.322
1017	ACAD-0101	0.013	☑	0.013	0.045	168	1-1.5	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 2-3' gaps; 15' off CL	Acad0101_0.013
1018	ACAD-0101	0.035	☐	0.035	0.054	108	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 8' wide max	Acad0101_0.035
1019	ACAD-0101	0.055	☑	0.055	0.131	401	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 1-3' gaps; 15' off CL	Acad0101_0.055
1020	ACAD-0101	0.073	☐	0.073	0.11	198	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 12' wide at max	Acad0101_0.073
1022	ACAD-0101	0.111	☐	0.111	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 28' span	Acad0101_0.111(2)
1021	ACAD-0101	0.115	☑	0.115	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18	F	☐	Culvert; long lintel stone spans inlet headwall; outlet pipe - partially blocked	Acad0101_0.115_In-Out
1023	ACAD-0101	0.121	☐	0.121	0.124	127	x	x	15	0	Circulation	Median	Paved - curb	asphalt	x	x	0		☐	Paved median on L; slope-faced granite curbs; 2' wide	Acad0101_0.121
1045	ACAD-0101	0.123	☐	0.123	0	0	x	x	30	30	Small-scale features	Sign (2)	Park	metal - wood frame	x	x	0		☐	Park signs on R and L; metal with wood frame	none
1040	ACAD-0222	0.005	☐	0.005	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick (2)	Not found	0		☐	Culvert; two inlets; outlet not found	Acad0222_0.005_In(2)
1043	ACAD-0222	0.019	☐	0.019	0	0	x	x	0	0	Small-scale features	Gate	Rustic	rough sawn wood	x	x	0		☐	Gate; 22' span	Acad0222_0.019
1042	ACAD-0222	0.025	☑	0.025	0.05	132	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 12' wide at max	Acad0222_0.025
1041	ACAD-0222	0.026	☐	0.026	0	0	x	x	30	0	Small-scale features	Sign	Park	wood - wood frame	x	x	0		☐	Park sign on L; wood with wood frame	Acad0222_0.026(2)

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left (	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diar	Con	NR (	Notes	Digital Photo(s)
1027	ACAD-0222	0.12	☐	0.12	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert;	Acad0222_0.120_In-Out
2	ACAD-0249	0.001	☐	0.001	0.516	0	x	x	0	0	Land use	Schoodic Point Road	Historic road segment	x	x	x	0		☐	Schoodic Point Road; completed 1935	none
5	ACAD-0249	0.068	☐	0.068	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18	F	☐	Culvert; grate on stones; outlet pipe - partially clogged	Acad0249_0.068_In(2)-Out
472	ACAD-0249	0.1	☐	0.1	0.25	792	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L;	none
6	ACAD-0249	0.114	☑	0.114	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	loose stones	18	F	☐	Culvert; inlet pipe - partially clogged; inlet overtaken by shoulder	Acad0249_0.114_In-Out
511	ACAD-0249	0.139	☐	0.139	0.43	1536	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; sizes of rocks varies	Acad0249_0.139(2)
7	ACAD-0249	0.14	☑	0.14	0.15	80	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 11' wide at max	Acad0249_0.140
10	ACAD-0249	0.16	☐	0.16	0.18	143	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 7' wide at max; opposite entrance to Schoodic Education Center	Acad0249_0.180
8	ACAD-0249	0.176	☐	0.176	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only*	24		☐	Culvert; outlet within Embankment 0.139; outlet pipe opening secured with iron grate	Acad0249_0.176_In-Out
9	ACAD-0249	0.18	☐	0.18	0	0	x	x	0	30	Small-scale features	Sign	Informational	wood/steel	x	x	0		☐	Informational sign on R: "Future Home of the Schoodic Education..."; sign board 4 x 6'; structure 8' high; gabled shingled roof with spot light tanding 8' high.	Acad0249_0.180
11	ACAD-0249	0.2	☐	0.2	0.206	33	x	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 14' from CL; comprised of 6 stones; next to culvert 0.202	none
12	ACAD-0249	0.202	☑	0.202	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only*	18	F	☐	Culvert; outlet within Embankment 0.139; inlet pipe and outlet pipe - partially blocked	Acad0249_0.202_In-Out
13	ACAD-0249	0.207	☐	0.207	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; steel; 4' high, 13' wide, painted brown	none
14	ACAD-0249	0.216	☐	0.216	0.237	111	x	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 15' from CL	none
15	ACAD-0249	0.255	☑	0.255	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only*	18	F	☐	Culvert, outlet within Embankment 0.139; outlet pipe - partially clogged	Acad0249_0.255_In-Out
473	ACAD-0249	0.3	☐	0.3	0.4	528	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L;	none
16	ACAD-0249	0.307	☐	0.307	0.337	159	x	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 14' from CL	none
17	ACAD-0249	0.321	☑	0.321	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only*	18		☐	Culvert; outlet within Embankment 0.139	Acad0249_0.321_In-Out
18	ACAD-0249	0.367	☐	0.367	0.435	367	x	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0	P	☐	Guardwall on L; 15' from CL, some stones need to be reset	Acad0249_0.367
19	ACAD-0249	0.368	☑	0.368	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only*	24		☐	Culvert; outlet within Embankment 0.139	Acad0249_0.368_In-Out(2)
20	ACAD-0249	0.387	☑	0.387	0.404	98	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 14' wide at max	none
21	ACAD-0249	0.41	☑	0.41	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	Not found	Not found	0	P	☐	Culvert; outlet possibly buried under loose stones that appear to be toppled;	Acad0249_0.410_In
22	ACAD-0249	0.491	☑	0.491	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only	18		☐	Culvert; utility conduit with PVC and galvanized pipe inside RCP	Acad0249_0.491_In-Out
23	ACAD-0249	0.499	☐	0.499	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	0		☐	Culvert, long culvert bisects parking lot; three 24" square grates on concrete flush with pavement; general locale of outlet found	Acad0249_0.499
474	ACAD-0249	0.5	☐	0.5	0.515	79	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L;	none
24	ACAD-0249	0.51	☐	0.51	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	loose stones	18	F	☐	Culvert; carries stormwater under far side of the parking lot; inlet pipe - partially clogged	Acad0249_0.510_In-Out
25	ACAD-0249	0.513	☐	0.513	0	0	x	x	0	20	Circulation	Steps	Tooled stone	stones	x	x	0		☐	Tooled stone steps; six sets of tooled stone steps connect three parking levels; six sets at the Schoodic Point parking lot	Acad0249_0.513
26	ACAD-0249	0.515	☐	0.515	0	0	x	x	30	0	Small-scale features	Monument	Boulder	stone	x	x	0		☐	Monument; stone boulder in parking lot; "John Godfrey Moore"; 27"x16" bronze plaque; 1928	Acad0249_0.515
1200	ACAD-0300	0.001	☐	0.001	1.817	0	x	x	0	0	Land use	Kebo Mountain	Historic road segment	x	x	x	0		☐	Kebo Mountain Road; completed 1938	none
513	ACAD-0300	0.01	☐	0.01	0.02	58	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 14' wide at max	Acad0300_0.010
512	ACAD-0300	0.024	☐	0.024	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	dry laid stone headwall	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_0.024_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
514	ACAD-0300	0.025	☑	0.025	0	0	x	x	0	0	Small-scale features	Gate	Cable	cable	x	x	0		☐	Gate; cable hooked into 2 larger rocks	Acad0300_0.024
515	ACAD-0300	0.059	☐	0.059	0	0	x	x	0	0	Small-scale features	Gate	Remnant	x	x	x	0		☐	Gate; stone on L w/pivot point; stone on R missing	Acad0300_0.059
912	ACAD-0300	0.06	☐	0.06	0.105	238	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_0.060
516	ACAD-0300	0.118	☑	0.118	0.206	464	20"	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3-5' long, 6' gaps; grey granite color	Acad0300_0.118
517	ACAD-0300	0.142	☐	0.142	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_0.142_In-Out
518	ACAD-0300	0.237	☑	0.237	0.319	432	20"	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 18" wide; stones 3-5' long; 2-5' gaps; grey granite color	Acad0300_0.237
519	ACAD-0300	0.254	☑	0.254	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert, long lintel stone spans inlet headwall	Acad0300_0.254_In-Out
520	ACAD-0300	0.313	☑	0.313	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18		☐	Culvert, long lintel stone spans inlet headwall; outlet headwall more small stones than large	Acad0300_0.313_In-Out
521	ACAD-0300	0.318	☑	0.318	0.376	306	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; sawn-top granite curbs	Acad0300_0.318(2)
931	ACAD-0300	0.319	☐	0.319	0.375	295	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L; includes Pullout 0.318	Acad0300_0.319
522	ACAD-0300	0.331	☐	0.331	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "North Ridge Trail"; 100' after Culvert .313	Acad0300_0.331
523	ACAD-0300	0.392	☑	0.392	0.719	1726	20"	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 18" wide, stones 3-5' long; 2-3' gaps	Acad0300_0.392
524	ACAD-0300	0.421	☑	0.421	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall	Acad0300_0.421_In-Out
525	ACAD-0300	0.474	☑	0.474	0.578	549	4	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0	F	☐	Retaining wall on R; 4' max height; handsome batter; some leaning at Culvert .484	Acad0300_0.474(2)
526	ACAD-0300	0.475	☑	0.475	0.579	549	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R; fronts Retaining wall 0.474	Acad0300_0.475
527	ACAD-0300	0.484	☑	0.484	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☑	Culvert; very nice example of stone drop-inlet; long lintel stone spans inlet headwall; inlet part of Retaining wall 0.474	Acad0300_0.484_In(2)-Out
528	ACAD-0300	0.573	☐	0.573	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall; inlet part of Retaining wall 0.474	Acad0300_0.573_In(2)-Out
529	ACAD-0300	0.628	☑	0.628	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	44	F	☐	Culvert; long lintel stone spans inlet headwall; outlet pipe - partially clogged	Acad0300_0.628_In-Out
530	ACAD-0300	0.661	☑	0.661	0.752	480	4	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on R; 4' high at max; tapers at ends	Acad0300_0.661(2)
531	ACAD-0300	0.662	☐	0.662	0.759	512	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_0.662_(2)
533	ACAD-0300	0.668	☐	0.668	0.727	314	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; begins 40' after Retaining wall 0.661	Acad0300_0.668(3)
532	ACAD-0300	0.69	☑	0.69	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall; inlet part of Retaining wall 0.661	Acad0300_0.690_In(2)-Out
534	ACAD-0300	0.741	☑	0.741	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert, long lintel stone spans inlet headwall; inlet part of Retaining wall 0.661	Acad0300_0.741_In(2)-Out
535	ACAD-0300	0.825	☑	0.825	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall; black PVC underdrain at inlet; stone lined waterway extends into woods	Acad0300_0.825_In(2)-Out
536	ACAD-0300	0.91	☐	0.91	0.951	216	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; parapet walls 36" high, 30" wide; 34' wall to wall; "Kebo Brook Bridge"; 1938	Acad0300_0.910(3)
537	ACAD-0300	0.929	☐	0.929	0.97	220	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; begins 42' prior to end of bridge	Acad0300_0.929
539	ACAD-0300	0.938	☐	0.938	0.94	10	4	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on L; 4' high at max, tapers down; interesting arced wall preserves stand of trees; pink quarried granite	Acad0300_0.938(2)
538	ACAD-0300	0.947	☐	0.947	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Gorge Trail"	Acad0300_0.947
540	ACAD-0300	0.999	☐	0.999	1	10	x	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 2-3' gaps; 3-4' diameter	Acad0300_0.999
541	ACAD-0300	1.012	☐	1.012	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18	F	☐	Culvert; long lintel stone spans inlet headwall; inlet includes a corrugated underdrain; outlet pipe - partially clogged	Acad0300_1.012_In-Out
542	ACAD-0300	1.068	☑	1.068	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall	Acad0300_1.068_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
543	ACAD-0300	1.081	☑	1.081	1.38	1578	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 20" wide, 3-4' gaps, stones 2-4' long; grey granite	Acad0300_1.081
608	ACAD-0300	1.13	☐	1.13	1.147	90	x	x	50	0	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on L; approx. 6' high at max	Acad0300_1.130
544	ACAD-0300	1.142	☑	1.142	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only*	18		☐	Culvert; long lintel stone spans inlet headwall; outlet in Retaining wall 1.100	Acad0300_1.142_in_out
545	ACAD-0300	1.218	☑	1.218	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	24		☐	Culvert; long lintel stone spans inlet headwall; outlet pipe - partially clogged	Acad0300_1.218_In-Out
546	ACAD-0300	1.305	☑	1.305	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18	P	☐	Culvert; long lintel stone spans inlet headwall; inlet structure - lintel damaged	Acad0300_1.305_In-Out
547	ACAD-0300	1.342	☐	1.342	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Deer Mtn North Ridge Trail"; includes steps	Acad0300_1.342
593	ACAD-0300	1.343	☐	1.343	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0300_1.343_In-Out(2)
696	ACAD-0300	1.344	☐	1.344	0	0	x	x	0	20	Circulation	Steps	Rough-cut stone	stones	x	x	0		☐	Rough-cut stone steps on L; connects road to ??	Acad0300_1.344
548	ACAD-0300	1.391	☑	1.391	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_1.391_In-Out
549	ACAD-0300	1.448	☑	1.448	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall	Acad0300_1.448_In-Out
550	ACAD-0300	1.45	☐	1.45	1.476	140	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 14' wide at max; poor ditch work in this area	Acad0300_1.450
594	ACAD-0300	1.46	☐	1.46	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Strath Eden Trail"	Acad0300_1.460(2)
551	ACAD-0300	1.514	☑	1.514	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_1.514_In-Out
552	ACAD-0300	1.61	☑	1.61	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_1.610_In-Out
553	ACAD-0300	1.617	☐	1.617	1.66	230	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 12' wide at max	Acad0300_1.617
554	ACAD-0300	1.678	☑	1.678	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_1.678_In(2)-Out
555	ACAD-0300	1.714	☑	1.714	1.752	200	20"	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; stones 3-6' long; 1-2' gaps; 12' from CL; grey granite color	Acad0300_1.714
556	ACAD-0300	1.723	☑	1.723	1.759	195	20"	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; gaps 1-2'; grey granite color; 11.5' off CL	Acad0300_1.723
596	ACAD-0300	1.74	☐	1.74	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone headwall	loose stones	0		☐	Culvert; 4" iron pipe in structure, beaver fool; wellhead nearby; former locale of Red Rock Springs	Acad0300_1.740_In(2)-Out
609	ACAD-0300	1.76	☐	1.76	1.774	75	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; extension of Guardwall 1.723	Acad0300_1.760
911	ACAD-0300	1.775	☐	1.775	1.839	337	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; no pullout	Acad0300_1.775
1203	ACAD-0300	1.819	☐	1.819	3.419	0	x	x	0	0	Land use	Kebo Extension	Historic road segment	x	x	x	0		☐	Kebo Mountain Road Extension; completed 1940	none
557	ACAD-0300	1.821	☐	1.821	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_1.821_In-Out
558	ACAD-0300	1.855	☐	1.855	1.877	120	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 7' wide at max	Acad0300_1.855
559	ACAD-0300	1.869	☐	1.869	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Great Meadwo Path/Jesup Trail"; stone steps on L	Acad0300_1.869
597	ACAD-0300	1.87	☐	1.87	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Great Meadow Path/Jesup Trail"	Acad0300_1.870
560	ACAD-0300	1.899	☐	1.899	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_1.899_In-Out
592	ACAD-0300	1.987	☐	1.987	2.037	266	1-1.5	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0	F	☐	PM stones on L; 5-6' gaps; obscured by tall grasses	Acad0300_1.987
607	ACAD-0300	1.992	☐	1.992	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Great Meadow Loop/Hemlock Fold"	Acad0300_1.992
929	ACAD-0300	2	☐	2	2.02	105	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; proximate to Pullout 2.167	Acad0300_2.000
925	ACAD-0300	2.149	☐	2.149	2.218	364	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☑	Framed/filtered view on R; includes Pullout 2.167	Acad0300_2.149(2)

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
561	ACAD-0300	2.159	☑	2.159	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	48	P	☐	Culvert; outlet headwall - heaving; drains to Great Meadow	Acad0300_2.159_In-Out(2)
562	ACAD-0300	2.167	☐	2.167	2.2	230	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; ends at Sign 2.200	Acad0300_2.167
563	ACAD-0300	2.258	☑	2.258	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_2.258_In-Out
564	ACAD-0300	2.306	☑	2.306	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	mortared stone headwall	0		☑	Culvert; 2x3' box; long lintel stones span inlet and outlet headwalls; very impressive	Acad0300_2.306_In-Out
565	ACAD-0300	2.355	☑	2.355	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	concrete	dry laid stone drop-inlet	loose stones	0	P	☐	Culvert; long lintel stone spans inlet headwall; outlet structure - failing	Acad0300_2.355_In(2)-Out
595	ACAD-0300	2.428	☐	2.428	2.449	111	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 9' wide at max	Acad0300_2.428
598	ACAD-0300	2.488	☐	2.488	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_2.488_In-Out
610	ACAD-0300	2.513	☐	2.513	2.515	15	x	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 3-4' gaps; 26' from CL	Acad0300_2.513
566	ACAD-0300	2.526	☑	2.526	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_2.526_In-Out
567	ACAD-0300	2.601	☑	2.601	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_2.601_In-Out
568	ACAD-0300	2.624	☑	2.624	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	24		☐	Culvert; CIP at inlet	Acad0300_2.624_In-Out
569	ACAD-0300	2.677	☐	2.677	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_2.677_In-Out
604	ACAD-0300	2.711	☐	2.711	2.728	90	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R, 8' wide at max	Acad0300_2.711
570	ACAD-0300	2.726	☐	2.726	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_2.694_In-Out
571	ACAD-0300	2.735	☐	2.735	2.739	25	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 11.5' from CL	Acad0300_2.735
572	ACAD-0300	2.748	☐	2.748	2.789	216	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-5' gaps; 11.5' from CL	Acad0300_2.748
573	ACAD-0300	2.79	☐	2.79	2.81	105	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 9' wide at max	Acad0300_2.790
601	ACAD-0300	2.828	☐	2.828	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18		☐	Culvert;	Acad0300_2.828_In-Out
603	ACAD-0300	2.838	☐	2.838	2.854	85	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 9' wide at max	Acad0300_2.838
574	ACAD-0300	2.85	☑	2.85	2.931	427	x	x	20	0	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on L; ditch ends w/plastic underdrain	Acad0300_2.850
599	ACAD-0300	2.867	☐	2.867	2.874	37	2-3.5	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-5' gaps; bocks old road bed trailing off into woods	Acad0300_2.867
576	ACAD-0300	2.875	☑	2.875	2.93	290	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R;	Acad0300_2.875
577	ACAD-0300	3.159	☑	3.159	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	0	P	☐	Culvert; 30" square grate on concrete; outlet pipe - rebar visible	Acad0300_3.159_In-Out
924	ACAD-0300	3.203	☐	3.203	3.416	1124	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; includes Pullout 3.324	Acad0300_3.203(2)
578	ACAD-0300	3.208	☑	3.208	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type concrete	pipe only	18	P	☐	Culvert; inlet structure - failing. pipe opening above grade of ditch	Acad0300_3.208_In-Out
579	ACAD-0300	3.234	☐	3.234	3.393	893	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; called guardwall in RIP. gaps 3-6'; 13.5 off CL	Acad0300_3.234
580	ACAD-0300	3.25	☐	3.25	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	mortared stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_3.250_In-Out
600	ACAD-0300	3.324	☐	3.324	3.33	32	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 9' wide at max; next to Beaver Pond on R	Acad0300_3.324
581	ACAD-0300	3.36	☑	3.36	3.67	1636	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; stones 4-6' long, 1-2' gaps; 14' off CL	Acad0300_3,360
582	ACAD-0300	3.394	☐	3.394	3.521	671	2-2.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; stones 4-6'; gaps 2-3' gaps; grey granite color	Acad0300_3.394(2)
583	ACAD-0300	3.415	☑	3.415	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	Not found	Not found	0		☐	Culvert; drains Beaver Pond, beaver fooler-wire mesh surrounds probable inlet	Acad0300_3.415_In

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR d	Notes	Digital Photo(s)
927	ACAD-0300	3.417	☐	3.417	3.473	295	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_3.417
1202	ACAD-0300	3.42	☐	3.42	5.33	0	x	x	0	0	Land use	BPR Project 4A2	Historic road segment	x	x	x	0		☐	BPR Project 4A2; completed 1958	none
605	ACAD-0300	3.431	☐	3.431	3.521	475	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; begin 195' after Guardwall 3.394	Acad0300_3.431
584	ACAD-0300	3.523	☐	3.523	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	pipe only	18		☐	Culvert;	Acad0300_3.523_In-Out
606	ACAD-0300	3.524	☐	3.524	3.596	380	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_3.524
585	ACAD-0300	3.525	☐	3.525	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; just after culvert 3.523; "Bear Brook Trail"	Acad0300_3.525
928	ACAD-0300	3.526	☐	3.526	3.66	718	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; includes Pullout 3.543	Acad0300_3.526
586	ACAD-0300	3.543	☑	3.543	3.579	190	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 5 striped parallel spaces; 13' wide max	Acad0300_3.543
613	ACAD-0300	3.587	☐	3.587	3.66	385	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L;	Acad0300_3.587
587	ACAD-0300	3.602	☑	3.602	3.646	232	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; stones 4-5' long, 1-2' gaps	Acad0300_3.602
614	ACAD-0300	3.605	☐	3.605	3.632	171	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R:	Acad0300_3.605
591	ACAD-0300	3.62	☐	3.62	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	Not found	24		☐	Culvert,	Acad0300_3.620_In(2)-Out
588	ACAD-0300	3.664	☑	3.664	3.713	258	x	x	20	0	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on L;	Acad0300_3.664
589	ACAD-0300	3.672	☐	3.672	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick (2)	dry laid stone headwall	24		☐	Culvert; two inlets; also an 18" RCP	Acad0300_3.672
616	ACAD-0300	3.673	☐	3.673	3.714	216	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_3.673
590	ACAD-0300	3.714	☐	3.714	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick (2)	x	18		☐	Culvert; two inlets; outlet appears to be Culvert 3.672	Acad0300_3.714_In(2)
628	ACAD-0300	3.715	☐	3.715	3.726	31	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_3.715
623	ACAD-0300	3.716	☐	3.716	3.719	15	x	x	20	0	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on L;	Acad0300_3.716
910	ACAD-0300	3.744	☐	3.744	3.822	411	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_3.744(2)
615	ACAD-0300	3.746	☐	3.746	4.137	2064	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; stones 4-5' long; 1.5-2' gaps	Acad0300_3.746
618	ACAD-0300	3.754	☐	3.754	3.94	982	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L;	Acad0300_3.754(2)
633	ACAD-0300	3.777	☑	3.777	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	pipe only*	18		☐	Culvert; 1 coping stone marks inlet; outlet within Embankment 3.754	Acad0300_3.777_In-Out
930	ACAD-0300	3.823	☐	3.823	4.067	1288	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L; includes Pullout 3.824	Acad0300_3.823
631	ACAD-0300	3.824	☑	3.824	3.882	258	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; sawn-top granite curbs; 20' wide at max	Acad0300_3.824
632	ACAD-0300	3.825	☐	3.825	3.881	295	x	x	25	0	Circulation	Walkway	Paved - curb	concrete	x	x	0		☐	Paved walkway on L; sawn-top granite curbs; 4' wide; parallels Pullout 3.824	Acad0300_3.825
622	ACAD-0300	3.845	☐	3.845	3.859	75	x	x	15	0	Circulation	Median	Mortared rubble	stones	x	x	0		☐	Mortared rubble median on L; 5' wide at max	Acad0300_3.845
617	ACAD-0300	3.849	☑	3.849	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	Not found	0		☐	Culvert; 30" square grate on concrete; outlet not found	Acad0300_3.849_In
624	ACAD-0300	3.86	☐	3.86	0	0	x	x	30	0	Small-scale features	Sign	Wayside	stone, metal, plastic	x	x	0		☐	Wayside sign on L	none
626	ACAD-0300	3.965	☐	3.965	4.051	455	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L;	Acad0300_3.965
619	ACAD-0300	3.965	☐	3.965	3.993	147	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_3.967
625	ACAD-0300	3.966	☑	3.966	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	Not found	18		☐	Culvert; outlet likely within Embankment 3.965	Acad0300_3.966_In

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
630	ACAD-0300	3.997	☑	3.997	4.046	258	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 2-3' gaps; 14' from CL	Acad0300_3.997
629	ACAD-0300	4.032	☑	4.032	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18		☐	Culvert;	Acad0300_4.032_In-Out
926	ACAD-0300	4.068	☐	4.068	4.14	380	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_4.068
634	ACAD-0300	4.077	☐	4.077	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "East Face Trail"	Acad0300_4.077
620	ACAD-0300	4.08	☑	4.08	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	loose stones	18		☐	Culvert;	Acad0300_4.080_In-Out
621	ACAD-0300	4.123	☐	4.123	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	loose stones	18	P	☐	Culvert; outlet pipe - rebar visible	Acad0300_4.123_In-Out
645	ACAD-0300	4.125	☑	4.125	4.167	221	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_4.125
636	ACAD-0300	4.168	☑	4.168	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	Not found	0		☐	Culvert; outlet not found	Acad0300_4.168_In
651	ACAD-0300	4.169	☐	4.169	4.197	157	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_4.169
649	ACAD-0300	4.232	☑	4.232	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	40		☐	Culvert; curved inlet and outlet headwalls; long lintel stones span inlet and outlet headwalls	Acad0300_4.232_In-Out
648	ACAD-0300	4.32	☑	4.32	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_4.320_In-Out
657	ACAD-0300	4.338	☑	4.338	4.46	644	1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; stones 5-6' long; 2-3' gaps	Acad0300_4.338
638	ACAD-0300	4.344	☑	4.344	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert,	Acad0300_4.344_In-Out
643	ACAD-0300	4.392	☑	4.392	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert;	Acad0300_4.392_In-Out
642	ACAD-0300	4.431	☑	4.431	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	30		☐	Culvert,	Acad0300_4.431_In-Out
641	ACAD-0300	4.472	☐	4.472	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18	F	☐	Culvert; inlet and outlet pipes partially blocked	Acad0300_4.492_In-Out
644	ACAD-0300	4.495	☑	4.495	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert,	Acad0300_4.495_In-Out
662	ACAD-0300	4.523	☐	4.523	4.536	69	x	x	0	20	Buildings/structures	Waterway	Paved	asphalt	x	x	0		☐	Paved waterway on R; bounded by low granite wall	Acad0300_4.523
932	ACAD-0300	4.53	☐	4.53	4.575	237	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; proximate to Pullout 4.546	Acad0300_4.530
639	ACAD-0300	4.535	☐	4.535	4.557	120	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R' 4-6' gaps; 13' off CL	Acad0300_4.535
627	ACAD-0300	4.536	☐	4.536	4.637	533	1-2	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 4-6' gaps; 13' from CL	Acad0300_4.536
652	ACAD-0300	4.537	☑	4.537	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	36		☐	Culvert;	Acad0300_4.537_In-Out
933	ACAD-0300	4.54	☐	4.54	4.626	454	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R, includes Pullout 4.546	Acad0300_4.540
650	ACAD-0300	4.546	☑	4.546	4.625	420	x	x	0	20	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on R; portions with concrete curbs; 35' wide at max; 21 striped spaces	Acad0300_4.546
653	ACAD-0300	4.564	☐	4.564	4.605	220	x	x	0	15	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on R; portions with concrete curbs	Acad0300_4.564
637	ACAD-0300	4.566	☐	4.566	4.606	215	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-6' gaps	Acad0300_4.566
640	ACAD-0300	4.567	☐	4.567	4.615	253	x	x	0	25	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on R; concrete curbs; 4' wide	Acad0300_4.567
635	ACAD-0300	4.568	☐	4.568	0	0	x	x	0	0	Buildings/structures	Culvert	CMP,RCP	metal, concrete	mortared stone headwall,	pipe only	18	P	☐	Culvert; first inlet above Pullout 4.546; second inlet along roadway; second inlet has grate; inlet headwall - damaged	Acad0300_4.568_In(2)-Out
666	ACAD-0300	4.576	☐	4.576	0	0	x	x	0	20	Circulation	Steps	Tooled stone	stones	x	x	0		☐	Tooled stone steps on R; connects Pemetic parking area to trails	Acad0300_4.576
659	ACAD-0300	4.577	☐	4.577	0	0	x	x	0	30	Small-scale features	Sign (2)	Wayside	stone, metal, plastic	x	x	0		☐	Wayside signs at steps on R;	Acad0300_4.577
665	ACAD-0300	4.58	☐	4.58	0	0	x	x	0	25	Small-scale features	Bench (2)	Tooled stone	stone	x	x	0		☐	Benches on R; two in L shape in middle of Median 4.564	Acad0300_4.580

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left C	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
664	ACAD-0300	4.605	☐	4.605	0	0	x	x	0	0	Buildings/structures	Culvert	CMP,RCP	metal, concrete	curb type concrete	pipe only	18		☐	Culvert; first inlet above Pullout 4.546; second inlet along roadway; second inlet has grate	Acad0300_4.605_In(2)-Out
663	ACAD-0300	4.607	☐	4.607	4.796	1000	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-6' gaps	Acad0300_4.607
661	ACAD-0300	4.63	☐	4.63	4.637	45	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0	P	☐	Mortared rubble waterway on R; very poor condition	Acad0300_4.630
646	ACAD-0300	4.638	☐	4.638	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	mortared stone headwall	18	P	☐	Culvert; Inlet structure - failing	Acad0300_4.638_In-Out
647	ACAD-0300	4.648	☐	4.648	4.65	15	1-2	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 3 stones; 3' gaps; 45' off CL	Acad0300_4.648
681	ACAD-0300	4.723	☐	4.723	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	pipe only	18		☐	Culvert;	Acad0300_2.723
674	ACAD-0300	4.753	☑	4.753	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert; perennial stream	Acad0300_4.753_In-Out
680	ACAD-0300	4.808	☑	4.808	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	30		☐	Culvert; perennial stream	Acad0300_4.808_In-Out
654	ACAD-0300	4.877	☑	4.877	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	36		☐	Culvert;	Acad0300_4.877_In-Out
679	ACAD-0300	4.936	☑	4.936	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert; perennial stream	Acad0300_4.936_In-Out
934	ACAD-0300	5.007	☐	5.007	5.03	121	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_5.007
678	ACAD-0300	5.008	☑	5.008	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	48		☑	Culvert; interesting curved headwalls; long coping stones span inlet and outlet headwalls; stream	Acad0300_5.008_In-Out
677	ACAD-0300	5.094	☑	5.094	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert;	Acad0300_5.094_In-Out
675	ACAD-0300	5.155	☑	5.155	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert;	Acad0300_5.155_In-Out
682	ACAD-0300	5.225	☑	5.225	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	18		☐	Culvert;	Acad0300_5.225_In-Out
673	ACAD-0300	5.246	☑	5.246	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		☐	Culvert;	Acad0300_5.246_In-Out
676	ACAD-0300	5.286	☐	5.286	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	curb type brick	pipe only	18		☐	Culvert;	Acad0300_5.286_In-Out
672	ACAD-0300	5.287	☑	5.287	5.304	- 90	x	x	0	20	Buildings/structures	Waterway	Mortared rubble	stone, concrete	x	x	0		☐	Mortared rubble waterway on R;	Acad0300_5.287
683	ACAD-0300	5.302	☐	5.302	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Metal gate; 31' span	Acad0300_5.302
1197	ACAD-0300	5.332	☐	5.332	5.93	0	x	x	0	0	Land use	Champlain Mountain	Historic road segment	x	x	x	0		☐	Champlain Mountain Road; completed 1940	none
668	ACAD-0300	5.414	☑	5.414	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only	18	P	☐	Culvert; long lintel stone spans inlet headwall; inlet headwall - failing; outlet pipe - partially blocked	Acad0300_5.414_In-Out
667	ACAD-0300	5.415	☐	5.415	5.435	110	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 7' wide at max	Acad0300_5.415
658	ACAD-0300	5.478	☑	5.478	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18		☐	Culvert;	Acad0300_5.478_In-Out
660	ACAD-0300	5.499	☑	5.499	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	24	P	☐	Culvert; exposed iron pipe above inlet structure; inlet structure - tree encroaching	Acad0300_5.499_In-Out
684	ACAD-0300	5.623	☑	5.623	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18	P	☐	Culvert; 30" square grate on concrete; inlet structure - failing	Acad0300_5.623_In-Out
656	ACAD-0300	5.703	☐	5.703	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete; 1 coping stone marks inlet	Acad0300_5.703_In-Out
669	ACAD-0300	5.721	☑	5.721	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall; shoulder overtaking inlet structure	Acad0300_5.721_In-Out
670	ACAD-0300	5.792	☑	5.792	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete; 1 coping stone marks inlet	Acad0300_5.792_In-Out
700	ACAD-0300	5.802	☐	5.802	6.214	2175	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-7' gaps	Acad0300_5.802
699	ACAD-0300	5.843	☑	5.843	5.918	396	2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3-4' long stones; 4-5' gaps	Acad0300_5.843
701	ACAD-0300	5.852	☐	5.852	0	0	x	x	25	0	Circulation	Junction	Paved walkway	asphalt	x	x	0		☐	Junction with paved walkway on L; leads to Sand Beach	Acad0300_5.852

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR d	Notes	Digital Photo(s)
935	ACAD-0300	5.854	☐	5.854	5.914	316	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout; Sand Beach	Acad0300_5.854
698	ACAD-0300	5.863	☑	5.863	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	mortared stone headwall	18		☐	Culvert; long lintel stone spans outlet headwall; new outlet structure	Acad0300_5.863_In-Out
702	ACAD-0300	5.892	☐	5.892	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_5.946_In-Out
671	ACAD-0300	5.911	☐	5.911	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Bowl Trail"	Acad0300_5.911
703	ACAD-0300	5.912	☑	5.912	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18		☑	Culvert, 2 coping stones mark inlet; interesting U-shape inlet structure	Acad0300_5.912_In-Out
1198	ACAD-0300	5.932	☐	5.932	6.58	0	x	x	0	0	Land use	Ocean Drive: Sand Beach	Historic road segment	x	x	x	0		☐	Ocean Drive. Sand Beach to Thunder Hole; completed 1934	none
697	ACAD-0300	5.946	☑	5.946	6.003	300	1-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; stones 3-4' long; 0-1.5' gaps	Acad0300_5.946(2)
688	ACAD-0300	5.947	☐	5.947	5.988	220	6	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0300_5.947
655	ACAD-0300	5.964	☑	5.964	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	dry laid stone drop-inlet	Not found	0		☐	Culvert;	Acad0300_5.964_In
686	ACAD-0300	6.004	☐	6.004	6.022	100	20	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	uncoursed stones	x	x	0		☐	Guardwall/retaining wall on L; both dry laid	Acad0300_6.004(2)
695	ACAD-0300	6.023	☐	6.023	6.896	4609	1-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; stones up to 4' long; 0-1.5' gaps	Acad0300_6.023(3)
704	ACAD-0300	6.039	☐	6.039	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18	P	☐	Culvert; 3" PVC waterline in culvert; inlet headwall - collapsed	Acad0300_6.039_In-Out
691	ACAD-0300	6.056	☐	6.056	6.078	120	3-4	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on L;	Acad0300_6.056
694	ACAD-0300	6.06	☐	6.06	6.071	58	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L	Acad0300_6.060
936	ACAD-0300	6.072	☐	6.072	6.184	591	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout; Sand Cove	Acad0300_6.072
690	ACAD-0300	6.177	☐	6.177	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	loose stones	0	P	☐	Culvert; inlet structure - safety issue (opening very close to road)	Acad0300_6.177_In-Out
937	ACAD-0300	6.185	☐	6.185	6.27	448	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☑	Panoramic view on L;	Acad0300_6.185
692	ACAD-0300	6.205	☐	6.205	0	0	x	x	30	0	Small-scale features	Other	Well	stone	x	x	0		☐	Other; circular stone well on L	Acad0300_6.205
685	ACAD-0300	6.215	☑	6.215	6.225	52	x	x	0	20	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on R,	Acad0300_6.215
689	ACAD-0300	6.23	☑	6.23	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert,	Acad0300_6.230_In-Out
693	ACAD-0300	6.289	☐	6.289	6.294	30	x	x	0	20	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on R, lined by larger stones on uphill side	Acad0300_6.289
687	ACAD-0300	6.295	☑	6.295	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall, dry	loose stones	0		☐	Culvert; two inlets	Acad0300_6.295_In(2)-Out
715	ACAD-0300	6.312	☐	6.312	6.33	95	x	x	0	20	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on R,	Acad0300_6.312
938	ACAD-0300	6.323	☐	6.323	6.483	844	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_6.323
708	ACAD-0300	6.331	☐	6.331	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwalls(2)	dry laid stone headwall	18		☐	Culvert; two inlets	Acad0300_6.331_In(2)-Out
709	ACAD-0300	6.333	☑	6.333	6.486	807	1-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R, 5-7' gaps; 11' off CL	Acad0300_6.333
716	ACAD-0300	6.361	☐	6.361	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert,	Acad0300_6.361_In-Out
711	ACAD-0300	6.412	☐	6.412	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	18		☐	Culvert, outlet structure includes small wingwalls	Acad0300_6.412_In-Out
710	ACAD-0300	6.467	☐	6.467	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_6.467_In
939	ACAD-0300	6.484	☐	6.484	6.55	348	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L;	Acad0300_6.484
717	ACAD-0300	6.486	☐	6.486	6.5	75	6	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L; 6' high at max; 30' off CL	Acad0300_6.486

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
987	ACAD-0300	6.492	☐	6.492	0	0	x	x	20	0	Circulation	Steps	Tooled stone	stones	x	x	0		☐	Tooled stone steps on L; connects Shore Path to shoreline	Acad0300_6.492
714	ACAD-0300	6.494	☑	6.494	6.621	620	1-1.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-6' gaps	Acad0300_6.494
712	ACAD-0300	6.503	☐	6.503	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; 1 coping stone marks inlet	Acad0300_6.503_In
940	ACAD-0300	6.551	☐	6.551	6.65	522	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; proximate to Thunder Hole	none
1207	ACAD-0300	6.581	☐	6.581	6.722	0	x	x	0	0	Land use	Thunder Hole Demonstration	Historic road segment	x	x	x	0		☐	Thunder Hole Demonstration Section; completed 1929	none
718	ACAD-0300	6.623	☑	6.623	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	drop-inlet with grate (2)	dry laid stone headwall	18		☐	Culverts; two inlets; 30" square grates on concrete	Acad0300_6.623_In(2)-Out
719	ACAD-0300	6.641	☑	6.641	6.708	353	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 3-5' gaps	Acad0300_6.641
941	ACAD-0300	6.651	☐	6.651	6.708	300	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L; proximate to Thunder Hole	Acad0300_6.651
713	ACAD-0300	6.659	☐	6.659	0	0	x	x	0	20	Circulation	Steps	Tooled stone	stones	x	x	0		☐	Tooled stone steps on R.	none
733	ACAD-0300	6.676	☐	6.676	0	0	x	x	0	20	Circulation	Steps	Concrete	concrete	x	x	0		☐	Concrete steps on R; connects parking area to road; railing	Acad0300_6.676
942	ACAD-0300	6.709	☐	6.709	6.805	506	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; proximate to Thunder Hole	Acad0300_6.709
720	ACAD-0300	6.71	☐	6.71	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	dry laid stone headwall	0		☐	Culvert; long stones cover inlet	Acad0300_6.710_In-Out
729	ACAD-0300	6.716	☐	6.716	6.725	50	1.5	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0300_6.716
728	ACAD-0300	6.722	☑	6.722	6.804	432	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 6-8' gaps	Acad0300_6.722
1206	ACAD-0300	6.723	☐	6.723	7.183	0	x	x	0	0	Land use	Ocean Drive. Thunder Hole	Historic road segment	x	x	x	0		☐	Ocean Drive Thunder Hole to Otter Cliffs; completed 1933	none
726	ACAD-0300	6.752	☐	6.752	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone drop-inlet	Not found	24		☐	Culvert, outlet not found	Acad0300_6.752_In
724	ACAD-0300	6.788	☐	6.788	0	0	x	x	0	0	Buildings/structures	Culvert	Clay pipe	clay	dry laid stone drop-inlet	dry laid stone headwall	12		☐	Culvert.	Acad0300_6.788_In-Out
721	ACAD-0300	6.896	☐	6.896	6.946	264	x	x	25	0	Circulation	Walkway	Unpaved - curb	gravel	x	x	0		☐	Unpaved walkway on L; rough-cut granite curbs; 4' wide; Shore Path; curb is at grade with walkway and road	Acad0300_6.896
730	ACAD-0300	6.897	☐	6.897	6.994	250	40+	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	uncoursed stones	x	x	0		☐	Guardwall/retaining wall on L; mortared guardwall; dry laid retaining wall; massive	Acad0300_6.897(2)
943	ACAD-0300	6.939	☐	6.939	6.975	190	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_6.939
723	ACAD-0300	6.943	☐	6.943	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	Not found	18		☐	Culvert.	Acad0300_6.943_In
706	ACAD-0300	6.945	☐	6.945	7.023	411	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 1-3' gaps; 13' off CL	Acad0300_6.945(2)
722	ACAD-0300	6.957	☐	6.957	6.988	163	5	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0	P	☐	Retaining wall on L; 40' from CL; tree encroaching on portion	Acad0300_6.957
707	ACAD-0300	6.972	☑	6.972	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	dry laid stone drop-inlet	Not found	0		☐	Culvert; coping stone marks inlet; outlet not found	Acad0300_6.972_In(2)
944	ACAD-0300	6.976	☐	6.976	7.095	628	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L;	Acad0300_6.976
705	ACAD-0300	6.982	☐	6.982	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Gorham Mtn. Trail"	Acad0300_6.982
732	ACAD-0300	6.983	☐	6.983	0	0	x	x	0	20	Circulation	Steps	Rough-cut stone	stones	x	x	0		☐	Rough-cut stone steps on L; connects road to Shore Path	Acad0300_6.983
736	ACAD-0300	7.013	☑	7.013	7.067	285	1-1.5	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-5' gaps	Acad0300_7.013
725	ACAD-0300	7.024	☐	7.024	7.084	316	5	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	coursed stones	x	x	0		☐	Guardwall/retaining wall on L; both dry laid; 5' high max	Acad0300_7.024
738	ACAD-0300	7.077	☐	7.077	7.095	100	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-6' gaps	Acad0300_7.077
737	ACAD-0300	7.082	☐	7.082	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only*	18		☐	Culvert, outlet within Retaining wall 7.024	Acad0300_7.082_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR d	Notes	Digital Photo(s)
988	ACAD-0300	7.085	☐	7.085	7.168	438	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L;	no pic
945	ACAD-0300	7.096	☐	7.096	7.155	311	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; proximate to Pullout 7.120	Acad0300_7.096
734	ACAD-0300	7.1	☐	7.1	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	dry laid stone headwall	18		☐	Culvert;	Acad0300_7.100_In-Out
740	ACAD-0300	7.117	☐	7.117	7.131	85	6	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0	P	☐	Retaining wall on L; 20' off CL; one section is failing	Acad0300_7.117
735	ACAD-0300	7.12	☐	7.12	7.134	74	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide max	Acad0300_7.120
739	ACAD-0300	7.135	☑	7.135	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone headwall	dry laid stone headwall	18		☐	Culvert, rip rap apron at inlet; long lintel stone spans inlet headwall	Acad0300_7.135_In-Out
741	ACAD-0300	7.143	☑	7.143	7.185	221	1.5-2	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-5' gaps	Acad0300_7.143
946	ACAD-0300	7.183	☐	7.183	7.22	195	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	none
471	ACAD-0300	7.185	☐	7.185	8.356	0	x	x	0	0	Land use	Otter Cliffs Road	Historic road segment	x	x	x	0		☐	Otter Cliffs Road; completed 1936	none
742	ACAD-0300	7.227	☐	7.227	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		☐	Gate; 27' span	Acad0300_7.227
758	ACAD-0300	7.301	☐	7.301	7.397	506	15	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	uncoursed stones	x	x	0		☐	Guardwall/retaining wall on L; both dry laid, 15' high at max	Acad0300_7.301
731	ACAD-0300	7.303	☐	7.303	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; outlet within Guard/ret wall 7.301	Acad0300_7.303_In-Out
947	ACAD-0300	7.375	☐	7.375	7.43	290	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☑	Framed/filtered view on L; no pullout	Acad0300_7.375
743	ACAD-0300	7.398	☐	7.398	7.438	211	1-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; pink granite; .5-1' gaps	Acad0300_7.398
757	ACAD-0300	7.432	☑	7.432	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert,	Acad0300_7.432_In-Out(3)
760	ACAD-0300	7.439	☐	7.439	7.507	359	20	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	coursed stones	x	x	0		☐	Guardwall/retaining wall on L; mortared guardwall, dry laid retaining wall, 20' high at max; 14' off CL	Acad0300_7.439
762	ACAD-0300	7.45	☐	7.45	7.452	11	x	x	0	15	Circulation	Median	Landscaped - curb	grass	x	x	0		☐	Landscaped median on R; rough-cut granite curbs; 5' wide	Acad0300_7.450
759	ACAD-0300	7.451	☐	7.451	7.509	307	x	x	25	0	Circulation	Walkway	Unpaved - curb	gravel	x	x	0		☐	Unpaved walkway on L; rough-cut granite curbs; 4' wide; Shore Path; ends as steps descending to cliffs below	Acad0300_7.451(2)
750	ACAD-0300	7.452	☐	7.452	7.53	411	10	x	0	40	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	coursed stones	x	x	0		☐	Guardwall/retaining wall on R; mortared guardwall; dry laid retaining wall; 10' high at max; 10' off CL	Acad0300_7.452
763	ACAD-0300	7.454	☐	7.454	7.577	337	2-5	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	coursed stones	x	x	0		☐	Guardwall/retaining wall on L; mortared guardwall; dry laid retaining wall, 8' off CL	Acad0300_7.454
948	ACAD-0300	7.456	☐	7.456	7.539	438	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L;	Acad0300_7.456(2)
755	ACAD-0300	7.469	☐	7.469	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	stone	dry laid stone drop-inlet	mortared stone headwall	0		☐	Culvert; inlet marked by wood posts, outlet within Guard/ret wall 7.439	Acad0300_7.469_In-Out
754	ACAD-0300	7.47	☐	7.47	0	0	x	x	20	0	Circulation	Steps	Tooled stone	stones	x	x	0		☐	Tooled stone steps on L; built within Guard/ret wall 7.439	none
753	ACAD-0300	7.518	☐	7.518	7.549	165	15	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	coursed stones	x	x	0		☐	Guardwall/retaining wall on L; both dry laid; .5' gaps; pink granite	Acad0300_7.518(2)
949	ACAD-0300	7.54	☐	7.54	7.565	132	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	none
756	ACAD-0300	7.554	☐	7.554	7.629	394	1.5-2	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	uncoursed stones	x	x	0	P	☐	Guardwall/retaining wall on L; both dry laid; .5-1.5' gaps; some toppled stones	Acad0300_7.554(2)
751	ACAD-0300	7.57	☐	7.57	7.583	70	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0	P	☐	Unpaved pullout on R; 6' wide at max; damaging roots of adjacent trees	Acad0300_7.570
727	ACAD-0300	7.585	☐	7.585	7.603	96	1-1.5	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 3-5' gaps	Acad0300_7.585
749	ACAD-0300	7.598	☐	7.598	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	dry laid stone headwall	Not found	0	F	☐	Culvert; outlet not found; inlet pipe - blocked	Acad0300_7.598_In
748	ACAD-0300	7.755	☐	7.755	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	drop-inlet with grate	mortared stone headwall	24		☐	Culvert, 30" square grate on concrete; long lintel stone spans outlet headwall	Acad0300_7.755_In-Out
950	ACAD-0300	7.757	☐	7.757	7.9	755	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_7.757

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR	Notes	Digital Photo(s)
747	ACAD-0300	7.759	☐	7.759	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Ocean Path"	Acad0300_7.759
745	ACAD-0300	7.785	☐	7.785	7.819	179	.5-1	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L;	Acad0300_7.785(2)
744	ACAD-0300	7.797	☑	7.797	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert;	Acad0300_7.797_In-Out
767	ACAD-0300	7.818	☐	7.818	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Ocean Path"	Acad0300_7.818
768	ACAD-0300	7.826	☐	7.826	8.033	1094	1-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones, rounded	x	x	0		☐	Guardwall on L; mix of rounded and angular stones; 13' off CL	Acad0300_7.826
746	ACAD-0300	7.828	☐	7.828	7.865	197	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded, angular stones	x	x	0		☐	PM stones on R;	Acad0300_7.828
761	ACAD-0300	7.885	☐	7.885	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; "Ocean Path"	Acad0300_7.885
764	ACAD-0300	7.894	☐	7.894	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	drop-inlet with grate	Not found	0	F	☐	Culvert; 30" square grate on concrete; inlet structure partially blocked; outlet not found	Acad0300_7.894_In
752	ACAD-0300	7.919	☐	7.919	8.021	538	15	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L; 15' high at max; 16' off CL	Acad0300_7.919
766	ACAD-0300	7.933	☐	7.933	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	dry laid stone drop-inlet	Not found	0		☐	Culvert; outlet likely within Retaining wall 7.919	Acad0300_7.933_In
782	ACAD-0300	8.016	☑	8.016	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop inlet	loose stones	18	F	☐	Culvert; 1 coping stone marks inlet; inlet structure blocked; outlet pipe blocked	Acad0300_8.016_In-Out
781	ACAD-0300	8.069	☐	8.069	8.075	30	1-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 4 stones	Acad0300_8.069
765	ACAD-0300	8.115	☐	8.115	8.206	480	1.5-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones, rounded	x	x	0		☐	Guardwall on L; mix of rounded and angular stones; 13' off CL	Acad0300_8.115
780	ACAD-0300	8.121	☑	8.121	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert,	Acad0300_8.121_In-Out
778	ACAD-0300	8.182	☑	8.182	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert; outlet structure possibly associated with road to former radio station	Acad0300_8.182_In-Out
769	ACAD-0300	8.283	☑	8.283	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18		☐	Culvert; coping stones mark inlet and outlet	Acad0300_8.283_In-Out
776	ACAD-0300	8.306	☐	8.306	8.309	16	x	x	45	0	Buildings/structures	Guardwall	Earthen berm	grass	x	x	0		☐	Earthen berm on L; 14' off CL	Acad0300_8.306(2)
777	ACAD-0300	8.31	☐	8.31	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	dry laid stone headwall	18	P	☐	Culvert; inlet structure 8' deep; cable seen emerging from under road; outlet pipe - blocked; outlet headwall - leaning	Acad0300_8.130_In(3)-Out2
775	ACAD-0300	8.357	☐	8.357	0	0	x	x	25	0	Circulation	Walkway	Paved - no curb	asphalt	x	x	0		☐	Paved walkway on L; 4' wide; leads to Fabbri monument	none
1205	ACAD-0300	8.358	☐	8.358	11.42	0	x	x	0	0	Land use	Otter Cove Causeway/Bla	Historic road segment	x	x	x	0		☐	Otter Cove Causeway/Blackwoods Road; completed 1939	none
770	ACAD-0300	8.36	☐	8.36	0	0	x	x	30	0	Small-scale features	Monument	Boulder	stone	x	x	0		☐	Monument on L; bronze plaque inset on pink granite boulder; "Fabbri Monument"; surrounded on one side by mortared stone cobbles	Acad0300_8.360
774	ACAD-0300	8.469	☑	8.469	8.487	95	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders, parapet walls 30" high, 26" wide; 30' wall to wall; "Fishhouse Road Bridge"; recently repointed	Acad0300_8.469(4)
773	ACAD-0300	8.521	☑	8.521	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_8.521_In-Out
958	ACAD-0300	8.618	☑	8.618	8.776	834	x	x	0	0	Buildings/structures	Causeway	x	earth, stone	x	x	0		☐	Causeway; 24' wide travel lanes; rock embankments on L slopes to sea	Acad0300_8.618(9)
779	ACAD-0300	8.619	☐	8.619	8.746	670	x	x	50	0	Buildings/structures	Embankment	Irregular flat stones	stones	x	x	0		☐	Embankment on L; flat stones; 24' off CL	Acad0300_8.619
772	ACAD-0300	8.62	☑	8.62	8.743	649	2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones, rounded	x	x	0		☐	Guardwall on R; 4-10' gaps; 14' off CL	Acad0300_8.620
951	ACAD-0300	8.621	☐	8.621	8.77	786	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R; Otter causeway	Acad0300_8.621
797	ACAD-0300	8.622	☐	8.622	8.68	306	x	x	25	0	Circulation	Walkway	Unpaved - curb	gravel	x	x	0		☐	Unpaved walkway on L; rough-cut granite curbs; 3-4' wide	Acad0300_8.623
952	ACAD-0300	8.623	☐	8.623	8.771	781	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☑	Panoramic view on L; Otter causeway	Acad0300_8.622
796	ACAD-0300	8.681	☐	8.681	8.742	322	x	x	25	0	Circulation	Walkway	Paved - curb	cobbles	x	x	0		☐	Paved walkway on L; rough-cut granite curbs; 4-5' wide	Acad0300_8.681
771	ACAD-0300	8.743	☐	8.743	8.773	158	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; rough-cut granite curbs; 5' wide	Acad0300_8.743

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left C	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
795	ACAD-0300	8.747	☑	8,747	8.772	132	x	x	0	0	Buildings/structures	Bridge	Arch (3)	mortared stone, concrete	x	x	0		☐	Bridge; asphalt shoulders, parapet walls 30" high, 26" wide; 35.5' wall to wall; 25.5' stripe to curb; "Otter Cove Causeway"	Acad0300_8.747(5)
798	ACAD-0300	8.775	☐	8.775	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; does not cross road	Acad0300_8.775_In-Out
800	ACAD-0300	8.928	☑	8.928	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	Not found	0	F	☐	Culvert; 30" square grate on concrete; inlet structure - half blocked	Acad0300_8,928_In
799	ACAD-0300	8.931	☐	8.931	8.947	85	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 7.5' wide at max	Acad0300_8,931
794	ACAD-0300	8.948	☐	8.948	9.053	554	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; rough-cut granite curbs; 2' wide	Acad0300_8,948
953	ACAD-0300	8.953	☐	8.953	9.798	4461	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; includes Pullouts 9,242, 9.720, 9.767; proximate to Pullout 9.506	Acad0300_8.953
786	ACAD-0300	8,954	☐	8.954	9.049	501	1-1.5	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; .5' gaps; grey granite color; 13' off CL	Acad0300_8.954
793	ACAD-0300	8.956	☐	8.956	9,02	340	3	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0300_8.956
792	ACAD-0300	8.995	☑	8.995	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	24		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_8,995_In-Out
791	ACAD-0300	9,069	☑	9,069	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0300_9,069_In-Out
783	ACAD-0300	9.157	☐	9.157	9.387	1212	x	x	45	0	Buildings/structures	Guardwall	Earthen berm	grass	x	x	0		☐	Earthen berm on L;	Acad0300_9.157
790	ACAD-0300	9.185	☐	9.185	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_9.185_In-Out
789	ACAD-0300	9.203	☑	9.203	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; long lintel stone spans inlet headwall; outlet pipe - rebar visible	Acad0300_9.203_In-Out
784	ACAD-0300	9.243	☐	9.243	9.281	200	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 6,5' wide at max	Acad0300_9.243
787	ACAD-0300	9.251	☑	9.251	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry laid stone headwall	24		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_9.251_In-Out
785	ACAD-0300	9.284	☑	9,284	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; 1 coping stone marks inlet; inlet structure - failing; outlet pipe - rebar visible	Acad0300_9.284_In(2)-Out
810	ACAD-0300	9.33	☑	9.33	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; outlet pipe - damaged	Acad0300_9.330_In-Out
809	ACAD-0300	9.357	☑	9.357	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_9.357_In-Out
820	ACAD-0300	9.438	☐	9.438	9.51	380	x	x	45	0	Buildings/structures	Guardwall	Earthen berm	grass	x	x	0		☐	Earthen berm on L; 14' off CL	Acad0300_9.438
816	ACAD-0300	9.441	☐	9.441	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18	F	☐	Culvert; 30" square grate on concrete; outlet pipe - blocked	Acad0300_9.441_In-Out
808	ACAD-0300	9.466	☐	9.466	9.51	232	x	x	25	0	Small-scale features	Fence	Post and rail	wood	x	x	0		☐	Post and rail fence on L; 16' off CL	Acad0300_9.466
817	ACAD-0300	9.479	☐	9.479	0	0	x	x	25	0	Circulation	Walkway	Unpaved - no curb	gravel	x	x	0		☐	Unpaved walkway on L; at Blackwoods Campground service road	Acad0300_9.479
807	ACAD-0300	9.488	☑	9.488	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	dry laid stone headwall	18		☐	Culvert; 30" square grate on concrete	Acad0300_9,488_In-Out
819	ACAD-0300	9.506	☐	9,506	9.543	195	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide at max	Acad0300_9.506
806	ACAD-0300	9.511	☐	9.511	9.551	211	20	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	uncoursed stones	x	x	0		☐	Guardwall/retaining wall on L; both dry laid; guardwall stones set in concrete; stones 3-5' long; .5-1' gaps; grey granite	Acad0300_9.511(2)
818	ACAD-0300	9.515	☐	9.515	9.553	200	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; rough-cut granite curbs; 3' wide	Acad0300_9.515
805	ACAD-0300	9.516	☐	9.516	0	0	x	x	30	0	Small-scale features	Other	Utility pipe	x	x	x	0		☐	Other; Utility pipe on L	Acad0300_9.516
821	ACAD-0300	9.523	☐	9.523	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; long lintel stone spans inlet headwall; outlet within Guard/ret wall 9.511	Acad0300_9.523_In-Out
802	ACAD-0300	9.547	☐	9.547	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	24		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_9.547_In-Out
803	ACAD-0300	9.555	☐	9.555	9.611	297	x	x	45	0	Buildings/structures	Guardwall	Earthen berm	grass	x	x	0		☐	Earthen berm on L; 18" high	Acad0300_9.555
801	ACAD-0300	9.667	☐	9.667	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_9.667_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
811	ACAD-0300	9.674	☐	9.674	9.7	137	x	x	45	0	Buildings/structures	Guardwall	Earthen berm	grass	x	x	0		☐	Earthen berm on L;	Acad0300_9.674
788	ACAD-0300	9.701	☐	9.701	9.71	54	40	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	coursed stones	x	x	0	P	☐	Guardwall/retaining wall on L; dry laid guardwall; mortared retaining wall; some guardwall stones toppled	Acad0300_9.701(2)
814	ACAD-0300	9.711	☐	9.711	9.874	860	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on L; 3-5' gaps	Acad0300_9.711
813	ACAD-0300	9.713	☐	9.713	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_9.713_In-Out
815	ACAD-0300	9.72	☑	9.72	9.746	137	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; sawn-top granite curbs; 15' wide at max	Acad0300_9.720
812	ACAD-0300	9.722	☑	9.722	9.746	126	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; sawn-top granite curbs; 5' wide	Acad0300_9.722
832	ACAD-0300	9.75	☐	9.75	9.759	50	6	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L;	Acad0300_9.750
833	ACAD-0300	9.752	☐	9.752	9.756	30	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; below Retaining wall 9.750	Acad0300_9.752
827	ACAD-0300	9.767	☑	9.767	9.799	168	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; sawn-top granite curbs; 15' wide at max	Acad0300_9.767
829	ACAD-0300	9.768	☐	9.768	9.826	306	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; sawn-top granite curbs; 5' wide	Acad0300_9.768
830	ACAD-0300	9.783	☑	9.783	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	mortared stone headwall	pipe only	24		☐	Culvert;	Acad0300_9.783_In-Out
831	ACAD-0300	9.784	☐	9.784	0	0	x	x	20	0	Circulation	Steps	Rough-cut stone	stones	x	x	0		☐	Rough-cut stone steps on L; connects pullout to shoreline	Acad0300_9.784
828	ACAD-0300	9.798	☐	9.798	9.808	55	8	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on L; 6' high at max	Acad0300_9.798
837	ACAD-0300	9.799	☐	9.799	9.805	31	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; below Retaining wall 9.798	Acad0300_9.799
954	ACAD-0300	9.8	☐	9.8	9.87	369	x	x	100	0	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on L; includes Pullout 9.809	Acad0300_9.800
834	ACAD-0300	9.809	☑	9.809	9.826	89	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; sawn-top granite curbs; 15' wide at max	Acad0300_9.809
835	ACAD-0300	9.829	☑	9.829	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	mortared stone headwall	pipe only	30		☐	Culvert; outlet pipe conspicuous	Acad0300_9.829_In-Out
822	ACAD-0300	9.86	☑	9.86	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	mortared stone headwall	pipe only	24		☐	Culvert;	Acad0300_9.860_In-Out
955	ACAD-0300	10.073	☐	10.073	10.23	844	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☑	Framed/filtered view on L; includes Pullout 10.159; proximate to Pullout 10.167	Acad0300_10.073
804	ACAD-0300	10.075	☑	10.075	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☑	Culvert; massive lintel stone at inlet topped by loose stones	Acad0300_10.075_In-Out
823	ACAD-0300	10.089	☐	10.089	10.1	50	50	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	coursed stones	x	x	0	P	☐	Guardwall/retaining wall on L; dry laid guardwall; mortared retaining wall; 25' high at max; 17' off CL; some guardwall stones missing	Acad0300_10.089
824	ACAD-0300	10.106	☐	10.106	10.20	509	1	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 5-10' gaps; 11' off CL; some stones missing	Acad0300_10.106
826	ACAD-0300	10.159	☐	10.159	10.20	230	x	x	20	0	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on L; no curb; 10' wide at max	Acad0300_10.159
825	ACAD-0300	10.167	☐	10.167	10.18	70	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 6' wide at max	Acad0300_10.167
843	ACAD-0300	10.175	☐	10.175	10.18	30	30	x	50	0	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☑	Retaining wall on L; impressive	Acad0300_10.175
846	ACAD-0300	10.176	☐	10.176	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert, inlet structure - tree enroaching; outlet within Retaining wall 10.175	Acad0300_10.176_In-Out
845	ACAD-0300	10.203	☐	10.203	10.22	80	15	x	40	0	Buildings/structures	Guard/ret wall	Mortared/dry laid stone	coursed stones	x	x	0	P	☑	Guardwall/retaining wall on L; dry laid guardwall; mortared retaining wall; 15' high at max; 14.5' off CL; some guardwall stones toppled/skewed	Acad0300_10.203(2)
844	ACAD-0300	10.219	☐	10.219	10.23	83	1	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 2-5' gaps; 13.5' off CL	Acad0300_10.219
858	ACAD-0300	10.232	☑	10.232	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	P	☐	Culvert; long lintel stone spans inlet headwall; outlet pipe - rebar visible	Acad0300_10.232_In-Out(2)
853	ACAD-0300	10.302	☐	10.302	10.32	105	.5-1	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on L; 16' off CL	Acad0300_10.302
842	ACAD-0300	10.303	☑	10.303	10.32	105	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 10' wide at max	Acad0300_10.303

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR d	Notes	Digital Photo(s)
857	ACAD-0300	10.323	☐	10.323	0	0	x	x	20	0	Circulation	Steps	Wood	wood	x	x	0		☑	Wood steps on L;	Acad0300_10.323(4)
956	ACAD-0300	10.324	☐	10.324	10.42	491	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; proximate to Pullout 10.339	Acad0300_10.324
852	ACAD-0300	10.324	☐	10.324	10.34	90	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☑	Bridge; grass/gravel shoulders; parapet walls 2.5' high, 2' wide; 32' wall to wall; includes culvert	Acad0300_10.324(9)
856	ACAD-0300	10.338	☐	10.338	10.39	293	x	x	25	0	Small-scale features	Fence	Post and rail	wood	x	x	0		☐	Split rail fence on L; 16' off CL	Acad0300_10.338
851	ACAD-0300	10.339	☐	10.339	10.42	444	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 10' wide at max	Acad0300_10.339
836	ACAD-0300	10.418	☐	10.418	10.43	52	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 12' off CL	Acad0300_10.418
860	ACAD-0300	10.429	☑	10.429	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_10.429_In-Out
847	ACAD-0300	10.509	☐	10.509	10.65	752	x	x	20	0	Circulation	Pullout	Paved - curb	asphalt	x	x	0		☐	Paved pullout on L; rough-cut granite curbs; 13-15' wide	Acad0300_10.509
957	ACAD-0300	10.524	☑	10.524	10.61	475	x	x	100	0	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on L; no pullout	Acad0300_10.524
848	ACAD-0300	10.525	☐	10.525	10.62	475	x	x	25	0	Circulation	Walkway	Paved - curb	asphalt	x	x	0		☐	Paved walkway on L; rough-cut granite curbs; 5' wide	Acad0300_10.525(2)
854	ACAD-0300	10.549	☑	10.549	10.59	200	x	x	40	0	Buildings/structures	Guard/ret wall	Dry laid stone	coursed stones	x	x	0		☐	Guardwall/retaining wall on L; both dry laid; guardwall stones set in concrete; 2-4' stones; .5' gaps; 29' off CL	Acad0300_10.549
841	ACAD-0300	10.681	☐	10.681	10.71	160	x	x	45	0	Buildings/structures	Guardwall	Earthen berm	grass	x	x	0		☐	Earthen berm on L; 16' off CL	Acad0300_10.681
849	ACAD-0300	10.691	☑	10.691	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	culvert	dry laid stone headwall	loose stones	24		☐	Culvert; long lintel stone spans inlet headwall	Acad0300_10.691_In-Out
859	ACAD-0300	10.824	☐	10.824	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0300_10.824_In-Out
855	ACAD-0300	10.88	☐	10.88	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0300_10.880_In-Out
840	ACAD-0300	10.911	☑	10.911	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		☐	Culvert; 30" square grate on concrete	Acad0300_10.911_In-Out
839	ACAD-0300	10.997	☑	10.997	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18	F	☐	Culvert; 30" square grate on concrete; outlet pipe - partially blocked	Acad0300_10.997_In-Out
838	ACAD-0300	11.192	☑	11.192	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	30	P	☐	Culvert; outlet pipe - rebar visible	Acad0300_11.192_In2-Out2
871	ACAD-0300	11.356	☑	11.356	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	concrete	mortared stone headwall	mortared stone headwall	0	P	☑	Culvert; interesting masonry design; outlet headwall - failing	Acad0300_11.356_In-Out(2)
879	ACAD-0300	11.365	☐	11.365	11.39	139	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		☐	PM stones on R; 4-5' gaps; some stones missing; 13' off CL	Acad0300_11.356
864	ACAD-0300	11.396	☑	11.396	11.47	364	4.5	x	50	0	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on L; 17' off CL	Acad0300_11.396
865	ACAD-0300	11.399	☑	11.399	11.47	359	3.5	x	0	50	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on R; 17' off CL	Acad0300_11.399
1199	ACAD-0300	11.423	☐	11.423	13.31	0	x	x	0	0	Land use	Day Mountain Road	Historic road segment	x	x	x	0		☐	Day Mountain Road; completed 1941	none
863	ACAD-0300	11.474	☐	11.474	11.5	135	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 12' wide at max	Acad0300_11.474
862	ACAD-0300	11.5	☐	11.5	11.51	50	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		☐	Bridge; grass shoulders; parapet walls 2.5' high, 2' wide; 30' wall to wall	Acad0300_11.500(6)
861	ACAD-0300	11.515	☐	11.515	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Hunters Brook Trail"	Acad0300_11.515
886	ACAD-0300	11.516	☐	11.516	11.54	140	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide at max	Acad0300_11.516
882	ACAD-0300	11.596	☑	11.596	11.62	142	2-4	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on R; 17' off CL	Acad0300_11.596
876	ACAD-0300	11.641	☐	11.641	11.65	26	x	x	20	0	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on L;	Acad0300_11.641
875	ACAD-0300	11.642	☐	11.642	11.7	284	20	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 21' off CL	Acad0300_11.642(2)
850	ACAD-0300	11.647	☐	11.647	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	24		☐	Culvert; long lintel stone spans inlet headwall; outlet within Retaining wall 11.642	Acad0300_11.647_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
873	ACAD-0300	11.648	☐	11.648	11.68	142	x	x	20	0	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on L;	Acad0300_11.648
878	ACAD-0300	11.676	☑	11.676	11.74	348	2-6	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on L; 16' off CL	Acad0300_11.676
872	ACAD-0300	11.696	☐	11.696	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	dry laid stone headwall	24		☐	Culvert; 30" square grate on concrete	Acad0300_11.696_In-Out
880	ACAD-0300	11.697	☐	11.697	11.7	5	x	x	20	0	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on L;	Acad0300_11.697
883	ACAD-0300	11.704	☐	11.704	11.79	470	20	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 21' off CL	Acad0300_11.704(2)
885	ACAD-0300	11.756	☐	11.756	11.76	15	x	x	20	0	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on L;	Acad0300_11.756
881	ACAD-0300	11.759	☑	11.759	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	24		☐	Culvert; outlet within Retaining wall 11.704	Acad0300_11.759_In-Out
866	ACAD-0300	11.76	☐	11.76	11.77	65	x	x	20	0	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		☐	Loose rubble waterway on L;	Acad0300_11.760(2)
874	ACAD-0300	11.81	☐	11.81	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	24	P	☐	Culvert; 30" square grate on concrete; outlet pipe - rebar visible	Acad0300_11.810_In-Out
867	ACAD-0300	11.854	☐	11.854	11.9	237	25	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 20' off CL	Acad0300_11.854
868	ACAD-0300	11.869	☐	11.869	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only*	18		☐	Culvert; 30" square grate on concrete; outlet within Retaining wall 11.854	Acad0300_11.869_In-Out(2)
869	ACAD-0300	11.976	☐	11.976	12.08	542	2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		☐	Guardwall on R; 3-5' gaps; 15' off CL	Acad0300_11.976
877	ACAD-0300	11.977	☐	11.977	12.07	491	15	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R, 18' off CL	Acad0300_11.977(2)
903	ACAD-0300	11.978	☐	11.978	12.06	432	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; no pullout	Acad0300_11.978
870	ACAD-0300	12.06	☑	12.06	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only*	18		☐	Culvert; 1 coping stone marks inlet; outlet within Retaining wall 11.977	Acad0300_12.060_In-Out
894	ACAD-0300	12.118	☐	12.118	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	Not found	0		☐	Culvert; 30" square grate on concrete; 1 coping stone marks inlet; outlet not found	Acad0300_12.118_In
890	ACAD-0300	12.146	☐	12.146	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_12.146_In-Out
901	ACAD-0300	12.189	☐	12.189	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	0	F	☐	Culvert; 30" square grate on concrete; 1 coping stone marks inlet; outlet pipe - blocked	Acad0300_12.189_In-Out(2)
900	ACAD-0300	12.203	☑	12.203	12.26	290	5	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on L; 5' high max; 13.5 off CL	Acad0300_12.203
902	ACAD-0300	12.259	☐	12.259	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18	P	☐	Culvert; 30" square grate on concrete; inlet structure - sits above grade; outlet pipe - tree encroaching	Acad0300_12.359_In-Out
889	ACAD-0300	12.315	☑	12.315	12.4	427	2-6	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☑	Retaining wall on L; 16' off CL	Acad0300_12.315
887	ACAD-0300	12.349	☐	12.349	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		☐	Culvert; 30" square grate on concrete	Acad0300_12.349_In-Out(2)
891	ACAD-0300	12.412	☐	12.412	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert;	Acad0300_12.412_In(2)
895	ACAD-0300	12.429	☐	12.429	12.45	92	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullourt on R; 9' wide at max	Acad0300_12.429
896	ACAD-0300	12.447	☐	12.447	0	0	x	x	0	25	Circulation	Walkway	Unpaved - no curb	gravel	x	x	0		☐	Unpaved walkway on R; 4' wide	Acad0300_12.447
892	ACAD-0300	12.448	☑	12.448	12.49	227	9	x	50	0	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on L; 18' off CL	Acad0300_12.448
884	ACAD-0300	12.449	☐	12.449	0	0	x	x	0	30	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on R; "Path to Carriage Road"	Acad0300_12.449
893	ACAD-0300	12.45	☑	12.45	12.49	221	8	x	0	50	Buildings/structures	Retaining wall	Mortared stone	coursed stones	x	x	0		☐	Retaining wall on R; 18.5' off CL	Acad0300_12.450
898	ACAD-0300	12.494	☐	12.494	12.54	245	15	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		☐	Retaining wall on R; 20' off CL	Acad0300_12.494(2)
897	ACAD-0300	12.511	☑	12.511	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; long lintel stone spans inlet headwall; outlet pipe within Retaining wall 12.494	Acad0300_12.511_In-Out
905	ACAD-0300	12.542	☑	12.542	12.56	110	3	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		☐	Retaining wall on L; 15.5' off CL	Acad0300_12.542

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
899	ACAD-0300	12.601	[x]	12.601	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	loose stones	18		[ ]	Culvert; 30" square grate on concrete	Acad0300_12.601_In-Out
919	ACAD-0300	12.611	[x]	12.611	12.68	343	2.5-5	x	50	0	Buildings/structures	Retaining wall	Dry laid stone	coursed stones	x	x	0		[ ]	Retaining wall on L; 15' off CL	Acad0300_12.611
909	ACAD-0300	12.698	[ ]	12.698	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		[ ]	Culvert; 30" square grate on concrete	Acad0300_12.698_In-Out
908	ACAD-0300	12.715	[ ]	12.715	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	drop-inlet with grate	pipe only	18		[ ]	Culvert; 30" square grate on concrete	Acad0300_12.715_In-Out
907	ACAD-0300	12.784	[ ]	12,784	12.81	115	x	x	20	0	Buildings/structures	Waterway	Loose rubble	stones	x	x	0		[ ]	Loose rubble waterway on L; does not lead to culvert	Acad0300_12.784
906	ACAD-0300	12.852	[ ]	12.852	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	concrete	mortared stone headwall	mortared stone headwall	0		[ ]	Culvert; 3' square box	Acad0300_12.852_In-Out
920	ACAD-0300	13.049	[x]	13.049	13.06	79	x	x	0	0	Buildings/structures	Bridge	Arch	mortared stone, concrete	x	x	0		[ ]	Bridge; grass shoulders; parapet walls 1,5' high, 1.5' wide; 29' wall to wall; fords abandoned road	Acad0300_13.049(6)
923	ACAD-0300	13,104	[ ]	13.104	13.13	145	.5-1	x	45	0	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		[ ]	PM stones on L; 3-5' gaps; 12.5' off CL	Acad0300_13.104
918	ACAD-0300	13.206	[ ]	13.206	13.23	110	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		[ ]	Unpaved pullout on R; 8' wide at max	Acad0300_13.228
921	ACAD-0300	13.227	[x]	13.227	0	0	x	x	0	0	Buildings/structures	Culvert	Box culvert	concrete	mortared stone headwall	mortared stone headwall	0		[x]	Culvert; followed by Retaining wall 13,228	Acad0300_13.227_In2-Out2
917	ACAD-0300	13.228	[ ]	13.228	13.24	46	3	x	0	50	Buildings/structures	Retaining wall	Dry laid stone	uncoursed stones	x	x	0		[ ]	Retaining wall on R; in stream	Acad0300_13.228
916	ACAD-0300	13.248	[ ]	13.248	13.26	74	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		[ ]	Unpaved pullout on R; 7' wide at max	Acad0300_13.248
915	ACAD-0300	13.263	[ ]	13.263	13.27	52	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		[ ]	PM stones on R;	Acad0300_13.263
914	ACAD-0300	13.267	[ ]	13.267	0	0	x	x	0	0	Small-scale features	Gate	Metal	galvanized iron pipe	x	x	0		[ ]	Gate;	Acad0300_13.267
913	ACAD-0300	13.274	[ ]	13.274	13.29	60	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		[ ]	Unpaved pullout on R; 10' wide at max	Acad0300_13.285
888	ACAD-0300	13.282	[ ]	13,282	13.29	50	.5-1	x	0	45	Buildings/structures	PM stones	Rock barrier	rounded stones	x	x	0		[ ]	PM stones on R;	Acad0300_13.282
922	ACAD-0300	13.299	[x]	13,299	0	0	x	x	0	0	Buildings/structures	Culvert	CMP	metal	dry laid stone headwall	dry laid stone headwall	0		[ ]	Culvert,	Acad0300_13.299_In-Out
904	ACAD-0300	13.303	[ ]	13.303	13.32	100	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		[ ]	Unpaved pullout on R; 12' wide at max	Acad0300_13.303
1196	ACAD-0301	0.001	[ ]	0,001	5.819	0	x	x	0	0	Land use	Schoodic Loop Road	Historic road segment	x	x	x	0		[ ]	Schoodic Loop Road; completed 1935	none
475	ACAD-0301	0.001	[ ]	0.001	0.141	739	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		[ ]	Framed/filtered view on R; begin at Bridge 0.000; end at birch trees after Intersection 0.094	none
27	ACAD-0301	0.008	[x]	0.008	0.093	448	x	x	0	0	Buildings/structures	Causeway	x	earth, stone	x	x	0		[ ]	Causeway; 448' long; 24' wide travel lanes; bounded by guardwalls; rock embankment begins halfway down and slopes to sea	Acad0301_0,008(3)
28	ACAD-0301	0.013	[x]	0.013	0.107	496	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		[ ]	Guardwall on R; 2-3' gaps	Acad0301_0.013(4)
29	ACAD-0301	0.016	[x]	0.016	0.09	390	1.5-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	rectilinear quarried blocks	x	x	0		[ ]	Guardwall on L; 2-3' gaps	Acad030t_0.016
498	ACAD-0301	0.044	[x]	0.044	0.053	48	x	x	0	0	Buildings/structures	Bridge	Box	concrete	x	x	0		[ ]	Bridge; no shoulders, 24'-wide travel lanes; bounded by guardwalls with 3-6" gaps	Acad030t_0.044(2)
30	ACAD-0301	0.077	[x]	0.077	0.094	112	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		[ ]	Paved pullout on R; no curb; 17'-wide at max; separated from travel lane by small striped island; bounded on R by Guardwall 0.013	Acad0301_0.077(3)
31	ACAD-0301	0.085	[ ]	0.085	0	0	x	x	0	30	Small-scale features	Sign	Wayside	stone, wood	x	x	0		[ ]	Wayside sign on R; 8'-high with three panels; mounted on mortared stone base 2.5' deep x 8' long x 1.25' high	Acad0301_0.085(2)
32	ACAD-030t	0.194	[ ]	0.194	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24		[ ]	Culvert;	Acad0301_0.194_In-Out
33	ACAD-0301	0.395	[ ]	0.395	0.419	125	4-5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		[ ]	Guardwall on R; 3-4' gaps; 12' from CL	Acad0301_0.395
476	ACAD-0301	0.395	[ ]	0.395	0.554	839	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		[ ]	Framed/filtered view on R; begin at start of Guardwall 0.395; end at end of Guardwall 0.548	none
499	ACAD-0301	0.396	[ ]	0.396	0.41	74	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		[ ]	Embankment on R; below Guardwall 0.395	Acad0301_0.396
34	ACAD-0301	0.407	[x]	0.407	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only*	18		[ ]	Culvert; outlet within Embankment 0.396	Acad0301_0.407_In-Out

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR	Notes	Digital Photo(s)
35	ACAD-0301	0.47	☐	0.47	0.49	107	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps; 12' from CL	Acad0301_0.470
36	ACAD-0301	0.474	☐	0.474	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18		☐	Culvert;	Acad0301_0.474_In-Out
38	ACAD-0301	0.546	☑	0.546	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18		☐	Culvert;	Acad0301_0.546_In-Out
37	ACAD-0301	0.548	☐	0.548	0.554	33	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps	none
39	ACAD-0301	0.592	☑	0.592	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert; outlet overtaken by shoulder	Acad0301_0.592_In-Out
477	ACAD-0301	0.674	☐	0.674	0.848	918	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin prior to Pullout 0.693; end at end of Guardwall 0.827	none
40	ACAD-0301	0.682	☑	0.682	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	24		☐	Culvert; inlet and outlet overtaken by shoulder	Acad0301_0.682_In-Out
41	ACAD-0301	0.693	☐	0.693	0.706	70	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 10' wide a max	none
42	ACAD-0301	0.702	☐	0.702	0.719	89	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; no guardwall here to speak of	Acad0301_0.702
44	ACAD-0301	0.716	☑	0.716	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only*	18		☐	Culvert; outlet within Embankment 0.702	Acad0301_0.716_In-Out
500	ACAD-0301	0.72	☐	0.72	0.747	142	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 0.738	Acad0301_0.720
45	ACAD-0301	0.735	☐	0.735	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only*	18		☐	Culvert; outlet within Embankment 0.720	Acad0301_0.735_In-Out
46	ACAD-0301	0.738	☐	0.738	0.748	50	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-2' gaps	Acad0301_0.738
47	ACAD-0301	0.803	☑	0.803	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert; inlet and outlet overtaken by shoulder	Acad0301_0.803_In-Out
48	ACAD-0301	0.826	☐	0.826	0.846	112	3-4	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-4' gaps; 12' from CL	Acad0301_0.826
49	ACAD-0301	0.827	☐	0.827	0.846	100	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 100' long; 12' wide at max	Acad0301_0.827
501	ACAD-0301	0.828	☐	0.828	0.847	100	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 0.826	Acad0301_0.828
50	ACAD-0301	0.846	☑	0.846	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	Not found	18	P	☐	Culvert; inlet headwall - failing; outlet likely within Embankment 0.828	Acad0301_0.846_In
51	ACAD-0301	0.893	☑	0.893	0.914	110	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 17' wide at max	Acad0301_0.893
478	ACAD-0301	0.894	☐	0.894	1.023	681	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin at start of Pullout 0.893; end after end of Guardwall 0.999	none
52	ACAD-0301	0.915	☑	0.915	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	loose stones	18		☐	Culvert; pipe not found at outlet	Acad0301_0.915_In-Out
53	ACAD-0301	0.999	☐	0.999	1.023	126	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps	Acad0301_0.999
502	ACAD-0301	1.01	☐	1.01	1.02	52	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 0.999 and above Culvert 1.014	Acad0301_1.010(2)
54	ACAD-0301	1.014	☑	1.014	0	0	x	x	0	0	Buildings/structures	Culvert	RCP (2)	concrete	pipe only	Not found	24		☐	Culvert; 2 inlet pipes; inlet structure - trees enroaching; outlet likely within Embankment 1.101	Acad0301_1.014_In
55	ACAD-0301	1.051	☑	1.051	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only	18	P	☐	Culvert; inlet overtaken by shoulder; outlet structure - tree encroaching	Acad0301_1.051_In-Out
56	ACAD-0301	1.11	☑	1.11	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only	18		☐	Culvert;	Acad0301_1.110_In-Out
57	ACAD-0301	1.153	☑	1.153	1.183	158	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide in form of a 2-track lane; possibly old road remnant	Acad0301_1.153
479	ACAD-0301	1.183	☐	1.183	1.215	169	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin after Pullout 1.153; end at start of Guardwall 1.215	none
58	ACAD-0301	1.215	☐	1.215	1.233	97	1-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-2' gaps	Acad0301_1.215
480	ACAD-0301	1.216	☐	1.216	1.28	337	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R; begin at Guardwall 1.215; end at end of Pullout 1.269	none
503	ACAD-0301	1.217	☐	1.217	1.225	50	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 1.215	Acad0301_1.217

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP En	Length	Height	Depth	Left (	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diar	Con	NR C	Notes	Digital Photo(s)
59	ACAD-0301	1.227	☐	1.227	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert; inlet and outlet partially overtaken by shoulder	Acad0301_1.227_In-Out
60	ACAD-0301	1.23	☑	1.23	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	loose stones	18		☐	Culvert;	Acad0301_1.230_In-Out
504	ACAD-0301	1.235	☐	1.235	1.265	158	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 1.240	none
61	ACAD-0301	1.239	☐	1.239	1.25	60	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 10' wide; rutted	Acad0301_1.239
63	ACAD-0301	1.24	☑	1.24	1.245	32	2-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 32' long; 2'-3' high; 5' gaps; only 2 stones as guardwall	none
64	ACAD-0301	1.269	☐	1.269	1.28	60	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R, 60' long, 5' wide at max	Acad0301_1.269
65	ACAD-0301	1.305	☑	1.305	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert, outlet partially overtaken by shoulder 18" rcp	Acad0301_1.305_In-Out
66	ACAD-0301	1.345	☑	1.345	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	pipe only	48	P	☐	Culvert; inlet structure - tree encroaching	Acad0301_1.345_In-Out
481	ACAD-0301	1.361	☐	1.361	2.143	4128	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin at Culvert 1.360; end at end of Pullout 2.392	none
67	ACAD-0301	1.41	☑	1.41	1.452	221	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 16' wide at max No particular view here	Acad0301_1.410
68	ACAD-0301	1.569	☑	1.569	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18	F	☐	Culvert; inlet structure - tree encroaching; outlet severely overtaken by shoulder 18" RCP	Acad0301_1.569_In-Out
69	ACAD-0301	1.71	☑	1.71	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert; inlet and outlet partially overtaken by shoulder	Acad0301_1.710_In-Out
70	ACAD-0301	1.756	☑	1.756	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert, inlet and outlet partially overtaken by shoulder	Acad0301_1.756_In-Out
71	ACAD-0301	1.785	☐	1.785	1.799	75	x	x	20	0	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on L; 15' wide at max; bordered by small-med stones 1'-2' high, 4-5' gaps	Acad0301_1.785
72	ACAD-0301	1.823	☑	1.823	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18		☐	Culvert, outlet mostly overtaken by shoulder	Acad0301_1.823_In-Out
73	ACAD-0301	1.863	☑	1.863	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	loose stones	18		☐	Culvert,	Acad0301_1.863_In-Out
74	ACAD-0301	1.914	☑	1.914	1.96	242	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-4' gaps	Acad0301_1.914
75	ACAD-0301	1.929	☑	1.929	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18		☐	Culvert; inlet mostly overtaken by shoulder	Acad0301_1.929_In-Out
76	ACAD-0301	2.006	☐	2.006	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18		☐	Culvert;	Acad0301_2.006_In-Out
106	ACAD-0301	2.168	☑	2.168	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18		☐	Culvert, inlet and outlet somewhat overtaken by shoulder	Acad0301_2.168_In-Out
77	ACAD-0301	2.349	☑	2.349	2.378	153	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-4' gaps	Acad0301_2.349
78	ACAD-0301	2.36	☐	2.36	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	48		☑	Culvert; inlet includes 12" terra cotta pipe on R side; outlet has impressive headwall and small tree nearby	Acad0301_2.360_In-Out
79	ACAD-0301	2.392	☑	2.392	2.413	110	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R, no curb; 11' wide at max	Acad0301_2.392
482	ACAD-0301	2.428	☐	2.428	2.473	237	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R, begin at Intersection 4.427; end after Guardwall 2.430	none
80	ACAD-0301	2.43	☐	2.43	2.473	227	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; no guardwall feature	Acad0301_2.430
81	ACAD-0301	2.442	☑	2.442	2.473	163	1-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 1-4' gaps; 12' from CL	Acad0301_2.442
82	ACAD-0301	2.473	☑	2.473	0	0	x	x	0	0	Buildings/structures	Culvert	x	x	Not found	Not found	0		☐	Culvert; moving water visible, outlet likely within Embankment 2.430	none
84	ACAD-0301	2.512	☑	2.512	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	loose stones	loose stones	18	F	☐	Culvert, outlet somewhat overtaken by shoulder; outlet pipe - partially clogged	Acad0301_2.512_In-Out
85	ACAD-0301	2.552	☑	2.552	2.554	10	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 2-track lane to water's edge; bounded at end by low stones; old waterpipe cap visible	Acad0301_2.552
483	ACAD-0301	2.553	☐	2.553	2.884	1747	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin at Intersection R 2.552; end after Pullout 2.868	none
86	ACAD-0301	2.643	☑	2.643	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	loose stones	18		☐	Culvert,	Acad0301_2.643_In-Out

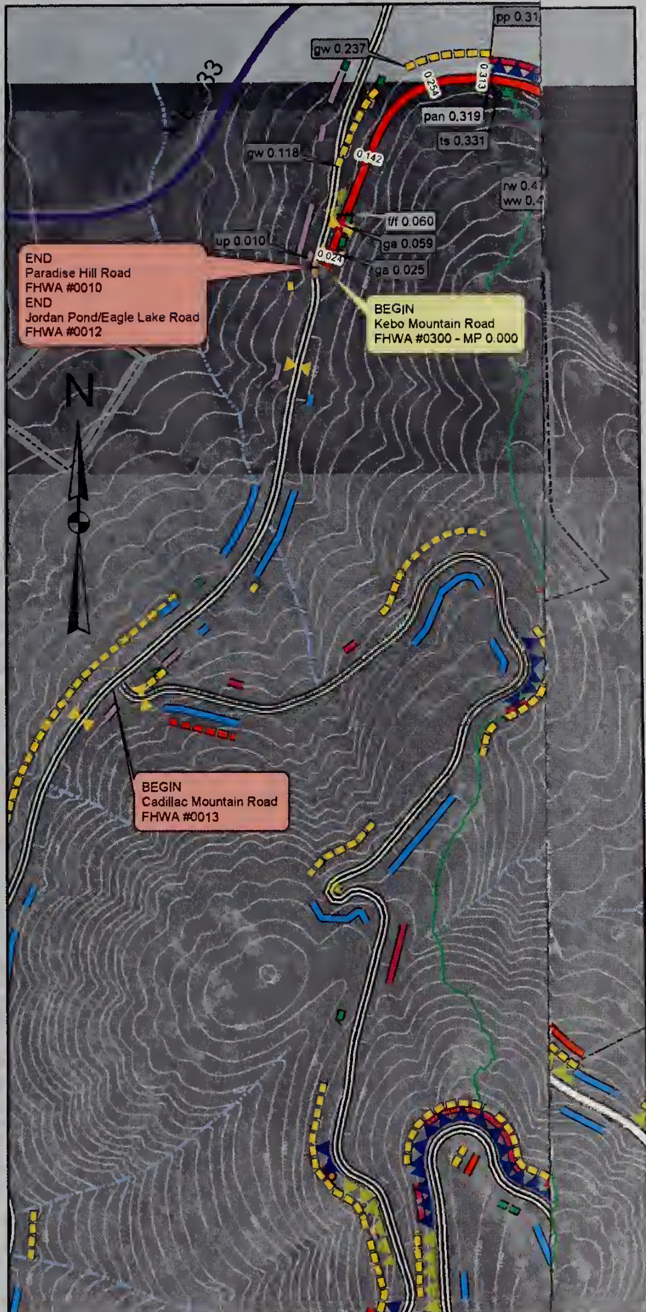
ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
88	ACAD-0301	2.774	☐	2.774	2.805	163	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-10' gaps; some stones missing; 12' from CL	Acad0301_2.774
505	ACAD-0301	2.78	☐	2.78	2.81	158	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 2.774 and Culvert 2.808	Acad0301_2.780
87	ACAD-0301	2.808	☑	2.808	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only*	24		☐	Culvert; outlet pipe within Embankmentl 2.780	Acad0301_2.808_In-Out
89	ACAD-0301	2.809	☐	2.809	2.811	11	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 12' wide at max	Acad0301_2.809
90	ACAD-0301	2.848	☑	2.848	2.894	243	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-12' gaps; 12' from CL; wraps around Pullout 2.868	Acad0301_2.848
506	ACAD-0301	2.849	☐	2.849	2.893	232	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 2.848 and Pullout 2.868	Acad0301_2.849
91	ACAD-0301	2.868	☑	2.868	2.884	84	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 10' wide at max; bounded by Guardwall 2.848	Acad0301_2.868
92	ACAD-0301	2.888	☑	2.888	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	18		☐	Culvert; inlet structure - stones skewed; outlet within Embankment 2.849 and below tide	Acad0301_2.888_In-Out
93	ACAD-0301	2.957	☑	2.957	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	mortared stone headwall	24	F	☐	Culvert; outlet pipe - partially clogged	Acad0301_2.957_In-Out
94	ACAD-0301	3.048	☑	3.048	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	Not found	18		☐	Culvert; outlet Not found	Acad0301_3.048_In
95	ACAD-0301	3.106	☑	3.106	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	pipe only	pipe only	18	P	☐	Culvert; inlet partially overtaken by shoulder; outlet structure - tree encroaching	Acad0301_3.106_In-Out
97	ACAD-0301	3.174	☐	3.174	3.212	200	1-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0	P	☐	Guardwall on L; 2-4' gaps; some stones missing or toppled	Acad0301_3.174
96	ACAD-0301	3.194	☐	3.194	0	0	x	x	0	0	Small-scale features	Other	Utility line	x	x	x	0		☐	Other; Utilty lines; two lines extend under road; located 108' before 3.214	Acad0301_3.194
99	ACAD-0301	3.333	☑	3.333	3.421	464	2-3	x	0	45	Buildings/structures	Guardwall Guard/retainin	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-2' gaps	Acad0301_3.333
484	ACAD-0301	3.334	☐	3.334	3.425	480	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R; begin at Guardwall 3.333; end after Pullout 3.416	none
510	ACAD-0301	3.334	☐	3.334	3.408	390	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 3.333	Acad0301_3.334
98	ACAD-0301	3.347	☑	3.347	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	Not found	Not found	0		☐	Culvert; outlet likley within Embankment 3.334	Acad0301_3.347_In
100	ACAD-0301	3.348	☑	3.348	3.409	322	0-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 1'-10' gaps; 14' from CL	Acad0301_3.348
101	ACAD-0301	3.416	☑	3.416	3.425	47	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 9' wide at max	Acad0301_3.416
103	ACAD-0301	3.457	☑	3.457	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert;	Acad0301_3.457_In-Out
107	ACAD-0301	3.469	☐	3.469	3.485	87	2-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps; 12' from CL	Acad0301_3.469
485	ACAD-0301	3.47	☐	3.47	3.484	74	x	x	0	100	Views/vistas	Framed/filtere d	x	x	x	x	0		☐	Framed/filtered view on R; begin at Guardwall 3.469; end at start of Guardwall 3.485	none
104	ACAD-0301	3.48	☑	3.48	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	Not found	pipe only	0	F	☐	Culvert: inlet pipe - partially clogged	Acad0301_3.480_Out
486	ACAD-0301	3.549	☐	3.549	3.738	997	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R; begin at start of Guardwall 3.550; end at end of Guardwall 3.723	none
108	ACAD-0301	3.55	☑	3.55	3.591	216	1.5-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 3-5' gaps	Acad0301_3.550
507	ACAD-0301	3.551	☐	3.551	3.589	200	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 3.550	Acad0301_3.551
109	ACAD-0301	3.552	☑	3.552	3.591	205	3-4	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-3 gaps	Acad0301_3.552
508	ACAD-0301	3.553	☐	3.553	3.59	195	x	x	50	0	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on L; below Guardwall 3.552	none
110	ACAD-0301	3.566	☑	3.566	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only*	24	P	☐	Culvert; inlet pipe - rebar visible; outlet within Embankment 3.551	Acad0301_3.566_In(2)-Out
111	ACAD-0301	3.592	☐	3.592	3.598	30	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 8' wide at max	Acad0301_3.592
112	ACAD-0301	3.632	☑	3.632	3.714	432	3-4.5	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-5' gaps; 12' from CL	Acad0301_3.632

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
509	ACAD-0301	3.633	☐	3.633	3.69	300	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; below Guardwall 3.632	Acad0301_3.633
113	ACAD-0301	3.649	☑	3.649	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18	P	☐	Culvert, inlet headwall - damaged; outlet likely within Embankment 3.633	Acad0301_3.649_In
114	ACAD-0301	3.684	☑	3.684	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	mortared stone headwall	pipe only*	24	P	☐	Culvert, long lintel stone spans inlet headwall; new pipe; inlet headwall - damaged; outlet within Embankment 3.633	Acad0301_3.684_In-Out
115	ACAD-0301	3.713	☐	3.713	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; wood post; "Alder Trail"	Acad0301_3.713
116	ACAD-0301	3.723	☑	3.723	3.738	79	1-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-3' gaps; 16' from CL	Acad0301_3.723
487	ACAD-0301	3.739	☐	3.739	3.828	443	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin at start of Guardwall 3.777; end at Trail marker L 3.828	none
118	ACAD-0301	3.777	☑	3.777	3.929	802	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 2-4' gaps; 13' from CL	Acad0301_3.777
117	ACAD-0301	3.791	☑	3.791	3.813	116	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 17' wide at max	Acad0301_3.791
119	ACAD-0301	3.831	☐	3.831	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; wood post anchored by loose stones; "Anvil Trail"	Acad0301_3.831
120	ACAD-0301	3.858	☑	3.858	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert;	Acad0301_3.858_In-Out
488	ACAD-0301	3.89	☐	3.89	4.121	1219	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin midway between Pullouts 3.791 and 3.939; end at Culvert 4.121	none
121	ACAD-0301	3.939	☑	3.939	3.969	158	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 19' wide at max	Acad0301_3.939
122	ACAD-0301	3.949	☐	3.949	3.959	52	x	x	0	15	Circulation	Median	Landscaped - no curb	grass	x	x	0		☐	Landscaped median on R; no curbs; 11' wide at max	Acad0301_3.949
123	ACAD-0301	3.985	☑	3.985	4.021	190	2-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps; 13' from CL	Acad0301_3.985
124	ACAD-0301	4.041	☑	4.041	4.071	158	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps	Acad0301_4.041
125	ACAD-0301	4.069	☐	4.069	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	P	☐	Culvert; inlet pipe - rebar visible	Acad0301_4.069_In-Out
126	ACAD-0301	4.121	☑	4.121	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; shoulder has overtaken inlet lintel stones	Acad0301_4.121_In-Out
127	ACAD-0301	4.167	☑	4.167	4.237	369	1.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-4' gaps	Acad0301_4.167
128	ACAD-0301	4.168	☑	4.168	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	24		☐	Culvert;	Acad0301_4.168_In-Out
489	ACAD-0301	4.168	☐	4.168	4.237	364	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin at start of Guardwall 4.167; end at end of Guardwall 4.167	none
490	ACAD-0301	4.238	☐	4.238	4.308	369	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view R, begin after end of Guardwall 4.167; end after Pullout 4.291	none
129	ACAD-0301	4.247	☑	4.247	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	dry-laid stone headwall	24		☐	Culvert;	Acad0301_4.247_In-Out
130	ACAD-0301	4.248	☐	4.248	4.287	205	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 205' long; 5' wide at max	Acad0301_4.247
131	ACAD-0301	4.291	☑	4.291	4.306	79	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 36' wide at max	Acad0301_4.291
132	ACAD-0301	4.311	☑	4.311	4.432	640	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-2' gaps; 12' from CL	Acad0301_4.311
133	ACAD-0301	4.364	☑	4.364	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18	P	☐	Culvert; inlet structure - tree encroaching	Acad0301_4.364_In
136	ACAD-0301	4.433	☐	4.433	4.443	53	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R, 5' wide at max	Acad0301_4.433
134	ACAD-0301	4.444	☑	4.444	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	24		☐	Culvert;	Acad0301_4.444_In-Out
135	ACAD-0301	4.445	☑	4.445	4.469	126	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 10' wide at max	Acad0301_4.445
137	ACAD-0301	4.487	☐	4.487	4.509	116	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-2' gaps; 12' from CL	Acad0301_4.487
138	ACAD-0301	4.524	☐	4.524	4.547	121	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 5' wide at max	Acad0301_4.524

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Cond	NR C	Notes	Digital Photo(s)
491	ACAD-0301	4.547	☐	4.547	4.798	1325	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view R; begin just before Guardwall 4.548; end after Guardwall 4.746	none
139	ACAD-0301	4.548	☑	4.548	4.642	496	1.5-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps; 13' from CL	Acad0301_4.548
959	ACAD-0301	4.549	☐	4.549	4.64	480	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R,	Acad0301_4.549
140	ACAD-0301	4.559	☑	4.559	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert; shoulder has overtaken inlet lintel, outlet likely within Embankment 4.549	Acad0301_4.559_In
141	ACAD-0301	4.631	☑	4.631	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert, long lintel stone spans inlet headwall; outlet likely within Embankment 4,549	Acad0301_4.631_In-Out
142	ACAD-0301	4.693	☑	4.693	4.713	104	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R, no curb; 27' wide at max	Acad0301_4.693
143	ACAD-0301	4.695	☐	4.695	4.715	105	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps; bounds Pullout 4.693; 39' from CL	Acad0301_4.695
144	ACAD-0301	4.714	☐	4.714	0	0	x	x	30	0	Small-scale features	Sign	Trailhead	wood	x	x	0		☐	Trailhead sign on L; wood post anchored by loose stones identifies "East Trail"	Acad0301_4.714
145	ACAD-0301	4.746	☑	4.746	4.788	222	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R, 2-3' gaps; 13' from CL	Acad0301_4.746
146	ACAD-0301	4.787	☐	4,787	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone drop-inlet	pipe only	18		☐	Culvert;	Acad0301_4.787_In-Out
147	ACAD-0301	4.801	☑	4.801	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concreta	dry laid stone headwall	loose stones	18	F	☐	Culvert, inlet somewhat overtaken by shoulder; outlet pipe - partially clogged	Acad0301_4.801_In-Out
148	ACAD-0301	4.823	☑	4.823	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	pipe only	18	F	☐	Culvert; outlet structure - tree encroaching; outlet pipe - clogged	Acad0301_4.823_In-Out
149	ACAD-0301	4.905	☑	4.905	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert, long lintel stone spans inlet headwall	Acad0301_4.905_In-Out
492	ACAD-0301	4.932	☐	4.932	5.148	1140	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin prior to Guardwall 4.972; end after end of Guardwall 5.092	none
150	ACAD-0301	4.957	☑	4.957	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0301_4.957_In-Out
151	ACAD-0301	4.972	☑	4.972	5.057	448	.5-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R, 1-2' gaps; 11' from CL	Acad0301_4.972_In-Out
152	ACAD-0301	5.042	☑	5.042	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18		☐	Culvert; long lintel stone spans inlet headwall	Acad0301_5.042_In-Out
153	ACAD-0301	5.068	☐	5.068	5.081	69	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 9' wide at max	Acad0301_5.068
154	ACAD-0301	5.092	☑	5.092	5.148	295	2-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R, 1-3' gaps; 11' from CL; wall appears to be old	Acad0301_5.092
960	ACAD-0301	5.095	☐	5.095	5.14	237	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R, appears to be old	none
155	ACAD-0301	5.108	☑	5.108	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	24		☐	Culvert, outlet likely within Embankment 5.095	Acad0301_5.108_In
156	ACAD-0301	5.21	☑	5.21	5.236	137	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-5' gaps, 12' from CL	Acad0301_5.210
493	ACAD-0301	5.211	☐	5.211	5.359	781	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R, begin at start of Guardwall 5.210; end at Intersection 5.359	none
157	ACAD-0301	5.222	☑	5.222	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	loose stones	18	F	☐	Culvert; outlet pipe - partially clogged	Acad0301_5.222_In-Out
158	ACAD-0301	5.282	☑	5.282	5.363	428	.5-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0	P	☐	Guardwall on L; 1-6' gaps, 13' from CL, some stones missing	Acad0301_5.282
159	ACAD-0301	5.365	☐	5.365	5.615	1320	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; extends to sea	Acad0301_5.365
160	ACAD-0301	5.477	☑	5.477	5.51	174	1-3	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0	P	☐	Guardwall on R; 1-3' gaps, 13' from CL; some stones missing	Acad0301_5.477
161	ACAD-0301	5.479	☑	5.479	0	0	x	x	0	0	Buildings/structures	Culvert	RCP	concrete	dry laid stone headwall	Not found	18		☐	Culvert, inlet overtaken by shoulder; outlet likely within Embankment 5,365	Acad0301_5.479_In
494	ACAD-0301	5.495	☐	5.495	5.621	665	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R; begin prior to Guardwall 5.477; end at start of Guardwall 5.621	none
162	ACAD-0301	5.512	☑	5.512	5.541	153	1-3	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 2-3' gaps; 12' from CL; sand/debris piled against stones	Acad0301_5.512
163	ACAD-0301	5.519	☐	5.519	5.528	48	x	x	0	20	Circulation	Pullout	Unpaved	gravel	x	x	0		☐	Unpaved pullout on R; 9' wide at max	Acad0301_5,519

ID	FHWA Route	Mile Poi	MP Ma	MP Beg	MP End	Length	Height	Depth	Left d	Right	Landscape Characterist	Feature	Type	Materials	Inlet Type	Outlet Type	Diam	Con	NR C	Notes	Digital Photo(s)
164	ACAD-0301	5.555	☑	5.555	5.695	739	1-2	x	45	0	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on L; 1-3' gaps; 12' from CL	Acad0301_5.555
165	ACAD-0301	5.621	☑	5.621	5.692	375	1-2	x	0	45	Buildings/structures	Guardwall	Rock barrier	angular ledge stones	x	x	0		☐	Guardwall on R; 1-3' gaps; 12' from CL	Acad0301_5.621
495	ACAD-0301	5.622	☐	5.622	5.653	163	x	x	0	100	Views/vistas	Framed/filtered	x	x	x	x	0		☐	Framed/filtered view on R; begin at start of Guardwall 5.621; end after start of Guardwall 5.621	none
496	ACAD-0301	5.654	☐	5.654	5.705	269	x	x	0	100	Views/vistas	Panoramic	x	x	x	x	0		☐	Panoramic view on R; begin after start of Guardwall 5.621; end at end of Pullout 5.687	none
166	ACAD-0301	5.684	☐	5.684	5.701	88	x	x	0	50	Buildings/structures	Embankment	Rip rap	stones/boulders	x	x	0		☐	Embankment on R; extends to sea; rock sizes vary	Acad0301_5.684
167	ACAD-0301	5.687	☑	5.687	5.705	95	x	x	0	20	Circulation	Pullout	Paved - no curb	asphalt	x	x	0		☐	Paved pullout on R; no curb; 12' wide at max	Acad0301_5.687

APPENDIX B
EXISTING CONDITIONS MAPS



Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Kebo Mountain Road and Kebo Mountain Road Extension

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- trail
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- 20' contour
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- stream

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006 Kebo Mountain Road and Kebo Mountain Road Extension

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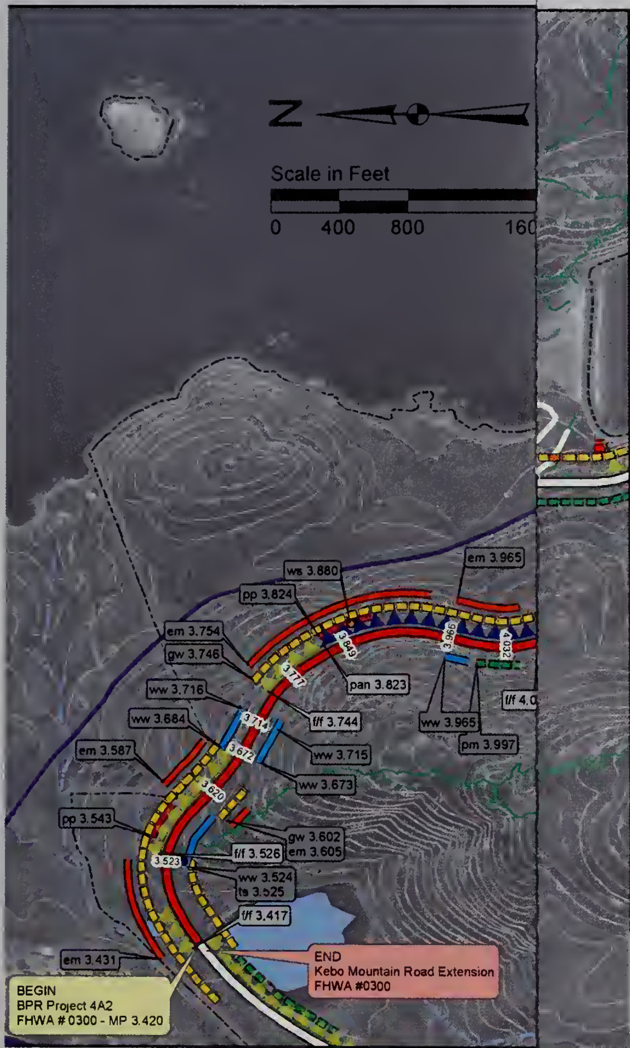

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006 BPR Project 4A2 and Champlain Mountain Road

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Cultural Landscape Report

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Acadia National Park
Bar Harbor, ME

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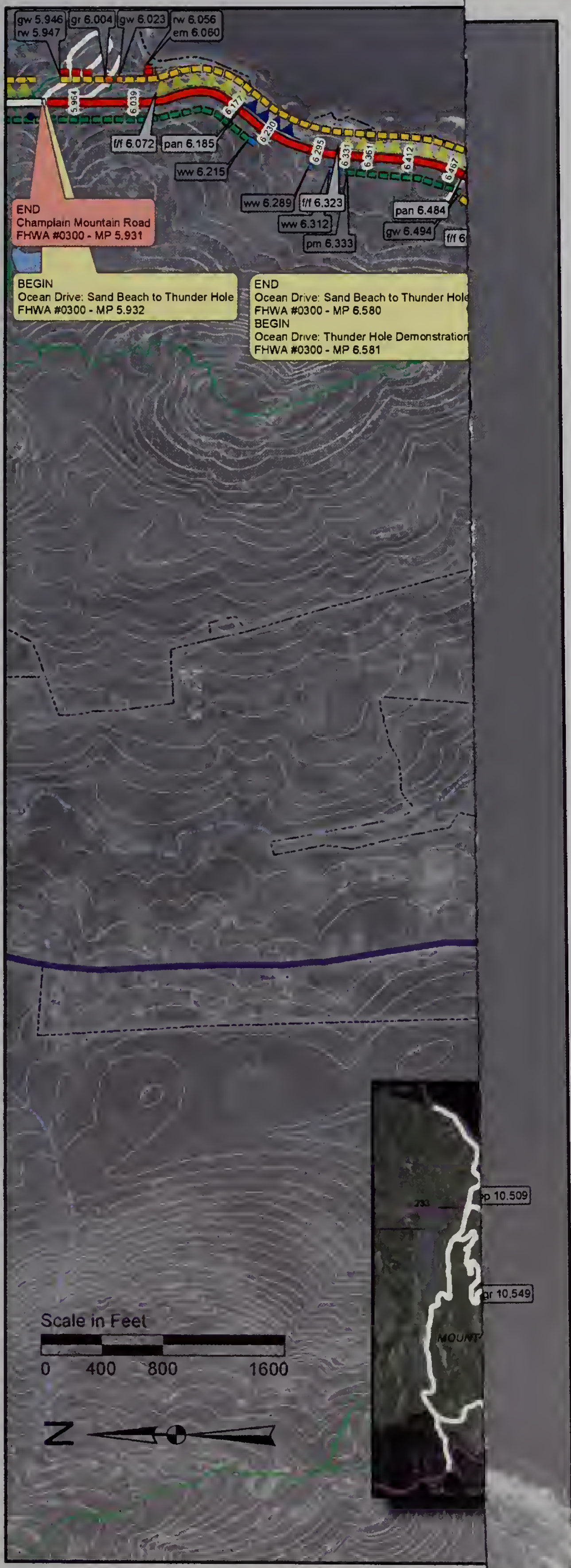

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Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Ocean Drives, Otter Cliffs Road, and Causeway/Blackwoods Road

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Bar Harbor, ME

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Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Day Mountain Road, Stanley Brook Road, and Cadillac Mountain Road

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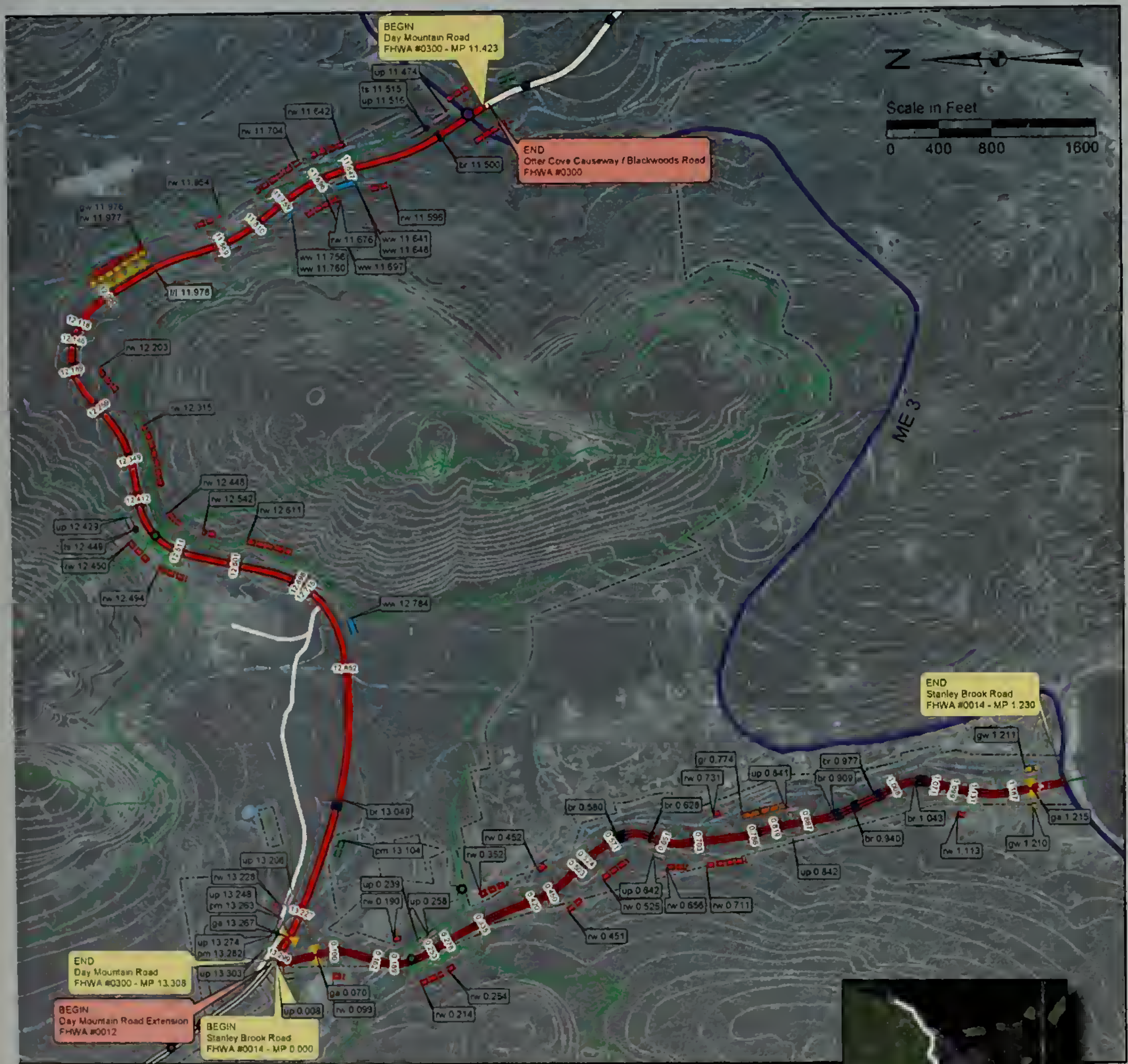

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Acadia National Park
Bar Harbor, ME

Existing Conditions 2006 Day Mountain Road, Stanley Brook Road, and Cadillac Mountain Road

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Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Day Mountain Road Extension and Jordan Pond/Eagle Lake Road

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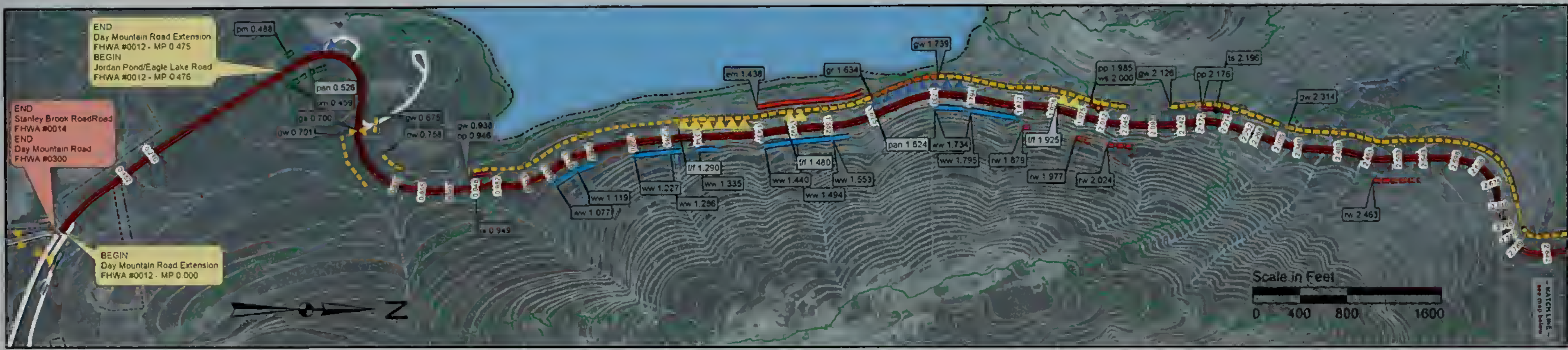

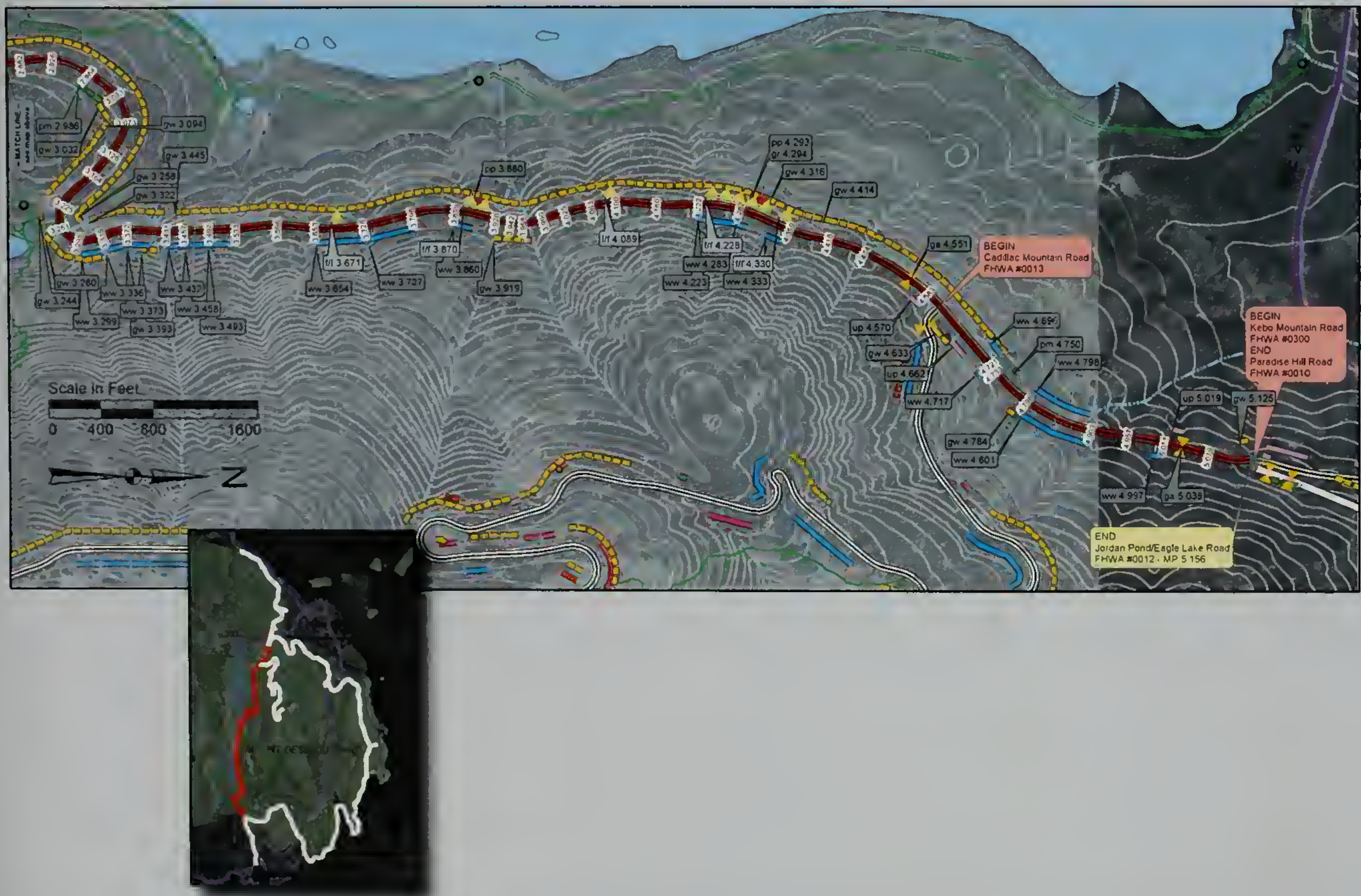

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
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Existing Conditions 2006 Day Mountain Road Extension and Jordan Pond/Eagle Lake Road

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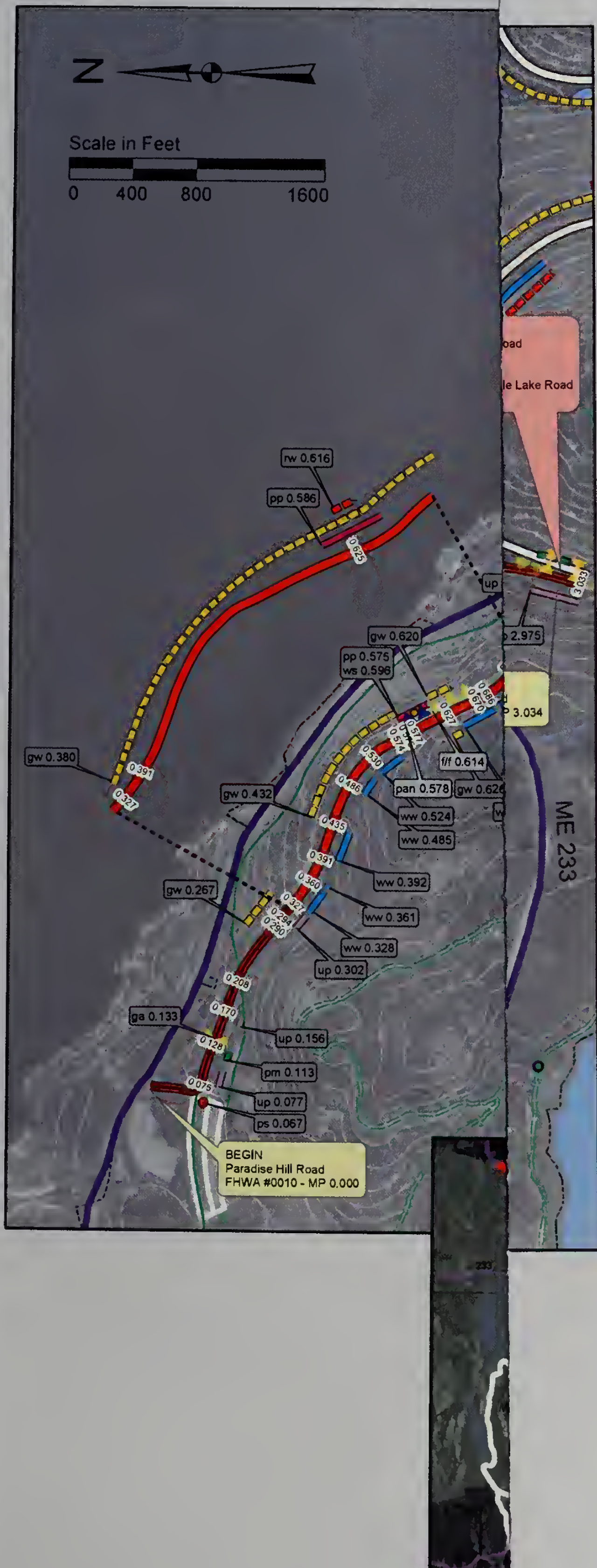

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Paradise Hill Road

National Park Service

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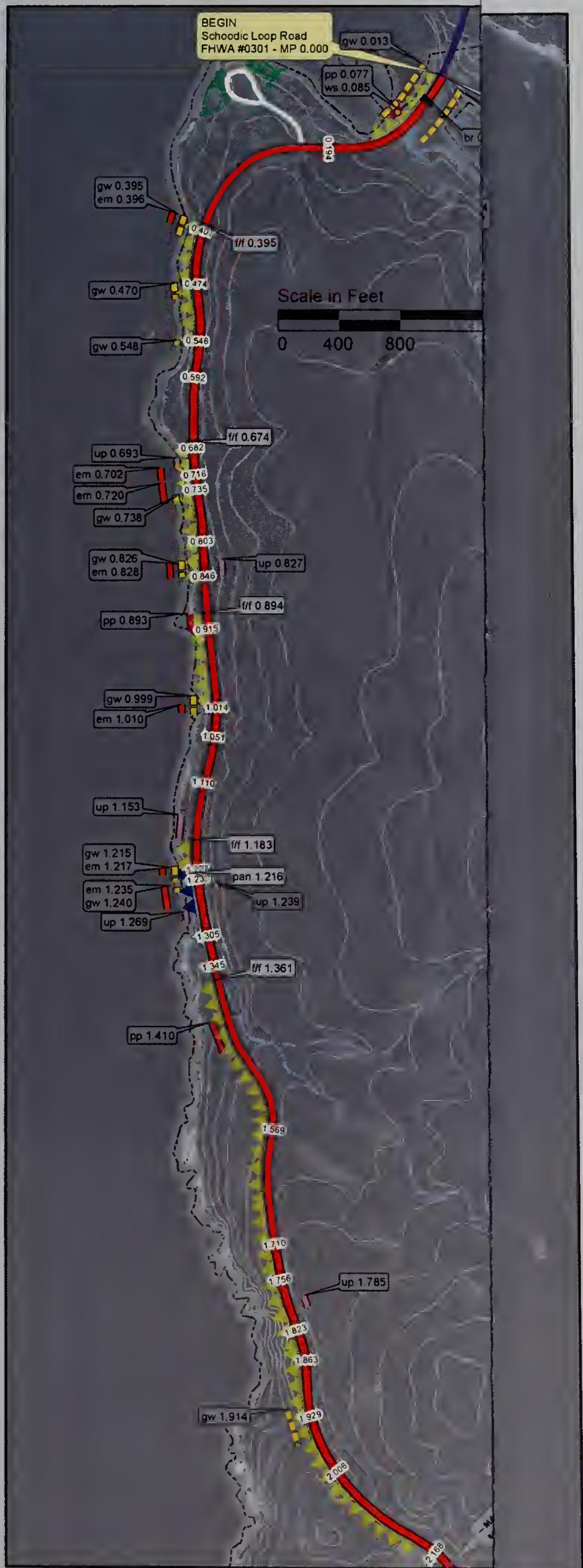

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Schoodic Loop Road

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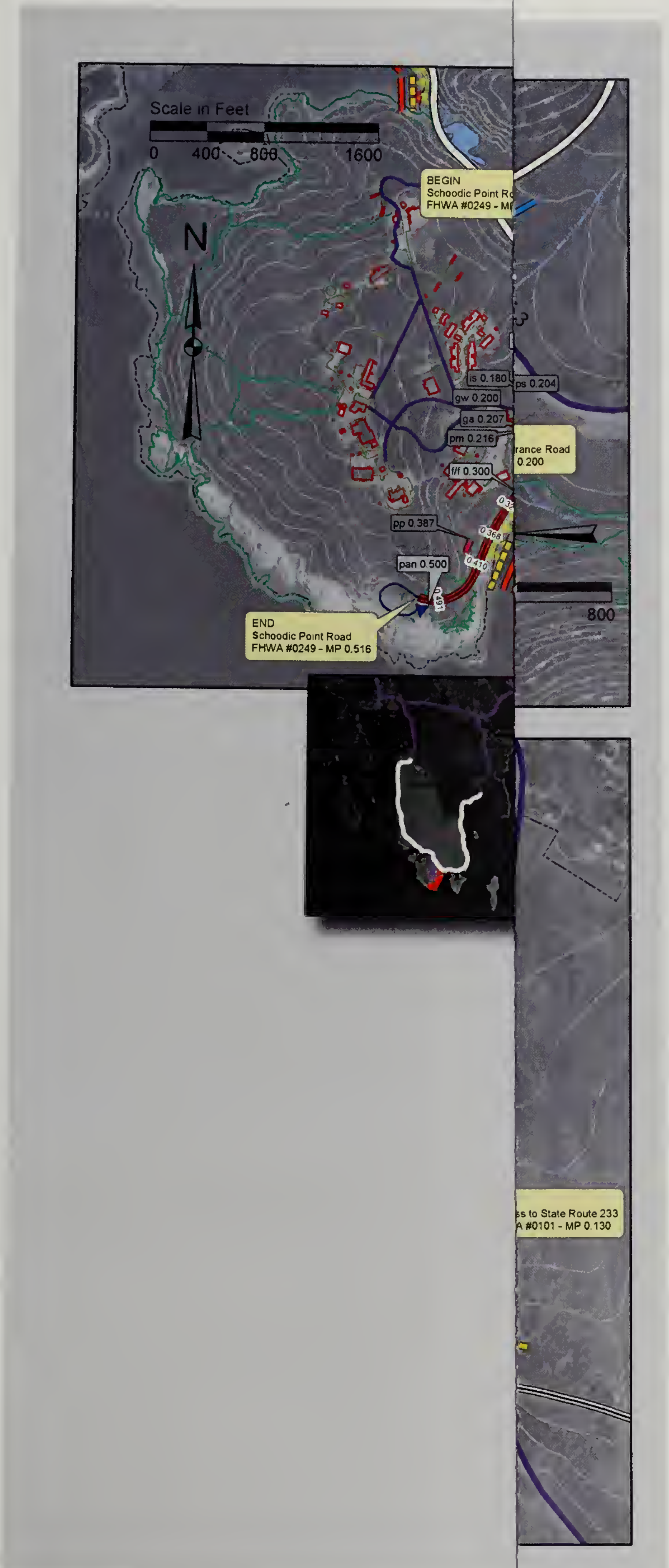

Cultural Landscape Report

Historic Motor Road System
Acadia National Park
Bar Harbor, ME

Existing Conditions 2006
Schoodic Point Road and Access Roads

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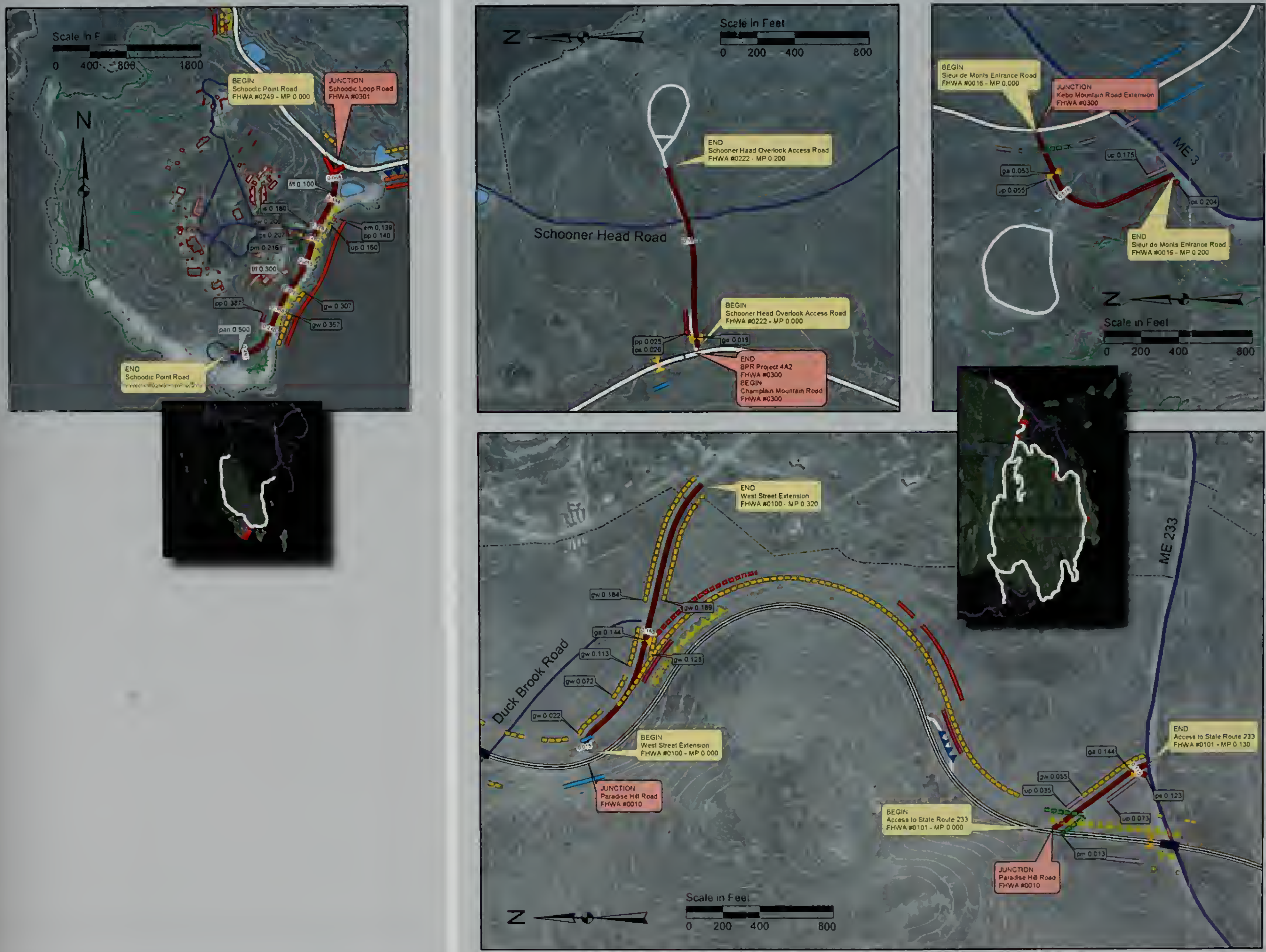

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Acadia National Park
Bar Harbor, ME

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APPENDIX C
SUMMARY OF LANDSCAPE CHARACTERISTICS AND FEATURES

The characteristics and features that describe Acadia National Park's historic motor road system are organized into three groups that extend outward from the centerline of the motor road: the traveled way, the road prism, and the road corridor. The traveled way concerns the alignment, geometry, and the surface of the motor roads. The road prism includes the shoulders, drainage features, vehicular barriers, retaining walls and embankments, and site details that define the typical cross-section of the motor roads. The road corridor concerns the viewsheds and vegetation that integrate the motor roads with the surrounding landscape.

The Traveled Way					
Feature	Historic road segment(s)/Name	Extant by 1958	Extant in 2006	Evaluation	Comment
Road Alignment and Geometry					
Horizontal alignment with arcs and tangents	Stanley Brook Road, Otter Cliffs Road, Ocean Drive (3 segments)	✔	✔	Contributing	
Horizontal alignment with spiral transitions and superelevated curves	Kebo Mountain Road, Kebo Mountain Road Extension, Bureau of Public Roads Project 4A2, Champlain Mountain Road, Otter Cove Causeway and Blackwoods Road, Day Mountain Road, Day Mountain Road Extension, Paradise Hill Road, Cadillac Mountain Road, Schoodic Loop Road, Schoodic Point Road	✔	✔	Contributing	
	Jordan Pond/Eagle Lake Road	✔	✔	Contributing	Realignment completed in 1964. Design consistent with Bureau of Public Roads projects from historic period.
Vertical alignment, with grades not exceeding 7 percent	All road segments	✔	✔	Contributing	
Vertical alignment – grade separations	at Otter Cliffs Road	✔	✔	Contributing	
	at Paradise Hill Road	No	✔	Non-contributing, compatible	Constructed in 1964. Design and materials consistent with Bureau of Public Roads projects from historic period.

The Traveled Way					
Feature	Historic road segment(s)/Name	Extant by 1958	Extant in 2006	Evaluation	Comment
Cross-sections with 18-20'-wide traveled way, crown of 1/3" per foot, shoulders in cut and fill equal in width	Stanley Brook Road, Otter Cliffs Road, Ocean Drive (3 segments)	✔	✔	Contributing	
Cross-sections with 18-20'-wide traveled way, crown of 1/4" per foot, shoulders in fill wider than shoulders in cut	Kebo Mountain Road, Kebo Mountain Road Extension, Bureau of Public Roads Project 4A2, Champlain Mountain Road, Otter Cove Causeway and Blackwoods Road, Day Mountain Road, Day Mountain Road Extension, Paradise Hill Road, Cadillac Mountain Road, Schoodic Loop Road, Schoodic Point Road	✔	✔	Contributing	
	Jordan Pond/Eagle Lake Road	✔	✔	Contributing	Realignment completed in 1964. Design consistent with Bureau of Public Roads projects from historic period.
Bridges that carry motor road over a water feature	Kebo Brook Bridge (Bureau of Public Roads, National Park Service, and Olmsted, 1937-1938)	✔	✔	Contributing	BR18P LCS #041118
	Otter Creek Cove Bridge and Causeway (Olmsted and Bureau of Public Roads, 1938-1939)	✔	✔	Contributing	BR19P LCS #041122
	Little Hunters Beach Brook Bridge (Bureau of Public Roads, 1938)	✔	✔	Contributing	BR08P LCS #041119
	Hunters Beach Brook Bridge (Bureau of Public Roads, 1939-1940)	✔	✔	Contributing	BR21P LCS #041113
	Stanley Brook Road Bridges #s1-6 (Olmsted, 1934-1936)	✔	✔	Contributing	BR28P-BR33P LCS #s 041133-041138
	Duck Brook Bridge (Bureau of Public Roads, 1950-1953)	✔	✔	Contributing	BR01P LCS #041107
	Frazer Creek bridge (part of causeway) (Designer unknown, rebuilt 1970s, 1990s)	No	✔	Non-contributing	no structure or LCS #s
Bridges that carry motor road over a carriage road	Dane Farm Bridge (Bureau of Public Roads, and National Park Service, 1939)	✔	✔	Contributing	BR04P LCS #041106

The Traveled Way					
Feature	Historic road segment(s)/Name	Extant by 1958	Extant in 2006	Evaluation	Comment
Bridges that carry motor road over a highway or local road	New Eagle Lake Road Bridge (Bureau of Public Roads, 1950-1952)	✔	✔	Contributing	BR10P LCS #041121
	Route 233 Bridge (Bureau of Public Roads, 1951-1952)	✔	✔	Contributing	BR20P LCS #041123
	Fish House Bridge (Bureau of Public Roads, 1938)	✔	✔	Contributing	BR02P LCS #041112
Bridges that carry a carriage road over the motor road	Triad-Day Mountain Bridge (Grossman and Mabel, 1938-1941)	✔	✔	Contributing	BR05S LCS #041139
	Stanley Brook Bridge (Stoughton, 1933)	✔	✔	Contributing	BR26S LCS #006572
Bridges that carry a highway over the Motor Road	Sieur de Monts Spring Bridge (McFarland, 1940)	✔	✔	Contributing	BR06P LCS #041131
	Blackwoods Bridge (Bureau of Public Roads, 1939-1941)	✔	✔	Contributing	BR03P LCS #041103
Causeways	Otter Creek Cove Bridge and Causeway (Olmsted and Bureau of Public Roads, 1938-1939)	✔	✔	Contributing	BR19P LCS #041122
	Frazer Creek causeway (Designer and date unknown)	✔	✔	Contributing	no structure or LCS #s
Road Surface					
Wearing course: Plant-mixed, hot-asphalt bituminous concretes	All roads	✔	✔	Contributing	Originally bituminous surface treatment with a final chip coat of coarser stones, but resurfaced with plant-mixed, hot-asphalt bituminous concretes beginning in mid-1950s.
Centerline and fog line striping	All roads	No	✔	Non-contributing	All roads feature painted centerlines; Cadillac Mountain Road also features fog lines.
Painted crosswalks and parking lines	All roads	No	✔	Non-contributing	Used in major developed areas and at some trail crossings.

The Road Prism					
Feature	**Type**	**Extant by 1958**	**Extant in 2006**	**Evaluation**	**Comment**
Road Shoulders					
Shoulders	Vegetated	✓	✓	Contributing	
	Gravel	No	✓	Non-contributing	Design and materials are not compatible.
	Bituminous	No	✓	Non-contributing	Design and materials are not compatible.
	Loose rubble	No	✓	Non-contributing-Compatible	Materials consistent with rustic character.
Pullouts	Paved	✓	✓	Contributing	Most paved pullouts are historic. Those that are not are compatible.
	Unpaved	Undeter-mined	✓	Undeter-mined	Needs additional research.
Parking lots	Paved	✓	✓	Contributing	
Drainage Features					
Ditches	Vegetated	✓	✓	Contributing	
Waterways	Mortared rubble	✓	✓	Contributing	Some obscured by vegetation
	Loose rubble	No	✓	Non-contributing, compatible	Design and materials consistent with the Rustic Design style.
	Bituminous	No	✓	Non-contributing	Design and materials are not compatible. Some may cover historic masonry waterways.
Culverts	Stone box culvert	✓	✓	Contributing	
	Concrete box culvert	✓	✓	Contributing	
	Corrugated metal pipe (CMP)	✓	✓	Contributing	
	Reinforced concrete pipe (RCP)	✓	✓	Contributing	
Inlet structures	Stone headwalls (dry-laid, mortared)	✓	✓	Contributing	
	Drop-inlets (dry-laid stone, pre-cast concrete with grate, curb type concrete, curb type brick)	✓	✓	Contributing	
	Loose stones	✓	✓	Contributing	
	Pipe only	✓	✓	Contributing	
	Combination	✓	✓	Contributing	
	Inlet not found	✓	No	Undeter-mined	Likely one of the types listed

The Road Prism					
Feature	**Type**	**Extant by 1958**	**Extant in 2006**	**Evaluation**	**Comment**
Outlet structures	Stone headwalls (dry-laid, mortared)	✔	✔	Contributing	
	Loose stones	✔	✔	Contributing	
	Pipe only	✔	✔	Contributing	
	Combination	✔	✔	Contributing	
	Outlet not found	✔	No	Undetermine d	Likely one of the types listed
Vehicular Barriers					
Guardwalls	Angular ledge stones	✔	✔	Contributing	
	Rectilinear quarried stones	✔	✔	Contributing	
Berms	Earthen berms	✔	✔	Contributing	
Parking management stones	Rounded stones	No	✔	Non-contributing, Compatible	Design and materials consistent with the Rustic Design style Distinguishable from historic guardwall stones
	Angular ledge stones	No	✔	Non-contributing	Appearance is too similar to historic angular ledge stone guardwalls.
Embankments and Retaining Walls					
Embankments	Vegetated	✔	✔	Contributing	
	Rock	✔	✔	Contributing	
Retaining walls	Dry-laid stone	✔	✔	Contributing	
	Mortared stone	✔	✔	Contributing	
Guardwalls/ retaining walls	Dry-laid stone and Mortared stone	✔	✔	Contributing	
Site Details					
Access gates	Civilian Conservation Corps gate	✔	✔	Contributing	
	Rustic wood	No	✔	Non-contributing, Compatible	Reconstruction is compatible with rustic character of original gates.
	Galvanized steel pipe	No	✔	Non-contributing	Design and materials are not compatible.
Fences	Post and rail	No	✔	Non-contributing - Compatible	Design is not historic, but materials are compatible with rustic

The Road Prism					
Feature	**Type**	**Extant by 1958**	**Extant in 2006**	**Evaluation**	**Comment**
					character.
Pedestrian barriers	Stainless steel railings	No	✔	Non-contributing	Design and materials are not compatible.
	Rope fences	No	✔	Non-contributing	Design and materials are not compatible.
Signage	Contemporary regulatory signs	No	✔	Non-contributing	Design and materials are not compatible.
	Contemporary directional signs	No	✔	Non-contributing	Design and materials are not compatible.
	Metal park entrance signs	No	✔	Non-contributing	Design and materials are not compatible.
	Wood park entrance signs	No	✔	Non-contributing - Compatible	Design and materials compatible with rustic character.
	Wayside signs	No	✔	Non-contributing	Design and materials are not compatible.
	Wood trailhead signs adjacent to motor roads	No	✔	Non-contributing - Compatible	Design and materials compatible with rustic character.
Medians	Landscaped with grass	✔	✔	Contributing	
	Mortared rubble	✔	✔	Contributing	
	Bituminous	No	✔	Non-contributing	Material is not compatible.
Walkways	Asphalt	✔	✔	Contributing	
	Concrete	No	✔	Non-contributing	Material is not compatible.
Trails adjacent to motor roads	Gravel	✔	✔	Contributing	
Steps	Tooled stones	✔	✔	Contributing	
	Rough-cut stones	✔	✔	Contributing	
	Concrete	No	✔	Non-contributing	Material is not compatible.
	Wood	No	✔	Non-contributing	Material is not compatible.
Curbing	Rough-cut granite	✔	✔	Contributing	
	Slope-faced rough-cut granite	✔	✔	Contributing	
	Concrete	✔	✔	Contributing	
	Slope-faced concrete	✔	✔	Contributing	
	Sawn-top granite	No	✔	Non-contributing	Design is not compatible. Replaced

The Road Prism					
Feature	**Type**	**Extant by 1958**	**Extant in 2006**	**Evaluation**	**Comment**
					some sections of concrete curbing
Monuments	Allesandro Fabbri Memorial Plaque (MON 20, LCS #041356)	✔	✔	Contributing	
	John Godfrey Moore Memorial Plaque (MON 28, LCS #041362)	✔	✔	Contributing	

The Road Corridor					
Feature (1961 Vista Number)	**Historic road segment(s)/Name**	**Extant in 1961**	**Extant in 2006**	**Evaluation**	**Comment**
Scenic Views					
56	Kebo Mountain Road (1961 Vista Plan #s 56-57)	✔	✔	Contributing	Near f/f 1.775; corresponds to pullout on 1941 Master Plan
57		✔	✔	Contributing	Near pan 0.319
52	Kebo Mountain Road Extension (1961 Vista Plan #s 52-55)	✔	✔	Contributing	Part of f/f 3.203
53		✔	No	Non-contributing	Obscured by vegetation
54, 55		✔	✔	Contributing	Near f/f 2.149
47	Bureau of Public Roads Project 4A2 (1961 Vista Plan #s 47-51)	✔	✔	Contributing	Near f/f 5.007
48		✔	No	Non-contributing	Obscured by vegetation
49		✔	✔	Contributing	Part of f/f 4.540
50		✔	No	Non-contributing	Obscured by vegetation
51		✔	✔	Contributing	Part of pan 3.823
46	Ocean Drive (1961 Vista Plan # 46)	✔	✔	Contributing	Includes f/f 6.072, pan 6.185, f/f 6.323, pan 6.484, f/f 6.551, pan 6.551, f/f 6.709, f/f 6.939, pan 6.976, f/f 7.096, f/f 7.183. Corresponds to parking lot on 1941 Master Plan (Thunder Hole)
42	Otter Cliffs Road (1961 Vista Plan #s 42-45)	✔	No	Non-contributing	Obscured by vegetation
43		✔	✔	Contributing	Part of f/f 7.757; corresponds to parking lot on 1941 Master Plan
44, 45		✔	✔	Contributing	Part of pan 7.455; correspond to parking lot on 1941 Master Plan (grade separation)
25	Otter Cove Causeway and Blackwoods Road (1961 Vista Plan #s 25-41)	✔	No	Non-contributing	Obscured by vegetation
26		✔	✔	Contributing	Part of f/f 10.524; corresponds to pullout on 1941 Master Plan

The Road Corridor					
Feature (1961 Vista Number)	**Historic road segment(s)/Name**	**Extant in 1961**	**Extant in 2006**	**Evaluation**	**Comment**
27		✓	✓	Contributing	Part of f/f 10.324
28, 29		✓	✓	Contributing	Part of f/f 10.073; corresponds to pullout on 1941 Master Plan
30, 31, 32		✓	✓	Contributing	Part of pan 9.800; corresponds to pullout on 1941 Master Plan (Western Point)
33, 34, 35, 36, 37		✓	✓	Contributing	Part of f/f 8.953
38		✓	✓	Contributing	Part of pan 8.623
39		✓	✓	Contributing	Part of pan 8.621
40		✓	No	Non-contributing	Obscured by vegetation
41		✓	No	Non-contributing	Obscured by vegetation; corresponds to pullout on 1941 Master Plan (Fabbri/former naval station)
24	Day Mountain Road (1961 Vista Plan # 24)	✓	✓	Contributing	Near f/f 11.978; corresponds to proposed pullout on 1941 Master Plan
23	Day Mountain Road Extension (1961 Vista Plan # 23)	✓	No	Non-contributing	Obscured by vegetation
6	Jordan Pond/Eagle Lake Road (1961 Vista Plan # s 6-23)	✓	No	Non-contributing	Obscured by vegetation
7		✓	✓	Contributing	Part of f/f 4.330
8		✓	✓	Contributing	Part of f/f 4.228
9		✓	✓	Contributing	Part of f/f 4.089
10		✓	No	Non-contributing	Obscured by vegetation; corresponds to pullout on 1941 Master Plan.
11		✓	✓	Contributing	Part of f/f 3.870; corresponds to pullout on 1941 Master Plan and
12, 13, 14		✓	No	Non-contributing	Obscured by vegetation
15		✓	✓	Contributing	Part of f/f 3.671
16, 17		✓	No	Non-	Obscured by vegetation

The Road Corridor					
Feature (1961 Vista Number)	**Historic road segment(s)/Name**	**Extant in 1961**	**Extant in 2006**	**Evaluation**	**Comment**
				contributing	
18, 19		✔	✔	Contributing	Correspond to pullout on 1941 Master Plan
20		✔	No	Non-contributing	Obscured by vegetation
21, 22		✔	✔	Contributing	Part of pan 1.624
58, 59, 60	Cadillac Mountain Road (1961 Vista Plan #s 58-67)	✔	No	Non-contributing	Obscured by vegetation
61		✔	✔	Contributing	Part of f/f 1.357
62		✔	✔	Contributing	Near pan 1.530
63, 64		✔	✔	Contributing	Part of pan 1.780
65		✔	✔	Contributing	Part of pan 2.586
66		✔	✔	Contributing	Part of f/f 3.111
67		✔	✔	Contributing	Vista from parking lot area
1	Paradise Hill Road (1961 Vista Plan #s 1-5)	✔	✔	Contributing	Near pan 0.578 and f/f 0.614; corresponds to pullout on 1941 Master Plan.
2		✔	No	Non-contributing	Obscured by vegetation
3		✔	✔	Contributing	Part of f/f 1.975; corresponds to pullout on 1941 Master Plan
4		✔	✔	Contributing	Part of pan 2.359; corresponds to pullout on 1941 Master Plan
5		✔	✔	Contributing	Part of f/f 2.527

The Road Corridor					
Feature	**Historic road segment(s)**	**Extant by 1958**	**Extant in 2006**	**Evaluation**	**Comment**
Roadside Vegetation					
Vegetation in and along road corridors	All roads	✔	✔	Contributing	

National Park Service
U.S. Department of the Interior

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