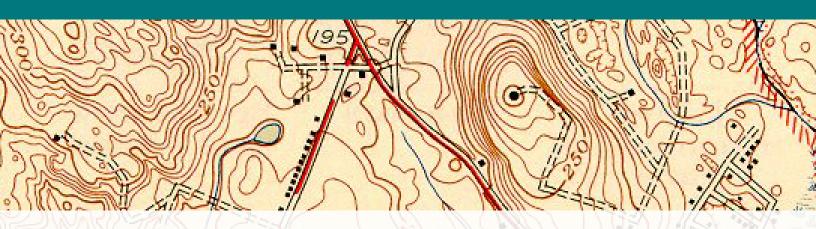
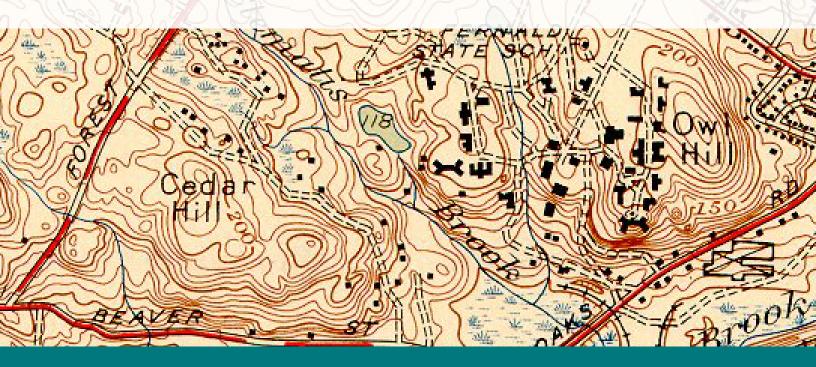
HISTORIC RESOURCE AREA REPORT



Walter E. Fernald Developmental Center National Register Historic District (WLT.AB) Northwest Quadrant



Waltham Historical Commission February 2016



City of Waltham Honorable Mayor Jeannette A. McCarthy 610 Main Street Waltham, MA 02452

Report Authored by Historical Commission Fernald Liaison Laurence A. Green.

Waltham Historical Commission

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This report was compiled with support from Marie Daly and Eric Rizzo

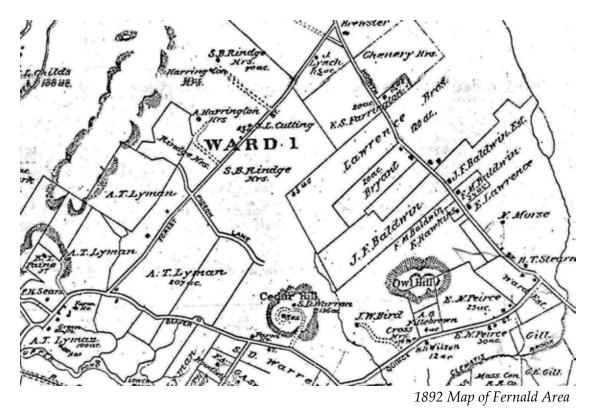
Cover Image: USGS 1946 Topographical Map Additional Images Courtesy of Marie Daly



Fernald Farmhouse, 1903, Image Courtesy of Harvard Art Museums/Fogg Museum, Transfer from the Carpenter Center for the Visual Arts, Social Museum Collection

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1.0 Scope

To provide a response to the following request, issued by the Fernald Ad-hoc Committee, December 14, 2015:

Request that the Waltham Historical Commission provide to the Fernald Ad-hoc Committee locations of historical farm fields, stone walls, and any other archaeological significant features in the northwest quadrant of the Fernald parcel.

This document provides responses to the committee's request including: a historical summary of the northwest quadrant, a historical evaluation of the landscape of the northwest quadrant, a summary description of existing and potential historic resource areas, a description of potential hazards to those resources, maps identifying potential and historic resource areas and historical topographical elevations, and a summary of findings. Comments are included in the summary of findings addressing the proposed redevelopment of the marshlands and ponds discussed at the December 14, 2015 meeting of the Fernald Ad-hoc Committee.

Given the scope of the request that led to the creation of this document, and furthermore, given the need for further, extensive review of deeds, documents, maps, and histories that could not be obtained with available time and resources, this documentation shall in no way constitute fulfillment of the requisite "recordation plan," required by the Memorandum of Agreement described herein. Furthermore, it does not reflect formal notice of intent to the Waltham Historical Commission or the Massachusetts Historical Commission for any RFP, development prospectus, or marketing plan.

This report has been reviewed by, and approved by the Waltham Historical Commission.

2.0 Methodology and Design

The report identifies potential historic resource areas within the northwest quadrant of the Fernald School. It should be noted, however, that the parcel in its entirety, is a nationally significant, federally-designated historic resource area, with the sole exception of non-contributing structures identified in the "Memorandum of Agreement Between the Massachusetts Division of Capital Asset Management and Maintenance, the City of Waltham, and the Massachusetts Historical Commission," (hereafter called "The Memorandum of Agreement"),

Available records, including Trustees Reports, the 1990 National Historic Register Nomination Form, historic maps, aerial photographs, books, and newspaper articles were consulted. Preliminary site survey was conducted as were interviews with neighbors and remaining staff. Some deed research was conducted. This report assesses the relationship between the landscape and the three principal groups to have used of the property throughout its history: First Nations/Native Americans, farmers, and the patients and employees of the Walter E. Fernald Developmental Center.

The report identifies and provides preliminary maps locating potential areas where historic and archaeological resources are, or are likely to be present. Lastly, the report presents summary comments reflecting the need for any proposed re-use and re-development to adhere to federal, state, and local regulations specific to historic preservation in a National Historic Register District.

3.0 Regulations & Existing Agreements—Summary

The northwest quadrant of the Walter E. Fernald Developmental Center property (WLT.AB), hereafter called "The Fernald School," is located within a National Historic Register District that was the site of the oldest institution dedicated to the treatment and care of people with developmental and intellectual disabilities in the Western Hemisphere.

The site area under review, comprising approximately 50 acres of the 196-acre parcel, was purchased with Community Preservation Act funds by the City of Waltham, and is subject to the conditions of that purchase. The City of Waltham proposes to demolish twenty (20) non-contributing structures in this portion of the property, and to daystream streams and reinstall pre-existing wetlands and two (2) ponds which were removed between 1943 and 1955 by the Fernald School.

Largely comprised of agricultural lands purchased from the Lawrence, Baldwin, and Bryant families, the landscape and historic assets of the northwest quadrant were subject to significant disturbance by the Fernald School from 1926 to 1991. Despite these disturbances, this report identifies significant existing and potential locations of human and natural historic assets in the northwest quadrant including, but not limited to:

- 1. Archaeological resources attributed to the presence of First Nations Peoples.
- 2. Archaeological resources, including farm foundations, attributed to the agricultural history of the Trapelo Road area.
- 3. Stone walls marking original 17th Century

Land Grants and Boundaries.

- 4. Old growth trees, both natural and orchard.
- 5. Undisturbed and disturbed historic pastures and farmland.
- 6. Existing historic structures relating to the operations of the Walter E. Fernald Developmental Center.
- 7. Existing historic structures relating to the agricultural and social history of North Waltham.

Per the Memorandum of Agreement, the City of Waltham has agreed to "include historic preservation in any redevelopment process," of the Fernald School. As such, the City of Waltham has agreed to consult the Waltham Historical Commission and Massachusetts Historical Commission regarding any plan for reuse or redevelopment of any portion of the property, beginning with a confidential draft of all RFPs. The City has further agreed to implement a historic "recordation plan" when undertaking any demolition or redevelopment of the property, including non-contributing structures.

Nominated to the State Register of Historic Places in 1994, and therefore in accordance with MGL Chapter 9, Sections 26-7, any projects undertaken on the 196-acre parcel, shall provide a project notification form to the Massachusetts Historical Commission for review, irrespective of the commitments set forth in the Memorandum of Agreement.

As a National Historic Register District, federal, state, and local regulations regarding historic preservation, including the Secretary of the Interior's Standards for Historic Preservation apply to the Fernald School in its entirety, with the exception of the non-contributing structures identified in the Memorandum of Agreement.

In addition, given the substantial and uncommon historical agricultural record of the given area—especially for a site within Route 128—restoration, rehabilitation, and required recordation should take into account the U.S. Department of Interior's Guidelines for Evaluating and Documenting Rural Historic Landscapes.

4.0 Historical Background and the Northwest Quadrant

4.1 The Development of the Fernald School Parcel at Waltham

The Fernald School is the oldest public institution in the Western Hemisphere for the treatment of individuals with developmental and intellectual disabilities. The school was founded as the Massachusetts School for the Feeble-Minded and Idiotic in South Boston in 1848, and moved to a 96-acre campus at its present Waltham location in 1888. A leading national institution, the school grew rapidly under the direction of Dr. Walter E.

Fernald, who was the Resident Superintendent from 1888 to 1924.

With substantial financial appropriations from the Commonwealth of Massachusetts, the southeast and east portions of the campus were developed in successive periods, most intensively from 1888-1892, in 1906, and again in the early 1930s. Following Fernald's death in 1924, the school

campus was expanded to its current 196-acre size through a series of farmland acquisitions to the west of the existing property. Conducted between 1926 and 1945, the purchases created space for the growth of the institution—including construction of buildings along the original parcel edge—while maintaining the open landscape originally intended by Fernald and Preston.

The last significant expansion of the school occurred from 1930-36 and included the Administration Building and Howe Hall, which were designed by Walter Hoyt, the same architect who designed portions of the nearby Metropolitan State Hospital, including the McLaughlin Building. Small building projects were conducted thereafter, often one at a time, until the construction of the cottage complex in the northwest quadrant in 1979. Building of the complex was attended by the construction of support buildings and ultimately the Malone Park residential cottages at the western edge of the property in 1990.

4.2 Pre-Fernald School Agriculture in the Northwest Quadrant

Once part of the town of Watertown, the North Waltham/Trapelo road area that became the Fernald School was first divided by early land grants, part of four Great Dividends, two of which crossed the current Fernald property at a west-northwest The land was continuously farmed direction. along Quince and North Streets, now Waverly Oaks Road and Trapelo Road, until successive purchases of farms created the current land delineation owned by the school.

The south-facing, sloping lands were bounded by the current Trapelo Road, where cottages were lined in a British-system of narrow, deep lot parcel division. As such, the farmhouses, three of which remain and are among the last remaining

farmhouses of Trapelo Road, were located closely together along the road, gaining acreage by extending far to the south, while development along Waverly Oaks road followed a similar, albeit eastwest pattern. The three remaining cottages are the Cardinal Cottage (1849), the Trapelo Cottage (1860) and the Baldwin Cottage (1875), and are part of the Fernald School National Historic Register District.

The soil was tilled for produce, including rhubarb, corn, and alfalfa, and the area was best known for dairy cows, sheep, and orchards, with lots divided by stone walls, many of which remain, and that were remarked upon as being among the most impressive in the Commonwealth.

Brooks and streams crossed the lands, including the Clematis and Beaver Brooks which drain into the Charles River Basin. A brook running across the northwest quadrant of the property ran through successive marshlands that were turned into two ponds by farmers. The area now occupied by the school baseball field, was also a sizable low marsh and sometimes pond area.

4.3 The School and the Land

The Waltham site for the school was likely located, selected, and secured by prominent Waltham politician Erskine Warden, who was an appointed trustee to the school. The trustees valued the location's proximity to the Waverly train line, the nearby Massachusetts General Convalescent Hospital, and most importantly, for its rural location near the rapidly-expanding Boston suburbs. The location and design of the campus, including the construction of buildings on south-facing slopes surrounded by large, open spaces, reflected many of the naturalist ideas of the burgeoning, "cottage system." The system rejected the large asylum structures characterized by the notorious asylum



Durivage/Cardinal Cottage Farm Courtesy M. Daly

architecture popularized Thomas Kirkbride in favor of low-rise, south-facing buildings that followed the natural contours of the landscape.

After moving to the Waltham campus, Dr. Fernald steadily changed the mission of the school, and the landscape, especially farmland, helped facilitate his planning. While retaining the school's dedication to providing education and skills for children, Fernald was increasingly concerned with how to provide long-term, "custodial," care for aging patients who, for many reasons would never be able to return to their families. This concern would become the foundation of his later belief in the genetic and pathological etiology of disability, including his belief in the importance of eugenics. It also mirrored the school's transition to a primarily long-term care institution.

Easily overseen by limited staff, tiring for energetic young men, and diverse in nature for patients of varying physical ability, farming became central to Fernald's daily administration of the school and remained so, in some capacities, until its closing. The land of the school was continuously farmed by the patients, with produce and

milk used to augment the output of the school's rural farming colony at Templeton. A horse barn was constructed, and large food storage was built into the basement of the original Administration Building, Waverly Hall.

Following World War I, Fernald began to reject many of the ideas that led to his custodial care model, culminating in a 1924 address on the subject, but he largely failed to alter that system before his death the following year. By the time of the building of the Metropolitan State Hospital in 1931, could be said to have become totally custodial, with little dedication to releasing patients back into their homes.

With the purchase of the lands that now form the northwest quadrant of the property, the school gained valuable farmland and recreation space to meet the growing population. It also gained dedicated access to the property along a main entry road, three historic farmhouses along Trapelo Road: The Baldwin Cottage (1875), the Trapelo Cottage (1860), and the Cardinal Cottage (1849). A ball field was constructed on the Baldwin Pond, land near the Wheatley Cottage was farmed, greenhouses were built, and ponds were used for skating by children and neighbors alike as farmland around the school gave way to mid-century suburban development.

4.4 Mid & Late-20th Century Development of the Northwest Quadrant

In 1953, the Greene Building, a hospital for patients with the most severe disabilities, was constructed on land purchased from Phineas Lawrence, at a low marsh, along the edge of the ponds and the ridgeline. An incinerator was constructed northwest of the building, across the road, and another incinerator was constructed atop the hillside at the edge of that portion of the property by the

Murphy Army Hospital. Amidst old growth trees, pesticides used to maintain the campus grounds, and other toxic material, were dumped and incinerated. To the north, behind the Baldwin Cottage, pasture land was continuously maintained, and structures, likely farmhouses, stood in the fields. In 1960 a chapel was built by the Boston Archdiocese to the northwest of the East Dowling Hall. Much of the northwest parcel, however, remained undisturbed. Farmland, the stream, and the ponds continued to be used. A small dam/water-release mechansim was created and used by the school to block and release the flow of water across the marshland. In winter, when farmland was unused, the marshes were flooded for skating, and used by neighbors and patients alike. In the other seasons, the dam was opened to allow use of the farmland by the school.

Throughout the late 1950s and into the early 1960s a growing patients' rights movement began to call for significant investment in state-run institutions, and in some cases, de-institutionalization. As the stigma of disability once propagated by Fernald began to dissipate, advocates focused on the abhorrent conditions in the schools. Underfunded and overcrowded, Fernald administrators continuously and ineffectively repurposed buildings for patient care, and failed to make necessary improvements to structures. A newly-formed advocacy group, the Fernald League, pushed for changes, and were joined by prominent national advocates.

Gunnar Dybwad, a lawyer and expert on disability rights, became involved in finding solutions to the school's overcrowding. A refugee from Nazi Germany, Dybwad was a professor at nearby Brandeis University and the founding President of the nation's first advocacy group for disability rights, the National Association for Retarded Children (ARC). Acting as an adviser to the center's leadership, in 1968 Dybwad published a plan

in Hospital & Community Psychiatry, entitled "Planning Facilities for Severely and Profoundly Retarded Adults," that was effectively a return to the ideals of the late 19th-century cottage system. Infused with ideas drawn from Scandanavian, Dybwad laid out a plan by which the large institutional buildings of the Fernald would be shut down, and patients moved into small, one-story mansard roof cottages units constructed with new ideas for patient care in mind, sensitive to the needs of patients and the difficulties of providing 24-hour care for those with significant disabilities.

Under pressure due to the revelation of increasingly scandalous conditions at the school, Supertintendent Malcolm J. Farrell embraced Dybwad's ideas, and set in motion a plan for the construction of cottages in the northwest quadrant of the property. By constructing the cottages while also reducing the size of the patient population, buildings could be vacated, refurbished, and reused. For the buildings that comprised the original campus, this was largely successful, leading to the current, albeit deterioritating, structural stability of many of the original buildings.

Construction of the cottages began in fits and starts in the early 1970s. The stream and ponds were filled in, and a drainage pipe installed behind the Baldwin Cottage, next to the current National Archives and Records Administration Building. To fill the basin where the cottages were subsequently erected, it appears that the sloping hillside behind the Phineas Lawrence School and Cardinal Cottage (see map) was used to fill the wetlands and ponds. A north-south road along the edge of the Phineas Lawrence parcel was removed and a road was installed, running along the edge of the now-steep ridgeline to create a loop. A small hill, once used for sledding at the north of the loop was also removed, the dirt likely pushed into the depression where the marshes were.

Throughout the 1970s the school was brought under the oversight and administration of Judge Joseph Tauro, and the construction of the cottages was an important part of his efforts to improve conditions at the Fernald School. Nevertheless, the construction of the cottages was plagued by poor oversight and accusations of poor construction. An outraged Dybwad distanced himself from the project and publicly denounced it as disrespectful to the patients. Yet, when construction was complete around [1983], families of patients were largely pleased with the new structures, leading to the addition of the Malone Park structures along the Clematis Brook in [1990]. A park was constructed on the hillside northeast of Malone Park, and was widely used by employees and patients. Initially planned as a cottage system, the school now large-

ly returned to being one, and as operations were shut down over the ensuing 25 years, the cottages became the locus of patient care. As patient populations were reduced, families and advocates continued to press the court to keep the school open, and as buildings were steadily closed in the old campus, court decrees allowed patients to stay in the homes they had known for decades until 2014 when the remaining few patients, housed in the Malone Park area, were moved to other state-supported facilities.

The Greene building, which houses a widely used heated pool, was in operation until August, 2015, when the Commonwealth closed the pool and transferred the property to the City of Waltham.

5.0 Historic Resources

5.1 Introduction

Continuously farmed from the 17th century until the mid-late 20th century, the northwest quadrant was, until quite recently, an example of the longstanding relationship between farmers and the natural landscape. Ponds, marshes, wetlands, streams, groves, ridges, hills, woodlands, and meadows, were used, cultivated, and sometimes modified by the farmers of Trapelo Road within the 50 acres. The parcel shows extensive evidence of the historical relationship between human activity and the physical landscape. Preliminary evidence suggests the presence of First Nations Peoples within the immediate vicinity, suggesting human activity that predates the historic record.

5.2 Contours of the Land

An elevated ridge along Trapelo Road curved along the western edge of the Lawrence lands near the current National Archives Facility, moving south to the Clematis Brook, and bounded by another line of ridges, hills, and knolls to the east and southeast. At the northeast edge of the property—likely the current location of the baseball field near the main entrance to the property—a marsh and pond were maintained by the Baldwin family. At the northwest ridgeline, a stream moved from the Mackerel Hill area off the hillside into the area of the cottages where extensive marshlands were likely modified by farmers to enhance the presence of two shallow ponds. Lands were

cultivated for produce and dairy cows, both by farmers and later by the school, including lands surrounding Wheatley Hall, and open lands were kept as meadows.

5.3 Modifications of the Landscape

Moderate modifications to the natural landscape gave way to substantial disruption of the natural landscape, including large-scale movement of soil, during the mid-20th century expansion of the Fernald School, culminating with the construction of the cottages. While some wetlands remain to the east of the Greene building and along the western edge of the cottages, much of the landscape was substantially altered. The once-sloping ridgeline along the north-northeast of the parcel behind the Cardinal Cottage appears to have been depressed into the meadows and farmland in order to make way for the cottages. Following construction of the Greene building, the ponds were created and dispersed through the use of a flow-control mechanism at the southern edge of the southerly pond and marshland. In winter they were flooded for skating in winter and released for farming the rest of the year. This was used until infill of the ponds and marshes in the mid-1970s. Purchased by the school in 1926, the Baldwin pond was drained in 1929. A hill once used for sledding, with a westerly slope, located at the northernmost point of the current loop road, was depressed into the cottage area, likely in the 1960s. A pipe was inserted in order to divert water beneath the cottage area, but failures in drainage led to substantially flooding of previously agricultural land behind the Baldwin cottage.

The once-sloping ridgeline is now a severe decrease in elevation along Trapelo Road, running northwest along the rear of the Phineas Lawrence School, Cardinal Cottage, and Baldwin Cottage. Indications of the original contours can be seen on the 1943 usgs Topographical Map and evidence of the wetlands and ponds is seen in a 1938 aerial photograph and the 1903 map.

The inadvertent creation of marshland at the northwest of the property has had an adverse affect on historic stone walls, while hazardous waste and dumping near the Greene building and along the ridgeline of the former Murphy Army Hospital further affected the landscape, in areas that may once have house incinerators owned by the hospital and school.

5.4 Wetlands and Agriculture

Extensive wetlands existed in the 50-acre parcel. The Baldwin pond comprised half of the Baldwin farm that extended, in part, from Trapelo Road east of the Phineas Lawrence School to the current Shriver Building and south to the Hillside Cottage. The pond, located at the southerly half, was filled in 1929 by the Fernald School.

The wetlands and marshes that extended through the Lawrence meadows and farmlands included a small pond and adjacent bordering vegetated wetlands (BVD) just south of the Baldwin Cottage, a large triangular pond to the northeast of the Greene Building, where the southernmost cottages now sit, and drained into a smaller pond that would have been located between the current Chapel and the marshlands that remain to the east of the Greene Building. These ponds, and most of the wetlands, were filled during construction of the cottages in 1976.

A likely unaltered course of the Clematis Brook exists at the southern edge of the Malone Park area, and receives additional drainage from an intentionally created streambed that runs north-south along the western edge of the former Lawrence/

Ringe division. The area abuts brook-land with conservation restrictions for an at-risk species of turtle.

5.5 Archaeological Resource Areas

To date, no archaeological site survey of the property has been conducted. The National Historic Register District Nomination form indicates the, "high potential for locating prehistoric resources," attributable to Native American/First Nations Peoples. Specifically, the form cites a geology supportive of the assertion. This includes the high elevations surrounding and within the property, the gradual southerly slope of the land, the presence of two brooks, and the one-time presence of the Lawrence meadows, marshlands, and ponds. Anecdotal evidence further supports this view, with numerous claims by local residents to have found stone shatter indicative of tool-making, including along Trapelo Road north of the property. While significant degradation has occurred to the landscape, numerous areas remain, particularly along undisturbed areas of woodland, pasture, and streams in the northwest corner, which should be considered potential resource areas. These include the western edge of the property near the Clematis Brook, and the entire brook-line along the abutting, southerly Cornelia Warren lands as well as the western edge that runs the length of current City of Waltham lands and Bentley College lands at Malone Park, following an approximate course of the original north-running 17th century Great Dividend stone wall.

In addition, any areas near the north/northwest ridgeline that remain undisturbed by late 20th century use should be considered for potential resources, as should the southwest side of the road across from the Wheatley building.

There is the potential for First Nations resources

as well as archaeological evidence of early agricultural life in Waltham along the Trapelo ridgeline that runs from the Phineas Lawrence School west to the Baldwin Cottage, and along the property edge to the pasture located behind the cottage near the National Archives. Aerial photographs indicate the presence, until the mid-20th century, of at least one structure at the southerly edge of the Baldwin pasture, and another in the area of Malone Park. The Baldwin pasture feature may be the location of the previously and subsequently-mentioned incinerator, but may also have been a barn building. Further research into deeds will more precisely identify these pasture resources.

Archaeological resources, including early barn foundations, agricultural evidence, and evidence of First Nations Peoples is considerable elsewhere on the property, site-wide, despite the considerable disruption of farming, building construction, and wetland reclamation. The outside bounds of all road should be considered for archeological resources unless otherwise proven.

5.6 Fences, Walls, and Boundary Marks

Numerous stone walls are present in the northwest quadrant, likely dating to the division of lands granted as Great Dividends in the 17th century, and subsequent divisions prior to the mid-19th century. Remarkably well-preserved, these walls are remarked to have been widely admired across the Commonwealth. Henry Bond remarks, "A writer [...], in describing Waltham[...], says: [...] 'Almost every farm is or may be fenced with stone-wall, from its own grounds; and probably few towns in the country exhibit more excellent walls." The longest-surviving physical evidence of the earliest European agricultural habitation of the portion of Watertown that later became

Waltham, the colonial-era walls and their successors are of historical significance.

Among the remaining walls are (a) a north-south wall at the western edge of the historic Baldwin pasture running the entire length of the pasture, (b) the west/northwest walls of the 2nd and 3rd dividends approximately 100 yards south of the National Archives facility adjoining the pasture, and along the Clematis Brook at Malone Park, and (c) a north-south wall at the western edge of the Malone Park pasture, intersecting the west-northwest wall at the Clematis brook, (d) walls likely along the Trapelo ridgeline—an area that has not yet been surveyed intensively due to overgrowth. Other walls may exist.

Wall (a) has suffered from the insertion of the drainage pipe to the east of the National Archives facility, and at points has sunk approximately 1-2 feet where the failed pipe has flooded the earlier farmland above the northwest edge of the loop road. Walls should be the subject of a gis/gps study and condition report.

Walls (a) and (c) appear to mark the westerly edge of what was, by 1892, land owned by the Lawrence family, abutting the Farrington Farm at the northwest and the lands of S.B. Ringe/Cornelia Warren to the west and south, which is bounded by a dividend wall. The dividend wall marks the southerly bound of the Farrington land. Remnants of stone walls belonging to the Lawrence, Baldwin, and Bryant estates, as marked on the 1896 map, may also exist. Newer fence-lines bound the property following a similar path to the stone walls. Due to flooding, the area behind the Baldwin cottage remains uninvestigated. Due to overgrowth, the area behind the Phineas Lawrence School, running north-northwest to the Baldwin Cottage remains yet unsurveyed, but likely contains stone walls and stone wall remnants.



Fernald Woods, Courtesy M. Daly

5.7 Roads

Three road paths are of note in the northwest quadrant. A road once extended from the western edge of the Cardinal Cottage, due south off the sloping ridgeline, ending at the northeastern edge of the northern "Triangle" Pond. Another road appears to have been built by the school, extending northwest from the main entrance road before turning south along the natural ridgeline west of the knoll which the Hillside Cottage was constructed and meeting, at East Dowling Hall, the southerly road from the Cardinal Cottage. Lastly the Malone Park road appears to have existed prior to purchase from the school, and connected with a loop road that extended to the now-demolished farmhouse at the southern edge of the Baldwin pasture.

5.8 Structural Assets—Cottages and **Buildings**

Two farm cottages located along Trapelo Road were purchased by the Fernald School. Baldwin Cottage was built around 1875 and lies near the

northwest edge of the property. Constructed in 1849, the Cardinal Cottage is directly west of the Phineas Lawrence School facing the entrance to Mackerel Hill. The cottages are among the last remaining farmhouses on the south side of Trapelo Road and represent some of the last and oldest examples of the once-rich farming community whose historical roots extend back to the 17th century. An extensive history of the cottages is not reproduced here, but given their age, architectural styles, National Historic Register Status, and associations with the history of Waltham, these cottages are of historical significance.

As with most buildings across the campus, newer interior additions to the cottages, including elements like drop ceilings, have deteriorated substantially and should be removed. Prior to, and since their purchase by the City of Waltham, the overall condition of the cottages has substantially deteriorated due to break-ins, lack of continued maintenance, and the effects of severe weather. Preliminary evaluation of both properties suggests that rehabilitation is possible.

Wheatley Hall lies behind the Greene Building at the intersection of roads that lead to Malone Park. Constructed in 1933 and named for the former President of the Board of Trustees, Dr. Frank Wheatley, the building was initially used to care for a growing number of infant patients in the care of the Fernald School. Originally intended to house 50 patients, Wheatley Hall is a one story colonial revival structure with a stately wooden and copper cupola and, as the NHRD nomination form states, "a cast-stone foundation to a slate gable roof[...] The main entry is centered on the east façade, where it is fronted by a gabled wood portico and embraced by cross pavilions with corner quoins and Palladian windows. Windows contain 8/8 or 10/10 sash." The building resembles a similar architectural style employed at the Wrentham State School.

Converted for varying uses and functions, Wheatley Hall served as a dormitory for older, male patients in the 1970s before being converted into a furniture repair shop. Previous reports were conducted without interior inspection of the building. A preliminary inspection of the interior has been made and a more extensive report can be provided.

All three structures are listed as contributing to the historical fabric of the National Historic Register District. As such, and given that renovation is feasible, the city is both obliged and encouraged to address the deterioration that threatens the structures in consultation with the Waltham Historical Commission and Massachusetts Historical Commission, in accordance with the Memorandum of Agreement. As with large swaths of the campus, this should include removal of encroaching plants and trees and enhanced security (see: Recommendations)

5.9 Inventory of Natural Species

A precise inventory of natural species of flora does not currently exist. There appear to be or-



Durivage/Cardinal Cottage Courtesy M. Daly

chard trees along the western ridge between the Baldwin pasture and Malone Park, along with old growth trees in multiple areas, all of which require further study and documentation. Aerial photographs suggest that much of the site was cultivated and many trees and plants are recent growth. Photographs also indicate that some old growth trees may be located in the area where hazardous contamination has been noted. Given current ecological restrictions applying to City-owned land along the Clematis brook at the southwest edge of the quadrant, care should be taken, and further investigation done.

6.0 Hazardous Waste

Interviews and physical remnants indicate the mid-20th century presence of an incinerator north of the Malone Park Road at a low area across from the Greene Building south of the rise to the ridgeline of the former Murphy Army Hospital. A 1969 aerial photo appears to indicate a small cluster of structures in this area. Additionally, a second incinerator is remarked to have existed along the ridge at the edge of the property, at the foot of which, additional signs of waste have been found. A small loop road is indicated in an earlier map, that suggests the outbuilding in the southerly Baldwin pasture may have been the Fernald incinerator while the Murphy incinerator was located atop the ridgeline.

It is likely that the waste incinerated included pesticides and other chemicals. The area, now wooded, is a combination of old growth trees, fruit trees, and newer undergrowth. Confirmation of the existence and location of the incinerators, along with soil testing in the areas in question are necessary in order to determine the scope of environmental hazard and the extent and need for remediation. The proposed demolition of the loop road will remove a barrier between the southerly Clematis Brook and Cornelia Warren waterways, and proposed re-creation of nearby ponds and wetlands could increase contact with this area. Further study is warranted by professional experts.

7.0 Summary of Findings

The northwest quadrant of the Walter E. Fernald Developmental Center is rich in historic resources and potential archaeological resources that show a continuous and close relationship between the natural landscape and human activity that predates the historical record. Further study, in accordance with, but not limited to the conditions of the Recordation Plan, are warranted, given the substantial relationship between the historic social, agricultural, medical, and scientific fabric of the National Historic Register District and their importance in understanding the history of the town, region, and country.

Even the well-intentioned recreation of natural landscapes can endanger historic and archaeological resources. As a National Historic Register District, the removal of non-contributing structures and the re-creation of original marshlands and ponds should show a sensitivity to the fact that are taking place in a nationally recognized and federally-designated historic site, and must meet the conditions and obligations of the Memorandum of Agreement and all relevant federal, state, and local historic regulations.

As such, the removal of the twenty (20) non-contributing structures be undertaken in such a way that does not disturb the historic resources that surround the two areas.

- Particular care should be taken in the demolition of the Malone Park area near the Clematis Brook, and in the cottage area near the areas of potential hazardous contamination, where the unintended spread of hazardous material could adversely impact nearby resources.
- Re-creation of ponds and marshes should

be done with proper notification to the Waltham Historical Commission, in accordance with the conditions set forth in Sections I, II, and IIIa of the Memorandum of Agreement. They should include the recreation of the north and northwest sloping elevations that once characterized the area behind Cardinal Cottage, but should not encroach on, or disturb the immediate area currently surrounding the house, which may contain archaeological resources. If any disruption is possible, an archaeological survey of the area surrounding the house should be conducted in accordance with section IIIb of the Memorandum of Agreement.

- The small hill that was once located at the north of the cottage road loop should be recreated and the road removal should be done in such a way that properly drains the marshland that overtook the farmlands behind Baldwin Cottage following the insertion of the drain pipe.
- The stabilization of the three significant historic structures (The Wheatley Building, Cardinal Cottage, and Baldwin Cottage) is feasible and should be undertaken in accordance with the spirit of the Memorandum of Agreement, in which it is stated that the city is, "encouraged to include historic preservation in any redevelopment process." Identified as contributing structures to the National Historic Register District, the current deterioration of the property conditions should be addressed in order not to impede the fulfillment of sections IA(1-3) and V of the Memorandum of Agreement, including

sufficient security measures, removal of invasive natural encroachment, and recordation.

- An inventory of plant and tree species should be conducted, identifying old growth and fruit trees, including sampling for the ages of trees.
- Any historic roads, including the remaining portions of the Cardinal Cottage Road and the Malone Park branch road, should be preserved.
- Historic stone walls should be documented, preserved, and restored. An initial condition report with exact GPS locations and GIS mapping should be produced. Special care should be taken when re-grading south of the Cardinal Cottage.

 Any redevelopment that affects previously undisturbed lands should follow the conditions set for for archaeological survey in section IIIb of the Memorandum of Agreement.

The pasture and stone walls behind Baldwin cottage are just one significant example of areas within the 50 acres that may be eligible for National Historic Landscape Status, and formal evaluation of the historic structures within the quadrant is necessary.

While this document provides an extensive initial evaluation of the historic resources in the northwest quadrant, further deed research, documentary work, site survey, and preservation planning and efforts are needed to establish a full picture of the historic record of this parcel, from its Neolithic and agricultural roots to the present day.