














Kalaupapa and Kalawao Settlements Cultural Landscape Report






VOLUME II OF II
APPENDIX A - INVENTORY TABLE AND MAPS
APPENDIX B - CEMETERY MANAGEMENT PLAN
JUNE 2020




Cultural Resources


Appendix A: Inventory Tables and Maps



Administrative Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Pacific shoreline				The Administrative Area character area edges the Pacific shoreline, including the historic site of the wharf.		
Patterns of Spatial Organization						
Streetscapes of buildings				Views along the road corridors are generally linear but with a sense of openness.		
Zoning of land uses				The Administrative Area character area is loosely zoned into medical, services, supply and storage, maintenance, and administrative areas. The medical zone is located at the southern end of the character area, while services are grouped near the center of the character area to the east of the wharf. Supply and storage functions are grouped to the north of the wharf. Maintenance functions are clustered to either side of Kamehameha Street, while administrative functions occur in the northwestern portion of the character area.		
Views and Vistas						
View across open space between Staff Street and Paschoal Hall				Each of the public road corridors that extend through the Administrative Area character area is edged to either side by relatively dense concentrations of buildings that form streetscapes.		
Views of the Pacific Ocean				From the public road corridors, particularly Damien and Beretania Streets, views are afforded of the Pacific Ocean to the west.		




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Views to the pali				The pali is located in to the south of the Administrative Area character area. Views to the south and southwest are punctuated by this dramatic landform.		
Circulation						
Kamehameha Street	C		early 20th century	Kamehameha Street extends north/south between the northern end of the character area and Beretania Street. Kamehameha Street provides access to the Kamahana Store, and the collection of residences and maintenance structures located to the east.		
Damien Street	C		early 20th century	Damien Street extends north/south between Kamehameha Street and Bishop Home at the edge of the character area. It provides access to the wharf and landing, laundry, maintenance shop, ice plant, Oceanside Pavilion, General Warehouse, and Crematory.		
Beretania Street	C		early 20th century	Beretania Street extends east west between Damien Street and Staff Row, providing access to the Patient Store, store warehouse, post office, DOH Administration building, Craft Shop, and Paschoal Hall.		
Mission Street	C		early 20th century	Mission Street extends north/south between Beretania Street and Damien Street, providing access to the hospital.		
Puahi Street	C		early 20th century	Puahi Street traverses the length of the Administrative Area character area. Fuesaina's Bar faces Puahi Street.		
School Street	C		early 20th century	School Street passes through a portion of the character area at its southern end, and provides access to the Kalaupapa Memorial Hospital, the Fumigation Room building and the Outpatient Clinic, which now serves as the office of the NPS park superintendent.		



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Kilohana Street	C		early 20th century	Kilohana Street is a short road segment that extends east/west between Damien and Kamehameha Streets. Accessed from Kilohana Street are the Shoichi Hamai Residence and an associated garage.		
Road adjacent to Paschoal Hall	C			A paved road edges Paschoal Hall to the west. It provides access to the Jail, Police Headquarters, and Old Stone Church buildings, as well as the Recreation Court.		
Internal access road	C			Unimproved internal access roads lead from the paved road west of Paschoal Hall to the dense cluster of buildings located to its northwest. These roads are also access from Kamehameha Street north of the Motor Pool.		
Industrial Area / Administration Sidewalks (864)	C	573970	By 1969	Several concrete sidewalks located within the character area provide access to building entrances from public road corridors. Most of the sidewalk are approximately 3 feet wide. A total of 1,600 linear feet of sidewalk falls within the character area. Although the individual dates of construction are not currently known, the majority were present by the end of the period of significance where they relate to historic structures. Some have been replaced in kind.		
Cultural Vegetation						
Coconut palm trees				A double row of coconut palm trees surrounds Paschoal Hall. Coconut palm trees also edge Damien Street in the vicinity of the wharf.		
Ornamental trees and shrubs				Ornamental trees and shrubs are located throughout the character area, primarily in association with building foundations. A row of mature trees edges the green space east of Paschoal Hall where it is edged by Staff Street.		




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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Buildings						
Materials Shed (DOH Plumbing Warehouse, Plumbing Shop) (263)	C	59976	1939	The Materials Shed is located along Damien Street in the northwest corner of the character area. It is a single story wood frame structure that measures 20 by 106 feet in plan, and features single wall construction with a concrete slab foundation, wood posts and board and batten siding in the back, a corrugated metal roof, and large wood double doors with vertical plank siding covering three of the bays. Plywood covers the north wall and part of the east wall. The building served as a laundry collection center in 1950.		
Quonset Storage Hut (DOH Lumber Warehouse) (263a)	C	59977	1950; altered 1980–1990; roof repaired 1995 and 2015	A World War II surplus Quonset hut sits along Damien Street north of the Materials Shed. The building, which measures 46 by 100 feet, has a semi-cylindrical shape, and is constructed of metal structural members supported by stone and cement mortar walls rising approximately 4 feet above grade. The exterior walls and roof are corrugated metal. The entry consists of double doors at the front (west) elevation. There is also a single small door and jalousie windows at the south elevation. Three large ventilators extend at the peak of the structure.		
Laundry (DOH Carpenter Shop; Carpenter Shop, Maintenance Shop) (264)	C	59978	1930–1931; damaged tsunami 1946; altered 1980; roof repairs 1995	The Laundry is a single story structure located to the west of Damien Street near its intersection with Kilohana Street. The Laundry measures 24 by 66 feet, and has hollow tile walls, a concrete slab foundation, and a gable roof framed with metal trusses. The north elevation is obscured by an adjacent lumber shed.		





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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Crematory (DOH paint shop) (262)	C	59975	1938–1939; additions 1992–2000	The Crematory is located east of the Materials Shed and Damien Street. Built in 1938-1939, the Crematory is a concrete block and plywood structure that measures 29 by 45 feet. The gable roof is clad with corrugated metal. Two sets of doors are on the east and west elevations along with louvered venting at the upper walls, while single doors are located at the north and south end. Jalousie windows are also on the south elevation. A central concrete block core represents the original crematory, while additions built circa 1992-2000 extend on the north, west, and south sides. This building is no longer accessible due to asbestos contamination.		
Shoichi Hamai Residence (DOH House – Hamai, DOH House – Florek) (53)	C	59954	1932	The Shoichi Hamai Residence is an A House located north of Kilohana Street and east of the Materials Shed. The house has a floor plan similar to many other dwellings located within the Settlement. It measures 25 by 40 feet in plan and features single wall construction, a concrete pad and post foundation, vertical tongue and groove siding with a broken girt and corner boards, a hip roof covered with asphalt shingles, and double hung windows. The front has a recessed entry porch accessed via concrete steps edged by low, graded stone and concrete border walls, and a concrete walkway that leads to the street. An enclosed washroom is at the rear. Dense vegetation conceals the house on its southwest and west sides. A rock wall borders the lot to the west.		
Garage (643)	C	573920	Undetermined	The residence is reportedly built on top of the Kuahu heiau, and “it is considered defiant to live there.” Women have traditionally been prohibited from visiting heiau. Residents believe that those who have occupied the house since its construction have all died fairly young, particularly the women.		




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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Benjamin Residence (NPS House – Kaawaloa) (30)	C	59953	1938; altered 1994	The Benjamin Residence is located north of the Shoichi Hamai Residence along Damien Street. It is a wood-frame residence is L-shaped and measures 24 by 30 feet. It features single wall construction with a wood post and concrete foundation, board and batten siding with a broken girt and corner boards, a hip roof with wood shingles, and wood framed double hung windows. A south gable roof extension measures 12 by 18 feet. The building is accessed via a recessed entry porch at the west elevation. Wood steps lead to the porch, and a single chamfered post and two pilasters articulate the edges of the porch. The dwelling is partially concealed by dense vegetation and miscellaneous debris.		
Storage Shed, Damien Road (641)	C	793330	Undetermined	Located to the south of the Benjamin Residence is a wood frame shed that measures 6 by 8 feet in plan of an unknown date of origin. The landscape surrounding the Storage Shed is overgrown with dense vegetation.		
Maintenance Shop (Shop Building, NPS Carpenter Shop, Maintenance Shop, Welding Shop)(265)	C	59979	1931; damaged tsunami 1946; converted to machine shop 1950; altered 1970	The Maintenance Shop is located west of Damien Street near its intersection with Kilohana Street. Built as a fire-proof structure to house carpenters, painters, blacksmith, and a battery-charging plant, the Maintenance Shop has concrete block walls, a corrugated asbestos gable roof with a 20 foot long wood louvered ventilating monitor at the ridge, and measures approximately 34 by 66 feet in plan. Windows and louvered vents break up with expanses of wall. A large wood frame storage shed is located on the west elevation, covered by a corrugated metal shed roof.		


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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Ice Plant (Ice and Cold Storage Plant, Butcher Shop and Freezer, Butcher/Electrician Shop, Poi Factory) (267/268)	C	59980	1931–1932; altered 1939–1940 and 1951–1952	The Ice Plant complex is located west of Damien Street north of the intersection with Beretania Street. Historically the complex included three separate buildings—an ice plant, and a poi factory and provision room and electrical plant, which are no longer extant. The ice plant and poi factory were connected by concrete walks and roofs. The complex currently consists of the original ice plant building with additions that include a meat shop, electrical shop, and wood shed on the east, north, and west sides of the building. The current complex measures 54 by 80 feet. Ice plant features a concrete slab foundation and the original parapet and flat asphalt roof. The meat processing addition is of concrete block construction with corrugated asbestos and has a gable roof of corrugated metal. It may include part of the original poi factory.		
Restroom (640)	C	59988	1930-1931	The Restroom is located south of the Ice Plant. The building measures 12 by 12 feet. It originally served as a bathroom for the old visitors' quarters and Superintendent's office at Kalaupapa Landing, and was divided into three sections, one for men, one for women, and one for settlement workers. The building was later reconfigured only for men and women. The building was scheduled for removal 2008 but a burial was discovered and the project was stopped. It currently serves as a washing station for swimmers at the landing area.		
General Warehouse (Food Warehouse, DOH Warehouse) (271)	C	59981	1932; addition 1937–1938; altered 1984; roof repaired 1995	The General Warehouse is a two-story reinforced concrete Art Deco building located at the end of Beretania Street near Kalaupapa Landing. The General Warehouse measures 30 by 60 feet and features a concrete slab foundation with a parapet at the northwest elevation, reinforced concrete exterior, and a flat roof with asbestos roofing material. Pilasters, or concrete buttresses, divide the exterior into several bays. A one-story attachment measuring 10 by 18 feet is located at the northeast corner. The building exhibits deterioration, cracking, and spalling on the west and north elevations.		




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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Patient Store (General Store, Kalaupapa Store) (272)	C	59982	1934; altered 1935; reroofed 2013	The Patient Store is located across the street from the General Warehouse, the single story reinforced concrete building is L-shaped and measures 60 by 65 feet. The building features a concrete slab foundation, reinforced concrete with concrete block infill walls, and a hip roof with asphalt shingles. The concrete tile blocks were reportedly manufactured on-site using local black and white sand. The west elevation has a recessed front lanai that measures 9 by 60 feet and leads to a set of double doors; a sidewalk and concrete steps lead to the lanai. Large picture windows are located on the west elevation.		
Gas Station (DOH Gas Station) (273)	C	59984	1934	The Gas Station is located to the south of the Patient Store along Damien Street. It is a single story, reinforced concrete building that measures 16 by 22 feet and separated from the street front by a circular drive. The structure features a concrete slab foundation and broken-pitch hip roof supported by two 1 by 1 foot concrete columns at the west side of the drive-thru bay. An 8 by 14 foot concrete block enclosure with wood frame doors and windows are at the east side of the drive-thru. The concrete tile blocks were reportedly manufactured on-site using local black and white sand. The reinforced concrete is moderately deteriorated due to the saline environment. A small shed has been added to the south side of the building to shelter a second gas pump.		


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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Post Office (Courthouse, Lion's Club Den) (290)	C	22687	1934; repaired 1935	The Post Office is a single story building located along Beretania Street directly south of St. Francis Church that includes a post office and the Lion's Club Den. The Post Office portion measures 28 by 22 feet while the Lion's Club Den, a former courthouse, measures 28 by 36 feet. The building features a concrete slab foundation, a hollow tile with cement stucco exterior finish, and a shingled hip roof which extends beyond the walls of the building. Hollow concrete tiles were reportedly manufactured on site using local black and white sand. A lanai surrounds all four elevations. A wind baffle of wood frame and sheets of corrugated metal shelters the business window.		
Administrative Building (DOH Administration Building, Hale O Kamiana) (270-61) (contributes)	C	1961; repaired 2012	56608	The Administrative Building is located along Beretania Street across from the Post Office. The irregularly-shaped structure measures 75 by 42 feet. It is more modern in design than most buildings in the Settlement. The Administrative Building features a stone and concrete foundation with a combination of hip and gable roofs with asphalt shingle roofing material and vertical siding at the gable ends. The exterior has stone masonry work half way up the building and vertical plank siding on the rest of the wall. Double entrance doors are located at the main entrance on the west elevation. The original entrance is accessed by historic concrete walks and a ramp.		
Library (Mother Marianne Library) (296) (contributes)	C	1956; repaired 2007	56607	The Library is located along Puahi Street across from the Administrative Building. The Library is also relatively modern in its architectural design. Measuring 26 by 38 feet in plan, the Library features a concrete slab foundation and a combination of lava rock, concrete block, and vertical tongue and groove siding. The overhanging gable roof has a 4 foot overhang with asphalt shingles and vertical plank siding at the gable ends. The building is currently used as NPS conference room and meeting space.		


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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Souza Residence (DOH House – Fujinaka, DOH House – Lelepali, DOH – Guest Cottage 3) (61)	C	59955	1931; moved 1971	The Souza Residence is located east of Mission Street and the Kana‘ana Hou Church complex. It is an A House that was moved to the current location in 1971. The irregularly-shaped wood-frame building measures 44 by 24 feet, and features single wall construction with a wood post and concrete pad foundation with a horizontal skirt, vertical tongue and groove siding encircled by a broken girt, and a hip roof covered by asphalt shingles. Recessed wood porches are located at both the front and rear. There is also an addition at the rear.		
Shed 623 (623)	C	55809	circa 1950-1964	Shed 623 is located behind the Souza Residence. The wood-frame structure, used as a garage, measures 12 by 20 feet and features single wall construction with a corrugated metal exterior and a corrugated metal gable roof.		
Fuesaina’s Bar (62)	C	59956	1930; additions 1970s; 1980; 2009; 2014–2018	Fuesaina’s Bar is located along Puahi Street. The building has undergone several additions and alterations over the years. It is now irregular in shape. The wood-frame structure measures 30 by 54 feet and features single wall construction with a wood post and concrete pad foundation, a mixture of vertical tongue and groove and board and batten siding, and a hip roof with an intersecting gable roof at an addition. The roof sections are rolled asphalt roofing over wood shingles. The bar continues to serve as an important gathering place for the community. An enclosed front porch edges the street.		
Fuesaina’s Bar Storage (Rea’s Tavern Storage, Elaine’s Tavern Storage) (298a)	C	59985	circa 1938-1950; rehabilitation 2004 and 2011	Located to the south of Fuesaina’s Bar is a single story storage building. The wood-frame structure measures 30 by 50 feet and features single wall construction, a concrete slab foundation, board and batten siding, and two gable roofs with rolled asphalt roofing material and corrugated metal. The remains of a porch are located at the east end of the building. The south section has been rebuilt with T-111 siding while the north section has been rebuilt with board and batten siding.		


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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Fuesaina's Bar Restroom (624)	NC	342014	1980	Fuesaina's Bar Restroom is a 12 by 12 foot structure connected to the front porch addition of the bar by another addition.		
Garage (NPS Mechanics Garage) (284)	C	573509	1940; moved 1980; repaired 2011; pad added 2015	The Garage is a two bay structure located east of Kamehameha Street. L-shaped and measuring 36 by 70 feet, the Garage is wood frame, with single wall construction and vertical plank siding and a hip roof with asphalt shingles. One wing is enclosed and used for storage. The other features two large bays and is open on the west elevation. The building was moved to this location from the corner of Mission and School Streets.		
Construction Camp Residence (657a)	C	55813	1950; altered 1990s; rehabilitated 2012	The Construction Camp Residence 657a is located north of Paschoal Hall. It measures 55 by 28 feet and features single wall construction with a concrete pad and pier foundation, vertical tongue and groove siding, and a low pitch hip roof intersecting with a shed roof and porch. An open porch or lean-to with a corrugated metal shed roof is at the north elevation. The building also has a porch with a shed roof at the south elevation with stairs leading to an entry door. The building has been rehabilitated for use as NPS cultural resources offices.		
Construction Camp Wash House 656 (656)	C	55786	1950; rehabilitated 2010	The Construction Camp Wash House 656 is located next to Construction Camp Residence 657a. The wood frame structure measures 10 by 18 feet and features single wall construction with a concrete slab foundation, corrugated metal walls and gable roof with plywood exterior cladding on the east elevation. It was rehabilitated for use as the NPS cultural resources shop and storage.		
DOH Motor Pool Garage (Vehicle Storage Garage, No. 2 Corporation Yard and Garage) (259)	C		1939; altered—addition by 1964	The DOH Motor Pool Garage is a wood-frame L-shaped and measures 40 by 50 feet, with 20 foot deep bays. The building features board and batten siding on back walls and a corrugated metal shed roof. It was altered by 1964 with extension to the west.		



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Feature	C/N/C	CRIS ID#	Date of Origin	Description	Condition	Photograph
DOH Motor Pool Gas Station (No. 2 Corporation Yard and Garage) (258a)	C	59973	1939	The DOH Motor Pool Gas Station is located on an unpaved gravel road off Kamehameha Street. The wood frame structure measures 16 by 22 feet. It has a flat wood frame roof spanning an 8 by 18 foot enclosure supported by 2 concrete columns, one of which has been temporarily replaced with a much smaller column with wood cross beam supports; the matching column is stored nearby. Building at the south end of the overhang is finished with cement stucco and has wood and metal frame windows. A 1970s vintage gas pump and air compressor are located inside. A portico at the front shelters the gas pump and the drive in section. The building no longer functions as a gas station.		
Kamahana Store (Richard Marks Museum, Old Store – Marks, Marks’ Concession) (260)	C	59990	1938	The Kamahana Store is located off Kamehameha Street near its intersection with Kilohana Street. The building measures 20 by 25 feet, and includes additions in the rear that extend the building footprint to 25 by 49 feet. The building is partially boarded up. The original building has a concrete slab foundation, wood siding with a stucco finish, a symmetrical façade with a door flanked by two picture windows, a flat roof with an articulated parapet over the wood entrance door, and a picture window with clerestory lights above the entry door. A small shed roof runs the length of the front of the building, and a parapet extends along the roofline. The rear section is used for storage and has vertical plank siding. Text over the entrance reads “David K. Kamahana”. The front elevation is currently covered in vintage license plates added after 1983.		




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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Mae Malakaua Residence (DOH House – Malakaua, DOH – Nishihira) (56)	C	22629	1931; altered 2014	The Mae Malakaua Residence is located along Kamehameha Street across from St. Francis Church. It is L-shaped and measures 35 by 42 feet in plan. The structure features a wood post and concrete pad foundation with diagonal lattice skirting, vertical tongue and groove siding with a girt broken by wood frames of screened double hung windows and corner boards, and a hip roof with asphalt shingles. Wood steps provide access to the recessed corner porch entrance located at the rear of the building.		
Craft and Storage Building (Craft Shop, Craft Store, Paschoal Craft Building, Beauty Shop, Bakery, Hale Kahu) (300)	C	22634	1931; altered 1940; burned 1948; rebuilt 1948–1949; stabilized 2014	Located near the intersection of Beretania and Kamehameha Streets on a small rise set back from the street is the Craft and Storage Building, which formerly served as a bakery and beauty shop. The structure was possibly built as a “hale kahu,” or house for the Protestant minister. It is composed of several small buildings that have been connected, with a modest shed at the rear. The irregularly-shaped building measures 37 by 61 feet and features a combination wood post and concrete slab and wood post and concrete or stone pads, a mixture of vertical tongue and groove and board and batten siding encircled by a broken girt with corner boards, a combination of gable and hip roofs finished by wood shingles at the front, and corrugated metal and rolled asphalt roofing at the rear. The building was later altered to accommodate use as a bakery, burned, and was rebuilt and used as a craft shop. The building held looms, work tables, sewing machines, and a ceramic kiln and supported a craft club. The Craft and Storage Building is under consideration as a focus of future NPS interpretive programming.		
Carport and Storage Shed (664)	C	22634	circa 1964-1972	Located behind the Mae Malakaua Residence is a Carport and Storage Shed structure. The wood frame structure measures 20 by 20 feet and features single wall construction, a dirt and gravel floor, board and batten siding, and a corrugated metal gable roof. A plywood storage enclosure is located at the rear.		






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Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Old Stone Church (Kalawina, former church storage, Fire House, NPS Ranger Station) (301)	C	1853	21064	<p>The Old Stone Church was built in 1853 prior to the establishment of Kalaupapa Settlement as a Protestant mission house or Kalawina. The building is located along the road that extends west of Paschoal Hall. The stone masonry structure measures 38 by 75 feet, and features lime mortar, quoins at the corners, a stone foundation, and corrugated metal gable roof. There is board and batten siding at the gable ends and in a 2 foot section above the stone wall along the eaves. There is also a large open concrete floor stall for vehicle storage is at the southeast corner. The building has been adapted for many purposes over the years, including a sheep pen, jail, repair shop, and warehouse. It presently serves as the NPS ranger station. A small segment of the wall that surrounded the structure when it served as a jail survives between the Old Stone Church and the Craft and Storage Building. Fire doors were added in 1947. Circa 2004, the building was renovated with concrete framed openings, a metal rolling door, a concrete slab foundation, and an HVAC shed. The NPS rehabilitated the structure in 2011 to address structural masonry repairs, wood lentil replacement for windows and doors, and siding carpentry work. Between 2005 and 2012, a shed roof addition was built on the west elevation to provide covered parking for law enforcement vehicles.</p>		



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Feature	C/N/C	CRIS ID#	Date of Origin	Description	Condition	Photograph
\		1931; addition 1950	22635	The Jail was constructed in 1931. It is located north of the Old Stone Church along the road that extends west of Paschoal Hall. The concrete walled structure measures 24 by 60 feet and features a concrete slab foundation, and a corrugated metal hip roof. A concrete loading dock with large wood double doors is adjacent to the building. Several original jail cell features survive. It was formerly joined in a T-shaped configuration with the Police Headquarters to form a single jail. A breezeway was added circa 1950, when the police headquarters moved from Paschoal Hall, at the juncture of the two building to separate them. In 2009, the building was rehabilitated to include new metal roofing, wood and masonry repairs, replacement of windows and reconstruction of trim to match original, and repair of existing exterior jail doors.		
Police Headquarters (Jail and Police Station Headquarters, NPS Maintenance Offices) (303)	C	22636	1931; addition 1950	The Police Headquarters is located east of the Jail. Built in 1931, the structure features a concrete slab foundation, plastered concrete walls, a metal hip roof, wood frame double hung windows, and a wood screened front door with a sign overhead reading "Police Headquarters." The building is attached to the Jail by a breezeway. The structure was rehabilitated in 2009 including roof replacement, wood and masonry repairs, replacement of windows and trim to match original, reconstruction of missing doors, and new plumbing in restrooms. The Police Headquarters serves as NPS facilities and maintenance office space.		






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Paschoal Hall (Paschoal Community Hall, Kalaupapa Social Hall, Social Hall) (304)	C	21065	1916; altered 1934–1936; name changed 1958; restored and rehabilitated 1998–2012; repainted 2006; interior rehabilitated 2010–2012; repair 2015	<p>Paschoal Hall is one of the few two story buildings located within the Settlement. It is located north of Beretania Street and is edged to the east and northeast by a large open green space. The large Hawaiian Plantation Style building measures 40 by 120 feet in plan. It is set on 124 concrete piers, and features wood post and beam single wall construction with tongue and groove siding, interior girts, corner boards, wood sliding sash windows with would louvers above, and a multiple hip on louvered gable roof with asphalt shingles. There are hipped side wings and a lanai running along the front (south) elevation with diamond-patterned railings and chamfered posts and pilasters. A parking area, concrete curbs, and concrete planters edge the building to the south. Paschoal Hall has served as a community building since its construction. The interior features large areas of empty floor space with a badminton court, storage rooms, and an auditorium with tiers of seating. An exterior stairway from the front lanai leads to a balcony and projection room. The building was originally fronted with picket fencing and a gate. Staff and visitors were required to use the exterior stair as an entrance to maintain separation from residents, and the seating areas were divided between upper and lower areas. The building currently serves as a meeting space for NPS staff, a community social hall, and a movie house for park volunteers.</p>		







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Fumigation Room (Fumigation Hall, Shoe Fitting House, Mental Ward, Autopsy Room/Morgue) (283BH)	C	22633	1935; rehabilitated 2011	The Fumigation Room is located south of School Street near its intersection with Puahi Street. The building is connected to the Hospital ruin by a concrete ramp and walkway. The wood frame building measures 22 by 30 feet in plan, and features single wall construction, a concrete slab foundation, vertical tongue and groove siding encircled by a broken girt with corner boards, and a broken-pitch hip roof with asphalt shingles. There is an enclosed porch with two entrances, one for men and one for women. First constructed as a mental ward for the hospital, the building was later used as an autopsy room/morgue in the 1940s and 1950s before being converted to a fumigation hall where those leaving the settlement for short periods were required to be fumigated. Those who remember this ordeal have recalled the terrible smell associated with the process. The building later served as a site for the custom manufacture and fitting of shoes. Currently used for storage. The Fumigation Room is under consideration as a focus of future NPS interpretive programming.		
Outpatient Clinic (Promin Building, Promin House, NPS Headquarters, Dispensary) (7BH)	C	22628	1940; moved 1948	Built in 1940, and moved to this location in 1948, the Outpatient Clinic is adjacent to the Fumigation Room. It is a wood frame structure of single wall construction that features a wood post and concrete pad foundation camouflaged by horizontal wood strip skirting, vertical tongue and groove siding, and a hip roof with wood shingles. There is a wood front porch that was added after 1977. In 1950, the building was converted to a sewing room, dispensary, break room, and visitor clinic. The roof was repaired in 2015.		



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Oceanside Pavilion (Gazebo) (638)	C	59986	by 1950; altered 1990s	The Oceanside Pavilion was built in 1950. It is located along Damien Street south of the General Warehouse and overlooks the Pacific Ocean. The pavilion is an open air, reinforced concrete structure that measures 14 by 20 feet in plan. It features a concrete slab foundation and a broken pitch hip roof with asphalt shingles supported by four 18 by 18 inch reinforced concrete columns. Diamond pattern railings frame the central open space. A concrete walk provides access to the east side from Damien Street, while concrete steps are on the west. The pavilion has been a popular gathering place, and there are grills and benches for use by residents. The reinforced concrete is severely deteriorated due to the saline environment.		
Kalaupapa Landing (Wharf, Kalaupapa Pier, Kalaupapa Dock) (817)	C	59991	1906; landing and breakwater added 1930–1932; altered 1950; repaired and rehabilitated 2012	Kalaupapa Landing, also referred to as the wharf, is an irregularly-shaped concrete structure with a 10 foot high concrete dog-leg shaped breakwater extending 50 feet into the bay. The wharf is used for boat landings, including the annual Barge Day, when the shipping barge arrives with supplies, including larger and heavier household items, for the community. The wharf is also a popular swimming spot. The first effort entailed the addition of 150 feet of masonry stone wall with fill and grading. Later additions included a landing dock and breakwater. Currently, the wharf features metal leveling decking that covers a portion of the U-shaped reinforced concrete dock that sits above the earlier stone wharf. Associated with the wharf are a winch, metal bollards, rubber tires, and railroad ties.		
Bulkhead wall, Damien Road (817a)	C	793334	1906; rehabilitated 2012	A bulkhead wall composed of poured concrete and volcanic rock set in concrete, approximately 105 feet long by 20 feet high, is associated with the shoreline at the wharf.		

Administrative Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Breakwater, Damien Road (817b)	C	793336	1930–1932; rehabilitated 2012	A breakwater composed of formed concrete and stacked volcanic rock, approximately 200 feet long, is associated with the wharf.		
Kamehameha Street Stone Culvert (836)	C	56535	1938; repaired 2015	Located beneath Kamehameha Street is a stone lined culvert that conveys stormwater to the swale associated with the northern section of the St. Francis Church property from the area east of the road. The culvert intake is located west of the Mae Malakaua Residence. The culvert consists of a 14 foot wide concrete structure with an 8 foot high stone headwall, a concrete drain, and a stone retaining wall. “John Kadowaki, Aug. 22, 1938” is etched in the mortar on top of the stone headwall.		
Industrial Area/ Administration Rock Walls	C		early 1900s; repaired 2000s	Several segments of dry stacked lava rock walls extend through the character area. Most are between 2 and 4 feet high and 2 to 3 feet wide. Walls are present at the intersection of Kilohana and Kamehameha Streets, in association with the Shoichi Hamai Residence, Souza Residence, Library, Fuesaina’s Bar, and north of the Craft and Storage Building.		
Concrete Footing for Flag Pole	C		by 1950	Located in an open area near the Old Stone Church is a circular concrete footing that measures 24 inches in diameter. It formerly served as the base for a flagpole.		
Recreation Court (871)	C	793341	Circa 1961–1966	A multi-purpose Recreation Court stands north of Paschoal Hall. The court measures approximately 60 by 120 feet and is partially surrounded by a contemporary chainlink fence and a historic concrete block wall. The court is striped for tennis but also includes a basketball hoop at the western edge. The court was built in response to resident requests for a central place to play volleyball, tennis, and basketball.		

Administrative Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Kalaupapa Memorial Hospital (Kalaupapa Care Home) (814)	NC	56606	Circa 1979	Located near the intersection of School Street and Damien Street is Kalaupapa Memorial Hospital. U-shaped in plan, the building measures approximately 120 feet by 90 feet and features loading areas on the east and west elevations.		
Hale Malama - NPS Cultural Resource Management and Curatorial Facility (313)	NC		2005–2011	Hale Malama was built on the footprint of the Construction Camp Dormitory; two building to the east of the structure survive from the Construction Camp and have been adapted for NPS use. It serves as the NPS Cultural Resource Management and Curatorial Facility. In addition to the central office space, the building features two wings, one to the north and the other to the south, which house park museum collections.		
Garage/HAZMAT (316)	NC		Circa 1992 and 2000	A small garage is located southwest of Hale Malama. The wood frame building measures 22 by 40 feet and features corrugated metal roofing and siding. The west elevation is open and used for hazmat storage, while the south elevation has a second entrance used for diesel storage and access.		
Vehicle/Equipment Storage (NPS Recycling Center) (259a)	NC		1991; rebuilt 2008–2009	The Vehicle/Equipment Storage structure was built on the site of an earlier structure. Located west of Hale Malama, the current building is of concrete block and wood frame construction. It measures approximately 24 by 90 feet in plan and features a shed roof covered with corrugated metal roof, and T-111 siding. The south elevation is open for vehicular and equipment access.		
DOH Large Equipment Storage (Big Garage) (315)	NC		1991; rebuilt 2008-2009	The DOH Large Equipment Garage is a large structure located east of Kamehameha Street. The 42 by 54 foot concrete block and wood frame structure features corrugated metal roof and plywood siding. The west elevation is open for vehicular and equipment access.		
NPS Garage near 302/303 (301a)	NC		Circa 1977-1992	A 20 by 20 foot garage of wood frame construction, corrugated metal roof, and plywood siding is located north of the Jail and Police Station used by the NPS.		

Administrative Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Containers	NC		2003-2004	Several 20 foot by 8 foot shipping containers are stored north of the wharf. Some are set between shed roof structures used for additional storage. These were originally placed on site for temporary storage associated with preservation projects by the NPS Historic Preservation Training Center.		
Store Warehouse (312)	NC		1992-2002	The Store Warehouse measures approximately 40 by 90 foot. The steel pole building with steel roofing and siding is located on an earlier stone foundation associated with a Quonset hut between the Post Office and the Patient Store. The building includes two storage spaces—one for the store and one for the hospital.		
Ambulance Garage (314)	NC		1977-1983	The Ambulance Garage is located along Mission Street near the hospital. The approximately 20 by 20 foot concrete block and wood frame garage features a corrugated metal roof and T-111 siding. The west elevation is open for vehicular access.		
Generator Shed	NC		2005-2012	A Generator Shed is also located along Mission Street near the hospital. The concrete block and wood frame structure measures approximately 14 by 22 feet. It features concrete block piers support hipped roof structure with asphalt shingles.		
Electrical system features	C		by 1969	Historic electrical system features edge many of the roads located within the Administrative Area character area, and are also associated with lines that extend to individual buildings or clusters.		
Small-scale features						
Wayside exhibits	NC			A standard NPS wayside exhibit, composed of a steel carrier inset with an interpretive panel, is located along Damien Street near the Oceanside Pavilion overlooking the Pacific Ocean shoreline. Another is located facing the Old Stone Church near Paschoal Hall.		

Administrative Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Benches	NC			A recycled plastic bench is located near the Oceanside Pavilion.		
Picnic tables	NC					
Concrete bollards	NC			Located along the west side of the access road near Paschoal Hall are three concrete bollards to restrict access to the lawn in front of the Old Stone Church for parking.		
Rock bollards	NC			Large boulders are located in the lawn west of Damien Street along the Pacific shoreline as bollards to prevent cars from driving too close to the cliffs.		
Grills	U			Grills are set within the lawn near the Oceanside Pavilion for use by residents.		
Concrete planters at Paschoal Hall	C			Concrete planters edge the concrete curbing along the front of the Paschoal Hall precinct.	The planters are broken due to the pressure exerted by the roots of plants in the planters.	
Chalkboard outside Paschoal Hall	NC			A wooden chalkboard protected under a small roof is located along the parking spaces in front of Paschoal Hall.		

Administrative Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Curbing around Paschoal Hall	C			Concrete curbing forms an edge around the Paschoal Hall precinct.		
Archeological Resources						
Carport Foundation (646)	C	Circa 1950-1964		A Carport Foundation is located east of the Shoichi Hamai Residence. It is a 25 by 25 foot concrete slab edged by low concrete stem walls associated with a former garage.		
Hospital Site and Ruins (282)	C	1932; burned 199a	21061	The Old Hospital Ruin occupies the majority of the block between Mission, Puahi, School, and Damien Streets south of the Fumigation Room and Outpatient Clinic. The site is characterized by open turf lawn and shade trees, with the remains of the building's concrete floors on concrete pier foundations and concrete ramps and stairs left after a fire destroyed the facility. There is also a paved driveway loop and island with a hedge at the intersection of Damien Road and Mission Street formerly associated with the facility.		
Missing Features						
<i>YMCA Hall</i>						
<i>Poi factory</i>						
<i>Superintendent's Office</i>						
<i>Kalaupapa Bandstand</i>						
<i>Early Protestant minister's residence/Kalaupapa School</i>						


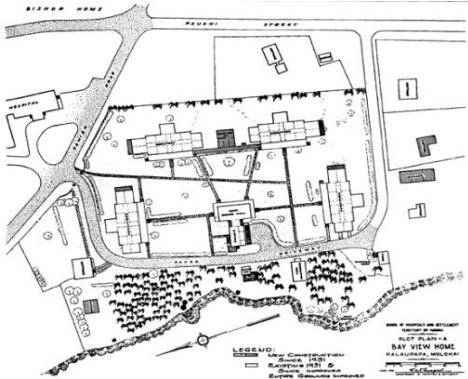









Administrative Area Resources





- | | | | |
|-----|--|-----|---|
| 1. | DOH Large Equipment Garage (NC) | 27. | Construction Camp Wash House 656 (C) |
| 2. | Kamahana Store (C) | 28. | NPS Garage near 302/303 (NC) |
| 3. | Benjamin Residence (C) | 29. | Recreation Court (C) |
| 4. | Quonset Storage Hut (C) | 30. | Police/Jail Headquarters (C) |
| 5. | Crematory (C) | 31. | Paschoal Hall, coconut palm trees and sidewalks (C) |
| 6. | Materials Shed (C) | 32. | Concrete flagpole footing (C) |
| 7. | Laundry (C) | | Wayside exhibit (NC) |
| 8. | Maintenance Shop (C) | | Concrete bollards (NC) |
| 9. | Shoichi Hamai Residence (C) | 33. | Mae Malakaua Residence (C) |
| 10. | Garage (C) | 34. | Old Stone Church (C) |
| 11. | Ice Plant (C) | 35. | Carport and Storage Shed (C) |
| 12. | Restroom (C) | 36. | Craft Shop and Storage Building (C) |
| 13. | Patient Store (C) | 37. | Library (C) |
| 14. | Kalaupapa Landing, Breakwater, Bulkhead Wall (C) | 38. | Administration Building (C) |
| 15. | General Warehouse (C) | 39. | Shed 623 (C) |
| 16. | Oceanside Pavilion (C) | 40. | Souza Residence (C) |
| 17. | Gas Station (C) | 41. | Fuesaina's Bar (C) |
| 18. | Store Warehouse (NC) | 42. | Fuesaina's Bar Restroom (NC) |
| 19. | Post Office (C) | 43. | Fuesaina's Bar Storage (C) |
| 20. | Garage (C) | 44. | Fumigation Room (C) |
| 21. | DOH Motor Pool Gas Station (C) | 45. | Outpatient Clinic (C) |
| 22. | Vehicle Equipment Storage (NC) | 46. | Hospital Site and Ruins |
| 23. | DOH Motor Pool Garage (C) | 47. | Kalaupapa Memorial Hospital (NC) |
| 24. | Garage/HAZMAT (NC) | 48. | Kamehameha Street stone culvert (C) |
| 25. | Hale Malama (NC) | 49. | Industrial Area / Administration Rock Walls (C) |
| 26. | Construction Camp Residence (C) | 50. | Ambulance garage (NC) |
| | | 51. | Generator shed (NC) |
| | | 52. | Containers (NC) |
| | | 53. | Storage Shed, Damien Road (C) |




MAP KEY




- Character area boundary
- Primary roads
- Secondary roads
- Buildings
- Foundations
- Sidewalks
- Walls (C)
- Fences (NC)
- Trees
- Key views



Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Pacific shoreline				The Bay View Home character area is edged to the west by the Pacific Ocean shoreline. The built complex occupies an upland plateau that sits adjacent to a steep and rocky coastline. The proximity to the shoreline affords expansive views to the west.		
Patterns of Spatial Organization						
Formal arrangement of built cluster symmetrically arranged around central open space, edged by perimeter road				The Bay View Home complex originally featured a symmetrical arrangement of five similarly-scaled group home buildings laid out around a central open space. Since its establishment in the 1910s, one of the five buildings has been lost. Surviving is an outer loop road and an internal walk system that connects the surviving buildings. Remnants of a once-lush display of ornamental plantings, fruit trees, and hedges also survive along with turf grass. Over time, residential and service buildings were added along the outer edge of the loop road; many of these historic features survive today.		
Linear arrangement of Visitor Services complex				A cluster of buildings constructed to support the needs of visitors to the Settlement during the era of separation exists along Damien Street to the north of the Bay View Home complex. The linear arrangement of buildings closely edges the road. Individual buildings are connected by concrete sidewalks and edged by plantings. The cluster is sited in close proximity to the wharf where visitors formerly arrived at the Settlement.		
Views and Vistas						
Dramatic views to the Pacific Ocean and pali				From Bay View Home and the Visitor Services complex, expansive and dramatic views of the Pacific Ocean are afforded to the west, while the pali presents a strong visual anchor to the south and southwest due to its proximity and height.		



Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Damien Street	C	793346	The road likely dates to the early twentieth century. It was paved in 1935, and repaired and resurfaced between 1956 and 1958, and again in the early 2000s.	Damien Road is known as Damien Street as it passes through Kalaupapa Settlement. Damien Street extends west from Kamehameha Street near the Church of Jesus Christ of Latter-Day Saints, following the alignment of the western shoreline through the Administrative character area before passing the Visitor Services complex and Bay View Home complex. Damien Street then continues east through the Residences character area. The width of the asphalt-paved road ranges from approximately 12 to 15 feet.		
Bay View Loop	C		The road was established during the early twentieth century, and paved in 1936-1937.	The Bay View Loop road edges the original Bay View Home complex to the west and south. The asphalt-paved road measures 18 feet and is edged by concrete curbing partially buried by subsequent paving. The pavement has been removed next to the dining hall and garage south of the complex.		
Bay View Sidewalks	C	573960	The first sidewalks were built in 1920. Additional walks were added in 1935-1936. Ramps were added in the 1980s and 1990s.	The network of concrete sidewalks associated with Bay View Home, which totals approximately 600 linear feet, links the original complex buildings with one another, and with a historically gated entry at Damien Street. The sidewalks are generally narrow, measuring 2 to 3 feet in width. Concrete ramps added in the 1980s and 1990s over top of some of the sidewalks accommodate wheelchair access to the main dining hall and dormitories.		
Visitor Services Concrete Walks	C	573960	Undetermined	Raised concrete walks link several of the buildings within the Visitor Services complex. These walks are narrow, approximately 3 feet wide.		
Informal access road	NC		Post 1969			




Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cultural Vegetation						
Coconut palms			Undetermined	A stand of coconut palms edges Bay View Loop to the west. These trees were planted by the residents and their kokua.		
Ironwood trees				Thick stands of ironwood trees are present to the south of the developed area of Bay View Home and along the western shoreline in places.		
Ornamental trees and shrubs			1918; later additions of undetermined dates	Bay View Home was initially landscaped in 1918, with additional ornamental trees and shrubs added over the years. The complex has featured foundation plantings, fruit trees, and native ornamental and shade tree plantings of species such as loulu palms (<i>Pritchardia schattaueri</i>), avocado, banana, date palm, mango, lemon, bougainvillea, hibiscus, golden shower tree, and ti. Many of the plantings present during the period of significance have been removed.		
Hedge remnant				A hedge formerly edged the Bay View Home complex along the western portion of Bay View Loop road. The hedge was comprised of hibiscus shrubs. Only one small shrub survives near the Old Bay View Kitchen and Dining Room to represent the hedge.		




Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Buildings						
Bay View Home Building 1 (Bay View 1, DOH House – Keola, Bay View Apartments)(1BV)	C	21043	1916; stained 1919-1920; a wheelchair ramp was added to the main entrance in 1985	Bay View Home Building 1, which sits at the northern end of the complex, is currently vacant. It is the least altered of the Bay View Home complex. The single-story, single wall building features a symmetrical T-shaped plan that measures approximately 50 by 100 feet. The main block is edged by wings that extend to the east, west, and north. The single wall building features a 3-foot-high concrete pier foundation, tongue and groove siding, a water table and rim fascia, intersecting composite shingled hip roofs, louvered gablets projecting above the main entrance, and 12-light double hung and jalousie windows. The lanai is supported by chamfered posts and pilasters with jigsaw brackets, and has diamond-patterned wood railings.		
Bay View Home Residence 2 (Bay View 2, Bay View Apartments, Bay View Dormitory, NPS – Dormitory)(2BV)	C	21044	1916; altered 1930; wood wheelchair ramp added 1992	Bay View Home Residence 2 is a single story single wall dormitory building located southeast of residence 1. The wood frame building is roughly rectangular and measures 50 by 100 feet in plan and consistent in architectural detailing to residence 1. A covered walkway connects this building with residence 3 and the dining hall; a concrete ramp covers the front stairs, while access is afforded by a wooden wheelchair ramp.		
Bay View Home Residence 3 (Bay View 3, DOH House – Uga, Bay View Apartments, DOH – Laundry)(3BV)	C	21045	1916; altered 19	Bay View Home Building 3 is consistent in architectural detailing to residences 1 and 2. It is located to the south of residence 2. A covered walkway connects the building with residence 2 and the dining hall. Access is afforded via a wooden wheelchair ramp.		





Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bay View Home Dining Hall (Bay View Kitchen)(5BV)	C	21046	1937	The Bay View Dining Hall was built to serve patients in a central location. The single story T-shaped wood frame building measures approximately 28 by 48 feet in plan. The dining hall is consistent with the three residences in terms of architectural styling and detailing. A covered walkway with a diamond patterned railing connects the Bay View Dining Hall with Bay View Home Residences 2 and 3.		
Old Bay View Kitchen and Dining Room (Bay View Old Kitchen, NPS Natural Resource Office)(6BV)	C	21047	1916; altered 1932-1934; windows installed 1990; roof repaired 2007-2008	The Old Bay View Kitchen and Dining Room is a single story T-shaped building that measures approximately 28 by 54 feet. The building serves as NPS offices housing Natural Resources staff.		
Carport/Garage (513BV)	C	55723	circa 1950-1964	The Carport/Garage is a five bay structure located at the southern end of the Bay View Home complex. It is a single wall wood frame structure that measures approximately 15 by 25 feet in plan. The building sits on a concrete retaining wall foundation and has a corrugated metal exterior and gable roof.		
Transformer Station (519BV)	C	342032	by 1950	The Transformer Station is located along Damien Street north of residence 2. The 8-by-10-foot structure features single wall construction, a concrete slab foundation, corrugated metal exterior, and a corrugated metal roof.		





Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bay View Home Building 8 (Bay View Pool Hall, Bay View Chapel, Bay View Recreation Hall)(8BV)	C	21049	1928 (assembly hall); adapted for use as a chapel circa 1930; repurposed as a recreation hall by 1938; altered 1950.	Bay View Home Building 8 is a single story building located across Bay View Loop from the Bay View Home complex. The structure measures 18 by 32 feet in plan and features wood frame, single wall construction, a concrete pad and wood pier foundation with horizontal skirting, and vertical tongue and groove siding encircled by a broken girt with corner boards and a water table. The gable roof is wood shingle. There is a portico with a small gable roof at the front (east) elevation, and a corner porch and enclosed addition at the rear (west) elevation. The porch is articulated by chamfered posts and pilasters. The original diamond-patterned railing has been replaced by 2 inch by 4 inch wood posts.		
Visitors' Quarters (274BV)	C	21051	1933; altered 1935-1936, 1988-1993, and 2001-2002.	The Visitors' Quarters is located at the north end of the Visitors Quarters complex. The single-story building is L-shaped and measures approximately 50 by 60 feet in plan. The wood frame structure features single wall construction, a wood post on concrete pad foundation, vertical tongue and groove siding, with corner boards, water table, rim fascia, and wood lattice skirting, and a broken pitch roof with composite shingles. Fencing separated visitors from patients prior to the 1940s that is no longer extant. The building is connected to the Visitors' Quarters Kitchen by raised concrete walkways.		

Bay View Home Resource Inventory Table						
Feature	C/N/C	CRIS ID#	Date of Origin	Description	Condition	Photograph
Wilcox Memorial Building (Visitors' Quarters, Wilcox Visitors' Quarters, Guest Matron House)(277BV)	C	21052	1906 (dispensary); altered 1922 (Delco plant to generate electricity); 1930 mobile x-ray unit added; 1932 (hospital staff quarters); 1950 altered and enlarged (residence for Brothers of the Sacred Hearts Order); rehabilitated 2011	Located north of the Bay View Home complex, Wilcox Memorial Building is a wood frame single wall structure that measures 28 by 45 feet in plan. The building features a concrete pad and post foundation, vertical tongue and groove siding with 12 inch rim fascia, and a wood shingle hip roof with louvered gables. There is a recessed corner porch with chamfered posts and a diamond-patterned railing under the northeast corner of the roof. A shed roof extension on a concrete slab foundation shelters an open washing area on the south corner. The building has a community kitchen and bathroom and shared and private bedrooms.		
Visitors' Pavilion (Separation House, Separation Hall, Visitor/Patient Meeting Hall, Long House)(278BV)	C	21069	1933; altered 1940; rehabilitated between 2004 and 2008	The Visitors' Pavilion is a single story wood frame structure located north of the Bay View Home complex. Measuring 14 by 28 feet in plan, the pavilion features a concrete slab foundation, vertical tongue and groove siding below a continuous row of screened wood double hung windows, and a broken pitch hip roof with composite shingles. There are screened wood doors on the north, south, and west elevations. The visitors' compound was fenced at the time and visitors were not allowed beyond the fence, while patients were not allowed inside.		





Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Visitors' Quarters Kitchen (275BV)	C	56539	1933; altered 1935-1936; dining area later enclosed, wood porch and wheelchair ramp added by 1994 to aid accessibility	The Visitors' Quarters Kitchen is a single story, wood-frame, single wall building located south of the Visitors' Quarters. The building is generally square and measures 22 by 24 feet in plan. It features a wood post on concrete pad foundation separated by termite shields and covered with lattice skirting, vertical tongue and groove boards with a midpoint "v" joint on the interior, a hip roof with composite shingles, and a mixture of double hung, screen, and jalousie windows. The Visitors' Quarters Kitchen is connected to the Visitors' Quarters by raised concrete walkways.		
Garage 524 (524BV)	C	55718	circa 1950-1964; altered 1990; partially rebuilt 2011; lattice doors added to the open bay 2015	Garage 524 is located north of Bay View Home Building 10a. It is a wood frame, single wall structure that features vertical plank siding, a shed roof with rolled asphalt roofing, and a large open bay at the front.		
Patients' Restroom (523BV)	C	22638	1940; rehabilitated 2010-2011	The Patients' Restroom is a small building located north of Bay View Home complex. The wood frame single wall structure features vertical tongue and groove siding and asphalt roofing. It is rectangular in plan and measures 6 by 10 feet.		
Telephone Station (522BV)	C	59993	circa 1938-1950 (garage); converted to Telephone Station by 1977	The Telephone Station is a small wood frame building located north of the Bay View Home complex. The building measures 10 by 19 feet in plan, and features a concrete foundation, board and batten siding, and a gable roof with rolled asphalt. A concrete sidewalk leads to the building from Damien Street.		

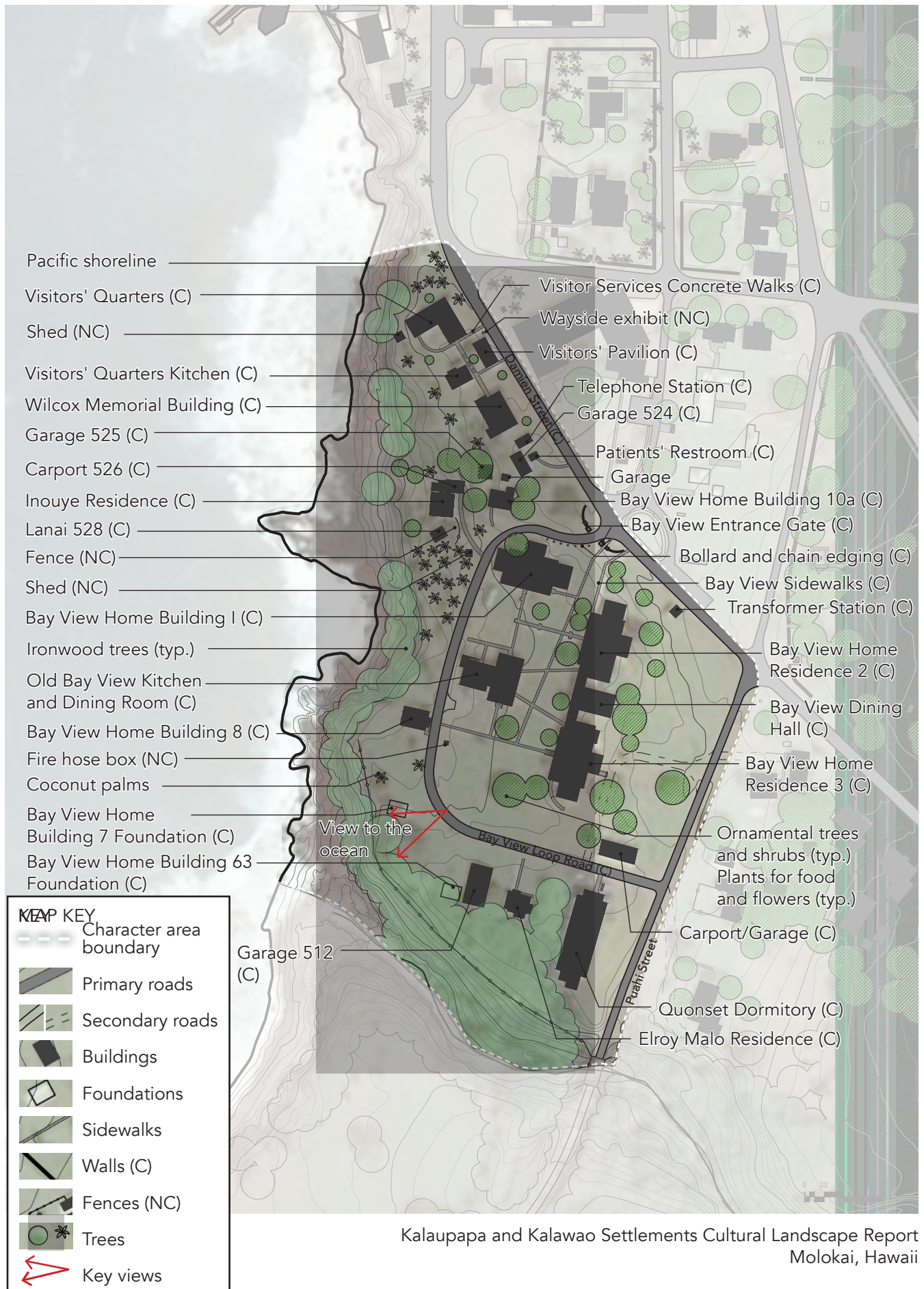
Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bay View Home Building 10a (Bay View Manager's Cottage, NPS House – Ellis, NPS House – Neuhart)(10aBV)	C	21050	circa 1930; altered	Bay View Home Building 10a is a single story wood frame building located north of and across the Bay View Loop from the Bay View Home complex. The building was constructed to house the manager of Bay View Home. It is L-shaped and measures approximately 30 by 36 feet in plan. The structure features a wood post on concrete pad foundation with horizontal skirting, board and batten siding, a gable roof with wood shingles, jalousie windows throughout, and rectangular louvers at the gable ends. There is a recessed lanai with a diamond-patterned railing along a part of the front elevation. A partially enclosed washroom with a shed roof and concrete pad foundation is at the rear.		
Garage 525 (525BV)	C	55719	by 1938; altered 1990	Garage 525 is a two-car garage located north of the Bay View Home complex. The wood frame structure measures 10 by 19 feet in plan. It features a concrete slab foundation, corrugated metal siding, and a gable roof clad with corrugated metal.		
Inouye Residence (DOH Administrator's House, Manager's Residence, DOH House – Maul, DOH House – Miller)(11BV)	C	56511	circa 1938-1950; 1990 (picture window was added in the west elevation); 2014 (large deck added)	The Inouye Residence is a single story, wood frame building located north of Bay View Home. The residence is approximately square in plan and measures 26 by 26 feet. It features a wood post and concrete pad foundation with vertical skirting, vertical tongue and groove siding with a broken girt, a hip roof with asphalt shingles, three doors, and a mixture of screened wood double hung and jalousie windows.		
Carport 526 (526BV)	C	55720	circa 1938-1950	Carport 526 is a two bay garage located northwest of the Bay View Home complex and east of the Inouye Residence. The carport is rectangular in plan and measures 18 by 24 feet.		

Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Elroy Malo Residence (DOH House – Malo)(64BV)	C	56512	1936; wood wheelchair ramp added between 1995 and 2003.	The Elroy Malo Residence is a single story wood frame residence located across Bay View Loop from Bay View Home. The house measures 22 by 30 feet in plan, and features a wood post and concrete pad foundation, board and batten siding, a hip roof with asphalt shingles, and 11 windows including nine double hung, one jalousie, and one 12-light horizontal sliding. There is also a small wood porch at the entrance and an enclosed washroom at the rear. A wood wheelchair ramp provides access to the house.		
Quonset Dormitory (Bay View Home Dormitory, NPS/DOH Housing)(10BV)	C	338860	1950; altered 1985; roof patched 2009	The Quonset Dormitory was acquired from military surplus and added to the south side of the complex to accommodate residents relocated from the New Baldwin Home when it closed. The dormitory is a rectangular corrugated metal structure with a barrel roof that measures 42 by 100 feet in plan.		
Lanai 528 (528BV)	C	55721	circa 1964-1972	Lanai 528 is located northwest of the Bay View Home complex near the Inouye Residence. The structure measures 12 by 15 feet in plan and features a flagstone foundation, wood or log columns, and a hip roof with corrugated metal. It sits in an open area with views of the Pacific Ocean and shoreline.		
Garage 512 (512BV)	C	55722	circa 1938-1950; stabilized and reroofed 2009.	Garage 512 accommodates six cars. It is located south of the main Bay View Home complex adjacent to the Elroy Malo Residence. The garage is rectangular and measures 18 by 50 feet in plan.		
Garage	U		Undetermined			

Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bay View Home Entrance Gate	C	56521	1917	The entrance to Bay View Home and Bay View Loop is marked by mortared lava rock gate posts. The posts were formerly associated with fencing that encircled Bay View Home on three sides; the complex was open to the Pacific Ocean shoreline on the fourth. The gate posts measure 2 feet square and are 10 feet tall. They feature square caps. The gate posts sit along either side of the Bay View Loop Road where it intersects Damien Street. Pedestrian gate posts edge the taller vehicular gate posts to either side that measure 1 foot square and 7 feet in height. The pedestrian gate posts allow for a 4 foot entrance associated with a concrete sidewalk that leads into the Bay View Home complex. A 5-foot-tall stone wall with a cement finish extends in an arc from each of the pedestrian gate posts.		
Shed	NC		Undetermined	A modest corrugated metal shed is located along the edge of the upland plateau overlooking the Pacific Ocean shoreline behind the Visitors' Quarters.		
Fire hose box	NC		Undetermined	A low wooden structure with a shed roof and two hinged doors on the front that houses fire hoses edges the Bay View Loop road to the south of Old Bay View Kitchen and Dining Room		
Electrical system features	C		by 1969	A secondary electrical line extends into the Bay View Home character area from the primary system along Puahi Street.		
Fencing around the Inouye Residence	NC		Undetermined	Wood posts and green and white lattice fencing screens the Bay View Home complex from view from the Inouye Residence		

Appendix A Inventory Table and Maps

Bay View Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Bollard and chain edging	C		By 1969	Metal posts and chains edge Bay View Loop Road to prevent cars from driving onto the grass at the north end of the complex.		
Wooden trash can stands	NC		Undetermined	An open box structure with a wooden base and open wood plant surrounds painted green is located within Visitors' Quarters complex.		
Wayside exhibit	NC		Post 1969			
Archeological Resources						
Bay View Home Building 7 Foundation (Store/Barbershop)	C	328843	1923; converted to store 1935-1936	The ruins of this former structure is located across the Bay View Loop from the Bay View Home complex. Bay View Home Building 7 was in deteriorated condition in 1977 and was removed after 1981.		
Bay View Home Building 63 Foundation	C	1060757	1931	The ruins of Bay View Home Building 63, a former residence, are located at the south end of Bay View Home. It was demolished after 1979.		
Missing Features						
<i>Bay View Home Residence 4</i>						
<i>Bay View Home Building 7</i>						
<i>Bay View Building 63</i>						
<i>Ylang ylang trees</i>				Patients recall a ylang ylang tree on the mauka side of the avocado tree at Bay View Home, and another in the backyard between staff quarters and the dining hall.		
<i>Separation pavilion hedge</i>						
<i>Fence that surrounded the complex on three sides</i>						



Bay View Home Character Area - Analysis and Evaluation

Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
‘Īliopi‘I			prior to Kalaupapa Settlement	‘Īliopi‘I is a narrow strip of high ground that extends north/south between the beach and a former fish pond site north of Cemeteries J, K, L, and M.		
Pacific shoreline			prior to Kalaupapa Settlement	The Beach Houses character area generally encompasses the Pacific shoreline adjacent to ‘Īliopi‘I, which includes a sandy beach. Also included is the eastern shoreline where two additional remains of beach houses are located.		
Papaloa Beach						
Coastal spray plant community			prior to Kalaupapa Settlement	The coastal spray zone along the Pacific shoreline often supports communities of endangered plants, such as dune tetramolopium (<i>Tetramolopium rockii</i>), that support a unique aquatic habitat for sea birds and the Hawaiian monk seal.		
Patterns of Spatial Organization						
Linear arrangement of beach houses along the shoreline			Circa 1920s	The majority of the beach houses follow the Kalaupapa Peninsula’s western Pacific shoreline, and the sand two-track road located west of Kamehameha Street at ‘Īliopi‘I.		
Views and Vistas						
Views to the Pacific Ocean			Circa 1920s	The beach houses as well as the picnic pavilion structures that comprise the Beach Houses character area are all sited to afford expansive views to the west of the Pacific Ocean.		
Views toward the pali						
Views toward the Beach Houses from the Lion'sPavilion						

Appendix A Inventory Table and Maps

Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Kamehameha Street	C					
Beach House Road	C	793344	1920s	Beach House Road is a 500-yard-long sand-surfaced two-track road that branches from Kamehameha Street south of Cemetery J. The road parallels the Pacific shoreline to the west of Kamehameha Street and provides access to the beach houses.		
Property access roads	C					
Cultural Vegetation						
Cultural vegetation				Many of the beach houses are edged by trees and shrubs that have been planted by the patients for shade, ornament, and fruit.	Heavy growth of volunteer species is obscuring an understanding of the arrangement of cultural vegetation in many cases.	
Invasive plants (ironwood along the shoreline)				Ironwood trees are growing along the shoreline and beginning to encroach inland. These trees serve as important shade for monk seals during mating and calf rearing periods.		
Buildings						
Richard Marks Beach House (Airport Road Beach House 1)	C	56121	by 1938	The Richard Marks Beach House is a single story wood frame cottage located at the northernmost end of the linear collection of beach houses. The dwelling is square in plan, measuring 40 by 40 feet, and features vertical plank siding and a front gable roof, which has collapsed. The Richard Marks Beach House is in deteriorated condition and is missing most of its windows and doors. Three former outbuildings associated with the property have collapsed.		

Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bernard Punikai'a Beach House (Airport Road Beach House 2, Airport Road Beach House 699)	C	56122	circa 1964-1972	The Bernard Punikai'a Beach House is a single story wood frame bungalow located at the north end of the beach house area. The Bernard Punikai'a Beach House has a square floor plan and measures approximately 25 by 30 feet. The foundation is wood post and concrete, with a wood skirt, and the walls board and batten siding. The central portion features a side gable roof; two additions to the west and east have shed roofs. The roofs are clad with asphalt shingles. Because the central section is finished in the same manner as the former Superintendent's Residence and Dentist's Residence at Staff Row, it is possible that material was salvaged from a structure located in that area. The yard is enclosed by a deteriorated wooden picket fence. A collapsed outbuilding is located in the northwest corner of the yard.		
Elizabeth Bell Beach House (Ku'u lei Bell Beach House)	C	336829	By 1938	The Elizabeth Bell Beach House is a small single story wood frame structure located toward the north end of the beach house row. The house is generally square in plan and measures 12 by 12 feet. There is a 10 by 12 foot attached garage on the west. The foundation is concrete post and wood pier with a horizontal wood skirt, while the walls are tongue and groove siding with a girt, water table, and corner boards. The garage has board and batten siding and a hip roof with asphalt shingles.		
Elaine Remigio Beach House (Clarence and Ivy Kahilihiwa Beach House)	C		by 1938	The Elaine Remigio Beach House is a single story wood frame structure located in the middle section of the beach house area. The dwelling is L-shaped and measures roughly 18 by 24 feet. There is an open covered porch at the northwest corner. The walls are board and batten siding, while the roof is a combination gable and hip with rolled asphalt roofing material.		

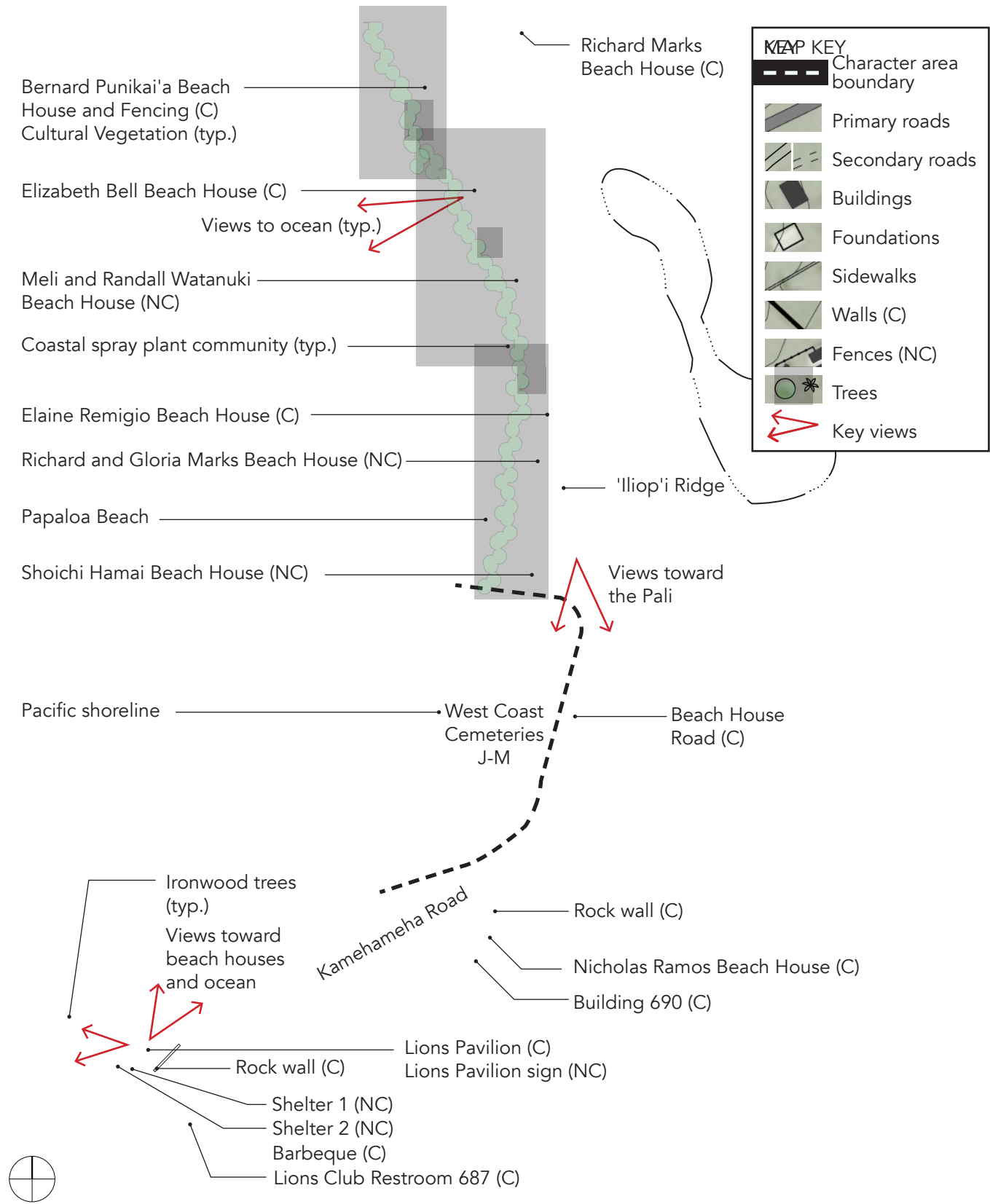
Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Nicholas Ramos Beach House (Airport Road Beach House 5)	C	56196	By 1938	The Nicholas Ramos Beach House is located at the south end of the beach house complex along Kamehameha Street, southeast of and below the level of the road, which blocks the view to the ocean. The single story, wood frame, single wall structure is roughly square in plan, and measures approximately 25 by 30 feet. The foundation is a combination stone footing and concrete slab, while the siding is board and batten with a water table. The hip roof is clad with rolled roofing material. A shed roof bathroom addition is located on the south elevation, and shed roof enclosed porch is located on the north elevation. A small shed (Building 690) is located in the southeast corner of the yard. A stone wall encloses the yard.		
Building 690	C	56207	Circa 1950-1964	Building 690 is a small storage shed located in the southwest corner of the yard of the Nicholas Ramos Beach House. The wood-frame, single wall building measures 7 feet square. It has a concrete slab foundation, recycled vertical plank siding, and a shed roof with rolled asphalt roofing.		
Lion's Club Restroom 687	C	55730	Circa 1950-1964	Sited across Kamehameha Street from the Lion's Pavilion is the Lion's Club Restroom 687. This is a wood frame building with a corrugated metal shed roof and stone masonry privacy fences at the three entrances.		

Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Lion's Pavilion (Ocean View Pavilion)	C	56611	1965	The Lion's Pavilion edges Kamehameha Street and overlooks the Pacific Ocean. It was built by the Kalaupapa chapter of the Lion's Club, traditionally an important booster of civic activities both inside the settlement and elsewhere in Hawai'i. The pavilion occupies the site of a former beach house destroyed by the 1946 tsunami. The pavilion is open on the sides and overlooks the beach. It is constructed of concrete masonry with stone veneer and column supports. It is associated with a sloping rock wall that parallels Kamehameha Street and an unpaved loop drive. Nearby to the south are Shelters 1 and 2 used for barbequing and seating. The Lion's Pavilion remains one of the most popular places for group gatherings and events within the Settlement.		
Meli and Randall Watanuki Beach House	NC		2008	The Meli and Randall Watanuki Beach House was constructed on the foundation of another former beach house. It is a wood-frame single story structure that measures 15 by 25 feet in plan. The building features two large covered patios at the east and west elevations. The foundation is post and pier, while the walls are plywood siding. The hip roof has asphalt shingles and the windows are jalousie.		
Richard and Gloria Marks Beach House	NC	342319	Circa 1977-1992; damaged and repaired 2014	The Richard and Gloria Marks Beach House is a rebuilt structure that incorporates material from the relocated beach house associated with the Mormon Beach House Steps site. The dwelling is a one story wood frame structure with a wood post and concrete pad with partial wood foundation. The walls are plywood, while the gable roof is wood shingle. A shed is located north of the house.		





Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Shoichi Hamai Beach House (Elizabeth Kahihikolo Beach House; Aunty Elizabeth's Beach House; Airport Beach House 693, Single Beach House)	NC	59701	2010-2012	This beach house was constructed on the site of an earlier beach house north of Cemetery M. Painted red with white trim, the beach house features a wood post and concrete pier foundation, plywood siding, jalousie windows, and a hip roof with asphalt shingles.		
Richard Marks Beach House (East Coast Fishing Shack, Rea's Beach House).	C	573955	Circa 1950-1964	The Richard Marks Beach House was built north of Kalawao along Kalaupapa Coastal Road and the peninsula's eastern shoreline. The beach house is a modest wood-frame building with shingle walls, a gable roof clad with rolled asphalt, and an open porch on the ocean side. The house is sited along rock terraces near a cliff edge. Set within one of the terraces is a bath tub perched on stacked lava rocks so that the water could be heated from a fire stoked in a void underneath. No longer in use, the house is overgrown with naupaka and other native coastal vegetation.		
Richard Marks Beach House Outhouse	NC	573956	Circa 1977-1992	Located near the Richard Marks Beach House on the eastern shoreline of the peninsula is an outhouse building. The structure, which is located west of the beach house, is wood frame with plywood siding.		
Shelter 1 (Lion's Club Bar)	NC		Circa 1972-1977	Shelter 1 is located southwest of the Lion's Pavilion. It is an open-sided wood structure with a shed roof. The shelter is used for barbequing and seating.		
Shelter 2 (Lion's Club Kitchen)	NC		1974	Shelter 2 is located southwest of the Lion's Pavilion. It is also an open-sided wood structure with a shed roof, and used for barbequing and seating.		




Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Fencing	C		Undetermined	Wood picket and post and rail fencing is located in association with several beach houses, including the Bernard Punikai'a Beach House.		
Stacked lava rock walls	C		by 1969	A stacked dry laid lava rock wall is located at the Nicholas Ramos Beach House and in association with the Lion's Club Pavilion. Mortared stone walls edge the Lion's Club Pavilion Restrooms.		
Electrical system features	C		by 1969	Historic electrical poles and wires are present within the character area. These extend to the line of beach houses from Kamehameha Street/Airport Road.		
Small-scale features						
Utilities	U		Undetermined	Hose box, yard hydrant		
Lion's Club Interational Sign	NC		post 1969	Set on a thick wooden post.		
Concrete barbecue	C		Undetermined			



Beach Houses Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Archeological Resources						
Mormon Beach House Steps	C	21181		The Mormon Beach House Steps are the remains of a former beach house on the northeast coast of the peninsula near Kalawao. Remnant features include six concrete steps flanked by stepped walls of lava stone set in lime mortar. A nearby yard area is enclosed with a rock wall that appears to have been used to exclude cattle. The house once belonged to Jack Sing, a member of the Kalaupapa Mormon Church, who often used it for social gatherings. Gloria and Richard Marks bought the house and moved it to 'Īliopi'i. Gloria and Richard Marks nearly entirely rebuilt the structure.		
'Īliopi'i Fishpond	C			The 'Īliopi'i Fishpond was established circa 1913 when the Settlement physician, William Goodhue, decided to attempt to establish a fish pond along Kamehameha Street. The fishpond was sited within an approximately 8 acre plot of low ground, and edged by a low rock wall. Goodhue flooded the low area in order to add fish. It may have occupied the site of an earlier, pre-settlement fishpond. The pond, however, never functioned properly due to sand blocking the channel to the bay. The site includes remnants of a boundary wall and well foundation.		
Missing Features						
<i>Souza Residence</i>		59955		<i>The Souza Residence is believed to have once stood near the Mormon Beach House, or was the building associated with the Mormon Beach House Steps before being moved to the Residential area of Kalaupapa Settlement</i>		









Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Patterns of Spatial Organization						
Formal site plan			1938	<p>The Bishop Home character area exhibits evidence of the formal site plan implemented in the 1930s. The focus of the plan is the Bishop Home for Girls, which is sited on axis with the entrance drive. The building and the adjacent St. Elizabeth Chapel front a geometrically arranged central core. The entrance drive, which is lined by piers, sidewalks, and the remains of an allee of trees, ends in front of the building in the form of a Loop Drive. Reinforcing the geometry are a central flagpole, a picket fence, and plantings. The Bishop Home for Girls is sited at the high point of a knoll on the property and features follow the alignment of the landform. Support features edge the building along a service drive. Rock walls define the margins of the property on three sides. Much of the rest of the property is maintained in open grassland with a few trees. Commemorative markers honor Mother Marianne and Father Damien in the southwest corner of the property.</p>	Fair. Many features no longer extant.	
Views and Vistas						
View along the entrance drive to the central core			1930s	<p>The entrance drive leads to the central core of the Bishop Home character area sites on axis with the Bishop Home for Girls and a flagpole sited in the center of the oval in front of the building.</p>	Good	



Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Bishop Home Roads and Curbs (832)	C	56528	By 1932; paved 1935-1936	Bishop Road is the name of the entrance drive leading into the Bishop Home character area. The road extends diagonally into the property from the intersection of School and Puahi Streets. Stone piers edge the road as it enters the property. Bishop Road measures between 16 and 20 feet in width, is asphalt paved, and is edged by 6-inch-high segmented concrete curbs, concrete sidewalks, and the remains of a formal allée of ironwood trees. The drive forms an elongated oval in front of the Bishop Home for Girls and St. Elizabeth Chapel.	Good; curbing on the driveway to the south remains visible although the pavement has deteriorated.	
Bishop Loop	C		Undetermined; paved 1935-1936	Bishop Loop arises from the elongated oval at the south end of Bishop Home Road. Bishop Loop is a service drive that provides access to support features to the east, south, and west of the Bishop Home for Girls and St. Elizabeth Chapel. Surviving support features include two cottages--the Barbara Marks Residence and Bishop Home Residence--and the Boiler Plant. Also edging the Bishop Loop are the ruins of other former buildings. Concrete walks connect the buildings with the road.	Good	
Bishop Home Sidewalks (861)	C	573963	By 1969	Concrete sidewalks, approximately 3 feet in width, are present along Bishop Road and the Bishop Loop, and connect the roads with individual buildings. Overall, there are approximately 1,250 linear feet of concrete sidewalk within Bishop Home character area.	Good; fair where sidewalks are cracked or broken.	
Walk to Mother Marianne's grave	C		Undetermined; rock added between the walk and the grave marker 2015	A concrete walk links Bishop Road with the Mother Marianne grave site along Puahi Street, and continues around the gravesite to a break in the perimeter wall along Puahi Street.	Good; fair where sidewalks are cracked or broken.	




Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Access road	NC		Undetermined	A grass-surfaced access road leads into the property from McKinley Street through a break in the stacked rock wall.		
Cultural Vegetation						
Ironwood allée remnant			Circa 1932	The remains of an allée of ironwood trees edges Bishop Road. All of the surviving trees are all located along the north side of Bishop Road.	Fair	
Ornamental plantings			1910s-1950s	Ornamental plantings and foundation plantings grace the environs of the Bishop Home for Girls and St. Elizabeth's Chapel, the two cottages, and the maintained lawn areas within the central core of the property. Plants include mango, false kamani, avocado, and banana trees. Additional ornamental plantings are associated with Mother Marianne's Grave and the Father Damien Monument. An areca palm tree at Mother Marianne Cope Grave marker was first planted by Ed Kato and Kenso Seki. The existing tree is a 2015 replacement.	Good	






Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Buildings						
Bishop Home for Girls (15BH)	C	21041	1934; interior altered 1990s; substantial rehabilitation occurred 2006-2007	The Bishop Home for Girls was built to house the nuns administering the group home. It is one of very few two story buildings within Kalaupapa Settlement. It is also one of the only buildings with double-wall construction. The wood-frame building measures approximately 25 by 50 feet in plan, features a concrete pad and post foundation, horizontal wood strip skirting, board and batten siding, and a gable roof with wood shingles and louver vents at either end. It also has three recessed porches, one at the front and two at the rear. The high pitch gable roof has second story dormers on the north and south elevations.	Good	
St. Elizabeth Chapel (Convent Chapel) (16BH)	C	21042	1934; rehabilitation occurred in 2013	St. Elizabeth Chapel edges Bishop Home for Girls to the southeast. The wood-frame, double-wall structure measures 18 by 42 feet in plan and features a wood post and concrete pad foundation, horizontal siding with corner boards, a gable roof with asphalt shingles and bracket eaves, and two double hung wood windows with standard frames on either side of gothic arch framed windows on the east and west elevations. The gable entrance portico has detailed columns and pilasters. Concrete steps extend the width of the main building entrance; the chapel also has a side entrance approached by a covered walk. A statue of St. Anthony is located near the chapel entrance.		






Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Barbara Marks Residence (DOH House – B. Marks) (3BH)	C	56499	1933; altered 1969 and 2002	The Barbara Marks Residence is a single story, wood frame, single wall, L-shaped structure that measures 17 by 40 feet and features a wood post and concrete pad foundation, Celotex sheets and wood batten exterior, intersecting gable roofs with asphalt shingles, and wood double hung 6-light windows. The cottage also has more recently added jalousie windows. The gable ends are filled with horizontal siding and have small triangular louvers. The cottage is entered via stairs at the front, rear, southwest elevations; an accessibility ramp was added to the front in 2002. There is an enclosed laundry area, and the yard is enclosed by a chainlink fence. An original lanai was enclosed to establish a kitchen by 1969.		
Bishop Home Carport (3aBH)	NC	573877	1977-1992	Adjacent to the Barbara Marks Residence to the north is a wooden carport with a shallowly-pitched shed roof. The carport is composed of wood posts at the corners and center of the long dimensions, to which plywood boards have been nailed. A concrete slab extends into the carport from the Bishop Loop Road.		
Bishop Home Residence 4 (Una Residence, DOH House – Una)(4BH)	C	56500	1933; altered 2002	Bishop Home Residence 4 is a single story, wood frame, single wall dwelling that measures 17 by 40 feet in plan. The cottage is L-shaped and features a wood post and concrete pad foundation, Celotex sheets and wood batten exterior, intersecting gable roofs with asphalt shingles, and wood double hung 6-light windows. Jalousie windows were added more recently. The gable ends are filled with horizontal siding and have small triangular louvers. There is a 6 by 6 front porch and a laundry area on the side. An accessibility ramp was added to the front of the building in 2002. An original lanai has been enclosed to establish an interior kitchen.		






Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bishop Home Boiler Plant (7aBH)	C	343769	1932	The Bishop Home Boiler Plant is a single story building located along Bishop Loop southeast of the Bishop Home for Girls. The rectangular reinforced concrete structure has a cement stucco exterior finish. The Art Deco style building features a flat roof. Although plywood covers the window openings, the original metal frame industrial windows with fixed hinged sashes appear to be extant beneath the plywood.		
Shed	NC		Undetermined; post 1969	A small shed sits in the yard behind the Barbara Marks Residence. The shed is wood-frame with a shed roof.		
Bishop Home Walls and Entrance Gates (gate piers) (830)	C	56526	By 1932s; stone piers circa 1932; repaired in the early 2000s.	Dry stacked lava rock walls edge much of the Bishop Home property along the east, south, and west sides. The walls range from 2 to 4 feet in height. Overall, there are approximately 1,900 linear feet of wall located on the Bishop Home property. Walls once completely enclosed the property. Sections that are now missing along School Street and elsewhere were lost to road paving efforts conducted in the 1950s. Stone piers mark some of the entrances into the property through the wall, such as at Bishop Road and the Morther Marianne Cope Grave Marker. The piers at Bishop Road form an entrance gate composed of two larger and two smaller mortared lava rock pylons. The two larger piers edge the vehicular entrance, while the smaller piers mark the pedestrian entrance to either side. The vehicular piers measure 3 by 3 feet in plan and are 7 feet tall. The pedestrian piers are smaller and only 5 feet tall. Smaller pylons edge the rock walls to either side. Identical piers are located 200 feet to the southeast at the edge of the central core area. Both sets of piers historically supported metal gates that are no longer present.	The vehicular gate post to the east of Bishop Road is in need of repair and has been stabilized with plywood and a metal brace system. One of the vehicular gates near the oval has a metal pin extending from the top.	

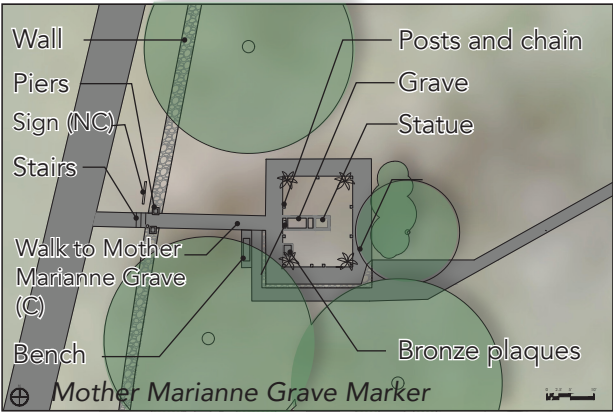
Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bishop Home Fence and Gate (831)		C	1930; a 3-foot high wood picket fence surrounded the Bishop Home for Girls as late as 1994.	The Bishop Home Fence and Gate is composed of a wooden trellis and short remnant fence segment located near the entrance to the Bishop Home for Girls. The fence and gate feature measures 4 by 8 feet in plan and is 8 feet high. It is constructed of 4x4 wood posts, 2x10 inch joists, and wood knee braces. The joists are covered by corrugated metal. Two sets of benches are located on each side of the picket gate. This is one of the three enclosure systems that historically surrounded the Bishop Home used to separate the area used by the Sisters of St. Francis from the rest of the community. The gate and a short section of fence are all that remain of this system today.		
Bishop Home Cistern (Bishop Home Well) (834)	C	56530	The date of origin of the cistern is not known but it was established by 1969	The cistern is located behind the site of a former dormitory near the Mother Marianne Cope Grave Marker. The underground structure is 8 feet in diameter, with a 3-foot opening at ground level.		
Electrical system features	C		by 1969	Historical electrical posts edge the property along Damien and School Streets. A secondary line extends into the Bishop Home property from Damien Street with historic electrical poles and related features.		

Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Father Damien Monument (807)	C	59950	1893	The Father Damien Monument is a 6-foot-high red granite Celtic cross with a white marble medallion designed by Edward Clifford. The cross supports a 1-foot-tall bas-relief bust of Father Damien. The monument sits on a 3-foot-square, 1-foot-tall concrete foundation and is surrounded by metal pipe fencing set in concrete blocks. The monument was funded by Edward VII, Prince of Wales. An inscription reads "Joseph Damien de Veuster 1839-1889 Greater love hath no man than this that he should lay down his life for his friends. This monument was erected to his memory by the people of England."		
Mother Marianne Cope Grave Marker (Cemetery I; Mother Marianne Monument) (839)	C	56516	1918-1919	The Mother (now Saint Marianne Cope) Marianne Cope Grave Marker sits at the foot of a small shady hill, just north of the Father Damien Monument. The marker is composed of a 6-foot-high statue of St. Francis, with Jesus on the cross, mounted on a pedestal with a bronze plaque. A 5-by-9-foot concrete tomb stands in front of the statue, inset with an etched granite plaque that reads "Mother Marianne." Mother Marianne's grave, however, was relocated to Syracuse, New York, in 2005. The marker is surrounded by a formal concrete walk, white-painted concrete bench, A stone monument that supports a bronze plaque, square concrete posts connected by metal chain edging, and ornamental plantings. The grave is accessed from Puahi Street through a break in the stacked rock wall marked by 8-foot-tall chamfered piers.	The concrete walk that surrounds the grave is cracked and broken in places	
Bishop Home Flagpole (833)	C	56531	circa 1932	The flagpole is located in the center of the oval turnaround loop of the entrance drive was added circa 1932. It is 40 feet in height and fashioned of tapered wood topped with a 6-inch ball, and set on a concrete foundation base. The flagpole is painted white.		

Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Statue of St. Anthony (855)	NC	345314	Post 1969	A statue of St. Anthony is located near the chapel entrance. The statue, which is painted white, sits on a 2-foot-tall concrete pedestal.		
Bishop Home Bake Oven (Portuguese Oven)	C	56529	Undetermined; by 1969; Portland cement added in the early 1980s.	The Bishop Home Bake Oven sits in the field near the intersection of School and McKinley Streets. The grass around the feature is mown to ensure the feature remains visible. The oven is composed of mortared lava rock fashioned to include a base and an upper opening. Overall, the oven measures 5-1/2 feet in height and is nearly 5 feet in diameter. The opening measures 21 inches in height and is approximately 20 inches wide. The top of the oven is coated with Portland cement plaster.		
Grave markers	C		by 1969	Two grave markers are present on the Bishop Home property. One is a pile of stacked lava rock, stabilized with concrete, that edges Bishop Road. The other is a stacked lava rock grave marker encased in concrete slurry located in the field west of McKinley Street.		
Ed Kato's painted rocks and sign	C		By 1969	Two rocks painted by Ed Kato are located near the entrance to the Bishop Home. One depicts a yellow smiley face, while the other includes the message "Smile – It no broke your face!" Other examples of Ed Kato's work on the property are located near the entrance to Mother Marianne's grave, including a wood sign and a painted rock with the message "Peace to All Who Enter Here," and near the Father Damien Monument that notes "Damien Blessed."		
Hand pumps and spigots	C		By 1969	Metal hand pumps are located in lawn areas near the Bishop Home for Girls building to provide water for the ornamental plantings. The spigot located along the outer edge of the oval is edged by informally stacked and mortared lava rock.		




Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Chainlink fence at the Barbara Marks Residence	NC		post 1969	The yard associated with the Barbara Marks Residence is enclosed by chainlink fencing.	The fencing is rusted, bent and mishapen, and loose in places.	
Mother Marianne Cope's Grave and Monument and Damien Monument signs	NC		post 1969	Signs mark the two monuments along Puahi Street. The signs are composed of painted plywood boards mounted on metal pipe.		
Commemorative markers	NC		1983; post 2000	Two trees planted within the oval in front of the Bishop Home for Girls are indicated with commemorative markers. One is a concrete slab inset with an etched granite plaque that notes "Planted Aug. 9, 1983 in memory of Mother Marianne Cope." The other notes "To remember Alice 'Pake' Kamaka longest living resident Kalaupapa 1919-2000."		
Wayside exhibit	NC		Post 1969	A wayside exhibit interprets Bishop Home property outside the entrance to the property along the short segment of stacked rock wall along School Street.		
Metal bath tub	U		Undetermined	Located on a large rock outside the Father Damien Monument is a metal bath tub filled with soil.		
Utility features	U		Undetermined	Fire hose box, fire hydrant, open throat inlet for stormwater		



Bishop Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Archeological Resources						
Bishop Home Social Hall Ruin (Bishop Home Building No. 1 Ruins) (1BH)	C	56612	1932	The ruins of the former Bishop Home Social Hall are located northwest of the Bishop Home for Girls building. The site consists of a concrete foundation measuring 20 by 30 feet. The original structure was built in 1930-1931, and removed in 1960.		
Bishop Home Laundry Foundation Ruin (8BH)	C	344203	1931-1932	The ruins of the Bishop Home Laundry Foundation are located southeast of the Bishop Home for Girls and east of the Boiler Plant. The ruins consist of a 24 by 32 foot foundation. The laundry was built in 1931-1932 and removed after 1977.		
Bishop Home Store Room Foundation (6BH)	C	793329	1932	The foundation ruins of the Bishop Home Store Room are located southeast of the Bishop Home for Girls building. They measure 21 by 35 feet. The building was constructed in 1932 and removed after 1977.		
Bishop Home Kitchen/ Dining Hall Ruin (5BH)	C	1060885	1932	The foundation ruins of the Bishop Home Kitchen/Dining Hall are located northwest of the Bishop Home for Girls building. They measure approximately 45 by 35 feet and include a raised concrete slab at the south elevation. The building was constructed in 1932 and removed between 1964 and 1972.		
Cemetery T	C		Undetermined	Cemetery T is composed of two graves located along the east side of the entrance drive and a grave located within the grassy field within the northeastern portion of the property near McKinley Street. The grave markers located along Bishop Road are severely deteriorated lava rock tombs.		
Missing Features						
<i>Original Bishop Home for Girls buildings</i>						



MAP KEY



- Character area boundary
- Primary roads
- Secondary roads
- Buildings
- Foundations
- Sidewalks
- Walls (C)
- Fences (NC)
- Trees
- Key views


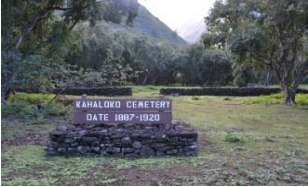


Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Patterns of Spatial Organization						
Linear road corridor			Circa 1870s	The Damien Road character area is structured around the linear circulation corridor that extends east/west across the peninsula to connect the developed clusters at Kalawao and Kalaupapa. The corridor is variously open and expansive, and tunnel like depending on the surrounding character of vegetation.		
Kahaloko Cemetery			1887-1920	Kahaloko Cemetery is located to the south of Damien Road, and southwest of Kauhakō Crater. The approximately 1-acre cemetery closely edges Damien Road. It is marked and surrounded by a rectangular stacked lava rock wall, approximately 3 to 4 feet in height, that edges the cemetery on three sides. The wall is broken along the north face to permit entry from Damien Road. Within the cemetery there are several prominent and well-marked headstones gravestones, as well as more modest markers, and unmarked gravesites represented by sunken grave shafts. The cemetery, formerly overgrown and hidden from view even from Damien Road, has been cleared of many large trees and lantana, and is now a prominent feature along Damien Road.		
Views and Vistas						
Expansive view toward the eastern shoreline from the road				At a high point along Damien Road, located near the interpreted heiau, views of the eastern Pacific Ocean shoreline are afforded to the east. Expanding tree cover threatens to obscure views in this direction		
Linear view corridor associated with the road				Views associated with Damien Road include open sunny views towards the pali and the Ambrose Hutchison House site, and tunnel like dark linear views where the road is edged by woodland.		


Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Damien Road	C	793346	1860s; improved 1883; rock surfaced 1935-1936; repaired 1956	Damien Road is the oldest Settlement era road on the Kalaupapa Peninsula. It was established in the 1860s to connect the western and eastern sides of the peninsula in support of the Kalaupapa Hansen's disease Settlement. Damien Road varies in width from 12 to 15 feet; it sometimes becomes wider for short segments. In total, the road extends for approximately 2.5 miles, including a portion referred to as Damien Street that falls within Kalaupapa Settlement. The road continues beyond the character area through Kalawao to the eastern Pacific Ocean shoreline. The surface of the road varies from deteriorated asphalt to crushed volcanic rock, gravel, and hard-packed earth. Both the western and eastern ends of the road have been realigned.		
Cattle guard	NC					
Road to Kauhako Crater	C	793345	Undetermined	Arising from Damien Road near the center of the character area is the Road to Kauhakō Crater. This feature is addressed in detail in the Kauhakō Crater character area section		
Interior Road to Kauhakō Crater	C		by 1938; formalized by 1964	Also arising from Damien Road is the Interior Road to Kauhakō Crater. This route travels around the Kauhakō Crater to the east, and traverses the center of the peninsula to the Molokai Light Station and Kalaupapa Airport. It is an unimproved hard-packed earth road that is rough in places. It is addressed in more detail in the Peninsula character area section.		


Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Coastal Road	C	793342		Also arising from Damien Road is the Coastal Road. This route, established circa 1900, follows the eastern shoreline of the peninsula to the Molokai Light Station and Kalaupapa Airport. It is an unimproved hard-packed earth road that is rough in places. It is addressed in more detail in the Peninsula character area section.		
Cultural Vegetation						
Cultural vegetation				Several plants have been identified along Damien Road that played an important role in providing food and flowers to Settlement residents. At the Ambrose Hutchison House Area site, several important species have been identified during archeological investigations. These include banyan, orange, java plum, and mango trees. These would have been planted for several reasons, among them decoration, subsistence, and/or barter. The orange trees may have provided seed for other orange trees present within Kalaupapa today.		
				Interviews conducted with patients during the 2000s suggest that flowers used in making leis were collected along the Damien Road corridor roadsides:		

Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
				You give them that, ilima [<i>Sida fallax</i> and spp.], and now we give kikania (<i>Xanthium strumarium</i>) ... We had it all over going all the way up to Kalawao. We had it all along side of the road—it didn't bother anybody. We left it alone because when we like, we know we can find 'em... We had so much kikania that when I went to the girls scout camp, we made lei for ourselves when we came back to town to go to the movie. I could swear each girl had four lei .. Four lei—all day when we come out from the movie. We start early in the morning, go pick them up and we do all the sewing and when we ready for go to the movie, we put it all on our neck. All of us had at least four lei.		
				Another culturally important plant located along Damien Road was a ylang ylang tree, reportedly removed by mistake by maintenance workers. The lore associated with the tree was described in an interview in the 2000s, and noted by Sonia Juvik in her Ethnographic Study.		
				Ti plants have been noted in association with both heiaus, and is an important plant culturally within the Settlement, both pre- and post-Settlement.		
Buildings						
Chlorinator Building (Medicine House)	C	1062723	1957-1958; stabilized 2015	The Chlorinator Building is a small shed located along the south side of Damien Road feet west of Crater Road. It was built to house chlorinator equipment used to treat settlement water. No longer in use, the building is currently maintained as an exhibit.		
Filter Building	C	1062727	circa 1964	The Filter Building was constructed to filter sediment from the Settlement water supply for purification using charcoal. The Filter Building is located along the south side of Damien Road west of Crater Road near the Chlorinator Building. The building is a small wood-frame shed that is open on three sides. The fourth side has plywood siding.		

Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Water Tanks	C	573952; 573957	1894-1908	Two subsurface stone and concrete water reservoirs are located south of Damien Road near the saddle between the Kalawao and Kalaupapa settlements. The tanks measure approximately 30 feet diameter and each have a 150,000 gallon capacity. The roofs are conical corrugated metal. They are no longer used in support of the Settlement water supply system.	The tanks are overgrown with vegetation.	
Tsunami Evacuation complex	NC		2012-2014	A Tsunami Evacuation complex sits within an open field south of Damien Road and north of the Ambrose Hutchison House site. The complex is comprised of four 20 by 8 foot shipping containers that contain supplies to support the community during tsunami evacuation procedures. The containers are painted green to blend in visually with the surrounding landscape.		
Cattle Guard	NC					
Livestock Fencing and Cattle Chutes	C			On the outskirts of Kalaupapa is a complex of Livestock Fencing, Cattle Chutes, and Cattle Guards that dates to the mid-twentieth century, but is no longer in use. These livestock related features are constructed of wood posts strung with hog panel, woven wire, and barbed wire fencing, as well as some metal piping. These features are visible from Damien Road near the east end of the Settlement.		






Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Grave markers associated with Kahaloko Cemetery	C		1880s-1920s	Kahaloko Cemetery contains approximately thirty-seven marked graves, and numerous unmarked graves. The grave markers vary in size and style. Grave markers range from concrete barrel vaults and other encasements, to upright stones, single or stacked field stones and boulders, and carved headstones. Some of the grave markers are inscribed either in Hawaiian or English. During the 2010s, the NPS has worked to clear woody growth from the cemetery and to repair damaged grave markers. An undated document titled “Mortarless Wall Repair and Reconstruction Kahaloko Cemetery” provides detailed documentation for work done to address various condition issues of concern within the cemetery. Photographs and a sketch map indicate where specific repairs have occurred.		
Identity sign associated with Kahaloko Cemetery	NC		post 1969	Located in proximity to Damien Road and standing in front of the Kahaloko Cemetery, is a wooden board sign that notes “Kahaloko Cemetery Date 1887-1920”. The sign is painted brown, and the routed letters white. The sign is set within a base of stacked dry laid lava rock. The sign was erected by the NPS		
Wayside exhibit	NC		post 1969	The heiau on Damien Road is interpreted with a wayside exhibit representative of the standard metal carrier used by the NPS for interpretation in many national park units.		
Pipe extending beneath wall	C					





Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Archeological Resources						
Ambrose Hutchison House Area site	C			<p>The Ambrose Hutchison House Area site is an archeological resource that contains evidence of two built features, artifacts, and historic plantings. One of the built features is a small enclosure composed of a deteriorated free-standing rock wall and a scatter of stone cobbles that may mark the footprint of a historic building thought to have been associated with Ambrose Hutchinson's House. Hutchison was a patient who also served as Resident Superintendent between 1884 and 1897. Other features associated with the site include a large scatter of iron artifacts, Japanese porcelain dating to the late nineteenth or early twentieth century, and a possible bathhouse represented by a scatter of broken porcelain plumbing fixtures. There are large banyan trees on the property, as well as orange, java plum, and a row of mango trees. These were planted, possibly for decoration, subsistence, and/or barter. Orange trees located elsewhere within the Kalaupapa Settlement are thought to have been planted from seeds from Hutchison's House site</p>		
Heiau on Damien Road	C			<p>Located 1-1/2 miles east of Kalaupapa, the Heiau on Damien Road consists of basalt boulders and cobbles in an area that measures approximately 70 by 45 feet. The rock forms a paved area with several pit features and an offering stone. The area was cleared in 2014 by the National Park Service. During the project, ti plants were discovered at the corners of the structure. The heiau is regularly maintained and cleared of vegetation by parks staff and volunteers. It is interpreted with a wayside exhibit accessible from Damien Road.</p>		




Damien Road Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Unidentified Heiau behind Damien Road				Approximately 150 feet south of Damien Road is a second heiau that has been less studied. It is composed of a basalt boulder and cobble platform that measures 75 by 55 feet, and features walls and twelve pits or enclosures. Some ti plants have been found growing in the vicinity of the heiau.		
Missing Features						
Ambrose Hutchison House						
Southern alignment of Damien Road						












KEY	
	Character area boundary
	Primary roads
	Secondary roads
	Buildings
	Foundations
	Sidewalks
	Walls (C)
	Fences (NC)
	Trees
	Key views






Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
St. Francis Church						
Natural Features and Systems						
Level land plateau				The southern portion of the St. Francis Church property occupies a level upland plateau.		
Patterns of Spatial Organization						
Sunken garden area				The northern portion of the property includes declining topography and a sunken garden area. Overland flow of stormwater from the adjacent street is directed through the swale associated with the space through a culvert.		
Walled precinct of church and churchyard				The land rises to the east of the New Baldwin Home site. The Grotto and Garden Structure is located on the rising terrain of a hillside. In the vicinity of the Grotto and Garden Structure there is extensive evidence of the landform having been terraced, potentially to support agriculture. The terracing could relate either to the pre-settlement or post-settlement era.		
Views and Vistas						
View of St. Francis Church from Beretania Street				Looking west along Beretania Street, St. Francis Church is visible on axis.		
Circulation						
Entrance road	C		By 1969	A narrow paved entrance road leads into the property between the church and the social hall from Puahi Street to the east. The road extends as far as the garage entrance.		




Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Stone steps leading to sunken garden	C		By 1969	Connecting the upper level terrace and the sunken garden area is a flight of three mortared stone steps.		
Cultural Vegetation						
Coconut palm trees				A cluster of coconut palm trees is located inside the church property along the southern wall.		
Ornamental plantings				Ornamental trees and shrubs, as well as large shade trees, are present along the margins of the sunken garden area.		
Flower beds				Flower beds are located in the sunny section of the sunken garden.		





Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Buildings						
St. Francis Catholic Church	C	21063	1908	St. Francis Church is located near the eastern end of the property near the perimeter rock wall. The Italian Gothic-style building measures 38 by 100 feet in plan, features a three-tiered steeple, and is constructed of ferro-cement. A gable roof covers most of the building. There is also a rectangular, arched three bay entrance portico at the main (west) entrance covered by a hip roof. A three-tiered steeple with a pyramidal roof on a tower with a cross is located at the southeast corner. Hooded gothic windows are interspersed with reinforced concrete buttresses and pointed arched windows on the north and south walls of the building. The church was renovated in 2002-2004. Renovations included re-roofing and painting.		
St. Francis Rectory (Church Rectory)	C	56502	1930-1931; rear porch added 1947; rehabilitated 1979	St. Francis Rectory is located west of the church at the edge of the level open space that characterizes the churchyard. The rectory is a wood frame single-story building with vertical plank siding and a large porch across the front of the structure. The building features a wood post and concrete pad foundation covered by vertical slat skirting, vertical plank siding encircled by a broken girt and corner boards, and a hip roof with asphalt shingles which overlay the original wood shingles. St. Francis Rectory measures 26 by 40 feet in plan.		
Damien Hall (Damien Social Hall, St. Francis Church Library, St. Francis Church Social Hall)	C	56536	1908-1910	Damien Hall is located near the eastern wall of the property. Built on the site of an earlier Catholic church, Damien Hall is a single-story, wood frame structure with tongue and groove siding that measures 28 by 32 feet in plan. The building may have been moved to serve as the Protestant Church from 1908 to 1915 before being moved back to St. Francis.		






Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
St. Francis Church Garage	C	56537	Circa 1966-1977	The St. Francis Church Garage is a single story building located just north of St. Francis Church. The modest wood frame structure is rectangular and measures 20 by 30 feet in plan. The building has one large bay leading to a carport, and one single door which leads to a storage area. It was likely built on the foundation of a former storeroom.		
St. Francis Churchyard Walls and Gates	C	56524	Circa early 1900s	This dry stacked stone wall stands 3 to 4 feet high and 3 to 4 feet wide. It edges the perimeter of the church property. Two concrete hexagonal gates, 2 feet in diameter by 6 feet high and 14 feet apart are at the eastern vehicle entrance. A south pedestrian entrance has 2 to 3 by 3 by 6 foot high square concrete posts. A gooseneck light fixture is over the gate. At the gates at Kamehameha and Kilohana Streets are hand-crafted tile murals of St. Francis, Father Damien, and Sister Marianne.		
Grotto at St. Francis Church (Grotto for Our Lady of Lourdes and St. Bernadette, St. Francis Shrine)	C	56520	Undetermined; by 1969	This 18 by 18 foot lava rock and mortar masonry structure includes multi-tiered with openings for statuary. A statue of Our Lady of Lourdes is at the top, with a statue of St. Bernadette below. A marble cross is in the lower opening. There are concrete steps at the base and electric lights to light the statue at night.		
Culverts	C		by 1969	A culvert passes beneath Kamehameha Street, emptying into the sunken garden area. The water flows across the sunken garden to a concrete structure that passes beneath Damien Street and empties into the Pacific Ocean beyond.		
Fire hose box	NC		post 1969	Located at the western end of the property near Damien Street at a break in the perimeter rock wall is a wood fire hose box, painted green, with a pair of doors on the front.		







Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Statue of the Sacred Heart of Jesus and Father Andre's grave	C	59987	1907	The Statue of the Sacred Heart of Jesus stands 6 feet tall and is made of iron, painted white. The statue is set on a 4 foot pedestal surmounting a 10 by 10 foot concrete base. The grave of Father Maxime André is located in front of the statue.		
St. Francis Church Bell Memorial	C	56519	1928; shelter added 1981	The St. Francis Church Bell Memorial is a 2 foot diameter bell mounted in a shelter that is supported by 2 by 5 foot concrete posts and a horizontal pipe to which the bell is mounted.		
Tile murals	NC		early 2000s	Four colorful tile mosaic murals representing Mother Marianne Cope, Saint Francis of Assisi, Father Damien, and Brother Dutton frame the vehicular and pedestrian gates into the church yard. The murals are composed of half inch to one-inch square colorful ceramic tile. The pieces representing Saint Francis and Mother Marianne and Damien are large, about 4 feet by 6 feet, while that of Brother Dutton is about 3 feet by 3 feet in size. The murals were controversial for their strong colors and imagery, considered to potentially detract from the historic setting.		
Lighting	NC		Undetermined	The tile murals and entry gate areas are marked with lighting composed of metal poles supporting long glass globes.		
Archeological Resources						
Missing Features						
<i>Original St. Francis Church</i>						




Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Church of Jesus Christ of Latter-day Saints						
Patterns of Spatial Organization						
Linear arrangement of features along Kamehameha Street				The three buildings and monument that comprise the Church of Jesus Christ of Latter-day Saints property are aligned to face Kamehameha Street.		
Walled churchyard precinct				The churchyard is edged on three sides by stacked lava rock walls. The fourth side is marked by a fence.		
Views and Vistas						
Axial views of the church building from the intersection at Kamehameha and Damien Streets				The church building face the intersection of Damien Street and Kamehameha Street, and is on axis with Damien Street.		
Circulation						
Concrete sidewalks	C			Raised concrete walkways lead to the church, parish hall, and mission house. A concrete walkway and wood access ramp lead to the north elevation of the parish hall from the church.		
Cultural Vegetation						
Ornamental plantings				The church property features shade and ornamental trees as well as shrubs within the yard and in association with the building foundations.		
Clipped bougainvillea vines				Dry stacked volcanic rock walls covered with clipped bougainvillea vines enclose the property on three sides.		

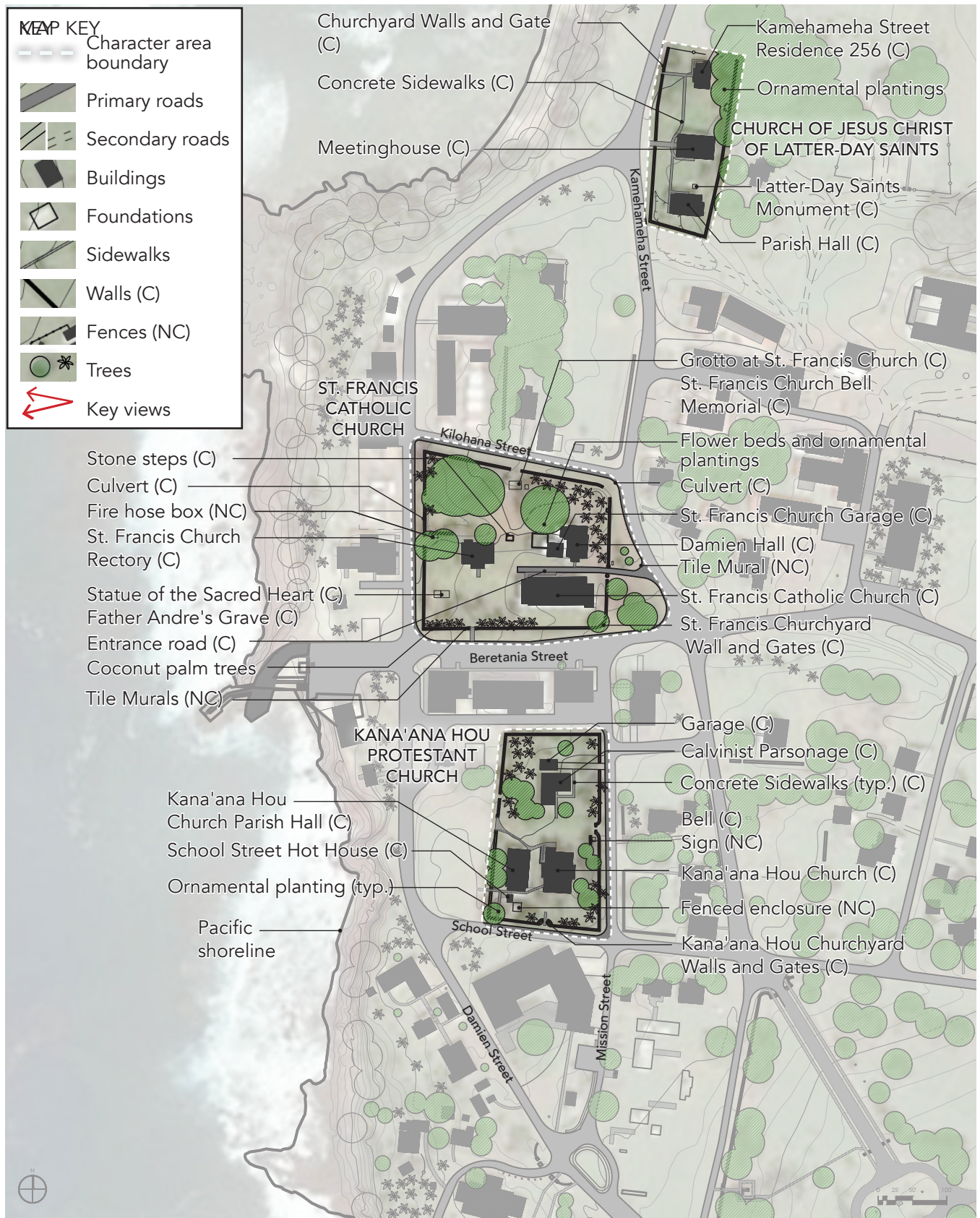
Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Buildings						
Church of Jesus Christ of Latter-day Saints Meetinghouse	C	56610	1965	This is the central building of the churchyard cluster. The wood-frame building is modern in style, rectangular in plan, and measures 25 by 40 feet. It features a concrete perimeter foundation, board and batten siding, and a shallow pitch gable roof with asphalt shingles. A small steeple is located at the west end above the primary entrance. The building replaced the original 1901 chapel on the same site. A dry stacked rock wall possibly dating to the earlier church surrounds the building on its west and east sides. A raised concrete walkway leads to the church from Kamehameha Street.		
Church of Jesus Christ of Latter-day Saints Parish Hall (LDS Social Hall)	C	59972	1940	The Latter Day Saints Parish Hall is a single story building located south of and oriented toward the Mormon Church. It is rectangular in plan and measures 35 by 40 feet. It features wood frame construction with a wood post and concrete pier foundation, vertical tongue and groove siding with a horizontal lath skirt, and a gable roof with asphalt shingles and an attached shed roof covering the porch and the west and east ends. A concrete walkway and wood ramp provide access to the north elevation.		
Kamehameha Street Residence 256 (Latter Day Saints Rectory, LDS Mission House)	C	59971	1935	The Kamehameha Street Residence 256 is a single story wood frame cottage located north of the Mormon Church within the LDS cluster. The building, constructed in 1935, measures 24 by 34 feet in plan. It is enclosed by a stone wall on the west and east sides. A chain link fence encloses the north side of the property near the residence.		




Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Church of Jesus Christ of Latter-day Saints Walls and Gate	C	56525	Circa early 1900s	Stacked lava rock walls mark the property boundary along Kamehameha Street. Set within the wall is an entrance gate on the west side of the complex. The gate consists of two 2 by 2 foot square concrete columns, 7 feet high, with chamfered corners, pyramidal tops, and metal pins for mounting gates. The posts are separated by 12 feet and tied to the adjacent 2 to 3 foot high stone rubble walls.		
Fence				A chainlink fence supported by metal poles forms the northern edge of the churchyard precinct.		
Small-scale features						
Latter-day Saints Monument		565514	Circa 1908-1938; bronze plaque added 1992	The Latter-day Saints Monument is a 6 foot high concrete obelisk mounted on a 10 by 10 by 4 foot high stepped base and pedestal. The monument features a bronze plaque that measures 8 by 18 inches. The monument is sited between the Latter Day Saints Parish Hall and Mormon Church. The monument recognizes the contributions of religious leader Jonathan Napela at Kalaupapa. A bronze plaque honors deceased church members.		
Laundry lines				Metal poles behind Residence 256 serve as laundry drying lines.		
Archeological Resources						
Missing Features						
<i>Original meetinghouse</i>				The original meetinghouse was built during the early twentieth century, and lost to the 1946 tsunami		





Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Kana'ana Hou Church						
Patterns of Spatial Organization						
Arrangement of buildings with a consistent orientation within walled churchyard				The buildings associated with property are all aligned north/south within the eastern half of the parcel.		
Walled churchyard precinct				The Kana'ana Hou Churchyard is marked by a stacked lava rock wall. Four gates mark entries into the churchyard from adjacent roads and spaces.		
Circulation						
Concrete sidewalks	C			Sidewalks provide formal access between the two buildings, which are sited adjacent to one another.		
Cultural Vegetation						
Ornamental plantings				The landscape surrounding the parsonage is densely planted with ornamental and fruit trees and shrubs.		
Buildings						
Kana'ana Hou Church (Protestant Church, Kana'ana Hou Calvinist Church, Unitarian Church)	C	21062	1915; massive concrete ramp added 1983	Kana'ana Hou Church is sited near the center of the church parcel, which is edged to the east by Mission Street, and to the south by School Street. The church is a wood frame structure that features a symmetrical Greek cruciform plan that measures 34 feet by 60 feet.		







Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Kana'ana Hou Church Parish Hall (Protestant Parish Hall, Wilcox Social Hall)	C	59972	1968	The parish hall is a single story building located west of Kana'ana Hou Church along School Street. It is rectangular in plan and measures approximately 30 by 40 feet. This building replaced an earlier YMCA hall that was a gift of G.N. Wilcox in 1895.		
Building 637	C	101951	1950	Building 637 is a single story wood frame maintenance building located along School Street in the Kana'ana Hou Church complex. It is rectangular and measures 7 by 10 feet in plan. A concrete ramp leads to the front door.		
Calvinist Parsonage (Kahu House, Calvinist Mission House, Kana'ana Hou Mission House)	C	59994	1932	The parsonage is a single story building located in the Kana'ana Hou Church complex. It is L-shaped, measures 20 by 28 feet, and features a wing that measures 12 by 16 feet.		
Garage	C	573907	1935	The wood frame garage is located next to the Calvinist Parsonage. It is a square, wood frame structure that measures 24 by 24 feet.		
Kana'ana Hou Churchyard Walls and Gates	C	56523	Circa early 1900s	Dry stacked lava rock walls 2 to 3 feet high by 3 feet thick surround the churchyard. Approximately 600 feet of walls enclose the property. Three entrances into the property are marked by mortared lava rock gate posts 2 by 2 by 5 feet high topped with 6 inch spheres, 12 feet apart. The south gate posts are 2 by 2 by 5 feet high and 3 feet apart.	Several of the gates are in need of repair	
Fenced enclosure	NC	573530	rebuilt 2014; damaged by a tree 2015	This is the greenhouse for the Kana'ana Hou Church complex. Located near Building 637, the hothouse is rectangular and measures 15 by 18 feet. It is constructed of 2 by 4 and 4 by 4 wood framing, and has a gravel floor.		





Kalaupapa Churches Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Bell	C		1928; shelter added 1981	A bell set within a wooden shelter is located at the Mission Street gate. The bell was moved to the church at an undetermined date.		
Sign	NC			A painted board sign mounted on a pair of metal poles is located adjacent to the bell that faces Mission Street.		
Yard hose						
Archeological Resources						
Missing Features						
<i>Original Church of Jesus Christ of Latter-day Saints meetinghouse</i>						
<i>Original St. Francis Catholic Church</i>						








Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Pacific shoreline				Kalawao is edged to the east by the Pacific shoreline, which can be rugged and rocky but also includes sandy beaches.		
Patterns of Spatial Organization						
Cemetery P – Siloama Churchyard			nineteenth century	The Siloama Churchyard, which is edged by a perimeter stacked rock wall, contains a small cemetery. An inventory conducted in 2003 identified thirteen graves in the cemetery.		
Cemetery Q – St. Philomena Churchyard			nineteenth century	The St. Philomena churchyard, edged by a perimeter wall, contains a large burial ground that is part of a larger complex known as Moku Puakala. The cemetery is the final resting place of several foreign church workers, including Father Damien and Joseph Dutton. The Dutton grave site is marked with an elaborate stone marker on a stepped concrete tomb and curb and edged by a metal railing set in the curb. Father Damien's grave site, which is associated with a relic of his right hand, is marked with a black concrete cross set atop a 3-foot-high pedestal mounted on a concrete slab. The inscription is painted gold. The grave marker is surrounded by a 3 foot high, black painted bronze guardrail with vertical rails with spikes at the top. A 2003 inventory identified nineteen additional graves in the cemetery. The burial ground edges Damien Road, and is surrounded by a volcanic boulder wall, 3 to 4 feet high.		







Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cemetery R – Kalawao Cemetery (North)/ Cemetery S – Kalawao Cemetery (South) (Moku Puakala)			nineteenth century	Kalawao Cemeteries North and South are comprised of two large burial fields southeast of the St. Philomena churchyard. The majority of the graves associated with these two cemeteries are not marked. Twelve graves were identified as part of the 2003 inventory. Like the St. Philomena Churchyard, these cemeteries are part of the larger Moku Puakala cemetery complex. The two fields, edged by Damien Road, and spatially comprised of two orthogonal open spaces, are separated by a long stone wall, 3 to 4 feet high, which the NPS repaired in 2014. Joseph Dutton remarked in a letter in 1887 that the cemetery held about 2,000 graves.		
Views						
Dramatic views to the Pacific Ocean and islets from Judd Park			by 1870	Judd Park overlooks the eastern shoreline of Kalaupapa Peninsula. From the park, dramatic views of the Pacific Ocean are afforded, including the northern shoreline of Molokai and the islets of Mokapu, Okala, and Huelo.		
Views of churches and associated features from Damien Road			by 1870	Damien Road provides access to Siloama and St. Philomena Churches. Both are visible from the road, and are focal points for visitors traveling east along Damien Road.		
Circulation						
Damien Road	C	793346	Circa 1860s; improved 1883; surfaced 1935-1936; repaired 1956	Damien Road is the primary circulation feature associated with Kalawao, and also connects the original settlement site with Kalaupapa. Damien Road served as a structuring element of the community, which was linear and followed the alignment of the road beginning in the 1860s. Damien Road is surfaced with hard-packed earth and crushed rock. The road varies in width between 12 and 15 feet.		





Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Coastal Road	C					
Siloama Church Sidewalks	C		By 1969	Concrete sidewalks lead to the church entrance from the gates in the perimeter rock wall.		
St. Philomena Church Sidewalk	C		By 1969	A concrete sidewalk and associated steps leads to the church entrance from the rock wall that edges the property along Damien Road. A temporary accessibility ramp has been added to facilitate wheelchair access to the church interior.		
Cultural Vegetation						
Coconut palms			1950s	Rows of coconut palm trees survive in association with foundation ruins along Damien Road that were planted by groups to commemorate Kalawao.		
Ironwood windbreak			late nineteenth century	A row of ironwood trees edges the St. Philomena Church perimeter wall near the Father Damien house site that may have been planted as a windbreak during the late nineteenth century.		
Baldwin Home plantings			late nineteenth century	Remnants of historic plantation trees and ornamental plantings remain on the site of the Baldwin Home for Boys.		
Row of eucalyptus trees along the wall edging Damien Road at Baldwin Home				A row of planted eucalyptus trees edges the dry stacked lava rock wall along Damien Road at Baldwin Home.		



Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Ornamental plantings			late nineteenth century	Near the St. Philomena Church perimeter wall, near the site of Father Damien's house, are patches of wild tobacco. "Downtown" Kalawao features historic era plantings of eucalyptus and ylang ylang trees.		
Stands of invasive plants				Stands of invasive trees edge Damien Road south of Cemetery S, and along the margins of the road west of St. Philomena Church.		
Buildings and Structures						
Siloama Church	C	21067	1871; rebuilt 1880; abandoned in 1927-1938; repaired 1938; altered and rededicated 1949; reconstructed in 1966	Siloama Church is a small, one story building located northeast of Damien Road. It is accessed via concrete walks that lead to the southwest and northwest elevations. The church is representative of Mission architecture introduced to Hawaii during the nineteenth century. The current structure differs from the 1880 building in the more steeply pitched roof, rectangular rather than square louvers in the gable ends, and the addition of the portico at the front entrance. The present building also does not have the original decorated pedimented lintel capping the double doors, narrower cornerboards, a lighter paint scheme, and a hexagonal steeple covered with wood in a herringbone pattern rather than a square steeple. Church services continue to be held in the church once a month.		
Siloama Restroom	C	59992	Circa 1966	The Siloama Restroom is a small outhouse located at the east corner of the Siloama churchyard. The building has two wood doors with signs indicating separate stalls for "kokua" and "patients." The building also features 5-foot-high wood horizontal siding screens at the front entrance and wood lattice vents in the wall.		

Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
St. Philomena Church	C	21068	1872; nave added 1876; 1888 steeple collapsed and building reassembled; repaired 1950; roof replaced 1998; rehabilitated 2009	St. Philomena Church is a simple, gothic-style structure located northeast of Damien Road and southeast of Siloama. The church is L-shaped, with a 28 by 60 foot nave of wood and masonry wall construction with pointed arch openings. Clad with a combination of shiplap and board and batten siding, the church features a corrugated metal roof, and wood-frame windows. The northwest wing, which is the oldest section of the church, measures 14 by 18 feet and is of wood frame construction. There is an entrance portico with a circular decorative window and wood shingle roof. A 30-foot-high bell tower with a metal cross is located at the southwest entrance. Services continue to be held at this location for special feast days and commemorative masses.		
Siloama Church Stone Wall	C	56605	Circa 1870	The Siloama Church Stone Wall is a volcanic boulder wall is approximately 3 feet tall that encloses the Siloama churchyard on all four sides, establishing a precinct that measures approximately 200 by 300 feet. Entrances are marked by 2 by 2 by 3 foot high concrete pylons spaced 4 feet apart. Metal turnstiles are in the center of the south and west pedestrian entrances. At the wider vehicular entrance from Damien Road on the southwest side of the property, there is a wooden double gate. The southwest wall connects to the St. Philomena Church Stone Wall.		

Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
St. Philomena Church Stone Wall	C	56604	Circa 1870; repaired 2006	The St. Philomena Catholic Church Stone Wall is a dry stacked lava rock. The wall edges the property along Damien Road. The wall stands 2 to 3 feet in height and is 2 to 3 feet wide. It extends northwest to Siloama Church before turning southeast and northeast to bisect Moku Puakala, forming the division line between the Kalawao cemeteries. A pair of piers mark the entry through the wall and the walk leading to the church. The piers are octagonal concrete pylons that measure approximately 2 by 4 feet. Several smaller stone walls intersect the main wall to create discrete areas adjacent to the church. Piers also mark the entry into Cemetery Q.		
Rock walls and ruins	C					
Old Stone Water Reservoir (Kalawao Reservoir, Damien Road Cistern)	C	56558	1886	Located to the north of Damien Road as it approaches Kalawao is a stone reservoir, open to the air, located on a small natural rise. The structure is nearly square in plan, and measures 25 feet on a side. It is enclosed by walls approximately 8 feet high and 4 to 5 feet thick. The interior is concrete-coated.		
Baldwin Home Gate and Walls	C	573984	circa 1890s; repaired 2014	A dry stacked volcanic boulder wall edges the Old Baldwin Home site along the southwest side of Damien Road. The wall is approximately 200 feet long and 3 to 4 feet high. The entrance to the former Baldwin Home for Boys is marked by 5-foot high pylons at the northwest side at the margin of a 40-foot break in the wall. A concrete gate pier with a pyramidal cap is believed to mark the location of Joseph Dutton's residence. Wooden posts extend above the top of the wall as it edges Damien Road.	The piers are cracked and broken in places. Portions of the walls are collapsing.	


Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Judd Park Pavilion (Kalawao Pavilion, Kalawao Picnic Pavilion, Kalawao Pavilion – Judd Park)	C	342332	1950; repaired 2014	The Judd Park Pavilion serves gathering and picnicking functions as part of Judd Park, located at the eastern end of Kalawao overlooking the eastern shore of the peninsula. The park occupies the site of the former U.S. Leprosy Investigation Station. The wood-frame pavilion is open-air, although one corner of the structure has been walled-in and converted to a restroom. The wood floor is approximately 2 feet above grade. The area was first used as a picnic and luau grounds in 1948 by the Kalaupapa Lion Club.		
Kalawao Picnic Shelters 1 and 2	C	573907	1935	The wood frame garage is located next to the Calvinist Parsonage. It is a square, wood frame structure that measures 24 by 24 feet.		
Shed 723	NC		1991	A wood frame shed is located near Judd Park Pavilion.		
Retaining wall and pipe railings	C			A concrete retaining wall topped with metal pipe railing painted black marks the entry into Cemetery Q where the ground drops away adjacent to St. Philomena Church.		
Grave wall and fencing	C			Father Damien and Joseph Dutton's graves are edged by low concrete walls topped with wrought iron and metal pipe perimeter fencing.		
Wood safety fence at Judd Park overlook	NC			A wood board and post fence edges the overlook at the eastern end of Judd Park to protect visitors from the steep drop and cliff below.		


Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Damien Road sign	NC		post 1969	Located along Damien Road near St. Philomena Church is a stylized routed wood sign marking Damien Road.		
St. Philomena Sundial	C	573972	by 1969	Located north of St. Philomena Church is a sundial that measures 3.5 feet in height, and sits on a 3-foot-square base composed of volcanic rock bound with cement. The base is inset with an inscribed marble plaque. The gnomon is missing.		
Grave markers, Cemeteries P, Q, and R	C		mid-nineteenth century through mid-twentieth century; repaired and lime washed early 2000s	Grave markers of various sizes, styles, and materials, are present within Cemeteries P, Q, and R. These include the graves of Father Damien and Joseph Dutton.		
Wood signs	NC			Along the Baldwin Home wall is a sign that notes "Danger Hunting Zone 3." At the Judd Park overlook is a wood sign that notes "Caution No Entry." Located further north is a wood sign that notes "Warning Dangerous Cliff." Many of the signs are wood panelled mounted on wood posts with routed lettering painted white. Along Damien Road near the U.S. Leprosy Investigation Station is a taller wooden post with directional signs nailed to different faces indicating the direction in which certain geographic features are located, such as Judd Park and Okala Island. Nearby is a wooden sign that notes "Warning Falling Coconuts."		


Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Wayside exhibits	NC			Wayside exhibits are located along Damien Road that interpret Baldwin Home, St. Philomena Church and Cemetery, the U.S. Leprosy Investigation Station, Siloama Church, and the stone bakery chimney ruins.		
Utilities	NC			Fire hydrant and hose box are located near Siloama Church.		
Archeological Resources						
‘Ahina Heiau	C			The ‘Ahina Heiau is a pre-Settlement site located on a steep hillside overlooking the mouth of Waikolu Stream, approximately 1 mile east of Kalawao. It includes a three-room oval structure composed of basalt boulders enclosed by a stone wall on the west and an earth embankment on the east.		
Kalaehala Heiau	C		pre-Settlement	The Kalaehala Heiau is a pre-Settlement site located on a steep slope above a boulder beach east of Wai‘ale‘ia stream. It consists of basalt boulders and cobbles with walls and a stone-paved terraced. There is also a small structure located to the northwest, and a long wall that angles off to the southeast.		
Ko‘a at Wai‘ale‘ia	C		pre-Settlement	The Ko‘a at Wai‘ale‘ia is a pre-Settlement feature located under the pali southwest of the mouth of Wai‘ale‘ia Stream. It was built around a basalt boulder and consists of a boulder and cobble-walled enclosure and terraces. The remains of a rectangular house are located nearby.		
Kawaha‘alihi Heiau	C		pre-Settlement	The Kawaha‘alihi Heiau is a pre-Settlement feature located at foot of a cliff near central Kalawao. It is a large heiau with a wall that retains the slope behind with basalt boulders and cobbles. The terrace floor features enclosures and pits, while additional enclosures are located below and to the northeast.		

Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Kanakaokai Tomb	C	56518	Nineteenth century; repaired early 2000s	<p>The Kanakaokai Tomb is located outside the western Siloama churchyard wall. The tomb is a 6 by 10 by 2 foot-high concrete-over-stone rubble structure with an arched top. It marks the grave of a prominent kama'āina—Kanakaokai—one of the residents of the peninsula displaced to make way for the settlement. Kanakaokai was a konohiki (headman or land division administrator) in Kalawao when the Act to Prevent the Spread of Leprosy passed in 1865. He initially traveled to Kalaupapa as a missionary during the 1830s, and may have been involved in the construction of a mission house in Kalaupapa in the late 1840s, the predecessor of the Old Stone Church built in 1853. The site includes a relatively intact boundary wall that can be traced to a 43-acre land grant awarded to Kanakaokai after the 1848 Mahele, which privatized Hawaiian land. The grant was for a place called Kuololimu within the Kalawao ahupua'a on the east coast of the peninsula. Records indicate that Kanakaokai was awarded land in topside Molokai in exchange for his land in Kalawao following passage of the 1865 Act. The presence of the tomb at Kalawao suggests that he may not have relocated, or retained a strong attachment to the land and importance to the community. This unique and significant resource represents the experiences of the kama'āina and their role in the early development of the settlement.</p>		
Coastal Plain	C			<p>The Coastal Plain site is located along the coast northwest of the central Kalawao area. It includes a variety of pre-settlement and settlement era features. Settlement era features include a rectangular stone enclosure that may have held livestock, and several concrete slabs that were part of the East Coast Peninsula Pier. Also present are a number of house sites that appear to pre-date the settlement but may have been reused by Kalawao residents.</p>		

Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
North of Road Site	C			The North of Road Site is located between the Cistern Area North site to the west, the Coastal Plain to the east, and the two churches to the southeast. It is composed primarily of stone enclosures and walls that may reflect presettlement use adapted by Kalawao residents. A 1906 survey map indicates the presence of a Church of Jesus Christ of Latter-day Saint church in this area, although no surface building remains are visible.		
South of Road Site	C			The South of Road Site is located between the Baldwin Home for Boys Site and the Cistern Area South site, southwest of Damien Road. The site consists of dispersed features, mostly dating to the pre-settlement era. There are also settlement-era features that include a historic habitation site, a dense scatter of historic artifacts, and the remains of a wood post and stone pier house.		
“Downtown” Kalawao	C		Mid- to late-nineteenth century	The “Downtown” Kalawao site is located southwest side of Damien Road between the Cistern Area South site and the Store Area. The site includes terraces, low stone walls, historic era plantings including eucalyptus and ylang ylang trees, and an imu or earth oven. Archeologist James Flexner suggests that the large concentration of surface remains indicates “that this area was bustling with residential and social activity throughout the late-nineteenth century.”		

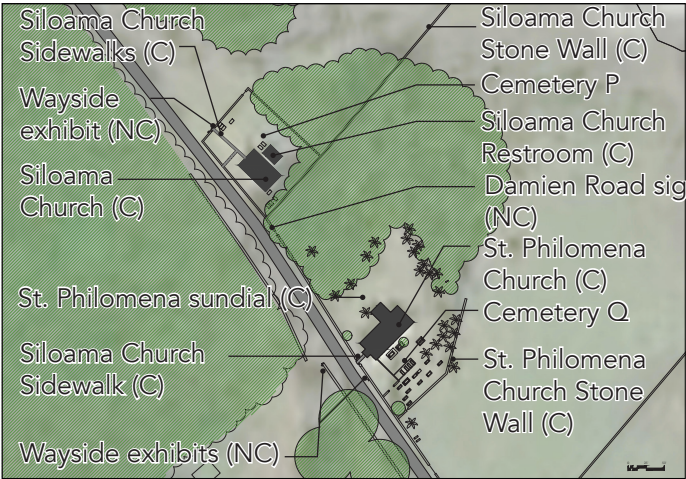
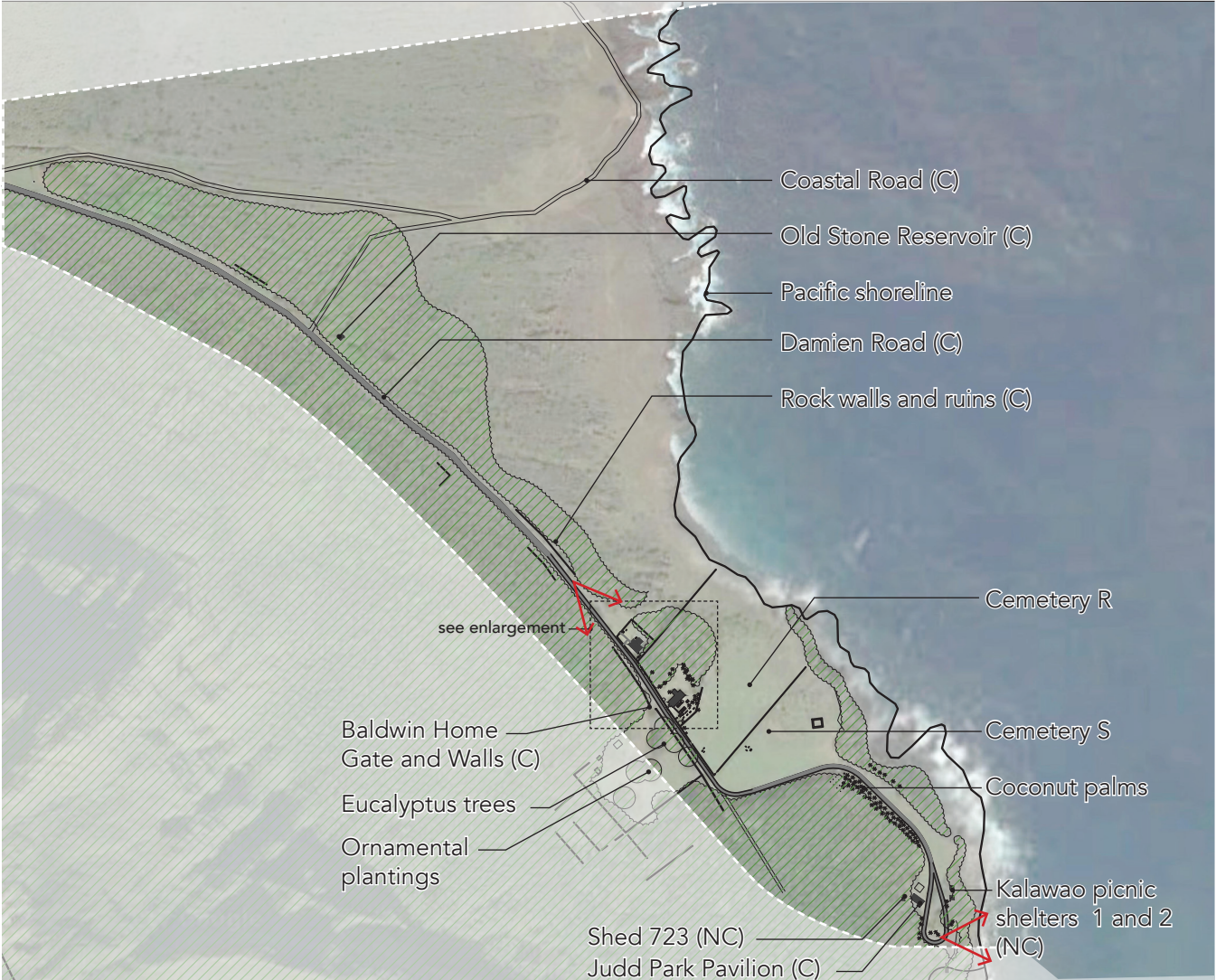
Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Store Area	C		1873; abandoned late nineteenth/ early twentieth century	The Store Area site is located southwest of Damien Road, across from the Hospital site. It is indicated on a 1906 Hawai'i Territory Survey Map as the "Old Store," a government-run commercial operation that supported the Kalawao Settlement. The site appears to contain evidence that the settlement-era structure was built above or incorporated pre-settlement features, such as terraces and stone walls and enclosures. It also features a depression containing a scatter of bottle glass and ceramics, a stone masonry feature with a metal water spigot near the road, and stone enclosures to the west that may have held livestock.		
U.S. Leprosy Investigation Station Ruin	C	21178	1908; abandoned 1913; removed 1929	Located on the far southeast side of Kalawao, the U.S. Leprosy Investigation Station Ruin consists of foundation piers and chimney falls spread over an area of approximately 100 by 400 feet. The site includes approximately 100 1 by 1 foot square concrete piers, 1 to 8 feet high, spaced approximately 12 feet on center and three chimneys. The buildings were designed in a so-called "bureaucratic-baroque style" popular at the time. The buildings included wide verandas, high ceilings, and black-painted wood floors to reduce glare.		
Administrator's House Ruin (Doctor's House Ruin)	C	56556	1908; razed 1929	The Administrator's House Ruin consists of approximately thirty-six concrete foundation piers, measuring 14 by 14 inches, and 6 to 8 feet high, arranged in a grid approximately 30 by 40 feet in size. Concrete grade beams and 5 foot walls span between some of the piers on the west side of the site. The dwelling was built to provide staff housing for the U.S. Leprosy Investigation Station.		

Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Pharmacist's Quarters Ruin (Gibson House Ruin)	C		1908; razed 1929	Located northeast of the Administrator's House is the site of the Pharmacist's Quarters, a support structure associated with the U.S. Leprosy Investigation Station. The site consists of approximately thirty-six concrete foundation piers, measuring 14 by 14 inches and up to 5 feet high, set in a grid that measures 30 by 40 feet. The site also includes the remains of a toppled concrete chimney.		
"Fraid House" Ruin (Storm Shelter Ruin)	C		1908; removed 1929	The "Fraid House Ruin" is located behind the Pharmacist's Quarters Ruin. It served as a living space, and later a storage structure, during operation of the U.S. Leprosy Investigation Station. Surviving evidence of the structure includes four stone walls capped by concrete beams.		
Baldwin Home for Boys Ruins	C	21177	1894; abandoned 1932; burned 1936; debris cleared circa 1950	The site of the Henry P. Baldwin Home for Boys, which operated between 1894 and 1932, is located southwest of Damien Road, across from St. Philomena Church. The site measures approximately 2.5 acres, and is partially enclosed by a 200-foot-long stone wall. The site contains a number of visible features including a kitchen ruin (see below), water garden, wash house foundation, plantings, circulation features, terrace walls, and house sites. A chimney fragment marked with the inscription "ALBERT GALASPO. AUG. 1910" may represent the site of the Kalawao Bakery. Early on, the Baldwin Home for Boys included twenty-nine buildings, such as cottages and support structures. It was later expanded to approximately fifty-five buildings. The site may have been built atop a series of heiau and pre-settlement agricultural terraces. The Baldwin Home for Boys was abandoned following the death of Joseph Dutton. The site was chosen as the location for the Kalaupapa Memorial, authorized by President Barack Obama in 2009.		



Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Baldwin Home Kitchen Ruin	C	56603	Circa 1894	The Baldwin Home Kitchen Ruin is located within the Baldwin Home for Boys site. It contains the remnants of a fireplace and chimney, a wall, concrete foundation, and concrete trough.		
Kalawao Slaughterhouse Chimney Ruin	C		Circa 1894	The Kalawao Slaughterhouse Chimney Ruin is located along Damien Road at the far west end of Kalawao, between the Kalawao Bakery Chimney Ruin and the Damien Road Heiau. The site is comprised of stone debris associated with the slaughterhouse, such as the chimney and an oven. Dry stacked rock walls surround the site.		
Kalawao Bakery Chimney Ruin	C	21180	Mid- to late-nineteenth century	The Kalawao Bakery Chimney Ruin is located on the north side of Damien Road at the west end of Kalawao. The site features an approximately 12-foot-high stone fireplace comprised of lime mortared uncut stones, and the ruins of a large rectangular enclosure and free standing rock wall. The remains of a stone-lined hearth is visible in the middle of the eastern wall. There are also rubble heaps that represent collapsed walls.		
Hospital	C		Complex built 1868	The site of the former Kalawao Hospital is located to the northeast of Damien Road, northwest of central Kalawao, and across the road from the Store Area site. The site consists of the remains of a stone wall associated with the Hospital. The wall measures approximately 45 feet in length. It is oriented east to west. It enclosed a complex that consisted of barracks, a dispensary, and a kitchen organized around a central plaza.		




Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cistern Area North	C			This archeological site is located on the northeast side of Damien Road on the northwest side of central Kalawao. The site contains a variety of features, but is named for a rectangular stone cistern, also known as the Old Stone Water Reservoir, which was part of the historic water system. The site occupies a natural rise and is surrounded by stone walls, terraces, building platforms, enclosures, and scatters of historic artifacts. It includes a terrace with a standing stone that may have had ritual importance as a shrine to the deity Kāne. Stone walls leading north continue beyond the surveyed area, possibly connecting with remains of the pre-settlement field system.		
Northwest of St. Philomena Church	C			Located northwest of St. Philomena Church, this site consists of a large mound and several depressions, possibly indicating the location of Father Damien's first house or his later, larger residence. Associated with the site is a row of ironwood trees along the church boundary wall that may have been planted as a windbreak for the property during the late nineteenth century. Patches of wild tobacco are also present. These may be descendants of plants originally planted by Father Damien or one of his associates for his personal use.		
East Coast Peninsula Pier (Crane Site, the Boom Site, Boom Site Landing)	C	793338	Circa 1870s	Located along the eastern shoreline one-half mile north of Siloama Church, the East Coast Peninsula Pier site is a former boat landing and unloading area associated with the Kalawao community. The site featured a boom, concrete pad, and piers used to unload supplies to the steep sea cliffs from boats anchored below. A concrete walkway and steps accommodated debarking passengers. The site contains evidence of a formed concrete pier and the concrete walkway and steps.		



Kalawao Resources Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cistern Area South	C			This archeological site is located to the southwest of Damien Road, across from the Cistern Area North site and southeast of central Kalawao. The site is primarily associated with pre-Settlement use, although there are later additions that relate to Kalawao community period occupation, including a series of free-standing, core-filled walls.		
Missing Features						
<i>Baldwin Home for Boys</i>						
<i>U.S. Leprosy Investigation Station</i>						
<i>Kalawao community</i>						
<i>Agricultural fields and pasture</i>						









Siloama Church and St. Philomena Church

Kauhako Crater Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Volcano landform			pre-Kalaupapa Settlement	Kauhakō Crater is the caldera of a volcano landform. The Kauhakō Crater character area focuses on this landform, which rises dramatically 400 feet above the relatively level plain that is associated with the rest of the Kalaupapa Peninsula.		
Freshwater lake			pre-Kalaupapa Settlement	The interior of Kauhakō Crater features one of the deepest volcanically-formed freshwater lakes in the world.		
Windward dryland forest			pre-Kalaupapa Settlement	The plant community associated with the windward dryland forest present within the character area is believed to be among the last remaining examples of this fragile Hawaiian island type in the world.		
Patterns of Spatial Organization						
Rock wall grave enclosures			Likely nineteenth century	Near the summit of the western rim of the crater are several rock wall enclosures that mark the location of approximately twenty-two graves. The walls edge Crater Road to the east, approximately mid-elevation, and west near the summit. The rock enclosures, grave markers, and several associated small trees convey a sense of intimacy and enclosure along the road prior to the expansive views afforded at the summit.		
Views and Vistas						
Expansive views of the peninsula and Kalaupapa Settlement, sense of prospect			pre-Kalaupapa Settlement	Expansive views of the peninsula to the north and the Kalaupapa Settlement to the west are available from the western rim. These views have inspired and engendered profound responses in residents as well as visitors. These views are beginning to be impacted by encroaching invasives		

Kauhako Crater Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Views to the crater interior			pre-Kalaupapa Settlement	Views to the crater interior are available from the western rim.		
Linear view associated with the Crater Road corridor			By 1938	Woodland edging Crater Road forms a dense visual edge and establishes a linear view corridor associated with passage along the slopes. The linear view opens slightly with the rock wall enclosures of the burial grounds before the road reaches the summit and expansive views to the north and west.		
Circulation						
Crater Road	C	793345	Trail by 1938; road formalized by 1950	Crater Road is a steep, unpaved, looped two-track that extends between Damien Road and the western rim of Kauhako Crater. Crater Road measures approximately 2,600 feet in length.		
Interior Road to Kauhako Crater	C		by 1938; formalized by 1964			

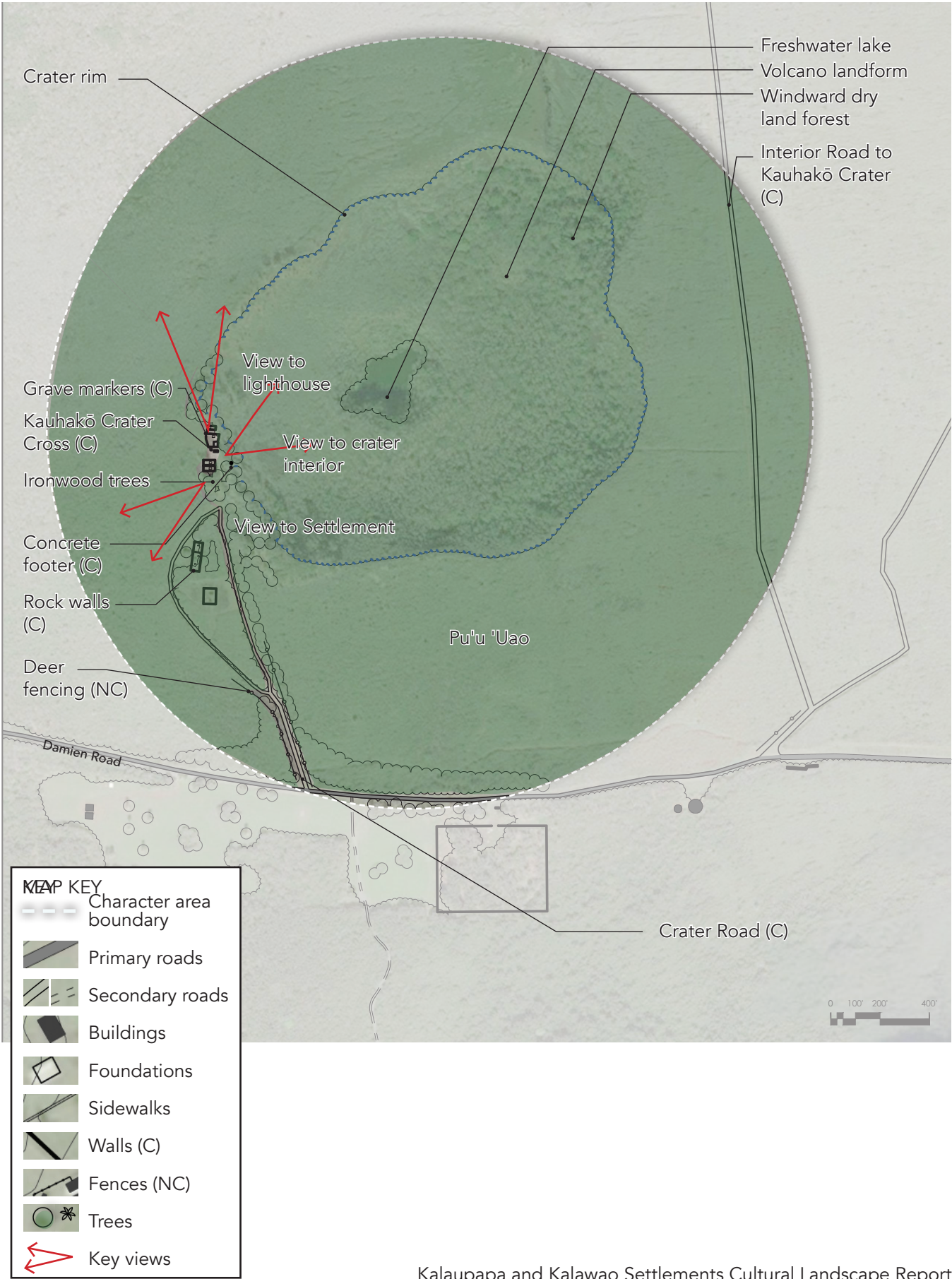
Kauhako Crater Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cultural Vegetation						
Cultural vegetation			Nineteenth and twentieth centuries	<p>Tree species associated with the crater that traditionally served as a source of food and craft—specifically breadfruit and wiliwili trees. It is not clear whether these species remain present within the crater landscape today. Some of the important flowering plants have been described in interviews:</p> <p><i>People bring flowers for the grave. The seed start blowing away, and it gets in the sand and come May, it blooms. It looks like daises, all different colors, and it was just beautiful down there. Across the road, there's wildflowers—white kind daisies. Yellow. It was so nice to see the flowers just blooming, and then you look up the [Kauhako] Crater from the graveyard going to the airport, it just a blanket of flowers. I am just sorry I never took pictures or video of that. You see, cameras are taboo in Kalaupapa. When they see you get one camera, they take that away. Taboo! You cannot. They even turn you in if you get one camera.</i></p> <p>Additionally, flowers for lei were collected at the crater. Lei have traditionally been an important Hawaiian craft dating to ancient times. The materials for lei, including seeds, fruits, and flowers, were traditionally collected from nature. Patients often asked their kōkua to collect orange wiliwili seeds from the crater.</p>		
Trees growing within grave enclosures			Nineteenth and twentieth centuries	<p>Ti plants have been noted in association with both heiaus, and is an important plant culturally within the Settlement, both pre- and post-Settlement.</p>		

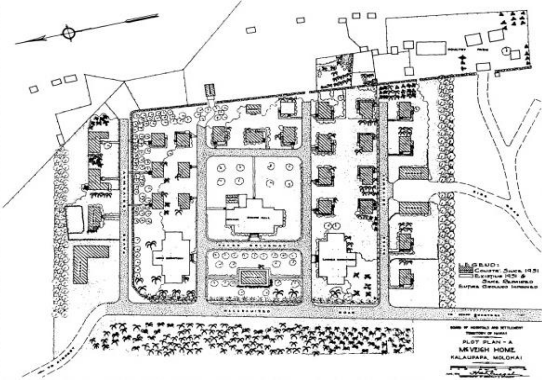



Kauhako Crater Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Invasive species (including ironwood)				The crater landscape has been heavily impacted by invasives, including lantana, Christmas berry, and ironwood. Colonies of invasives outcompete and displace native plant communities. In addition, much of the Crater landscape is difficult to access due to thick stands of lantana and Christmas berry. Stands of ironwood trees are expanding near the crater rim and beginning to alter the character of the open space, as well as the views.		
Buildings and Structures						
Rock walls	C		Nineteenth and twentieth centuries	Stacked lava rock enclosures edge Crater Road to the east as it approaches the crater's western rim. Additional walls are located to the west of the road at the rim. The rock walls protect burial sites, both marked and unmarked, that collectively comprise Cemetery N on Kauhakō Crater. The rock walls stand between 3 and 4 feet in height. They taper from approximately 3 to 2 feet in width between the base and the top.		
Deer fencing	NC		Post 1969	Portions of the crater have been fenced by the National Park Service since the 1990s to control deer populations. The fencing is woven wire, with metal posts. Although they serve a very different purpose, the new fencing has been a source of controversy, due to associations the community has had with fencing and its use in segregating patients from their families and others.		
Small-scale features						
Kauhakō Crater Cross	C	56602	1956	The Kauhakō Crater Cross is a commanding structure with a strong visual impact on the landscape. The concrete feature, which is located at the top of the western rim of the crater, stands 20 feet in height and has a 12-foot cross bar. The cross is mounted on a 4-by-5-foot stepped concrete base. Both the cross and the base are painted white. The base features an inscription that reads "Love never faileth."		






Kauhako Crater Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Grave markers	C		Nineteenth and twentieth centuries	The grave markers associated with Cemetery N vary in form, scale, and materials. Several are structures composed in architectural forms from lava rock covered with a concrete slurry. Others range from elaborate crypts to upright slabs. One of the crypts has distinctive wooden door leading to the remains of William K. Notley. The markers are sometimes inscribed with text and/or Christian symbology. Several have inscriptions written in Hawaiian. The impressive site atop the hill, together with the large size of each tomb, suggests that they are graves of individuals who were of considerable social status. These graves are believed to be associated with the Mormon Church or Church of Latter Day Saints.		
Concrete footer	C		1908	Concrete footer on the crater rim is etched "1908 Heilbron" with a metal rod extending through the concrete.		
Archeological Resources						
Holua	C		Pre-Kalaupapa Settlement	Located along Crater Road is a pre-settlement heiau feature known as a holua, or toboggan slide. The holua is composed of basalt boulders and cobbles piled to form a 90 by 120 foot platform from which the slide descends down the steeply-sloped outer southern edge of the Kauhako Crater. The slide is overgrowth with invasive vegetation		






Kauhako Crater Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Kauhakō Crater Sites	C		Pre-Kalaupapa Settlement	There is a residential and agricultural complex site that dates from either the late pre-contact period or early historic period located within the crater and along its upper benches. The complex is composed of habitation sites, caves and rock shelters, storage enclosures, and a large rectilinear arrangement of agricultural terraces.[1] The sheltered floor of the crater is known to have been planted with sweet potatoes and other vegetables as part of these complexes. There is evidence that the sloped ground was terraced to facilitate farming.		
Heiau	C		Pre-Kalaupapa Settlement	Located on the north side of Kauhakō Crater on the slope of a lava stream or gulch is an undocumented heiau composed of two rooms formed by basalt boulder and cobble walls. The feature measures approximately 18 by 27 feet. Associated with the walls is an area of stone paving that measures approximately 9 by 27 feet.		
Pre-settlement rock walls	C		Pre-Kalaupapa Settlement	Several examples of prehistoric rock walls, rock enclosures, and wall segments of various heights, lengths and uses have been documented by archeologists within the more level areas north of the crater. Many are overgrown, and it is likely that dense vegetation obscures additional features not yet undocumented.		
				Field ecologist Jeffrey Trainer, who was involved in removal of invasive species while stationed at Kalaupapa, commented on his experience working in the vicinity of the crater:		




Kauhako Crater Resouce Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
				<p><i>The best reference I had, when first came, I talked to John Kaimikaua. He's a Kumu Hula. I think he lives on Kauai. I think his hanai grandmother up here gave him a stack of chants on Molokai and supposedly he's the most knowledgeable about Molokai through the chants about anything from heiaus to the starting of the makahiki games. ... He said there were a couple of graves where people were buried. We did find one ... When I cleared the trail around the rim, or at the eastern rim of the crater, there was a bunch of archaeological sites, and I thought ... So this really was something ... it's just neat hearing that, then going and finding that it was really there because my view of legends is, like, you have to believe maybe some aspects of them, but some aspects are added on, or how truthful are they. So it's always nice to go have it proved afterwards.</i></p>		
Missing Features						
<i>First cross</i>			1946	Replaced by current concrete cross in 1956		










McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Patterns of Spatial Organization						
Formal arrangement of the built cluster centered on an orthogonal system of internal roads				McVeigh Home was designed as a tightly-knit community, with modest buildings set along a grid of four narrow streets extending east from McVeigh Home Street and two cross streets. The buildings used by the community as a whole are set apart like objects in open turf areas, and arranged with a nearly symmetrical geometry. These buildings are edged by streetscapes of structures with consistent setbacks.		
Field				Fencing, mown		
Views and Vistas						
View to the Molokai Light Station						
View to the pali						





McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Staff Street	C	793346	The road likely dates to the early twentieth century. It was paved in 1935, and repaired and resurfaced between 1956 and 1958, and again in the early 2000s.	Staff Street edges McVeigh Home to the west. It provides access to the system of internal roads associated with the housing complex, and likely has been present in its current configuration since the late nineteenth or early twentieth century. Staff Street is an asphalt- and crushed volcanic rock-paved two-way road corridor that extends approximately 1,350 feet in a south-north direction between an unimproved road north of McVeigh Home and Beretania Street to the south. A historic dry stacked rock retaining wall and culvert lines the west edge of the road near the McVeigh Home.		
McVeigh Road/ McVeigh Home Paving and Curbs	C	56532	1931-1936	McVeigh Home is characterized by an internal network of four east-west and two north-south paved roads that provide access to each of the buildings. The roads are paved with asphalt and crushed volcanic rock, range in width from 12 to 18 feet, and are edged by 6 inch tall segmented concrete curbs (Figure 203). In total, there are approximately 1,380 feet of road associated with McVeigh Home.		
Sidewalks	C		1931-1936	Concrete sidewalks provide access to the main entrances to most of the buildings located within McVeigh Home. The sidewalks are typically 3 feet wide.		
Access roads	C		By 1969	Unpaved access roads extend to a field north of McVeigh Home, as well as to the south toward Staff Row.		
Cultural Vegetation						
Coconut palms			1930s	A double row of coconut palm trees edges Staff Street to the west of McVeigh Home.	Some dead or dying	







McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Ironwood trees			Undetermined	Ironwood trees were planted to demarcate the northern and southern margins of McVeigh Home historically.		
Ornamental trees and shrubs				Ornamental tree and shrub plantings are associated with many of the group or public buildings located within the McVeigh Home complex. Among the notable species are plumeria and shower trees.		
Individual residential plantings				Individual residences have been planted with a wide range of plant material, including hedges, trees, shrubs, foundation plantings, and plantings for food and flowers. Among the notable plants are mango, chili pepper, citrus, banana, and crown flower. A high hedge edges the road in front of McVeigh Home Residence 13. Several trees of cultural interest are associated with the yard of McVeigh Residence 2.		
Buildings						
McVeigh Home Garage	C	56554	1934	The McVeigh Home Garage is a large structure that can house up to seven cars. It is located along the northernmost street of the complex, and anchors the northwestern corner of the cluster of group or public buildings. The wood-frame single wall building is L-shaped and measures 50 by 60 feet. It features a concrete slab foundation and vertical plank siding with lattice vents.		
Nahoopii Residence (DOH House – Nahoopii, DOH House – D'Arcy)	C	56553	1936	The Nahoopii Residence is located adjacent to the McVeigh Home Garage, and is one of the larger residence within the complex. The floor plan is irregular, but predominantly square in shape. The wood-frame, single wall building measures 24 by 32 feet. It features a wood post and concrete foundation with horizontal skirting, board and batten siding, a hip roof with green asphalt shingles, and 12-light wood sash screened double hung windows. There are two wood entry porches on the front, and a rear addition.		





McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Gaspar Residence (DOH House – D. Hashimoto)	C	56551	1934	The Gaspar Residence edges the Nahoopii Residence to the east. It is a single story, wood-frame, single wall residence, one of the larger ones within the McVeigh Home complex. The Gaspar Residence features an irregular double L-shaped plan, and measures 30 by 30 feet. The residence features a wood post and concrete pad foundation with horizontal skirting, board and batten siding, a hip roof with red asphalt shingles, and 12-light screened wood double hung windows. There is a wood entry porch and steps on the south elevation, and a shed addition at the rear with a stone foundation and two tongue and groove walls. A roofed porch structure was added to the south elevation in 2014-2015.		
McVeigh Storage Building (McVeigh Home Wash House)	C	55717	by 1950; altered 1990.	The McVeigh Storage Building is a single story outbuilding located north of the Gaspar Residence. The wood-frame structure measures 8 by 12 feet, and features single wall construction with a concrete slab foundation, board and batten siding, and a gable roof covered with rolled asphalt. It has been converted from its origin use as a laundry room.		
Shed near McVeigh Storage Building (Shed near McVeigh Home Wash House)	C	56552	circa 1950; altered 1990.	Also located northwest of the Gaspar Residence is a wood frame shed that measures 31 by 22 feet. One side is used as a shed, while the other serves as a carport. Walls are plywood, while the partially collapsed roof is flat with asphalt shingles.		
Nalaie lua Residence (DOH House - Nalaie lua; DOH House – Mollena)	C	56549	1930-1932; repairs 2010	The Nalaie lua Residence is a single story, wood frame structure located south of the northernmost road in the McVeigh Home complex. The building measures 18 by 22 feet and features a wood post and concrete pad foundation with vertical skirting, vertical tongue and groove siding with broken girt and corner boards, an irregular broken-pitch hip roof with red asphalt shingles, and screened 12-light wood double hung windows. The front has a wood entry porch with steps. The floor plan is similar to that in the William Kaakimaka Residence, McVeigh Card Room, and Ed Kato's Studio.		






McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Hashimoto Residence (DOH House – Hashimoto; DOH House – T. Tanaka)	C	56550	1934	The Hashimoto Residence is a single story, wood-frame, single wall structure located to the east of the Gaspar Residence. The L-shaped dwelling measures 30 by 30 feet, and features a wood post and concrete pad foundation with horizontal skirting, board and batten siding with no girt, a hip roof with red asphalt shingles, and 6-light screened wood double hung windows.		
McVeigh Dormitory (Mens' Dormitory; NPS Dormitory)	C	21056	1929; altered 1978; rehabilitated 2003	The McVeigh Dormitory is a single story that falls within the public building core at the west of the complex between the northernmost and second streets. It is a mirror of McVeigh Home Building 12. The wood frame building measures 40 by 60 feet, and features a wood post and concrete pad foundation, vertical tongue and groove siding with a broken girt, corner boards, a water table, fascia, lattice work, and 12-light double hung wood windows that project several inches from the exterior wall. The main hip roof has louvered gablets, and hip roofs on the wings at the east and west ends of building, clad with asphalt shingles. A recessed lanai runs the length of the main wing at the south elevations.		
McVeigh Card Room (NPS House – Kaawaloa, NPS House – Lee)	C	56509	1932	This single story, wood-frame, single wall building is east of McVeigh Dormitory. The nearly square structure measures 18 by 22 feet, and features a wood post on concrete pad foundation with vertical skirting, vertical tongue and groove siding with broken girt and corner boards, and a broken-pitch irregularly shaped hip roof with asphalt shingles. The floor plan is similar to that used in the William Kaakimaka Residence, Nalaei lua Residence, and Ed Kato's Studio.		
William Kaakimaka Residence (DOH House – Kaakimaka, NPS House – W. Hashimoto; NPS House – Harte)	C	56548	1932	The William Kaakimaka Residence is located at the eastern end of the street below the northernmost in the McVeigh Home complex. It is similar to Ed Kato's Studio, McVeigh Card Room, and Nalaei lua Residence.		







McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
McVeigh Pool Hall (McVeigh Pavilion)	C	21055	1932; enclosed 1938 so residents could play ping pong; rehabilitated 2005.	McVeigh Pool Hall is located in the center of the public or group home cluster of buildings adjacent to Staff Street, and west of McVeigh Social Hall, and is a focal point of the community. The symmetrical wood frame, single wall building measures 22 by 38 feet. It features a concrete slab with stone edge foundation and a hip roof with asphalt shingles. There are two pilasters on each elevation and one at each corner that articulate the edges of the building. Windows comprise a great area of the walls on all facades. Many are on tracks to slide open for ventilation.		
McVeigh Social Hall (McVeigh Home Recreation Hall, McVeigh Rec Hall, McVeigh Dining Hall, McVeigh Kitchen and Dining Hall)	C	21054	1929; converted to community center 1960; rehabilitated 2003	Located along Staff Street east of the McVeigh Pool Hall, McVeigh Social Hall was constructed to serve as the complex kitchen and dining hall. The building is symmetrical, measuring 40 by 56 feet. Along with the Bishop Home for Girls, St. Elizabeth Chapel, and Siloama Church, this is one of the few buildings in the settlement with double wall construction. The foundation is wood post and concrete pad with lattice skirting, while the siding is tongue and groove boards nailed vertically on both the exterior and interior. The roof is gable and clad with asphalt shingles. There are three wings that feature hip roofs. The recessed lanai has chamfered posts and tongue and groove planking. The building has been added onto several times. The McVeigh Social Hall has historically served as an important community gathering place for social events and entertainment.		
Boiler Room (Boiler Plant)	C	56510	1931-1932	The Boiler Room is a single story structure located at the northeast corner of the McVeigh Social Hall. The building measures 12 by 20 feet, and is constructed of reinforced concrete with a cement stucco finish and features Art Deco detailing. The roof is flat with a parapet.		








McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Gertrude Kaauwai Residence (Frasco Residence)	C	56547	1933	The Gertrude Kaauwai Residence is a one story building located in the central east section of McVeigh Home. The wood-frame structure measures 18 by 24 feet, and features single wall construction with wood post and concrete pad foundation with horizontal skirting, board and batten siding, a hip roof with red asphalt shingles, and screened 12-light wood double hung and jalousie windows. There is a wood entry porch with steps and a gate. The property is surrounded by a chainlink fence.		
McVeigh Home Wash House (McVeigh Laundry)	C	55713	1934; partially rehabilitated 2004; stabilized 2015	The McVeigh Home Wash House is located to the east of the Gertrude Kaauwai Residence. It was originally constructed as a community laundry. The wood frame building is one story and measures 20 by 30 feet, has a wood post and concrete slab foundation and a hip roof with rolled asphalt roofing.		
McVeigh Home Residence 12 (McVeigh Apartments, Ladies' Dormitory, DOH Dormitory)	C	21053	1929; altered 1930s and 1950; rehabilitated 2003	This single story building is located south of the McVeigh Pool Hall. It is a mirror of McVeigh Dormitory, which it faces across the grassy McVeigh quadrangle. The building was originally a dormitory, but later converted to four 1-bedroom apartments.		
McVeigh Home Residence 13 (DOH House – Carpenter, DOH House – K. Smith)	C	56507	1933	The McVeigh Home Residence 13 is part of a group of eight dwellings located along the southern two roads that are similar in scale, materials, and floor plan. The single story dwelling is wood frame and measures 20 by 22 feet. It features a wood post and concrete pad foundation with horizontal skirting, vertical tongue and groove siding with girt and corner boards, and a broken-pitch hip roof with asphalt shingles. There is a recessed corner entry porch with concrete stone steps; a post and pilasters articulate the edges of the porch. A partially enclosed exterior washroom with a concrete slab foundation and shed roof is located at the rear elevation. The dwelling is difficult to see from the road due the extent of the vegetation along the property line. A double gate provides access to the property along the western edge of the dwelling.		



McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
McVeigh Home Residence 14 (Brede Residence)	C	56545	1932	This residence is similar to and has the same floor plan as McVeigh Residence 13. The building is partially collapsed. A short chainlink fence surrounds the building.		
Elizabeth Kahihikolo Residence (Hayase Residence)	C	56506	1932	The Elizabeth Kahihikolo Residence is similar to and has the same floor plan as McVeigh Home Residences 13 and 14. A shed is located at the rear elevation.		
Leabata Residence (DOH House - Leabata)	C	56546	1932	The Leabata Residence is a single story building located at the eastern end of the block with the three residences described above. The dwelling is similar in appearance to the Elizabeth Kahihikolo Residence. There is an exterior washroom.		
Ed Kato's Studio	C	56501	1931; rehabilitated 2003	This residence has a similar floor plan and appearance to the four dwellings described above. Ed Kato was a resident artist whose work is displayed around the Settlement. Ed Kato's Studio is under consideration as a focus of future NPS interpretive programming.		
Nancy and James Brede Residence (DOH House - Brede)	C	56544	1933	This single story wood frame residence measures 30 by 30 feet and has the same floor plan as the Kahihikolo Residence. The house features a wood post and concrete pad foundation with horizontal skirting, vertical tongue and groove siding, a hip roof with red asphalt shingles, and screened wood 12-light double hung windows and some jalousie windows. There is a concrete entry porch with concrete block side rails. The property includes an exterior washroom, while chainlink fencing surrounds the building. Stone edging lines the fence along the driveway.		
Kahihikolo Residence (DOH House – Kahihikolo, NPS House – Vacant)	C	56543	1933	The Kahihikolo Residence is similar in appearance and has the same floor plan as the Nancy and James Brede Residence, which it edges to the east. The building measures 16 by 30 feet. There is an exterior washroom.		

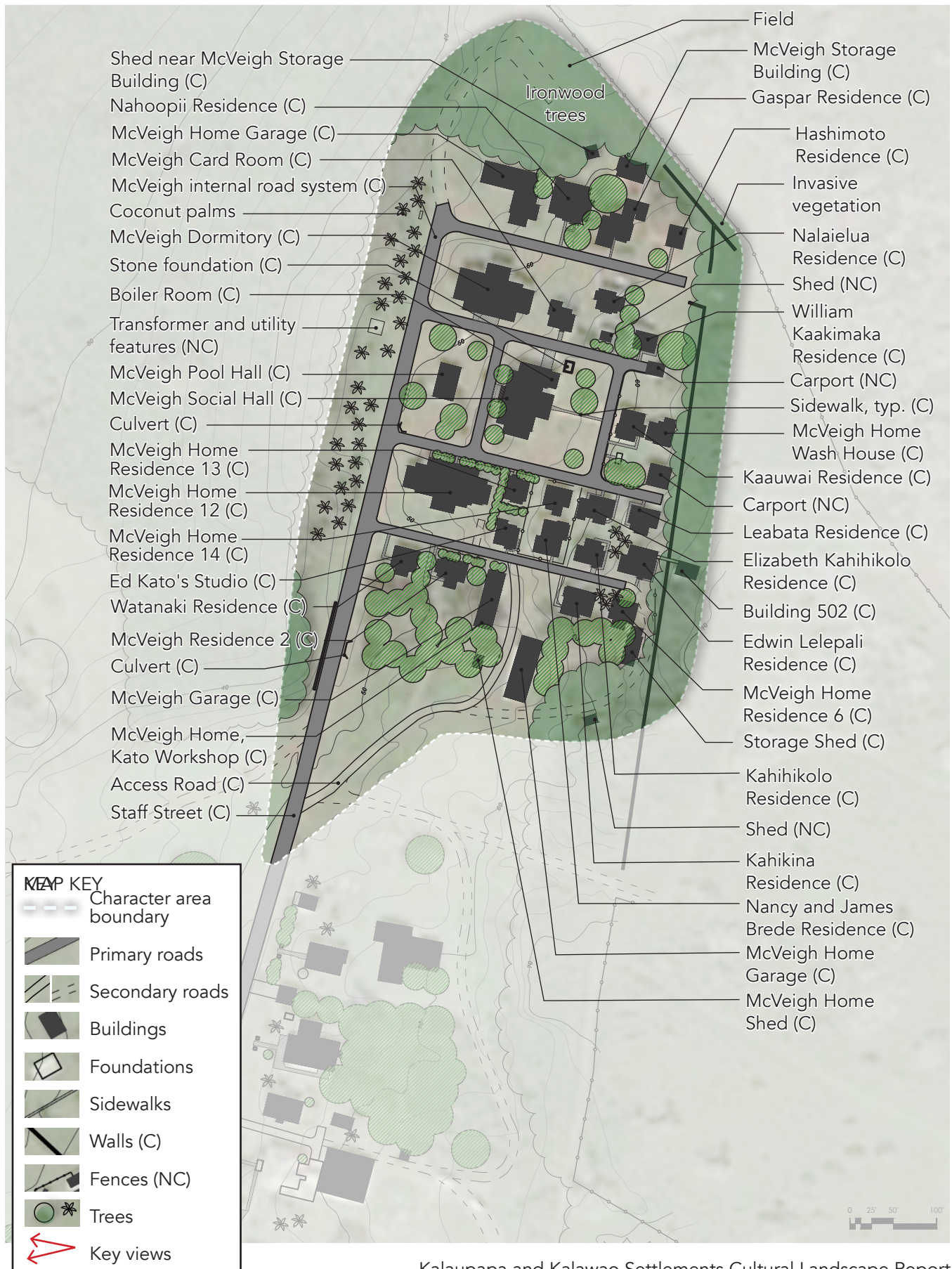
McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Edwin Lelepali Residence (DOH House – Lelepali)	C	56542	1933	The Edwin Lelepali Residence is located east of the Kahihikolo Residence. The single wall dwelling measures 16 by 30 feet, and features a wood post and concrete pad foundation with lattice skirting, vertical tongue and groove siding, and a broken-pitch hip roof with red asphalt shingles. There is a concrete entry porch with concrete block side rails. The building has an addition at the southeast corner, and a partially enclosed exterior washroom at the rear. Post and wire fencing was added to the yard in 2014.		
Building 502	C	331233	1930	Building 502 is located in the southeast section of the complex, east of the Edwin Lelepali Residence. The outbuilding measures 10 by 20 feet and has vertical board siding and a shed roof covered with rolled asphalt roofing. It may have supported former poultry farming activity in the area.		
Watanuki Residence (DOH House – Watanuki, NPS House – T. Hooper)	C	56508	1933	Located in the southwest section of the complex, the Watanuki Residence is a single story wood frame dwelling that measures 20 by 25 feet. The Watanuki Residence features a wood post and concrete pad foundation, board and batten siding with horizontal skirting, a hip roof with asphalt shingles, and wood double hung windows. There is a recessed corner porch with concrete stone steps.		
McVeigh Home Residence 2 (NPS House – Whiting, NPS House – E. English)	C	56505	1933; altered 1987 and 1998	McVeigh Home Residence 2 is a single story wood-frame dwelling located in the southeast section of the complex. It is T-shaped and measures 20 by 25 feet. The building features a wood post and concrete pad foundation with horizontal skirting, board and batten siding, and a hip roof with asphalt shingles. There is a wood porch on the west elevation with a shed roof. A washroom is located at the rear. Woven wire fencing and dense ornamental vegetation surround the building. The yard associated with the residence contains several trees of cultural interest.		

McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
McVeigh Garage	C	56504	1933; repaired 2012	The McVeigh Garage is open along the front with four bays separated by wood posts and diagonal bracing. It is located along the access road east of McVeigh Residence 2. The single story wood frame structure measures 18 by 32 feet, and features board and batten siding. An unattached shed edges the garage to the south.		
McVeigh Home, Kato Workshop	C	55710	circa 1950-1964	Located in the south section of the complex, the McVeigh Home, Kato Workshop is a single story building that measures 10 by 12 feet, and features board and batten siding and a shed roof finished with rolled asphalt roofing. It may have been constructed of recycled materials.		
McVeigh Home Shed	C	55712	circa 1950-1964	The McVeigh Home Shed is located in the south section of the complex, south of the McVeigh Garage. It is a wood-frame structure with corrugated metal siding in the rear and a corrugated metal roof. The shed is partially collapsed.		
McVeigh Home Garage	C	55711	circa 1950-1964	The McVeigh Home Garage accommodates six cars and is located in the south central section of the complex. The garage measures 20 by 60 feet. It is of metal and wood frame construction with open bays, corrugated metal walls, and a corrugated metal Quonset roof with metal framing members.		
Kahikina Residence (DOH House – Kato, NPS House – Vacant)	C	56503	1933; rehabilitated 2013	This single story wood frame cottage is located along the south side of the southernmost internal road. Measuring 25 by 25 feet, the Kahikina Residence features a wood post and concrete pad foundation, board and batten siding with horizontal skirting and no girt, and a hip roof with asphalt shingles. A small wood porch with a shed roof is located on the west elevation; a sidewalk leads to the porch and cottage entry. There is also a washroom at the rear. Also known as the Kato Residence, this building is related to Ed Kato's Studio and Workshop nearby.		

McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
McVeigh Home Residence 6 (DOH House – Lelepali)	C	56541	1933	This single story wood frame residence is located in the southeast section of the complex. It is T-shaped and measures 20 by 25 feet. The residence features a wood post and concrete pad foundation with no horizontal skirting, board and batten siding, a hip roof with rolled asphalt roofing, and wood 12-light windows that project several inches from the exterior wall. There is a recessed corner entry porch with concrete steps and a rear washroom.		
Storage Shed	C		by 1964; collapsed after 2012	The Storage Shed is collapsed. It is located in the southeast section of the complex, adjacent to McVeigh Home Residence 6.		
Shed/Carport	C		early 1960s	A one story Shed/Carport is located along the third internal road (north to south) across from the Leabata Residence. The wood frame structure measures 20 by 21 feet and features plywood siding, a concrete slab foundation, and a corrugated metal roof. The gable roof is asymmetrical and longer on the west end. The building is painted green.		
Carport	NC		1972-1977	At the end of the second street to the south of the northern end of McVeigh Home is a single car Carport adjacent to the William Kaakimaka Residence. The wood-frame structure measures 10 by 12 feet, has a concrete slab foundation, and a corrugated metal roof.		
Shed	NC			This shed is located along the northernmost internal road.		
Shed	NC			This shed is located along the southeastern margin of McVeigh Home.		
Stone foundation east of the Boiler Room	C		by 1969	A rectangular, mortared rock wall foundation is located along the street east of the Boiler Room. It is currently used as a planting bed for ornamental vegetation, and once was used to grow potatoes.		
Stacked lava rock wall along eastern side of McVeigh Home complex	C		by 1969			





McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Woven wire fencing	NC		2014	Post and wire fencing edges the Edwin Lelepali Residence property.		
Chainlink fencing				Chainlink fencing is present in association with the Gertrude Kaauwai Residence, McVeigh Home Residences 13 and 14, and Nancy and James Brede Residence.		
Salvaged fencing and gates	U		Undetermined	Gertrude Kaauwai Residence is set within a fenced precinct between the two central internal roads.		
Culverts (2)	C		by 1969	A historic dry stacked rock retaining wall and culvert lines the west edge of the road near the McVeigh Home. A second culvert is tied to an open-throat inlet set within the curbs at the edge of the internal road system near the McVeigh Pool Hall.		
Electrical system features	C		by 1969	Historic electrical poles and wires and associated features extend as a secondary power system from Staff Street into the McVeigh Home complex.		
Transmission tower	NC		post 1969	Located within the coconut palm grove along Staff Street.		
Utility features	NC		post 1969	Fire hydrants; fire hose box		






McVeigh Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Clothes lines			Undetermined	Located within the yard near the Hashimoto Residence		
Archeological Resources						
Foundation outline adjacent to Gertrude Kaauwai Residence	C					
Missing Features						
<i>Original McVeigh Home</i>						
<i>Picket fencing</i>						
<i>Residence adjacent to Gertrude Kaauwai Residence</i>						












Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii




McVeigh Home Character Area - Analysis and Evaluation

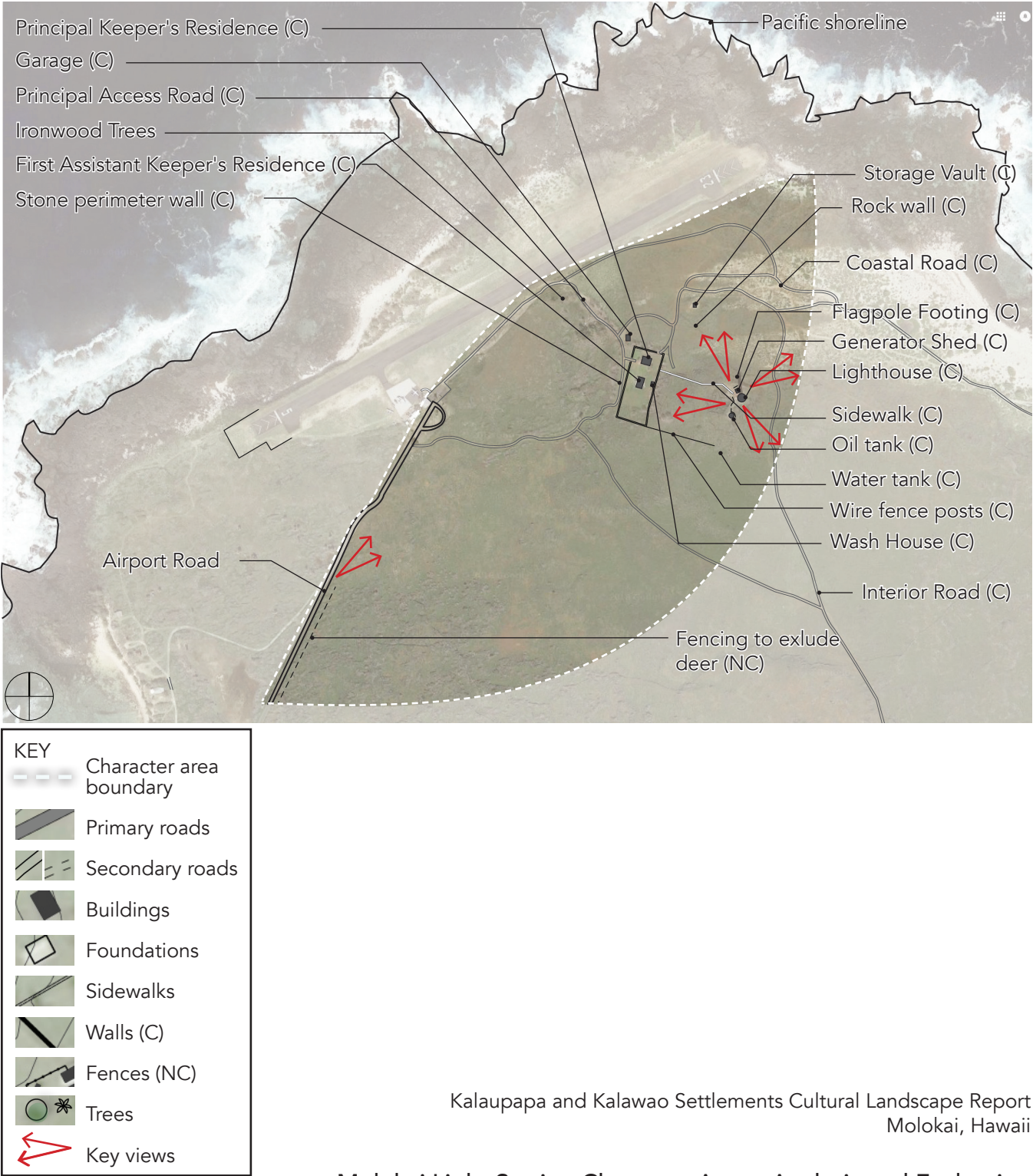
Molokai Light Station Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Prominence			prior to Kalaupapa Settlement	The lighthouse is sited on an elevated prominence near the northern end of the peninsula.		
Patterns of Spatial Organization						
Rectilinear perimeter wall configuration of light keeper's complex			Circa 1920s	Stacked rock walls form a rectangular precinct that contains the keeper's complex to the west of the lighthouse.		
Views and Vistas						
Views of the lighthouse			1909	The lighthouse is a focal point for views from the crater as well as the north/south road corridor. Residents have described the comfort afforded from seeing the light shining at night.		
Views from the lighthouse			1909	From the tall tower of the lighthouse, expansive views are afforded of the entire peninsula and the pali, as well as the Pacific Ocean waters north of Molokai.		
Circulation						
Interior Road	C	793344	1938; formalized by 1950	The Interior Road to Kauhakō Crater extends north to the lighthouse. This unimproved road is relatively rough.		
Coastal Road	C		By 1900	The Coastal Road follows the peninsula's eastern shoreline north to connect with roads associated with the Molokai Light Station and Kamehameha Street/Airport Road.		
Principal Access Road / Lighthouse Road	C	793349; 92704	1908	The Principal Access Road/ Lighthouse Road is a gravel surfaced and graded road approximately 700 feet long. The road extends from the northwest edge of the light station in a southeasterly direction to the west wall of the keeper's complex. Ironwood trees line a portion of the access road.		





Molokai Light Station Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Internal Access Road / Lighthouse Road	C	793349; 926705	1908	The Principal Access Road intersects the Internal Access Road / Lighthouse Road, an unpaved, 12-foot wide internal access road begins on the north side of the Molokai Light Station Garage, and winds around the northern edge of the knoll toward the light house.		
Northern Access Road	C		By 1908	The Northern Access Road is a gravel road that extends around the north edge of the point, leading toward Kalawao, before branching southward toward the light station. Approximately 900 feet in length, portions of the original Northern Access Road are no longer in use and have become eroded.		
Molokai Light Station Concrete Sidewalk	C	926703	1929	The Molokai Light Station Concrete Sidewalk is a 450 foot long walkway that extends from the keeper's complex to the lighthouse. An inscription in the sidewalk reads "WM KLEE 1929."		
Cultural Vegetation						
Ironwood trees (arranged in two double rows)			Circa 1909	A double row of ironwood trees serve as a windbreak on the north of the keeper's complex. A second row is to the west, parallel to the west wall of the compound.		
Buildings						
Molokai Light Station Lighthouse (715)	C	21176	1908-1909	The Molokai Light Station Lighthouse is a concrete tower with stucco finish that stands 138 feet in height, and 21 feet in diameter at the base. The structure tapers to 14 feet 6 inches in diameter at the top. The lighthouse is octagonal in cross section topped with a circular glazed enclosure capped with a conical shaped metal lantern.		
Molokai Light Station First Assistant Keeper's Residence (706)	C	232237	1950 (replaced 1909 structure)	The Molokai Light Station First Assistant Keeper's Residence is a one-story, concrete-block, flat-roofed building that measures 30 by 46 feet. The building is located in the near middle of the keeper's complex.		






Molokai Light Station Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Molokai Light Station Principal Keeper's Residence (Stone House)(707)	C	926707	1908-1909	The principal lightkeeper resided in the Molokai Light Station Principal Keeper's Residence, a Craftsman style cottage built as part of the residential complex for the station. The wood-frame building is L-shaped in plan. It features a rectangular, masonry-walled main body, with a recessed porch on the west, and a smaller, wood-frame ell across the rear of the building on the east. Rows of ironwood trees form windbreaks to the north and west, parallel to the west wall of the compound.		
Molokai Light Station Wash House / Storage Shed (708)	C	573542	1909; rehabilitated 2008	The Molokai Light Station Wash House /Storage Shed was built as a laundry, but may have also included a shower. The single story wood frame building measures 20 by 9.5 feet.		
Molokai Light Station Garage (709)	C	340719	Late 1910s-early 1920s; rehabilitated 2007-2008	Molokai Light Station Garage is a one story structure currently used to store the original Fresnel lens associated with the lighthouse.		
Molokai Light Station Generator Shed (713)	C	59999	1934; rehabilitated 2008	The Molokai Light Station Generator Shed is a symmetrical, utilitarian wood frame shed with a concrete slab foundation, vertical tongue and groove siding, and a gable roof with asphalt shingles overlaying tongue and groove boards.		
Molokai Light Station Storage Vault (Oil Storage Building)(714)	C	55730	1908-1909; rehabilitated 2009	The Molokai Light Station Storage Vault is used for oil storage. The hexagonal structure measures 12 by 12 feet, and features a slab foundation, reinforced concrete walls, and a red pyramidal roof.		
Molokai Light Station Water Tank (712)	C	21174	1908; roof reconstructed 1997; rehabilitated 2009	The Molokai Light Station Water Tank was built south/southwest of the lighthouse. The octagonal concrete structure, which has a capacity of 12,000 gallons, is painted white and has a red conical roof.		





Molokai Light Station Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Oil Tank	C	to be added	to be added			
Molokai Light Station Stone Perimeter Wall	C	926708	1909	The Molokai Light Station Stone Perimeter Wall is a stacked stone wall that forms a large rectangular enclosure measuring approximately 300 by 160 feet in plan west of the lighthouse. It is built to establish a precinct for the keeper's quarters and associated features. Rock for the wall was collected when the site was readied for construction of the lighthouse.		
Wire Perimeter Fence Posts	C		1910	A row of wood fence posts, built of square cut redwood, that once supported a wire fence, extends east from the southernmost portion of the light keeper's station rock enclosure. The wire fence was used to delineate the Molokai Light Station property. The wire is no longer extant, and only a portion of the original line of posts survives today.		
Fencing to exclude deer	NC		post 1969			
Electrical lines	C					
Small-scale features						
Archeological Resources						
Flagpole Footing	C		1909	The Concrete Footing for a former Flag Pole site includes a circular slab measuring 24 inches in diameter and 5 inches in height. The flag pole is no longer extant. The flag pole was likely added at the site circa 1909, but is known to have been present by 1924.		






Molokai Light Station Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Reinforced Concrete Base for Former Oil Storage Tank	C		1908-1909	The Reinforced Concrete Base for Former Oil Storage Tank site is comprised of the partial ruin of a concrete base and four concave concrete supports for a wood oil tank that is no longer extant. The tank was installed between 1908 and 1909, and removed circa 1925 to 1930.		
Concrete Pier Supports for Oil-Drum Loading Dock	C		1908-1909	The Concrete Pier Supports for Oil-Drum Loading Dock site is composed of thirteen regularly spaced tapered piers, two square piers set below them, and a narrow concrete slab to the south. The concrete slab may have served as the base for the wood ramp built circa 1920 that supported loading operations.		
Dog heiau	C					
Infant grave						
Missing Features						
<i>Molokai Light Station First Assistant Keeper's Residence</i>			1909	<i>The original wood frame structure was replaced in 1950.</i>		
<i>Oil Storage Tank</i>		59955	1908-1909			
<i>Oil-Drum Loading Dock</i>			1908-1909			
<i>Flagpole</i>			1909			










New Baldwin Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Pacific shoreline				The entire western edge of the character area is composed of the Pacific Ocean shoreline. The character area occupies an upland plateau that overlooks the steep and rocky coastline, which is challenging to access in this location. The proximity to the shoreline affords expansive views to the west.		
Patterns of Spatial Organization						
Dispersed developed areas				The New Baldwin Home character area is comprised of a series of discrete developed areas connected by unimproved roads, and sometimes surrounded by woody vegetation. These developed areas include the Slaughterhouse complex, composed of two buildings and a corral area set within the open landscape near the shoreline, the dump and recycling center located within a wooded area to the east, the New Baldwin Home site, located at the south-central edge of the character area, the rock crusher to its west, and the mule corral and concessionaire operations are due west of the rock crusher.		
Terraced landform				The land rises to the east of the New Baldwin Home site. The Grotto and Garden Structure is located on the rising terrain of a hillside. In the vicinity of the Grotto and Garden Structure there is extensive evidence of the landform having been terraced, potentially to support agriculture. The terracing could relate either to the pre-settlement or post-settlement era.		
Views and Vistas						
Dramatic views to the Pacific Ocean and pali				From New Baldwin Home, expansive and dramatic views of the Pacific Ocean are afforded to the west, while the pali presents a strong visual anchor to the south and southwest due to its proximity and height.	Blocked in part by invasive and other vegetative growth	

New Baldwin Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Trail Access Road	C	793350	Undetermined	Puahi Street extends north/south between Beretania Street and the bridge leading to the Trail Access Road within the New Baldwin Home character area. South of the Quonset hut associated with Bay View, Puahi Street crosses the intermittent Waihanau Stream via a single lane wooden bridge. South of the bridge, the road is referred to as the Trail Access Road.		
Recycling access road	NC		Undetermined	One of the unimproved roads arising from the Trail Access Road is located near the northern end of the character area. It leads east to the NPS recycling center and Construction Debris Dump. The margins of the road are wooded.		
New Baldwin Home access road	C		Undetermined	Another unimproved road arising from the Trail Access Road leads south to New Baldwin Home at the same point as the Recycling access road. The southern end of the road extends through woody vegetation.		
Rock Crusher access road	C		Undetermined	Arising from the New Baldwin Home access road just inside the wood line is a short unimproved spur that is the access road to the Rock Crusher.		
Slaughterhouse access roads	C		Undetermined	A network of unimproved access roads loop to the west of the Trail Access Road to and around the Slaughterhouse complex.		
Cultural Vegetation						
Cultural vegetation			Undetermined	One of the important plants that is known to have been associated with the New Baldwin Home character area is the kukui nut (<i>Aleurites moluccanus</i>) tree. Other species known to have been planted include papaya and banana trees.		

New Baldwin Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Invasive plants			Undetermined	Problematic invasive species present within the New Baldwin Home character area include Java plum (<i>Syzygium sp.</i>) and Christmas berry trees (<i>Schinus terebinthifolius</i>). These plants obscure views and spatial relationships present historically within the character area.		
Buildings						
New Baldwin Home for Boys Entrance Gate	C	56522	Circa 1907-1938	The New Baldwin Home for Boys Entrance Gate consists of four concrete columns located at the original entrance to the New Baldwin Home and curved concrete wing walls approximately 5 feet high. The gate itself is missing. The gate was either built as part of the New Baldwin Home or earlier as part of the hospital.		
New Baldwin Home for Boys Rock Walls	C		Undetermined; by 1969	Dry stacked lava rock walls edge the New Baldwin Home for Boys Entrance Gate. The walls extend for approximately 200 feet to either side of the gate. The walls measure approximately 2 to 3 feet in width and are between 3 and 4 feet tall. They may have replaced an earlier fence system.		
Grotto and Garden Structure	C	573951	Circa 1907-1938	Located near the site of the original chapel associated with New Baldwin Home for Boys is a dramatic stacked stone grotto, which was either built as part of the New Baldwin Home, or earlier as part of the hospital. The grotto measures 15 by 20 feet. It is comprised of dry stacked and mortared stone that incorporates a natural stone outcrop. The grotto features a recessed alcove for a statue of the Virgin Mary. Behind the grotto there are dry stacked stone walls that create a series of structural terraces each approximately 4 feet tall. The terraces extend north and south and generally follow the contour of the slope. There is also remnant cultural vegetation evident around the grotto.		

New Baldwin Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Slaughterhouse	C	59997	1953	The Slaughterhouse is located in the open area along the western edge of the character area. It is located adjacent to the Slaughterhouse Restrooms. The Slaughterhouse features concrete wall construction with a concrete slab foundation, wood frame walls above the 6 foot level, and a corrugated metal gable roof. The building is a remnant of the period when the settlement maintained its own herd of cattle.		
Slaughterhouse corral	C		Undetermined	A pipe metal corral fence and loading chute is located adjacent to the Slaughterhouse.	The fence is rusted.	
Slaughterhouse Restrooms	C	59996	Moved from Staff Row 1950; rehabilitated 1999, 2015	The Slaughterhouse Restrooms is a single story building located adjacent to the Slaughterhouse at the western edge of the character area overlooking the shoreline. The building, which is rectangular, measures 18 by 22 feet in plan, and features a 4 by 7 foot opening in its north elevation.		
Rock Crusher	C	59998	1937-1938; rebuilt 1950; move to New Baldwin 1960	The Rock Crusher is located in a clearing in the woods west of the New Baldwin Home Entrance Gate. It was used to develop aggregate for road surfacing and paving material. The Rock Crusher is a 30 foot tall structure of timber frame construction with external frame walls, diagonal braces, and a corrugated metal roof. It contains an engine shelter and compartments for three separators for processing different sized gravel. There are also remnants of related equipment scattered nearby.		
Concessionaire building	NC		Undetermined	A modest wood-frame structure with plywood siding edges the mule corral. The building supports concessionaire operations.		







New Baldwin Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Mule corral	NC		1992	The Mule Corral is located west of the New Baldwin Home site and east of the Municipal Solid Waste Dump. The circular fenced precinct of the corral is used to house mules for the concessionaire—Kalaupapa Rare Adventure—that operates park tours and brings people to the site via the Pali Trail on mules. Associated with the corral are metal bleachers and the small building associated with visitor and muleskinner needs.		
Municipal Solid Waste Dump Site	NC		1964-1972; capped and closed, detention basin added 2015	The Municipal Solid Waste Dump, located west of New Baldwin Home site and trailhead for Pali Trail, was formerly used to dispose of household and medical waste.		
Construction Debris Dump	NC		1977-1992	The Construction Debris Dump is located northeast of New Baldwin Home site and south of the Damien Road residential area. It includes cleared areas for construction debris, green waste, and carcass pit disposal to the south, and composting to the north.		
Stormwater detention basin	NC		post 1969			
Puahi Street Bridge	C		by 1969	Puahi Street crosses the intermittent Waihanau Stream via a single lane wooden bridge. The current bridge is a contemporary replacement of a historic bridge		
Electrical system features	C		by 1969	Historic electrical system features, including poles and wires, extend into the character area from Puahi Street and extend to the Slaughterhouse complex and New Baldwin Home site.		
Small-scale features						
Bleachers	NC			Aluminum stadium seating is set on concrete blocks for visitors to use while waiting for tours to begin.		




New Baldwin Home Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Recycling center	NC					
Archeological Resources						
New Baldwin Home site	C			Following its abandonment in the 1950s, the buildings associated with New Baldwin Home were removed or relocated. Only a few ruins remain today to mark the New Baldwin Home archeological site. Evidence of the former complex includes remnants of the gravel driveway and sidewalk system, the grotto, rock wall, and gate.		
Cemetery V - Miscellaneous	C			Three graves are located near the Construction Debris Dump. Collectively these are inventoried as part of Cemetery V – Miscellaneous.		
Missing Features						
<i>View to the Pacific Ocean from the Grotto</i>				<i>The historic view of the ocean from the Grotto and Garden have become blocked by invasive vegetation.</i>		
<i>New Baldwin Home buildings</i>				<i>The buildings associated with the complex included a large dormitory, recreation room, cottages, and a chapel. At least one of the cottages is known to have been moved to the Residences character area. Most of the other buildings were likely razed.</i>		
<i>Dormitory</i>						
<i>Recreation room</i>						
<i>Cottages</i>				<i>One was moved to the Residences character area.</i>		
<i>Chapel</i>						











Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii



New Baldwin Home Character Area - Analysis and Evaluation

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Patterns of Spatial Organization						
Linear streetscapes of houses to either side of a central road corridor				The Residential Area is comprised of several public road corridors edged by modest dwellings and associated features that create a series of streetscapes.		
Consistent set-backs to houses				Along each public road, the houses are generally sited with consistent set-backs, contributing to the sense of streetscapes.		
Public front yard and private back yard				The dwellings associated with the Residential Area frequently are visible from the road, but have private back yards that are screened by plants, fences, walls, and outbuildings.		
Walled plant nursery				Walled precinct north of Haleakala Street, east of McKinley, and west of Baldwin Streets.		
Views and Vistas						
Views along road corridors				Views along the road corridors are generally linear but with a sense of openness.		
Views to south of the pali				Views along the roads to the south are directed at the pali.		

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Circulation						
Puahi Street	C			Puahi Street edges the northwestern and southwestern corners of the Residential Area character area. Several residences face Puahi Street.		
Goodhue Street	C			Goodhue Street is located north of Bishop Home and between Puahi and Bishop Streets. It extends between Beretania to the north and School Street to the south.		
Bishop Street	C			Bishop Street is located north of Bishop Home and between Goodhue and McKinley Streets. It extends between Beretania to the north and School Street to the south.		
School Street	C			School Street extends between Puahi and McKinley Streets within the Residential Area character area. Residences do not face School Street.		
McKinley Street	C			McKinley Street extends the length of the Residential Area character area between Beretania to the north and Damien Street to the south. It is crossed by Haleakala Street.		
Baldwin Street	C			Baldwin Street extends the length of the Residential Area character area between Beretania to the north and Damien Street to the south. It is crossed by Haleakala Street.		
Ka'iulani Street	C			Ka'iulani Street extends the length of the Residential Area character area between Beretania to the north and Damien Street to the south. It is crossed by Haleakala Street.		



Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Kapi'olani Street	C			Kapi'olani Street extends the length of the Residential Area character area between Beretania to the north and Damien Street to the south		
Haleakala Street	C			This is a short street that connects McKinley and Baldwin Street.		
Damien Street between Puahi and Kapi'olani Streets	C			Damien Street forms the southern edge of the Residential Area character area. Residences face the road between Puahi and Kapi'olani Streets.		
Residential Area Sidewalks	C			Concrete sidewalks located throughout the residential area, measuring approximately 3 feet wide by 1,000 feet (not contiguous). Sidewalks are also present at vacant lots, marking locations of former residences. Built between the 1930s and 1960s.		
Cultural Vegetation						
Ornamental trees and shrubs						




Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Plant nursery			1935-1936; early 2000s	The Plant Nursey is an L-shaped parcel of land measuring approximately 150 feet by 350 feet bounded by McKinley, Haleakala, and Baldwin Streets. The nursery property includes three tool sheds/outbuildings, a shade house, and planting beds outlined with low rock walls 1 to 2 feet high constructed in 2010 from rock salvaged from the Kalaupapa dump. The site is surrounded by a perimeter rock wall and chainlink fencing, as well as rows of loulu palms that parallel the streets. The rock walls surrounding the nursery along the street edge are historic and addressed as the Residential Area Rock Walls under Structures below. Plots for community garden spaces are located at the north end of the space. It was altered in early 2000s with the establishment of new structures, planting beds, fencing, and rock walls. It no longer retains historic integrity.		
Buildings						
Seki Residence	C	22632	Circa 1908; damaged fire; stabilized 1999; rehabilitated 2003-2004	The Seki Residence is located east of Puahi Street across from the Bay View Home complex near the intersection with Damien Street. This is the only residence within this section of the Residential Area character area that is not a Hicks Home. It may have been relocated from New Baldwin Home where it possibly served as part of a nursery where babies born at the Settlement were kept separate from their parents. If the house is in fact derived from the nursery, it would have a construction date of 1908. The Seki Residence is under consideration as a focus of future NPS interpretive programming.		
Puahi Street Garage	C	56538	Circa 1950-1964; rehabilitated 2006	Located to the north of the Seki Residence is a single-story wood-frame garage and storage room that measures 50 feet square. The garage features vertical plank siding, a gable roof with rolled roofing material, a corrugated metal shed roof over the entrance, and Seki's Ford Model A.		


Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Puahi Street Residence 103-64	C	55640	1964	Puahi Street Residence 103-64 is a Hicks Home located across from Bay View Home. A carport (Puahi Street Garage 515) is located to the north of the house.		
Puahi Street Garage 515	C	55643	Circa 1950-1964	Puahi Street Garage 515 is a two bay wood frame garage that measures 20 by 30 feet in plan. It is located across from Quonset Hut 10BV. The garage features a low pitched corrugated metal roof. The building was altered after 1977.		
Puahi Street Storage Building 520	U	55641	Undetermined	This single story shed is located to the east of Puahi Street Residence 103-64. It is built with recycled materials. The date of construction is currently not known.		
Puahi Street Hothouse	U	55642	altered 1977	The Puahi Street Hothouse, or greenhouse, is located behind Puahi Street Residence 103-64. Measuring 8 by 10 feet in plan, the building has a concrete slab foundation, vertical wood plank siding, a corrugated metal shed roof, and double hung windows. The structure was altered after 1977.		
Olivia Breitha Residence	C	55639	1962	The Olivia Breitha Residence is located at the southern end of the streetscape along Puahi Street. It is a single story Hicks Home. A stone wall runs along the south side of the building.		

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Clarence Naia Residence (DOH House – Naia, DOH House – M. Jordan)	C	22630	By 1930s; ramp added 1994	This may be one of the early residences associated with Kalaupapa, but has been extensively modified over the years. It is located west of Goodhue Street at the northern end of the block The Clarence Naia Residence is a single story, wood-frame structure that measures 20 by 28 feet in plan. It features single wall construction with a wood post and concrete pad foundation, vertical tongue and groove siding, wood frame double hung windows, and a gable roof with wood shingles extending into the shed roofs at the front and rear. There are several additions that include a lanai with wood stairs and diamond-pattern rails, a wash shed, and jalousie windows on the south and east elevation. The shed roof over the south entryway has been enlarged and the west porch modified.		
Nono Residence (DOH House-Nono)	C	59957	By 1930s	This may be one of the early residences associated with Kalaupapa, but has been extensively modified over the years. It is located west of Goodhue Street and south of the Clarence Naia Residence. Roughly square in plan, the single story, wood-frame structure measures 30 by 37 feet. The residence features single wall construction with a wood post and concrete pad foundation, vertical tongue and groove siding, a gable roof with wood shingles, and wood sash casement and double hung and jalousie windows. There is a recessed entry porch with wood steps and horizontal railing, and a shed roof addition with board and batten siding.		
Sagadraca Residence	C	55804	1962	The Sagadraca Residence is a Hicks Home located west of Goodhue Street south of the Nono Residence.		
Goodhue Street Shed 605 (Game Room, Poker Room, Sagadraca Poker Room)	U	55807	By 1972	Goodhue Street Shed 605 is located west of the Sagadraca Residence. It is a single story wood frame structure that measures 15 by 25 feet in plan. It features single wall construction with a stone pier foundation, board and batten and vertical plank siding, and shed roof. The west elevation has collapsed. A stacked stone wall extends along the west and north sides of the building.		



Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Goodhue Street Garage 609	U	55808		Goodhue Street Garage 609 is located west of the Nono and Sagadraca Residences. It is a single story, wood frame structure that measures 24 feet square. It features single wall construction with a concrete slab foundation, vertical plank siding, and a low pitch corrugated metal gable roof. The date of origin is currently not determined but occurred by 1972.		
Elaine Remigio Residence (DOH House-A Cuello)	C	59958	1931; roof 1980	The Elaine Remigio Residence is one of the Settlement A Houses. The residence is the northernmost structure on the east side of Goodhue Street.		
Goodhue Street Garage 613	C	55805	By 1938	Located to the south of the Elaine Remigio Residence is Goodhue Street Garage 613. This two bay wood frame garage structure measures 17 by 20 feet in plan and was constructed with recycled materials. The garage features single wall construction with a partial concrete foundation, vertical wood plank walls, swinging double doors, and a low pitch gable roof with asphalt roofing. There is a shed addition.		
Goodhue Street Shed	C	55806	By 1964	Located to the east of Goodhue Street Garage 613 is the Goodhue Street Shed. It measures 12 by 20 feet. Associated with the structure are the remains of a hothouse. The shed features single wall construction with a concrete slab foundation, board and batten siding with vertical plank exterior finish, jalousie windows, gable roof with rolled asphalt roofing, and a concrete accessibility ramp.		
Storage Shed/ Carport	C	338619	By 1964	The Storage Shed/Carport is located to the south of Goodhue Street Garage 613. It is a single story, wood frame building that measures 20 by 14 feet in plan. The building features single wall construction and a shed roof with rolled asphalt roofing material. The walls are currently plywood.		
Goodhue Street Garage 614	NC	55803	Post 1977	Goodhue Street Garage 614 is located east of Goodhue Street and south of the Storage Shed/Carport. The single story, wood frame structure features single wall construction with a concrete slab foundation, both vertical plank and board and batten siding, and a low pitch gable roof supported by 4 by 4 inch wood posts.		


Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cabane Residence (NPS House – L. Namakaeha)	C	22639	1937; moved 1960	The Cabane Residence is located at the southern end of Goodhue Street near School Street. The original location of the residence is not currently known. The building is irregular in plan, but roughly L-shaped, and measures 24 by 24 feet. It includes a 10 by 12 foot addition wing. The wood frame residence features single wall construction with a wood post and concrete pad foundation, vertical tongue and groove siding, screened double hung wood windows, and hip roof with gablets and wood shingles. There is a recessed porch under the southwest corner of the gable, and a 10 by 10 foot washing area at the northeast corner.		
John Arruda Residence	C	55802	1964	The John Arruda Residence is the northernmost residence west of Bishop Street. It is a Hicks Home. The property includes a mortared rock “fish pond” in the front yard, and a 3 foot high rock wall around the east, north, and west elevations of the building. The John Arruda Residence is under consideration as a focus of future NPS interpretive programming.		
Garage near John Arruda Residence	NC		Circa 1977-1992	This wood-frame garage has a wood post on concrete block foundation, corrugated metal shed roof, and corrugated metal siding on three sides. The east elevation is open.		
Bishop Street Garage 622	C	55740	Circa 1950-1964	Located to the south of the John Arruda Residence is Bishop Street Garage 622. This structure measures 20 feet square and features wood frame construction with vertical plank siding mixed with plywood (probably recycled), low pitch gable roof with rolled asphalt roofing, one doorway and two 6-light windows on the north end		
Yamamoto Residence (NPS House – A. Ainoa)	C	55739	1962; altered 1997	Located at the southern end of the Bishop Street block to the west of the road and north of School Street is the Yamamoto Residence. This is a Hicks Home. It features an attached carport with a shed roof on a concrete slab foundation at the northwest corner.		

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bishop Street Garage 621	C	55738	By 1964; enlarged 1972 and 2000-2005	Located at the northern end of the Bishop Street block to the east of the road is Bishop Street Garage 621. The wood-frame garage measures 20 by 30 feet in plan and features single wall construction with a concrete slab foundation, corrugated metal and plywood siding, and a low pitch gable roof with asphalt roofing.		
Paul and Winifred Harada Residence	C	56609	1931-1932	To the south of Bishop Street Garage 621 is the Paul and Winifred Harada Residence. The dwelling is an A House. The building features an addition at the rear with a shed roof and concrete slab foundation that possibly dates to 1977. The property features a dry stacked rock wall. The Paul and Winifred Harada Residence is under consideration as a focus of future NPS interpretive programming.		
Garage	NC	573919	Circa 1977-1992	Located to the west of McKinley Street and north of School Street is a Garage associated with McKinley Residence 123-62. It measures 22 by 20 feet in plan, and features wood frame construction, a concrete post foundation, dirt floor, vertical plank wood siding, and a corrugated metal gable roof.		
McKinley Street Residence 123-62 (DOH House– Naeole)	C	55801	1962	McKinley Street Residence 123-62 is a Hicks Home. It is located west of McKinley Street near the intersection with School Street. The building has been modified through inclusion of a concrete wheelchair ramp leading to the front entrance. The yard is enclosed by a hibiscus hedge.		
Shed 590	NC	55814	2008 (replaced a structure built circa 1950-1964)	Shed 590 is the northernmost structure associated with the McKinley Street streetscape. It is located between McKinley and Baldwin Streets north of School Street. The wood-frame structure features single wall construction with a wood post and concrete pad foundation, vertical plank siding, a corrugated metal roof, two door openings (no doors), and wood window frames (no glass).		


Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Nicky Ramos Residence (DOH House – Ramos, NPS House – L Kaaihue)	C	59959	1930s	The Nicky Ramos Residence was built at the same time as the A Houses, and has a similar floor plan. It may have been constructed with lumber salvaged from the US Leprosy Investigation Station. The single story wood frame building is located east of McKinley Street and north of School Street. It measures 25 by 40 feet and features single wall construction with a wood post and concrete pad foundation with lattice skirting, vertical tongue and groove siding, a hip roof with asphalt shingles, and screened wood sash double hung windows. There is a recessed corner entry porch articulated by one chamfered post and two chamfered pilasters leads to the front door. An enclosed shed with a shed roof is located at the rear of the building. A dry stacked rock wall encloses the lot. Entry is marked with ornamental gate piers possibly salvaged from another site.		
Guest House, Ramos (Nicky's Wash House)	U	573913	Undetermined	To the southeast of the Nicky Ramos Residence is a single story guest house possibly used by Ramos's wife. The wood frame structure measures 20 by 30 feet in plan and features single wall construction with a poured concrete foundation, plywood siding, and a corrugated metal shed roof.		
McKinley Street Building 592	U	101950	Circa 1964 to 1972.	To the south of the Nicky Ramos Residence is a single story garage located east of McKinley Street. The wood-frame structure measures 18 by 30 feet in plan and features single wall construction with a concrete block foundation and a dirt and gravel floor, vertical plank siding, a corrugated metal gable roof placed over 2 by 4 inch purlins, three sets of sliding 12-light windows, and a four paneled single door at the rear.		
Punikai'a Residence	C	59960	1931-1932; altered 1977	The Punikai'a Residence is located east of McKinley Street south of the terminus of School Street. This is one of the A Houses. It is currently vacant. The residence features an addition at the rear with a shed roof and concrete slab foundation. A dry stacked rock wall runs along McKinley Street west of the house.		


Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Lourdes Taghoy Residence	C	55769	1956	The Lourdes Taghoy Residence is located east of McKinley Street and south of Haleakala Street. It is a Hicks Home. A carport with a shed roof on a concrete slab foundation is located at the rear. The carport features a mural painted by residents in the early 2000s. A dry stacked rock wall separates this residence from McKinley Street Residence 154 next door.		
McKinley Street Residence 154 (NPS House – Pu, NPS House – L. Delos-Reyes)	C	59961	Circa 1933; altered 1990	This single story wood frame residence is located east of McKinley Street and south of the Lourdes Taghoy Residence. This residence has a unique character and is similar to the style of early period cottages. It features an irregular floor plan, measures 18 by 24 feet, and features single wall construction with a wood post and concrete pad foundation with a horizontal lathe skirt, board and batten siding with a water table, intersecting gable roofs with wood shingles, and 12-light double hung windows throughout. There is a recessed entry porch with vertical wood rail, and a partially enclosed wash room on a concrete slab foundation at the rear. A dry stacked rock wall separates the lot from the Lourdes Taghoy Residence to the north and the AJA Benevolent Society Hall to the south.		





Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
AJA Benevolent Society Hall (AJA Hall, Buddhist Temple)	C	21066	1910; tori added 1935-1936 (since removed); rehabilitated 2005; chairlift added 2015.	The AJA Benevolent Society Hall served as the Buddhist Temple and community hall for the Americans of Japanese Ancestry (AJA) Benevolent Society. It is one of the few surviving resources associated with the lives of Kalaupapa residents of Japanese ancestry. It is currently used as the park bookstore. The single story wood frame residence edges McKinley Street to the east. It is cruciform in shape and measures 30 by 30 feet. The building features single wall construction with a wood post and concrete foundation concealed by latticework, vertical tongue and groove siding encircled by a broken girt with corner boards and a water table, intersecting gable roofs with wood shingles, and wood 12-light double hung windows throughout. A front projecting portico supported by chamfered posts and two chamfered pilasters with a wood shingle gable roof provides access to the front entrance. It is painted a distinctive dark green with white trim. A mill stone made from fine grained stone is located behind the building. The original rock wall located along McKinley Street is no longer extant. The AJA Benevolent Society Hall is under consideration as a focus of future NPS interpretive programming.		
AJA Outbuilding (AJA Benevolent Society Storage Building)	C	22637	1938	This single story wood frame structure is located adjacent to and north of the AJA Benevolent Society Hall. The building is T-shaped and measures 18 by 18 feet. It features single wall construction with a wood post and concrete pad foundation, vertical tongue and groove siding with corner boards, a wood shingle gable roof, and wood casement and double hung windows throughout. A wood shingle shed roof shelters the main (west) entry door. An extension on the north elevation is also covered by a shed roof with rolled asphalt roofing materials.		






Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Bernard Punikai‘a Residence (Alice Kamaka Residence, Ka ‘Ohana O Kalaupapa House)	C	59962	1931-1932	Located to the south of the AJA Benevolent Society to the east of McKinley Street is the Bernard Punikai‘a Residence. This is an A House. A dry stacked rock wall parallels McKinley Street at the west edge of the lot. Building currently used by Ka ‘Ohana O Kalaupapa.		
Lucy Kaona Residence (DOH House – M. Macloves)	C	55810	1956	To the south of the Bernard Punikai‘a Residence is the Lucy Kaona Residence. This is a Hicks Home. A dry stacked rock wall separates this residence from the Henry Nalaei lua Residence to the south. A chainlink fence encloses the yard to the west.		
Henry Nalaei lua Residence (Uncle Henry’s House)	C	59964	1932; wheelchair ramp added 2009	The Henry Nalaei lua Residence is the southernmost dwelling associated with the McKinley Street streetscape. The dwelling is an A House. A dry stacked rock wall separates this residence from the Lucy Kaona residence to the north. Another rock wall separates the yard from Damien Street to the south.		
Baldwin Street Garage	C	55819	Circa 1950- 1964; stabilized 2004	This single story garage is located at the southwest corner of Baldwin and Haleakalā Streets. The wood-frame garage features an irregular floor plan, measures 40 by 40 feet, and has single wall construction with a concrete slab foundation, vertical plank siding, a corrugated metal gable roof, three doors, two window openings (no glass), and wood louvered vents throughout. There is a carport with a corrugated metal shed roof is on the east elevation.		
Baldwin Street Residence 182-62 (NPS House – P. Lee-Namakaeha, NPS House – R. Mahiai)	C	55770	1962	Baldwin Street Residence 182-62 is a Hicks Home. It is located east of Baldwin Street at the northern end of the streetscape. A shed and an attached carport are located at the northwest corner. A dry stacked rock wall lines the east edge of the lot along Ka‘iulani Street.		
Nakoa Residence (DOH House – Benjamin, “Banyan Tree,” DOH House – K. Flores)	C	59966	1930s	The Nakoa Residence is located to the south of Baldwin Street Residence 182-62. It is one of the A Houses. A dry stacked rock wall lines the east edge of the lot along Ka‘iulani Street. A partially enclosed wash shed with a concrete slab foundation is at the rear.		




Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Baldwin Street Garage	C	55771	1950	This single bay garage is located south of the Nakoa Residence east of Baldwin Street. The garage features wood and metal pole framing, single wall construction with vertical plank and plywood siding, a nearly flat corrugated metal gable roof, and wood frame windows (no glass) throughout.		
Yonemori Residence	C	55772	1962	The Yonemori Residence is located south of the Baldwin Street Garage east of Baldwin Street and north of the intersection with Haleakala Street. It is a Hicks Home. There is a carport with a shed roof and concrete slab foundation at the northeast corner. A dry stacked rock wall lines the east edge of the lot along Ka'iulani Street. This dwelling is used for short-term housing for Department of Health visitors and contractors.		
Haleakalā Street Garage 587	U	55773	Circa 1964-1972	Haleakalā Street Garage 587 is a two bay structure associated with and located south of the Yonemori Residence. It measures 20 by 25 feet, and features wood frame, single wall construction with a concrete slab foundation, board and batten siding, a corrugated metal shed roof, and three 4-paned windows.		
Katherine Costales Residence	C	55775	1956; wheelchair ramp added 2012	The Katherine Costales Residence is a Hicks Home located east of Baldwin Street and south of the intersection with Haleakalā Street. There is a dry stacked rock wall that separates the yard from an empty lot to the south.		
(Baldwin Street) Garage	U	573560	Circa 1964-1972	Some distance to the south of the Katherine Costales Residence is a garage located east of Baldwin Street that is associated with the Nellie McCarthy Residence. The wood-frame Garage features single wall construction with a concrete slab foundation with a concrete retaining wall, plywood siding, and a shed roof with rolled asphalt roofing.		
Nellie McCarthy Residence (DOH House – B. Chang)	C	55776	1956	The Nellie McCarthy Residence is a Hicks Home. The residence features an attached carport with a shed roof and concrete slab foundation on the east elevation.		




Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Rea Residence (NPS House – S. Prokop, NPS House – K. McGuire)	C	55777	1956	The Rea Residence is a Hicks Home. It is the southernmost dwelling associated with the Baldwin Street streetscape. The building features an attached carport with a shed roof and concrete slab foundation located on the east elevation. This residence is the last remaining Hick's Home with the original eat-in nook in the kitchen; other nooks were removed to provide more kitchen space.		
Kapi'olani Residence (DOH House – Chow)	C	59967	1931-1932; moved 1971	The Kapi'olani Residence is one of the A Houses. There is a 14 by 14 foot shed on a concrete pad foundation, which was reconstructed in 2012, at the rear.		
Ka'iulani Street Garage 563	U	55817	Circa 1964-1972	Ka'iulani Street Garage 563 is composed of four interconnected sheds located east of the Kapi'olani Residence. The wood-frame structure overall measures 20 by 40 feet. The south shed has a concrete slab foundation, while the others have wood post and concrete pad foundations. The sheds are single wall construction with a mixture of vertical plank, plywood, and corrugated metal. Each has a distinct roof, but all are gable with corrugated metal or asphalt roofing.		
Ka'iulani Street Garage 564	U	55783	Circa 1964-1972; south elevation reconstructed 2007	Located south of the Kapi'olani Residence, Ka'iulani Street Garage 564 is a single bay wood-frame structure that measures 25 by 35 feet in plan. The building features single wall construction with a concrete slab foundation, vertical wood plank siding, a low pitch corrugated metal gable roof, two window openings (no glass), one jalousie window, and two 6-light double hung window. Some elevations have deteriorated siding, framing, and roof.		
Gloria Marks Residence (Kaliko Residence)	C	55782	1964	The Gloria Marks Residence is a Hicks Home. It is located east of Ka'iulani Street. A carport with a flat roof and concrete pad foundation protrudes from the northwest elevation. The building is concealed from the road by large bougainvillea shrubs and other dense vegetation. A chainlink fence surrounds the front yard. The Gloria Marks Residence is under consideration as a focus of future NPS interpretive programming.		





Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Richard Marks Residence	C	55780	1964	The Richard Marks Residence is a Hicks Home along Ka'iulani Street. A carport with a flat roof and concrete pad foundation protrudes from the northwest elevation. The residence is painted lime green. It is concealed from the road by large bougainvillea shrubs.		
Richard Marks Bottle House	C	573890	1969	Located at the west elevation of the Richard Marks Residence is the Richard Marks Bottle House, a wood frame carport structure that measures 12 by 16 feet and has wood siding and asphalt roll roofing.		
Richard Marks Carport	C	573904	1969	A second carport structure is attached to north elevation of the Richard Marks Residence. this wood-frame structure measures 32 by 20 feet and has corrugated metal siding and roofing.		
Garage	C	573911	1969	A Garage in ruinous condition is located southeast of the Richard Marks Residence. The wood frame structure measures 24 by 36 feet and has a metal roof.		
Shed in Bus Storage Area	C	573915	1969	Located to the south of the Garage is the Shed in Bus Storage Area. This wood frame structure is composed of two sheds joined by an open sided roofed over area.		
Elizabeth Bell Residence (Ku'u lei Bell Residence, DOH House – Bell, DOH House – T. Richmond)	C	59968	1931-1932	The Elizabeth Bell Residence is an A House. A partially enclosed wash house is at the rear.		
Ka'iulani Street Garage	U	344990	Circa 1964-1972	Located to the south of the Elizabeth Bell Residence is a one bay garage built by 1938. The wood frame garage measures 27 by 18 feet and features single wall construction with a concrete retaining wall foundation, plywood siding, a corrugated metal shed roof, and one window opening covered by a screen at the center. There is an addition on the south elevation with a corrugated metal shed roof.		




Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Ka'iulani Street Building 569 (Garden House)	C	102323	1938; carport added 1972-1992	Located east of the Ka'iulani Street Garage is Ka'iulani Street Building 569. This single story building has an adjacent later carport. The wood frame building features single wall construction with a wood post and concrete pad foundation, vertical tongue and groove siding, a hip roof with asphalt shingles, jalousie windows throughout, and one door.		
Soria Residence ("Mango Tree," DOH House – Soria, NPS House – D. Ainoa)	C	59969	1931, moved 1966, altered 2004	The Soria Residence is located south of the Elizabeth Bell Residence along Ka'iulani Street. The house was moved to this site from McVeigh Home. The wood frame residence features single wall construction with a wood post and concrete pad foundation with a horizontal lath skirt, vertical tongue and groove siding encircled by a broken girt with corner boards, a broken pitch hip roof with asphalt shingles, twelve double hung windows and one jalousie window, and two doors (front and back). A recessed enclosed porch with wood steps provides access to the front entrance.		
Ka'iulani Street Garage 570	C	55815	By 1972	This two bay garage is adjacent to the Soria Residence. The wood-frame garage measures 20 by 30 feet and features single wall construction with a gable roof with an intersecting shed roof over the main entryway (both corrugated metal) supported by two wood posts set into a concrete foundation.		
Sebastiana Fernandez Residence	C	59970	1931-1932; shed addition 1980s	The Sebastiana Fernandez Residence is an A House potentially from materials salvaged from the former US Leprosy Investigation Station. The structure has a shed addition built on a concrete slab foundation at the rear. A chainlink fence surrounds the house and yard.		
Ka'iulani Street Garage 571	U	55779	Circa 1964-1972; rehabilitated 2005	This single bay garage is located at the southern end of Ka'iulani Street behind the Sebastiana Fernandez Residence. The garage also includes a later shed addition with rolled asphalt roofing. The garage measures 25 to 40 feet and features single wall construction with vertical plank walls, a low pitch corrugated gable roof, and four windows.		

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Ka'iulani Street Storage Shed	C	344095	By 1950	The Ka'iulani Street Storage Shed is located next to the Sebastiana Fernandez Residence. Built potentially on the foundation of an earlier building, the shed is single wall construction with a concrete slab foundation, vertical plank siding except on the east wall which is finished with lava rock, a corrugated metal gable roof, and no windows.		
Ka'iulani Street Shed 573	C	55778	By 1950; enlarged 1972-1992	Located next to the Ka'iulani Street Storage Shed, Ka'iulani Street Shed 573 is associated with the Sebastiana Fernandez Residence. The shed measures 12 by 18 feet and features single wall construction with a wood post and concrete pad foundation, board and batten siding, and a gable roof with asphalt shingles.		
Storage Shed	NC	573912	post 1969	The Storage Shed is located next to Ka'iulani Street Shed 573.		
Kapi'olani Street Residence 199 (NPS House – J. Cerny, NPS House – E. Espaniola)	C	55704	1931-1932; rehabilitated 2006-2015	Kapi'olani Street Residence 199 is the only extant residence on the street. It is an A House with a partially enclosed porch/wash house with a shed roof and concrete slab foundation at the rear.		
Richard Purple Residence (DOH House – L. Anamagi)	C	55644	1962; rehabilitated 2004	The Richard Purple Residence is a Hicks Home. The residence is located south of Damien Street and the Bishop Home complex. Attached to the building is a shed with a shed roof and concrete slab foundation on the southeast corner. The 10 by 20 foot shed has a single bay carport. A wheelchair ramp is at the front entrance.		
Clarence and Ivy Kahilihiwa Residence	C	55662	1962; enclosed porch added 2004	The Clarence and Ivy Kahilihiwa Residence is a Hicks Home located south of Damien Street and the Bishop Home complex. The residence also has a carport with a shed roof and concrete slab foundation at the southeast corner. A boat shed is also located at the rear of the building. Both sheds were added by the resident in the 1970s. The Clarence and Ivy Kahilihiwa Residence is under consideration as a focus of future NPS interpretive programming.		
Damien Road Garage 531	NC	55664	Circa 1972; enlarged 1977-1992	This two bay carport is located southwest of the Clarence and Ivy Kahilihiwa Residence.		
Damien Road Carport Tool Shed	NC	573908	Circa 1977-1992	This carport/toolshed is located southwest of the Clarence and Ivy Kahilihiwa Residence.		

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Damien Road Carport	NC	573523	Circa 1977-1992	This carport is located southwest of the Clarence and Ivy Kahilihiwa Residence.		
Cathrine Puahala Residence (DOH House – G. Naeole)	C	55663	1956	The Cathrine Puahala Residence is a Hicks Home. A continuous girt surrounds most of the building except at the northwest corner where it is broken by the front door and windows. There is an attached carport located on the south elevation with a concrete foundation and shed roof. A wheelchair ramp is located along the west elevation, while a patio addition is at the rear. A wire fence with a wood gate surrounds the lot.		
Meli and Randall Watanuki Residence	C		1964; addition 2015	The Meli and Randall Watanuki Residence is a Hicks Home. It is located south of Damien Street and the Bishop Home complex. A continuous girt surrounds most of the building except at the northwest corner where it is broken by the front door and windows. The house has a rear bedroom and closet addition. There is an attached carport on the south elevation with a concrete foundation and shed roof. A garage addition at the rear of the building measures 24 by 24 feet and is attached to adjacent Garage 533. A wheelchair ramp is located along the west elevation. A 4 foot chicken wire fence with wood posts surrounds the building.		
Garage 533	NC	55665	Circa 1992-2000	Associated with the Meli and Randall Watanuki Residence is a single story garage.		
Damien Road Residence 110-64 (DOH House – M. Naone, DOH House – I. Angel)	C	55697	1964	Damien Road Residence 110-64 is a Hicks Home. A wheelchair ramp is located at the front of the building. An attached carport with wood sidewalls and single open bay with a wood gate is located at the front. There is also a possible shed addition not visible from the road. The building is concealed from view from Damien Street by large bougainvillea shrubs.		
Damien Road Carport	NC	55707	Circa 1977-1992	Located east of Damien Road Residence 110-64 is a carport in close proximity to Damien Street.		

Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Damien Road Residence 111-56	C	55698	1956	Damien Road Residence 111-56 is a Hicks Home. A carport on a concrete slab foundation is located at the rear of the building. The residence is used for short-term housing for DOH visitors and contractors.		
Damien Road Residence 112-56	C	55699	1956	Damien Road Residence 112-56 is a Hicks Home. A shed with a corrugated metal roof and open bays is at the southwest corner of the building.		
Anita Una Residence (Duarte Residence, DOH House – L. Linker)	C	55700	1962	The Anita Una Residence is a Hicks Home located on Damien Street near the intersection with Baldwin Street. A carport with a shed roof and concrete slab foundation is at the west elevation.		
Nakanishi Residence (DOH House – Benjamin, “Banyan Tree,” DOH House – K. Flores)	C	55701	1964	The Nakanishi Residence is a Hicks Home. A dry stacked rock wall lines the west edge of the lot, separating it from the Anita Una Residence. A concrete gate post, associated with the former Chinese Society building (no longer extant) marks the end of the wall.		
Shed east of Nakanishi Residence	U		Circa 1964-1972	A shed east of Nakanishi Residence measures 6 by 9 feet. It is of wood-frame construction with board and batten siding and corrugated metal roofing.		
Mamuad Residence (DOH House – Mamuad, Community Thrift Store)	C	59965	1936	The Mamuad Residence is a single story wood-frame building located at the intersection of Damien and Ka‘iulani Streets. The wood-frame residence measures 25 by 30 feet and features single wall construction with a wood post and concrete pad foundation with a horizontal lath skirt, board and batten siding, and a hip roof with asphalt shingles. A partially enclosed porch at the southeast corner of the building provides access to the front door. A wheelchair ramp added later to the south elevation also leads to the front door. There is also an 8 by 10 foot enclosed shed at the rear of the building. A dry stacked rock wall lines the east edge of the lot along Ka‘iulani Street. A remnant foundation of a former garage (#584) is also to the east. The residence currently serves as the community thrift store.		

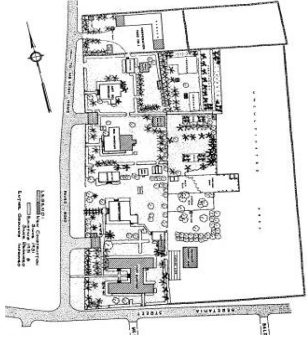



Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Damien Road Residence 26 (NPS House – Borgmeyer, NPS House – T. Trainer, NPS House – J. Kaiama)	C	59952	1932; moved circa 1964-1972	Damien Road Residence 26 is a single story wood frame structure along Damien Street east of Ka'iulani Street. The residence measures 16 by 28 feet, and features single wall construction with s wood post and concrete foundation, vertical tongue and groove siding encircled by a broken girt, an irregularly shaped broken pitch hip roof with asphalt shingles, and 12-light double hung windows throughout. A recessed corner entry porch articulated by a post and two pilasters provides access to the front door. A partially enclosed shed with a shed roof and concrete slab foundation is located at the rear.		
Residential Area Rock Walls	C	55641		Multiple dry stacked rock walls are located throughout the Residential Area character area that are associated with individual properties, including: John Arruda Residence, Paul and Winifred Harada Residence, Nicky Ramos Residence, Punikai'a Residence, Lourdes Taghoy Residence, McKinley Street Residence 154, Bernard Punikai'a Residence, Lucy Kaona Residence, Henry Nalaelua Residence, Baldwin Street Residence 182-62, Nakoa Residence, Yonemori Residence, Katherine Costales Residence, Nakanishi Residence, Mamuad Residence, and the plant nursery	Many rock walls were lost when rock was reused for road paving in the 1950s	
Chainlink fences	NC			Chainlink fences enclose the yards of the Lucy Kaona Residence to the west, the front yard of the Gloria Marks Residence, and the house and yard of the Sebastiana Fernandez Residence. Chainlink fencing also encloses the Plant Nursery.		
Wire fence	NC			At the Cathrine Puahala Residence a wire fence with a wood gate surrounds the lot. At the Meli and Randall Watanuki Residence a 4 foot high chicken wire fence with wood posts surrounds the building.		
Electrical system features	C			Electrical system features, such as wooden poles and wires, extend along several of the roads that fall within the Residential Area character area that are historic.		







Residential Area Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Mother Clinton Monument	C	56517	1945	Located at the southeastern corner of Damien Street and Puahi Street is the Mother Clinton Monument. This commemorative marker was erected in honor of Bessie “Mother” Clinton, an administrator at the Kalihi Hospital from 1918-1946. The monument is composed of a 2 foot by 8 inch by 1 foot wedge-shaped concrete base inset with a bronze plaque.		
John Arruda Residence fish pond	C			The property includes a mortared rock “fish pond” in the front yard.		
Japanese concrete worship yard feature	C					
Archeological Resources						
Residential Area Outbuilding Ruins	C			Within the Residential Area character area there are several ruinous structures and foundations associated with former garages, sheds, and other outbuildings of the vernacular landscape that has been developed by individual residents. Many of these are obscured by dense vegetation; not all have been formally inventoried. The individual contributing sites include four concrete foundations identified as Park #'s 541, 584, 599, and 604. Although the construction dates of these structures have not been determined, they are believed to date to the period of significance.		
Stop signs	NC			On metal poles		
Missing Features						
<i>Damien Street east of Kapolani Street</i>						
<i>Residential Area Outbuildings</i>						









Residences Area Resources




- | | |
|--|---|
| 1. Beretania Street (C) | 55. Shed in Bus Storage Area (C) |
| 2. Goodhue Street (C) | 56. Katherine Costales Residence (C) |
| 3. Clarence Naia Residence (C) | 57. Elizabeth Bell Residence (C) |
| 4. Nono Residence (C) | 58. Ka'iulani Street Building 569 (C) |
| 5. Goodhue Street Shed 605 (C) | 59. Kapi'olani Street Residence 199 (C) |
| 6. Goodhue Street Garage 609 (U) | 60. Ka'iulani Street Garage (U) |
| 7. Sagadraca Residence (C) | 61. Soria Residence (C) |
| 8. Elaine Remigio Residence (C) | 62. Garage (U) |
| 9. Goodhue Street Garage 613 (C) | 63. Ka'iulani Street Garage 570 (C) |
| 10. Storage Shed/Carport (C) | 64. Nellie McCarthy Residence (C) |
| 11. Goodhue Street Garage 614 (NC) | 65. Rea Residence (C) |
| 12. Goodhue Street Shed (C) | 66. Kaiulani Street Garage 571 (U) |
| 13. Cabane Residence (C) | 67. Sebastiana Fernandez Residence (C) |
| 14. School Street (C) | 68. Kaiulani Street Storage Shed (C) |
| 15. Yamamoto Residence (C) | 69. Kaiulanai Street Shed 573 (C) |
| 16. Bishop Street (C) | 70. Storage Shed (NC) |
| 17. John Arruda Residence, Garage, and fishpond (C) | 71. Puahi Street (C) |
| 18. Bishop Street Garage 622 (C) | 72. Puahi Street Garage (C) |
| 19. Bishop Street Garage 621 (C) | 73. Seki Residence (C) |
| 20. Paul and Winifred Harada Residence (C) | 74. Puahi Street Garage 515 (C) |
| 21. Rock walls (typ.) (C) | 75. Puahi Street Residence 103-64 (C) |
| 22. Garage (NC) | 76. Damien Street (C) |
| 23. McKinley Street Residence 123-62 (C) | 77. Puahi Street Storage Building 520 (U) |
| 24. McKinley Street (C) | 78. Puahi Street Hothouse (U) |
| 25. Nicky Ramos Residence (C) | 79. Richard Purple Residence (C) |
| 26. Shed 590 (NC) | 80. Clarence and Ivy Kahilihiwa Residence (C) |
| 27. McKinley Street Building 592 (C) | 81. Cathrine Puahala Residence (C) |
| 28. Guest House, Ramos (U) | 82. Meli and Randall Watanuki Residence (C) |
| 29. Punikai'a Residence (C) | 83. Garage 533 (NC) |
| 30. Haleakala Street (C) | 84. Olivia Breitha Residence (C) |
| 31. Lourdes Taghoy Residence (C) | 85. Damien Road Garage 531 (NC) |
| 32. Baldwin Street Garage (C) | 86. Damien Road Carport (NC) |
| 33. McKinley Street Residence 154 (C) | 87. Damien Road Carport Tool Shed (NC) |
| 34. AJA Outbuilding (C) | 88. Wire fencing (typ.) (NC) |
| 35. AJA Benevolent Society Hall, worship feature (C) | 89. Damien Road Residence 110-64 (C) |
| 36. Bernard Punikai'a Residence (C) | 90. Damien Road Carport (NC) |
| 37. Lucy Kaona Residence (C) | 91. Damien Road Residence 111-56 (C) |
| 38. Henry Nalaelua Residence (C) | 92. Damien Road Residence 112-56 (C) |
| 39. Baldwin Street (C) | 93. Anita Una Residence (C) |
| 40. Baldwin Street Residence 182-62 (C) | 94. Mamuad Residence (C) |
| 41. Nakoa Residence (C) | 95. Residential Area Sidewalks (typ.) (C) |
| 42. Baldwin Street Garage (C) | 96. Nakanishi Residence (C) |
| 43. Yonemori Residence (C) | 97. Shed (U) |
| 44. Haleakala Street Garage 587 (U) | 98. Chainlink fencing (typ.) (NC) |
| 45. Kapi'olani Street (C) | 99. Damien Road Residence 26 (C) |
| 46. Ka'iulani Street (C) | 100. Mother Clinton Monument (C) |
| 47. Ka'iulani Street Garage 563 (U) | |
| 48. Kapi'olani Residence (C) | |
| 49. Kaiulani Street Garage 564 (U) | |
| 50. Gloria Marks Residence (C) | |
| 51. Richard Marks Carport (C) | |
| 52. Richard Marks Bottle House (C) | |
| 53. Garage (C) | |
| 54. Richard Marks Residence (C) | |







Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Patterns of Spatial Organization						
Linear arrangement of residences along Staff Street			1890s	The residential structures that comprise Staff Row are primarily arranged along Staff Street at a consistent set-back from the road, forming a single-sided streetscape. Concrete walks marked by concrete posts lead from near the edge of the road to the entrances to several of the buildings. The posts, a hedge, and fencing in front of the Residence for Single Women recall the linear edge that formally marked Staff Row and signaled its separation from the patient community.		
Views and Vistas						
View across the greensward northeast of Paschoal Hall						
Circulation						
Staff Street	C	793346	circa 1890s; paved 1935	Staff Street edges Staff Row to the west. It provides access to the buildings and structures sited along the road, and those located to the east along internal access roads. Staff Street is an asphalt- and crushed volcanic rock-paved two-way road corridor that extends approximately 1,350 feet in a south-north direction between an unimproved road north of McVeigh Home and Beretania Street to the south.		
Staff Loop	C		Undetermined	Staff Loop is a mostly unimproved road corridor that edges Staff Row to the east. It extends from Beretania Street to the northern edge of the character area. It includes a spur that leads through the center of the character area, the western portion of which is paved with asphalt. The road provides access to the buildings located along the eastern side of the character area. The date of origin of Staff Loop is not yet determined.		







Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Access roads	U		Undetermined	Unimproved earthen two-track that leads from Beretania Street to the Laundry Room and Apartment building and another that extends to a field north of McVeigh Home, as well as to the south toward Staff Row.		
Beretania Street	C			Beretania Street edges Staff Row to the south.		
Sidewalks	C		by 1969	Concrete sidewalks lead to the entrances of the Assistant Resident Physician's Residence, the Resident Physician's Residence, former Superintendent's Residence, and Residence for Single Women. Additional walks lead around the south side of the Resident Physician's Residence and connect the Residence for Single Women with the site of the former Superintendent's Residence. These walks are all approximately 3 feet wide. The date of origin, which falls within the period of significance is not yet determined.		
Cultural Vegetation						
Coconut palms			post 1932	A double row of coconut palm trees edges the Residence for Single Women.		
Ornamental trees and shrubs			Undetermined	Several ornamental trees and shrubs are associated with the buildings located within the Staff Row character area.		
Foundation plantings			Undetermined			


Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Buildings						
Residence for Single Women (Nurse's Quarters, Staff Row Dorm, DOH Staff Housing, DOH House – Nurses, NPS Female Dormitory)(1SR)	C	22627	1932; rehabilitated 2008	This single story wood frame building features an H-shaped plan and measures 60 by 70 feet. The Residence for Single Women has a wood post and concrete pad foundation, tongue and groove siding with broken girt on the perimeter wall, a water table, rim fascia, wood battens, and a hip roof with composite shingles. There is also a screened lanai with double hung windows. The building is used to house seasonal staff, guests, and volunteers. The building also features a yard planted with ornamental vegetation that is edged to the west and south by a white picket fence. A double row of coconut palms follows the fenceline.		
Guest Cottage (Guest Cottage, Visitors' Quarters, Veterans' Quarters) (1ASR)	C	56540	by 1950	The Guest Cottage is a single story wood frame building set back from the corner of Beretania and McKinley Streets to the east of the Residence for Single Women. The cottage measures 25 feet square in plan and features a wood post and concrete pad foundation and horizontal skirting, vertical tongue and groove siding with broken girt, a hip roof with asphalt shingles, a shed extension over the front door, and screened wood sash windows. There is a concrete walk and slab with a wash basin located south of the building.		
Laundry Room and Apartment (3SR)	C	329371	1940	The Laundry Room and Apartment is a single story concrete block structure, finished with cement stucco, that measures 28 by 44 feet in plan. Portions of the upper section and roof are wood frame construction. The building features a concrete slab foundation, has a gable roof finished with corrugated metal, and double hung and jalousie windows throughout. The Laundry Room and Apartment is set back from Staff Street to the northeast of the Residence for Single Women. It is currently used as a gym and laundry room.		

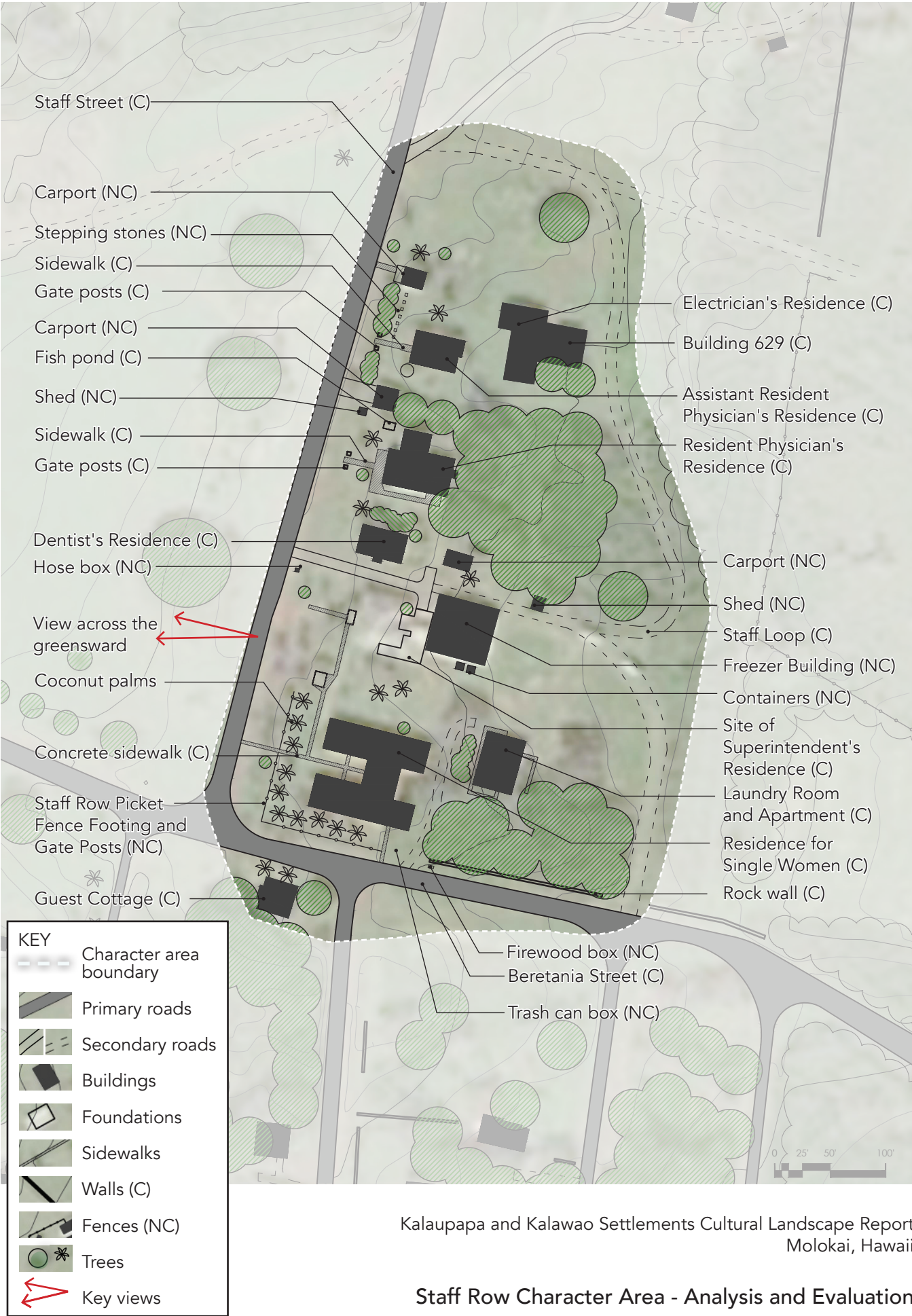
Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Dentist's Residence (Guest Quarters, Volunteer Housing, NPS House – Transient) (8SR)	C	21058	1892	The Dentist's Residence is a single story wood frame building that measures 24 by 36 feet in plan and faces south towards the site of the former Superintendent's Residence. The Dentist's Residence features a wood post and concrete pad foundation with horizontal skirting, board and batten siding with corner boards, a gable roof with asphalt shingles applied over wood shingles, and wood screened double hung windows, most of which are 12-light. There is an addition that extends along the length of the south elevation, and a small wood entry porch.		
Resident Physician's Residence/Administrator's Residence (Doctor's Residence, Administrator's House, Volunteer Housing, DOH House – Schwind, NPS House – Transient) (10SR)	C	21059	1901-1902; expanded 1911-1912; partially destroyed by fire and rebuilt 1929-1930, altered 1934	The Resident Physician's Residence is a single story, T-shaped, single wall building located east of Staff Street between the Assistant Resident Physician's Residence and the Dentist's Residence. The building measures 24 by 50 feet in plan, and has a 14 by 26 foot wing, and a possible addition on the north. The building features stone pad and post foundation and latticework skirting, vertical tongue and groove siding with a broken girt and corner boards, intersecting corrugated metal gable roofs, and wood double hung 12-light windows.		
Assistant Resident Physician's Residence/Doctor's Residence (DOH Housing, Doctor's House, Resident Physician's House) (14SR)	C	21060	1905-1906; addition 1911-1912; altered 1935-1936	Concrete steps provide access to a front porch. A long concrete sidewalk extends from the front porch toward Staff Street. Near the road, the walk is edged by a pair of gate posts and a small wooden gate. A mortared rock "fish pond" is present in the front yard of the property.		






Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Electrician's Residence (DOH House – Decosta, DOH House – Crivello) (16SR)	C	59995	1935-1936; altered 1977; 1992-2000.	The Electrician's Residence is a single story wood frame building located along Staff Street northeast of the Assistant Resident Physician's Residence. The building measures 18 by 20 feet in plan and features a wood post and concrete pad foundation with water table, board and batten siding, and a gable roof with shed extension at the front, finished with rolled asphalt roofing. Diamond-patterned railings encircle the front porch. Several shed roof additions exist on the east and south elevations, closely approaching Building 629. This building may have served as a servant's quarters during the early to mid-twentieth century.		
Building 629/Utility Building (629SR)	C	333513	circa 1950-1964	This single story single wall building is located along Staff Street to the east of the Assistant Resident Physician's Residence and Electrician's Residence. The building measures 24 by 30 feet in plan. The walls are corrugated metal and board and batten siding. Building 629 was constructed between 1950 and 1964. There is a shed roof addition to the north.		
Gate posts	C			Historic gate posts survive at entrance to several of the buildings that face Staff Row, including the Assistant Resident Physician's Residence, Resident Physician's Residence, Residence for Single Women. The gate posts are concrete with chamfered edges and square caps. The posts are painted or white washed. The posts are similar to those present at Bishop Home, New Baldwin Home, Bay View Home, several dwellings within the Residences Area, and the churches. The original wooden swing gates that hung from the posts are no longer extant.		

Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Staff Row Picket Fence Footing and Gate Posts (869, 870)	NC	793339	1932; replaced post 1969	Picket fencing edges the Residence for Single Women along Staff Street and Beretania. The fence is L-shaped and measures 120 feet east to west and 135 feet north to south. It is composed of 4x4 wood posts, 2x4 rails, and 1x4 pickets. A gate measures 8 by 8 feet and is edged by concrete posts. The gate features thirteen wood slats and rusted iron hinges and latch. The fence is a replacement but is set on historic concrete footings, while the gate posts are also historic.		
Carports (3) (67-70SR)	NC		post 1969	There are three small carports located within the character area. These are believed to have replaced earlier garages at the Assistant Resident Physician's Residence, Resident Physician's Residence, and the Dentist's Residence. Assistant Resident Physician's Residence carport shown.	Carport near the Resident Physician's Residence is collapsing.	
Shed (71SR)	NC		post 1969	Located near the collapsing carport.		
Freezer building (66SR)	NC		1975	This large white building is located directly east of the Superintendent's Residence.		
Shed (71SR)	NC		post 1977			
Rock walls	C		by 1969	Stacked lava rock walls edge Staff Row to the east along Beretania Street, and form the eastern edge of the precinct. The walls are obscured in some places by dense woody vegetative growth.		






Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Electrical system features	C		by 1969	Historic electrical poles and wires and associated features extend as a secondary power system from Staff Street into the McVeigh Home complex.		
Utility features (hose box)	NC		post 1969	Hose box and fire hydrants		
Containers	NC		post 1969	Located behind the Freezer Building		
Small-scale features						
Fish pond in front of the Resident Physician's Residence	C		by 1969	A mortared rock "fish pond" is present in the front yard of the Resident Physician's Residence		
Trash can box	NC		post 1969	Wooden platform with sides for trash cans		
Laundry lines	U		Undetermined			
Firewood box	NC		Undetermined			





Staff Row Resource Inventory Table						
Feature	(C/NC status)	CRIS ID#	Date of Origin	Description	Condition	Photograph
Archeological Resources						
Site of Superintendent's Residence	C					
Missing Features						
Superintendent's Residence (DOH Kitchen, DOH Central Kitchen, State Kitchen)			circa 1890; burned 2016	<i>The Superintendent's Residence, built circa 1890, was a single-story wood-frame dwelling with single wall construction. It was added onto several times over the years. The residence featured a wood post and concrete pad foundation, horizontal skirt, board and batten siding with corner boards, a broken-pitch hip roof with asphalt shingles, and 12-light wood double hung windows. There was also a recessed porch with concrete steps, edged by two planters, at the southwest corner.</i>		
Picket fencing						
Hedges						
Slaughterhouse Restroom		59996	relocated to the shoreline near New Baldwin Home, 1950			








West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Natural Features and Systems						
Pacific shoreline				The West Coast Cemeteries character area edges the Pacific shoreline, including rocky sections as well as Nurse's Beach.		
Papaloa				Papaloa is the name for the terraced landform on which the West Coast Cemeteries are sited.		
Patterns of Spatial Organization						
Linear arrangement of cemeteries occupying an irregularly-shaped wedge of land between Kamehameha Street and the Pacific Ocean				The West Coast Cemeteries character area follows the Kalaupapa Peninsula's western Pacific shoreline. The cemeteries follow the shoreline in a north/south arrangement to the west of Kamehameha Street.		
Internal boundary demarcations comprised of walls and rows of trees				Remnants of a much stronger system of walls and plantings survive to depict the way the cemeteries were historically delineated and individually distinguished. Contemporary wood signs placed by the NPS at the eastern and western edges of the cemeteries help to delineate the cemeteries today since much of the original demarcation system has been lost to the 1946 tsunami, and contemporary maintenance practices. The NPS has also reestablished some of the walls damaged by the tsunami.		
Row of houses along Kamehameha Street				A linear streetscape of houses faces Kamehameha Street east of West Coast Cemeteries G and H.		
Barrel Field				To the east of West Coast Cemeteries A through F is a large open field, known as Barrel Field, which has served several purposes. It was the initial airfield between 1929 and 1933. It has also served as a site for baseball games.		






Appendix A Inventory Tables and Maps





West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Views and Vistas						
Linear view corridor associated with Kamehameha Street				Looking northwest and southeast from Kamehameha Street, the long extent of the linear system of cemeteries is evident and expansive.		
Views across open space associated with cemeteries to east and west				Because there are few vertical elements within the cemeteries, with the exception of a few scattered trees, long views are afforded across the open spaces to the Pacific Ocean beyond.		
Ironwood trees blocking views of the ocean				Where ironwood trees have colonized the shoreline, views of the Pacific Ocean are more limited.		
Circulation						
Kamehameha Street	C		By 1969	The principal feature forming the eastern boundary of the West Coast Cemeteries is Kamehameha Street, which leads north/south between the Kalaupapa Airport and the Kalaupapa Settlement. Kamehameha Street is a two-way asphalt-paved road. The road is also edged to the east by a cluster of residences and a large field that has served as a recreation area, and to the west by features associated with the 'Īliopi'I Beach House character area. Wooden signs that delineate the individual cemeteries by name face Kamehameha Street.		
Internal access roads	NC		Undetermined	Grassy two-track roads provide internal access to the cemetery system. These arise from Kamehameha Street, and are particularly evident within Cemeteries G and H.		




West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cultural Vegetation						
Cultural vegetation			By 1969	Patient interviews have suggested that wildflowers on the graveyard side of the baseball park have traditionally served as a source for lei flowers, and that flowers have traditionally been placed on graves in honor of the dead. Date palm, ficus, and haole koa trees are also present that appear to have been planted. Haole koa trees were historically used to mark boundaries. A ficus that is entwined with one of the grave markers is among the most photographed features of Cemetery H.		
Coconut palm trees				Portions of the West Coast Cemeteries are planted with coconut palm trees.		
Ironwood trees			By 1969	Ironwood trees are one of the species found throughout the West Coast Cemeteries. Some mark cemetery boundaries. This invasive species has also colonized extensive portions of the western shoreline.		
Buildings						
Olivia's Beach House (Olivia Breitha's Beach House, Gloria Marks's Beach House, Green Beach House)	C	55729	Circa 1938-1950	Gloria's Beach House is a single story wood frame structure located on a beach dune at the southwest corner of Cemetery G. A cluster of date palms grows in the stone wall near the house. The house features an irregular floor plan and measures approximately 20 by 40 feet. The foundation is wood post and concrete and stone pier. The walls are a combination of tongue and groove, board and batten, and corrugated metal siding, while the roof is a combination gable and shed configuration with rolled asphalt roofing material.		

Appendix A Inventory Tables and Maps

West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Dry stacked lava rock walls	C		Early twentieth century; affected by tsunami 1946	Stacked dry-laid lava rock walls once edged many of the individual cemeteries within the West Coast Cemetery system. Several of these walls were damaged or destroyed by the 1946 tsunami, leaving rock scattered around the burial grounds. Some of the walls have been repaired by the National Park Service.		
Enclosures	C			A concrete walled enclosure surrounds several graves in Cemetery ? Another surround is composed of concrete piers connected with pipe metal. Wrought iron surrounds are also present.		
Concrete piers	C			Concrete piers are located within the cemeteries. Some are free standing and others are related to wall enclosures.		
Miriam Mina Residence	C	235713	1931; stabilized 2003	The Miriam Mina Residence is a one story wood frame building. A shed is located at the rear of the building. A concrete sidewalk runs from the front lawn to the front porch entry, while a dry stacked lava rock wall runs along the northern edge of the yard parallel to the sidewalk. Associated with the residence is a chicken coop. The coop was constructed by 1938. It features wood posts on concrete blocks, corrugated metal shed roof, and a combination of corrugated metal, vertical board, and wire mesh siding. The north elevation features seven small entrances for chickens.		
Brown Residence	C	333837	1933; moved 1965; front porch enclosed post 1977; rehabilitated 2001-2002	The Brown Residence is a one story wood frame building. The house was moved to this location from McVeigh Home. The front porch has been enclosed and the front steps turned ninety degrees.		

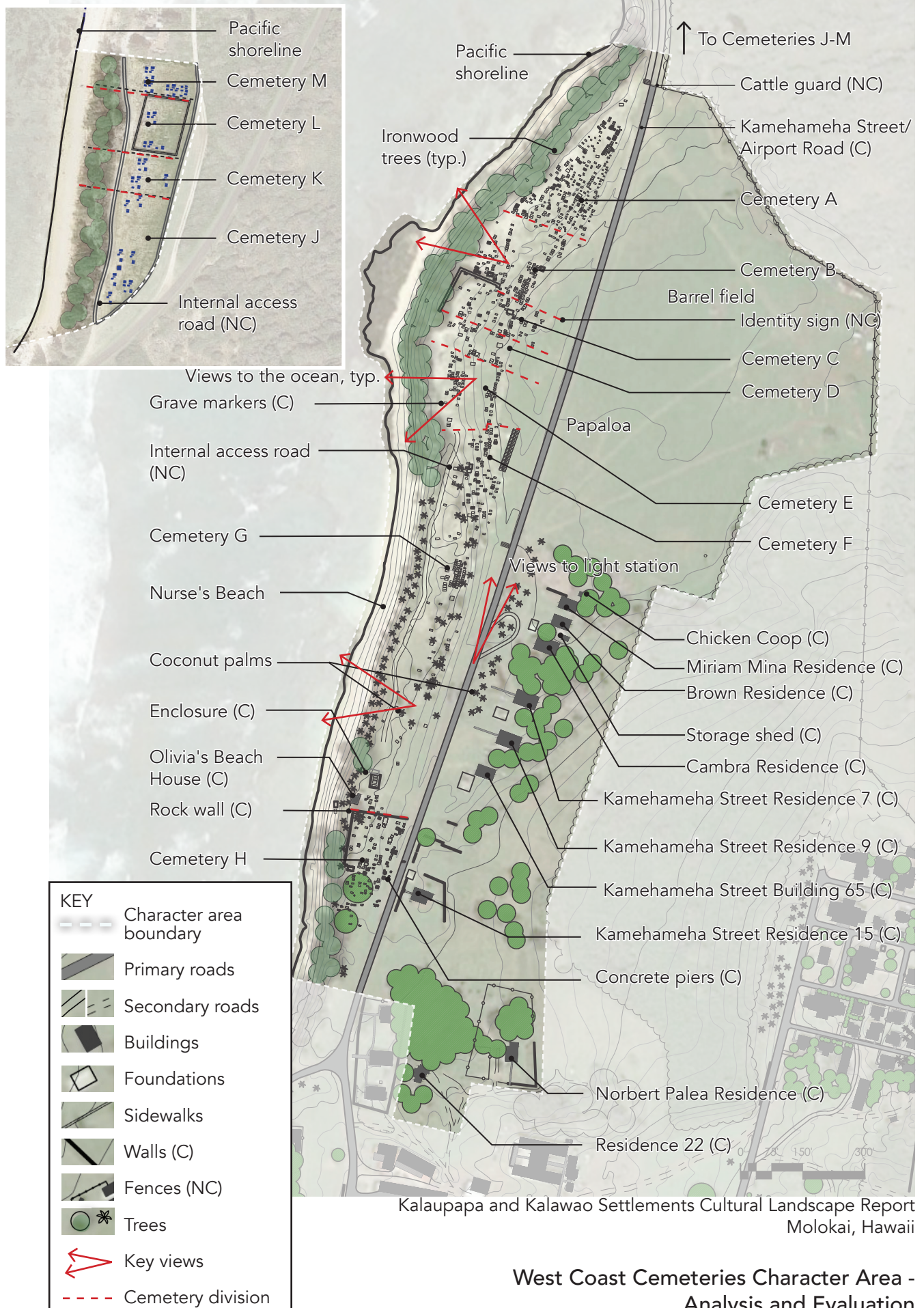
West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Cambra Residence	C	341955	1913	This one story building features a porch across the entire front of the building under the shed roof extension. A wood frame addition is located on the north elevation. The residence, which reflects the types of residences that existed at Kalaupapa prior to the 1880s, may date to an earlier period.		
Cambra Residence Storage Shed	C	573888		This storage structure is attached to the north side of the Cambra Residence.		
Kamehameha Street Residence 7	C	55800	1931-1932; repaired 2008	This one story wood-frame building was built includes a small wood porch and wash house on the south elevation.		
Kamehameha Street Building 9	C	56104	1931-1932	This one story wood-frame building is one of several "A Houses" in the settlement with similar floorplans. A gable roof addition is on the south elevation. A concrete sidewalk connects the lawn to the front porch. There is also a partially enclosed wash house with a concrete slab foundation and shed roof located at the northeast corner.		
Kamehameha Street Residence 65	C	101952	Circa 1938; moved 1978; rehabilitated 2010	This is a carport that was moved from Bay View Home to the site of a former residence. The building has a corrugated metal gable roof, board and batten siding, and five windows. It once sported a deteriorated wood sign reading "IKE'S SCENIC TOURS" that is now in park curatorial storage.		
Kamehameha Street Residence 15	C	55726	1936; front porch enclosed post 1977	This one story wood frame building is one of several "A Houses" in the settlement with similar floor plans. A 3-foot-high dry stacked lava rock wall, marked with entrance piers, separates the yard from Kamehameha Street to the west. A concrete sidewalk connects the entrance gate to the front porch, located on the southwest corner of the house. A wood picket fence, painted white, defines a planting area around the building foundation.		

West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Residence 22	C	55724	By 1938	This one story wood-frame building features a shed roof addition on the north elevation. Two ruins of outbuildings are located north of the house. A dry stacked rock wall runs along the south and west edges of the yard that may date to an earlier period.		
Norbert Palea Residence	C	59951	1936	This one story wood frame building is one of several “A Houses” in the settlement with similar floorplans. The entrance is located in an enclosed porch on the north elevation accessed by concrete steps. The yard is accessed through a vinyl lattice gate located between two mortared rock piers, measuring approximately 2 by 2 by 4 feet high. A dry stacked rock wall lines the property to the south and east. Chain link and metal fencing mark the property to the north and west. There are foundation plantings around the house, but these are overgrown with invasives.		
Chicken Coop	C		1938	The Chicken Coop is an approximately 6 foot by 9 foot raised structure located in overgrown area northeast of Miriam Mina Residence. It is constructed of wood posts on concrete blocks, features a corrugated metal shed roof, and a combination of corrugated metal, vertical board, and wire mesh siding.		
Electrical system features	C		by 1969	Historic electrical system features, including poles and wires, extend to Olivia’s Beach House and the row of houses that face the cemetery along Kamehameha Street.		
Cattle guard	NC			At the north end of Cemeteries A through H is a cattle guard that is associated with fencing used to exclude axis deer from Kalaupapa Settlement.		

West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Small-scale features						
Grave markers	C			As many as 1,400 grave markers have been inventoried within the West Coast Cemeteries. These grave markers vary in terms of form, size, style, and materials. Grave marker types include upright slabs, slabs set flush with the ground, crosses, mausoleums, tomb and vaults, obelisks, posts, pillows, slab-covered graves, haka or urn houses, and concrete slurry-covered lava rocks configured in geometric forms). Some graves are marked with simple signs. Materials used to fashion grave markers include wood, rough lava stone, concrete, iron pipe, bronze plaques, granite, marble, and sand. Grave sites also feature draped leis, plastic flower bunches, and other memorabilia placed by friends and family members.	Many grave markers are deteriorated. Others are being negatively impacted by vegetation.	
Identity signs	NC			Modest brown painted wood signs with routed letters are placed along Kamehameha Street to the east, and the Pacific shoreline to the west, to indicate the boundaries between adjacent cemeteries.		
Lions Club sign; Welcome to Kalaupapa sign; road signs	NC					

Appendix A Inventory Tables and Maps

West Coast Cemeteries Resource Inventory Table						
Feature	C/NC	CRIS ID#	Date of Origin	Description	Condition	Photograph
Archeological Resources						
West Coast Cemeteries Outbuilding Ruins	C			Concrete slab foundations of four one-story garages/sheds are located throughout the residential area of the West Coast Cemeteries Area. These are included here as individual contributing sites. Foundations are located west of Cambra Residence; between Kamehameha Street Building 9 and Kamehameha Street Residence 7; and northwest of Kamehameha Street Residence 15. The foundation north of Kamehameha Street Residence 15 was storage shed, which has been removed. Additional foundations may also be present in the dense invasive vegetation that surrounds the area to the east.		
Missing Features						
<i>Rock walls</i>				<i>damaged by tsunami in 1946</i>		
<i>Plantings</i>				<i>damaged by tsunami in 1946</i>		
<i>Grave markers</i>				<i>damaged by tsunami in 1946</i>		
<i>Cattle fencing</i>				<i>damaged by tsunami in 1946</i>		



Appendix B: Cemetery Management Plan

Introduction

This Cemetery Management Plan is intended to support implementation of one of the primary recommendations of the Kalaupapa and Kalawao Settlements Cultural Landscape Report – establishment of appropriate protocols and procedures for stewardship of the twenty cemeteries located throughout the Settlements where it is believed as many as 8,000 people are buried. These cemeteries and burial places are collectively among the most powerful imprints on the cultural landscape, reflecting cultural values and practices, evoking reverence for the story of those who lived at Kalaupapa, and perhaps most importantly, are profoundly personal and significant for the families, descendants, and friends of all those who lived here.

The cemeteries range in size from a few burials to several acres, with many graves marked with historic markers, tombs, and dry-stacked stone walls. The known cemeteries, including those located along the West Coast of the Kalaupapa Settlement, along the Damien Road corridor, in the vicinity of Kauhakō Crater, and at Kalawao, are actively managed by the National Park Service (NPS). The NPS CRIS lists approximately 1,551 tombs and grave markers at Kalaupapa and Kalawao Settlements.¹ Grave markers vary in size, style and forms. They include tombs, vaults, temporary markers, burial mounds, and simple concrete slabs over individual gravesites. Materials used for grave markers include wood, lava stone, concrete, granite, marble, and sand.² However, it is believed that the majority of the burials within the known cemeteries are not marked. In addition to grave markers, known cemeteries are marked by dry stacked stone walls, burial plot enclosures, and ephemeral offerings. Mown turf grass serves as the primary landcover for most of the known cemeteries. Others feature swept earth and low growing vines and shrubs. Trees are also present in association with some of the cemeteries. Wooden signs identify several of the cemeteries by name; not all of the cemeteries are marked in this way. Informal maintenance roads afford access to several of the cemeteries.

Over time, features have deteriorated in terms of condition due to environmental conditions, maintenance practices, and colonization of some areas by large trees and invasive vegetation that has grown up and obscured historic patterns of spatial organization and viewsheds. Falling branches and undermining root systems have created a hazardous situation and damaged grave markers. Necessary future stewardship and preservation of cemetery features involves maintenance and repair of grave markers, rock walls, signs; care of plantings and turf. Guidance is based on documentation of existing and historic conditions, evaluation of condition issues of concern, and past preservation approaches and strategies applied at Kalaupapa.

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1. While the CRIS records 1,551 grave markers located to date on the peninsula, there remains a possibility that more markers and/or cemeteries may be identified in the future.
 2. Richard Miller, *Grave Markers at Kalaupapa, A Study of Two Material Types, Determining Causes of Damage and Repair Methods* (Savannah, Georgia: Savannah College of Art and Design, Conservation Science and Technology, 2012).

Project Scope

As noted in the project statement of work, the Cemetery Management Plan focuses on the completion of documentation and management strategies for twenty ethnographic and historic cemeteries and isolated gravesites in Kalaupapa National Historical Park. Tasks undertaken to complete the plan include:

- Preparation of a history of each cemetery or gravesite
- Documentation of existing conditions and change that has occurred since the end of the period of significance
- Provision of maintenance recommendations for removal of invasive vegetation and other maintenance issues related to cemeteries and gravesites
- Provision of cemetery and gravesite management guidelines that can be implemented throughout the park
- Provision of GIS data for cemetery and gravesite features not previously recorded by NPS

Methodology

Research, Field Investigations, GIS Data Collection

Work on the Cemetery Management Plan commenced in November 2018 during a site visit to Kalaupapa and Kalawao Settlements. During the November 5-9, 2018, site visit, team members Liz Sargent and Jen Trompetter conducted research in the park archives to collect all relevant information related to cemeteries, while also completing field survey of each cemetery using non-destructive investigation techniques. Representatives of Garcia Associates also participated in the site visit, collecting GIS data related to previously undocumented grave markers and other cemetery features. These efforts centered on Cemeteries J through V. The work was anticipated to include documentation of 270 cemetery markers, ten stone walls, and twenty gate posts or gates. While on site, team members also met with NPS staff who have been involved in cemetery management at Kalaupapa to discuss their knowledge and techniques used to repair grave markers and other cemetery features.

Documentation

Using available historical records, including the park HRS, CLI, NHL nomination update, and the materials collected at the park during archival research, team members Deborah Slaton and Tim Penich completed site history information related to each of the cemeteries.

Using available GIS data provided by the NPS, and GPS data collected for features associated with Cemetery O, Garcia Associates created maps of each cemetery addressed by this study.

Team members Liz Sargent and Jen Trompetter then assembled existing conditions documentation at a landscape scale rather than at an individual marker scale for each cemetery that included text descriptions, photographic illustrations, and labeled mapping. The document relied on the CRIS database for the existing conditions documentation for each marker. The documentation included an inventory of the condition-related issues observed on site during field investigations.

Existing conditions documentation and site historical information was then compared to evaluate changes that have occurred within the cemeteries since the end of the period of significance, with identification of contributing features and conditions provided by landscape characteristic and illustrated by Liz Sargent HLA on the maps created by Garcia Associates.

Treatment

Team members Liz Sargent, Deborah Slaton, Joshua Freedland, and Jen Trompetter collaborated on the development of treatment recommendations for the cemeteries that addressed

- Vegetation management strategies
- Grave marker stabilization strategies
- Ethnographic association management strategies

Additionally, the team prepared maintenance recommendations for cemeteries that addressed

- Type of cyclical and deferred maintenance needed
- Frequency of cyclical maintenance
- Appropriate maintenance techniques

Project Location

The twenty cemeteries that are the focus of the Cemetery Management Plan are located throughout Kalaupapa and Kalawao Settlements. The cemeteries are typically referred to using a discrete letter identification, as shown on Figure B-1.

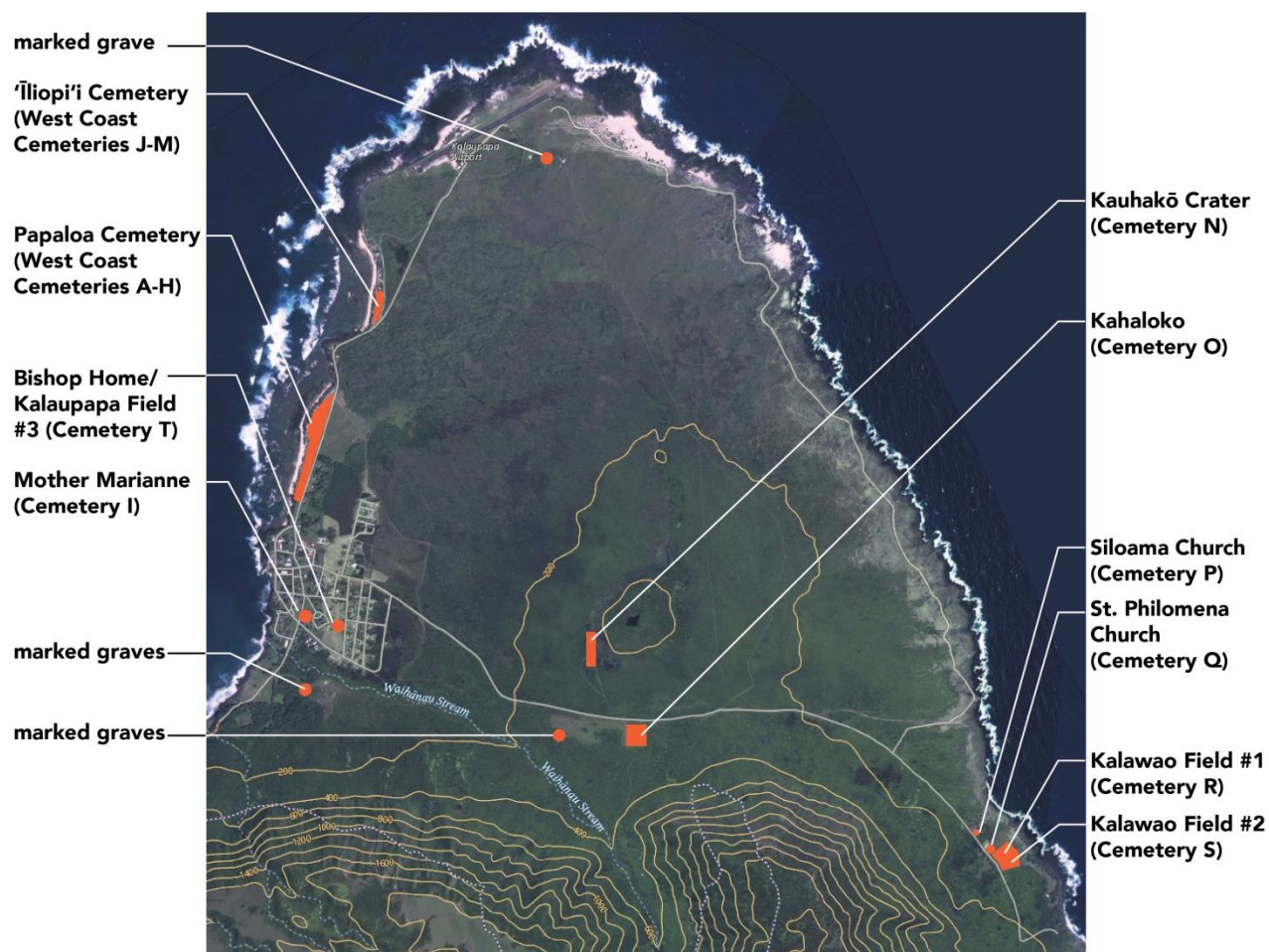


Figure B-1. Map illustrating cemetery locations at Kalaupapa and Kalawao Settlements. (Source: LSHLA).

Historical Overview

The following physical history of the cemeteries at Kalaupapa and Kalawao is based on research conducted for the Kalaupapa and Kalawao Settlements Cultural Landscape Report to which this Cemetery Management Plan is an appendix; and on review of documents, including *A Study of the Stone Materials Used to Mark Kalaupapa Burials from the Time of Exile to 1930* by Richard Miller (Fall 2010); the Historic Resource Study entitled, *Exile in Paradise: The Isolation of Hawaii's Leprosy Victims and Development of Kalaupapa Settlement, 1865 to the Present*, by Linda W. Greene (1985); National Historic Landmark nomination documentation for the Kalaupapa Leprosy Settlement Historic District (1975); and *Kalaupapa and Kalawao Settlements Cultural Landscape Inventory* (2011).

The first Hansen's disease patients reached the isolation settlement in January 1866. As the sick were not able to care for themselves, their health deteriorated, and supplies ran low. Even as conditions worsened, the settlement continued to expand. The total number of residents reached 142 patients, with twenty-two kōkua, by October 1866.³ Given the poor living conditions and lack of medical care, many of the early patients at the settlement died within a few years of being sent to Kalawao. More than 40 percent of patients at the settlement died from 1866 to 1873.⁴

Historically, traditional Hawaiian burials consisted of placing bodies in caves or at the edge of the ocean, and graves were not necessarily marked. In an essay on "Hawaiian Methods of Interment," in his travel journal of 1823, William Ellis wrote: "A pile of stones, or a circle of high poles, surrounded their grave, and marked the place of their interment. It was only the bodies of priests, or persons of some importance, that were thus buried."⁵ However, in the early years of the isolation settlement, patients did not have the resources or strength to create formal burials for the deceased:

Had conditions been any more amenable the initial inclination of those who survived would likely have been to follow the burial customs and practices familiar to them: individual in-ground burial in a place designated for the purpose, with some marker to indicate at the very least the place of burial. However, without the necessary tools or materials for the construction of even shelter from the elements, the earliest exiles were forced to return to an interment method of the past, entombment in rough stacked mounds of stone and earth and leaves. The peninsula is generally very rocky, and the soil layer at the base of the high pali is locally thick, providing a ready source of material with which to cover the dead. Possible burial mounds dot the landscape in the area surrounding the Kalawao Settlement. The practice of entombment in rough piled stone mounds continued to some degree until the end of the nineteenth century.⁶

Saint Damien, who arrived at the Kalawao Settlement in 1873, was concerned about providing for proper interment of deceased patients. A common burial ground was present (likely the cemetery now identified as

3. Johnson, 26.

4. Juvik, *Ethnographic Study*, 26; 1886 "Honolulu Almanac and Directory"; Greene, 62.

5. Richard Miller, "A Study of the Stone Materials Used to Mark Kalaupapa Burials from the Time of Exile to 1930," (Fall 2010), citing "Hawaiian Methods of Interment," from the *Journal of William Ellis: A Narrative of a Tour through Hawaii in 1823* (1825).

6. "The Honolulu Almanac and Directory," *Pacific Commercial Advertiser Steam Print* (Honolulu, 1887)," 39.

Cemetery S). As the government did not have funding to purchase coffins, he formed coffin associations to provide a common fund for interment. Early residents in the settlement had been required to pay for their own coffins, or if they could not afford a coffin, were buried in blankets.⁷ Sick patients were required to dig graves when needed, and could be denied food rations if they refused.⁸ Bodies were often washed out by rain, or dug up and mutilated by hogs.

The Catholic graveyard at Kalawao abutted St. Philomena Church, with Saint Damien's residence located nearby. In 1886:

Owing to the rocky nature of the ground in some places, the corpses were not regularly distributed in places two, three, and four coffins were placed on top of each other, naturally the soil became oversaturated with the soluble products of the corpses and the percolating rain drowned the maggots and surrounding air being filled with foetid and foul vapors emanating from these semi-decomposing corpses, and to add to the gruesomeness of the surroundings, the closeness of the coffins to the surface of the ground encouraged the visits of scavenger dogs and pigs, and by these animals rooting and disturbing the graves, the odor around Fr. Damien's home was similar to a charnel house⁹

In an 1887 letter, Brother Dutton noted that the principal graveyard (located near his cabin) held approximately 2,000 graves; nearly 1,000 people were buried elsewhere.¹⁰

To address the problems noted above, Saint Damien added a fenced cemetery adjacent to St. Philomena Church (likely the cemetery now identified as Cemetery Q).¹¹ The new cemetery was "quite French with its elaborate entrance, filigree woodwork painted in black and white, and its tall, slender and very graceful cross in its very center."¹² The cemetery adjacent to St. Philomena Church (Cemetery Q) may later have been expanded to the east (likely the cemetery now identified as Cemetery R), or the extension may be a previous burial area. Both are contained within dry stacked lava stone walls.

Saint Damien also served as coffin-maker and gravedigger, as well as officiating at services. His house was located adjacent the cemetery. Damien wrote: "The cemetery, church and my house form one enclosure; thus at night time I am the sole keeper of this garden of the dead."¹³ The two burial associations participated in services and the settlement band provided music.¹⁴

Burials also occurred in the churchyard of Siloama Church to the northwest (Cemetery P), which includes evidence of traditional Hawaiian burials as well as other forms of grave markers. Given the fact that Siloama Church was established in 1871, it is likely that burials began to occur within the churchyard during the late nineteenth century. The cemetery was probably not used after services stopped there in 1927.¹⁵

When Saint Damien passed away on April 15, 1889, he was buried under a tree that had provided him with shelter when he first arrived at Kalawao located near St. Philomena Church and within the fenced cemetery he had established. The Catholic mission erected a black marble cross above his grave with the inscription "V.C.J.S. / Sacred to the Memory / of the Revd. Father / DAMIEN DE VEUSTER / DIED A MARTYR TO THE CHARITY / for the afflicted Lepers / April 15, 1889 / R.I.P." (In 1936, at the request of King Leopold

7. Greene, 107–108.

8. Ibid., 105.

9. Ibid., 583–584, citing Mouritz.

10. Greene, 583–584.

11. Rygh and Tamimi.

12. Greene, 146.

13. Ibid., 105.

14. Ibid., 105.

15. Ibid., 590.

III of Belgium, the Territory of Hawai‘i arranged for Saint Damien’s body to be returned to his native Belgium for reinterment). In 1995, the year of his beatification, his right hand was returned to the gravesite at St. Philomena Church. His sainthood was confirmed in 2009.

While many burials of patients occurred in the vicinity of Kalawao during the nineteenth century, the first known individual marked graves on the peninsula are located at Kahaloko Cemetery east of Kalawao along Damien Road (Cemetery O). This cemetery may have been established on the site of an earlier, pre-Kalawao Settlement, burial ground. Kahaloko Cemetery contains several marked traditional Hawaiian burial sites composed of single lava stones embedded at the head of the graves or rocks placed at both the head and foot, rocks rimming the grave, and sometimes a head marker to indicate the orientation of the remains.¹⁶ The burial dates associated with these traditional grave markers are unknown. Records indicate that Kahaloko Cemetery was established for Settlement use in 1887.¹⁷ The cemetery, however, contains one inscribed marker dated 1885 in addition to, as Linda Greene notes, “some very old Hawaiian graves.”¹⁸ The latest inscribed tombstones are dated 1914. The cemetery is surrounded by lava stone walls, and contains several types of uninscribed lava stone grave markers. Although native Hawaiians shaped the stone to create utilitarian and spiritual items, “the material does not lend itself readily to tooling or inscription, and there are no extant examples of inscribed local lava stone cemetery markers on the peninsula.”¹⁹ Additional cemeteries appear to have been established soon thereafter along the western shoreline of the peninsula near Kalaupapa based on inscriptions found on some grave markers in the West Coast Cemeteries indicating death dates of circa 1888.

At Kauhakō Crater, the deep salt water pond was a burial ground in ancient times.²⁰

Individual in-ground burials, with lava stone used as grave markers, began to occur once supplies and kōkua who could assist with this process arrived.²¹ The ongoing need for new grave markers was met by the use of local materials including lava stone, beach sand, ocean water, and lime. Lime for use in masonry construction was first prepared at Kalaupapa by burning coral or shells, and was later purchased from Honolulu firms such as the Hawaiian Stone Company.⁴ These materials were also used to construct large tombs, often built over initial in-ground interments; some tombs were built prior to a person’s death, with the body placed later and the tomb then sealed.²²

Early tombs were constructed without foundations; base stones were placed on the ground and lava stone with lime-based mortar erected to form the structure, with loose rock as fill. Layers of lime-based render were applied to provide a smooth surface, which was lime-washed periodically to fill small cracks and strengthen the render.²³

By the late 1880s, manufactured portland cement was available at Kalaupapa.⁵ Artisans were able to create grave markers using cement-based rather than a lime-based mortars or renders, and concrete could be cast in forms. For grave markers, the cast concrete marker was covered with a 1/4- to 1/2-inch-thick layer of fine mortar, into which an inscription was incised. Inscriptions varied in their lettering and artistry. Approximately

16. “The Honolulu Almanac and Directory,” 39.

17. Sign at cemetery states Kahaloko Cemetery was established in 1887.

18. Greene, 591.

19. “The Honolulu Almanac and Directory,” 39.

20. Greene, 591.

21. Ibid., 42.

22. Ellis, 22. An advertisement by Wilder and Company for Portland cement appeared in the 1887 “Honolulu Almanac and Directory.”

23. “The Honolulu Almanac and Directory,” 39.

75 percent of all existing grave markers were locally fabricated using lime-based or cement-based mortars and renders.

Early cemeteries also included wooden crosses marking numerous graves. None of these wood crosses exists today.

Inscribed stone grave markers began to appear in the Kalaupapa cemeteries at Papaloa along the western shoreline by the late 1880s. The earliest dated grave marker at Kalaupapa, from 1888, commemorates the death of Solomon Thompson. It is located in Cemetery H, the burial ground at the southern end of the West Coast Cemeteries closest to Kalaupapa.

It is entirely possible that stone markers and tombs were placed sometime after the death date indicated, given the slow methods of communications and transport available, and the time required to allow the soil to settle.²⁴ Stone was shipped as ballast from Europe to the United States, and from marble quarries on the East Coast to California; from the West Coasts, stone and other materials could be shaped in grave markers and shipped to Hawai‘i. *Husted’s Directory of Honolulu and the Hawaiian Islands* (1899 edition) includes advertisements for manufacturers and suppliers of two stone grave markers: Fred Harrison Monumental Marble Works of Honolulu and the H. L. Lloyd Company of San Francisco, both of which offered marble and granite monuments.²⁵ Although the grave markers on Kalaupapa are not documented as having been manufactured by these firms, it is possible that stone grave markers were available for graves at Kalaupapa.²⁶

Some of the marble markers are identical in terms of form and material—such as markers with bullnosed molding, tassels hanging above the out-tapering chamfers, and the deceased’s name in an arched format—suggesting that they were acquired as stock items from a monument shop. As there is no white marble naturally occurring in Hawai‘i, the material for marble markers would have been imported to the islands. At the time these markers were procured, the state of Vermont was the leading producer of white marble for cemetery use in the United States. Stone was often transported in the holds of ships, providing ballast. It is not known whether slabs of stone were transported in rough form, to be sized and finished in Honolulu, or whether markers were shipped finished except for the inscription. An advertisement in McKenny’s *Hawaiian Directory* (late 1880s) for E. B. Thomas, Contractor and Builder, listed items for sale including brick, lime, and marble dust. Analysis of later coating mortars at Kalaupapa revealed marble dust utilized as a very fine aggregate in some renders.²⁷ The two nearly identical marble markers are located near one another in the Old Hawaiian Cemetery (G). Both markers shown are set on hand finished basalt pedestals, but the ghost line on the pedestals does not fit the markers.

In 1890, the Board of Health decided to officially relocate the isolation settlement from Kalawao to Kalaupapa to take advantage of the sunnier climate, better proximity to a boat landing, and other conditions more favorable to the settlement.²⁸ With the relocation of the settlement to Kalaupapa, additional cemeteries were established to accommodate patients who had passed away. These cemeteries were established along the

24. Ibid., 79. Under “Dutiable Imports,” the directory notes “stone, marble, plaster of Paris, alabaster, and all imitations thereof.”

25. *Husted’s Directory of Honolulu and the Hawaiian Islands* (1899 edition).

26. Richard Miller, “A Study of the Stone Materials Used to Mark Kalaupapa Burials from the Time of Exile to 1930,” Fall 2010; Richard Miller, “Living with the Dead: A Socio-Technical Look at Gravemarker Preservation at Kalaupapa” PowerPoint, for SCAD MA Final Project, Winter 2017. From “The Honolulu Almanac and Directory,” 79.

27. Ibid, 79.

28. Rygh and Tamimi, 34.

western shoreline of Kalaupapa to the north of the relocated Settlement as a linear system of discrete burial grounds associated with religious and other affiliations. In 1901, two benevolent societies were formed to take care of graves on the peninsula, including the cemeteries at Kalawao and Kalaupapa. Graves within fenced areas in unfenced sites were cared for by the societies, and graves in unfenced areas were under the stewardship of the Board of Health.²⁹ Fences and walls were constructed to prevent livestock from damaging the graves. For example, a graveyard at Kalawao Hospital was enclosed by a fence, while several burial grounds at Kalaupapa were contained by stone walls.³⁰ With relocation of the settlement from Kalawao to Kalaupapa, the deeper harbor on the western shoreline allowed larger cargo ships to dock and bring supplies and manufactured goods from Honolulu, including gravestones.³¹

For hundreds of years, the fine grained structurally stable basalt found on the Island of Hawai‘i had been rendered into adzes, axes, and other heavy duty edge tools. Basalt grave markers first appeared in Kalaupapa in the mid-1910s. The early basalt grave markers featured “. . . exquisite hand cut detail, including relief lettering, florals, moldings, and much more.”³² By the early 1940s, the use of basalt grave markers at Kalaupapa ended, possible to materials shortages or costs.³³

Saint Marianne Cope of the Franciscan Sisters of Charity, who had arrived on the island in 1888 and administered the Bishop Home for Girls, died in 1918. An elaborate grave marker indicates the original place of her burial, on the grounds of the Bishop Home, near Puahi Street (in what is now designated as Cemetery I). In 2005, the year she was beatified, her remains were moved for reinterment at the motherhouse of the Franciscan Sisters in Syracuse, New York. She was canonized in 2012, and in 2014 her remains were returned to Honolulu and were enshrined at the Cathedral Basilica of Our Lady of Peace.

The West Coast Cemeteries contain grave markers with a range of dates, as well as undated markers and graves that may be older than those with dated markers. For example, the earliest markers with incised dates in the various cemeteries range from 1888 (Cemeteries F and G); 1891 (Cemetery H); 1892 (Cemetery F); 1895 (Cemetery D); 1897 (Cemetery C); 1899 (Cemetery J, although the remainder of the dated markers in this cemetery postdate the 1930s); 1900 (Cemetery B); 1903 (Cemetery L); 1918 (Cemetery I, the grave of Saint Marianne Cope); 191 (Cemetery A); 1932 (Cemetery K); and 1937 (Cemetery M).

On April 1, 1946, a large tsunami struck the west side of the Kalaupapa Peninsula of Molokai, significantly affecting the community and many structures and other features. The cemeteries along the western shoreline were heavily damaged, with gravestones moved off their foundations and displaced; graves washed open and remains exposed; some tombs collapsed; wooden crosses lost; fences and stone walls washed away; plantings destroyed and shoreline erosion effectively erasing some burial locations.³⁴ In some areas of the cemetery, more than half the grave markers were lost.³⁵ Cemetery maps were rudimentary and workers had great difficulty in relocating graves on which to reposition the dislodged markers. Although measurements were taken from tombs and grave markers placed based on available information, headstones were placed on any

29. Greene, 294.

30. Ibid., 206, citing Report of 1890.

31. “The Honolulu Almanac and Directory,” 39.

32. “The Honolulu Almanac and Directory,” 79.

33. National Park Service, “Asian American and Pacific Islander Heritage.”

34. Johnson, 166, Greene, 525, 534.

35. National Park Service, “Asian American and Pacific Islander Heritage,”

<https://www.nps.gov/subjects/aapiheritage/index.htm>, accessed August 2019.

available base and “The appearance of individual grave markers, and of the cemetery itself were irreparably altered.”³⁶

In 2003, Kalaupapa National Historical Park instituted a baseline condition assessment of all known grave markers and tombs on Kalaupapa peninsula, at the time totaling more than 1,300.³⁷ NPS has also implemented conservation treatment of grave markers. In June 2016, the NPS hosted a ten-day workshop on preservation practices, including thirty-five participants from neighboring islands for classroom instruction on Kalaupapa history, Section 106 and NAGPRA compliance, Hawaiian cultural practices, and cemetery mapping. The workshop addressed preservation and conservation practices including grave marker cleaning, lime mortar formulation and use, and masonry repair techniques. The workshop also included field studies to provide hands-on training and implement preservation of selected grave markers and tombs in historic Papaloa cemetery.³⁸



Figure B-2. Papaloa Cemetery, 1924 (Source: St. Patrick's Church, Brother Bertram Collection, Boland Doneux 00372 Box 01 001)

36. Ibid.

37. Johnson, 166.

38. National Park Service, “Asian American and Pacific Islander Heritage.”



Figure B-3. Papaloa Cemetery, 1930s (Source: St. Patrick's Church, Brother Bertram Collection, Boland Doneux 00372 Box 01 004)



Figure B-4. Catholic Mission Cemetery, Kalaupapa, before 1900. (Source: Kalaupapa Historical Society Album, page 19, #841; St. Patrick's Church, Brother Bertram Collection, Boland Doneux 00372 Box 01 003)



Figure B-5. Papaloa Cemetery, Kalaupapa, undated view. (Source: Kalaupapa Historical Society Album, page 20, #845)



Figure B-6. Kalaupapa Cemetery, “Head” modeled by a patient. (Source: Kalaupapa Historical Society Album, page 20, #844)



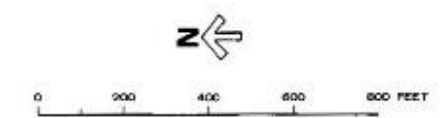
Figure B-7. Buddhist priests at A.J.A. Cemetery, Kalaupapa, 1950s. (Source: Kalaupapa Historical Society Album, page 18, #840)



Figure B-8. Buddhist priests at A.J.A. Cemetery, Kalaupapa, 1950s. (Source: Kalaupapa Historical Society Album, page 18, #856)



Adapted from map titled:
**BOARD OF HOSPITALS
 AND SETTLEMENT**
 From office of H.A. Kluegel, Supt.
 April 17, 1936



HISTORICAL BASE MAP 4
KALAUPAPA SETTLEMENT - 1936
KALAUPAPA NATIONAL HISTORICAL PARK
 MOLOKAI, HAWAII
 UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

481	25,006
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1 Figure B-10. Map of Kalaupapa Settlement, 1936. (Source: Greene, Historical Base Map 4)

Existing Conditions and Analysis

Significance of Kalaupapa and Kalawao Cemeteries

The Kalaupapa and Kalawao Settlements cemeteries are among the most important historic sites and resources on Kalaupapa Peninsula, connecting the profound stories of this place with the people of the community. The cemeteries will continue to convey these key historic associations into perpetuity, and offer a place for descendants and other visitors to contemplate and reconcile a difficult period in Hawaiian and American history.

The twenty burial grounds that are the focus of the cemetery management plan all fall within the broader historic landscape of Kalaupapa and Kalawao Settlements (Figure B-11) that has been designated a National Historic Landmark. As noted in the National Historic Landmark nomination for the property, Kalaupapa and Kalawao Settlements meet NHL Criteria 1, 2, 3, 4, and 6 under NHL themes that include Peopling Places, Creating Social Institutional Movements, Expressing Cultural Values, Expanding Science and Technology, and the Changing Role of the United States in the World Community. The period of significance for the property extends between 1866 and 1969.

Several significant persons are noted as associated with the settlement. These include Father Damien De Veuster (Saint Damien of Molokai), Mother Marianne Cope (Saint Marianne Cope), Brother Joseph Dutton, and the People of Kalaupapa. While neither Saint Damien nor Saint Marianne Cope is interred at Kalaupapa today, both were originally buried within the cemeteries addressed by this study and later reinterred elsewhere away from Molokai. The cemeteries also continue to represent the final resting place of as many as 8,000 others traditionally associated with Kalaupapa.

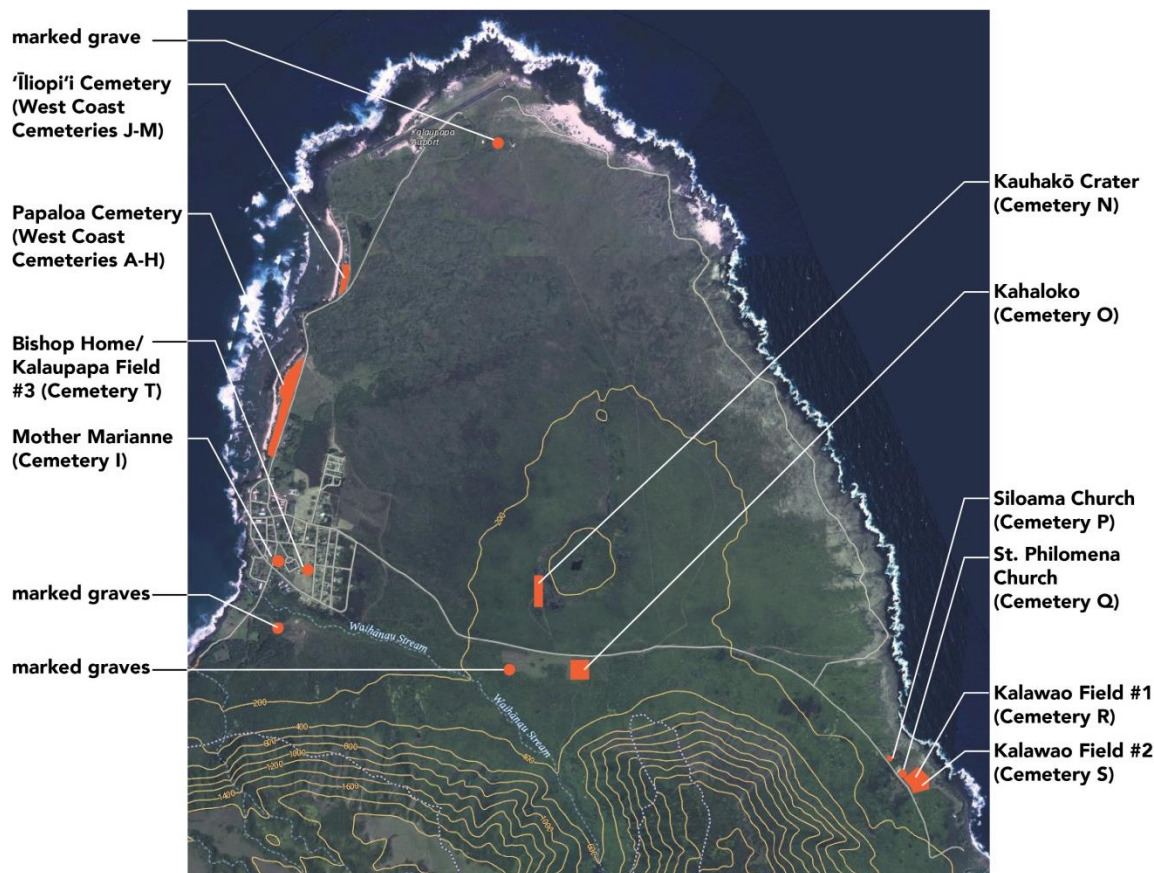


Figure B-11. Map illustrating cemetery locations at Kalaupapa and Kalawao Settlements. (Source: National Park Service)

Features Contributing to the Significance of Kalaupapa and Kalawao Cemeteries

The twenty cemeteries and burial locations that are the focus of this Cemetery Management Plan are located in several places within the CLR study area. Twelve form a linear system of discrete but contiguous burial grounds referred to as the West Coast Cemeteries. The West Coast Cemeteries are divided into two clusters—the Papaloa Cemeteries, Cemeteries A through H; and the ʻĪliopiʻi Cemeteries, Cemeteries J through M. Four additional cemeteries are located in Kalawao, with three forming a contiguous cluster near St. Philomena Catholic Church (Cemeteries Q, R, and S), and the fourth located nearby in association with Siloama Church (Cemetery P). Two additional cemeteries are found along the Damien Road corridor near the rim of Kauhakō Crater and at Kahaloko (Cemeteries N and O). The remaining burial grounds are composed of individual graves or small groups of burial sites. One of these marks the original grave of Saint Marianne Cope, located on the Bishop Home property along Puahi Street (Cemetery I). Three other unnamed graves are marked on the Bishop Home property, two along the entrance drive, and the third in the field west of McKinley Street (Cemetery T). There are also marked graves that have been identified elsewhere on the peninsula. These are located near the recycling center south of Waihānau Stream, near the Ambrose Hutchison Home site, and near the Molokai Light Station.

Spatial Organization

Patterns of spatial organization associated with these cemeteries vary. The two clusters that comprise the West Coast Cemeteries occupy sand dunes west of Kamehameha Street and Beach House Road overlooking the western shoreline. Because the cemeteries abut one another as a linear system, at first glance they convey

the appearance of two units. With closer inspection, the clusters are composed of a series of separate cemeteries that closely edge one another with few boundary elements dividing them. Each conveys a distinct organizational system derived from the arrangement of the grave markers, and the character of the predominant grave marker types. The West Coast Cemeteries also share a sense of being bound by roads to the east and dense stands of trees to the west.

Many of the cemeteries associated with the Damien Road corridor and Kalawao share a sense of boundedness resulting from being enclosed by dry stacked lava rock walls arranged to form rectilinear precincts with distinct entry points. The churchyard cemeteries of Siloama and St. Philomena, as well as Kahaloko Cemetery, share this sense of enclosed, protected interior space. The walled burial grounds at Kauhakō Crater are smaller and formed of a series of enclosures tucked into the hillside of the elevated landform. The Saint Marianne Cope grave is the most formal of the burials on the peninsula, with statuary serving as the focal point of a chain and bollard enclosed central open space. All other graves are individual markers set within the broader landscape of mown turf.

All existing patterns of spatial organization associated with the Kalaupapa and Kalawao Settlement cemeteries were established during the period of significance and are little changed since 1969. The greatest change that has occurred since 1969 is the removal of fencing that originally enclosed the West Coast Cemeteries to exclude cattle. There has also been a modest loss of trees that formerly marked divisions among some cemeteries, and the expansion of ironwood pine plantings along the western shoreline.

Circulation

None of the cemeteries at Kalaupapa and Kalawao Settlements feature formal circulation. While each cemetery is accessed from an adjacent road, such as Damien Road, Kamehameha Street, Crater Road, Beach House Road, Puahi Street, and McKinley Street, none have paved walks or paths. Graves are visited by walking across the turf grass that characterizes most of the open space of each cemetery. Historic concrete walks lead into the churchyards and to the entrances of St. Philomena and Siloama Churches, as well as the Saint Marianne Cope Grave. Other circulation associated with the cemeteries consists of informal two-tracks that follow the western margins of portions of the West Coast Cemeteries. These are used by maintenance staff. The date of origin of these unimproved access roads is unknown, but they appear to post-date 1969, the end of the period of significance for the NHL. The concrete walks at the churchyards and the Saint Marianne Cope Grave appear to be the only contributing circulation features associated with the cemeteries.

Vegetation

Most of the Kalaupapa and Kalawao cemeteries are maintained in turf grass that is mown to allow the grave markers to remain visible and accessible. Exceptions are the cemeteries near Kauhakō Crater, Kahaloko Cemetery, and the Saint Marianne Cope Grave. Both the Kauhakō Crater burial grounds and the Kahaloko Cemetery contain sparse ground cover composed of field grasses and lantana. A few Java plum trees are present within the lava rock enclosures of the burial grounds near Kauhakō Crater. A dense stand of Java plum trees occurs within Kahaloko Cemetery, particularly in the southeastern quadrant. The cemetery was found to be completely obscured by Java plum trees and lantana, both classified as invasive species that are difficult to control, following establishment of Kalaupapa National Historical Park. The NPS cleared many of the trees and began to repair the grave markers that had been damaged by tree branches and roots, before the clearing work was suspended to allow for study. It is believed that Henry Law, Kalaupapa Settlement's first

superintendent, planted java plum trees to shade the cemetery during the late nineteenth century.³⁹ During the 1920s, active use of the cemetery ceased, and the trees slowly spread until the cemetery was no longer visible, and memory of its existence also faded. The presence of Java plum trees is therefore a historic condition. However, it is not known where the original plantings occurred. Further study is needed to determine which trees were planted and which are volunteers.

Similarly, ironwood pine trees are present along the road leading to the burial grounds near Kauhakō Crater that were planted during the period of significance. The extent of the area covered by ironwood pine trees has expanded due to their aggressive and invasive growth habits. Thus, stands of ironwoods include both planted individuals and volunteers. The expansion of the grove has begun to infringe on historic views of Kalaupapa Settlement, the Pacific Ocean, and the pali to the west from the burial grounds.

Ironwood pine trees also edge most of the burial grounds that form the West Coast Cemeteries. Like the road leading to Kauhakō Crater, rows of ironwood pine trees appear to have been planted along the western edge of the cemeteries during the period of significance, but have since expanded through seeding and suckering of volunteers. Views to the west and the Pacific Ocean are now generally obscured, whereas filtered views were present during the period of significance.

Within Cemeteries F, G, and H, there are also stands of coconut palms, ficus, haole koa, date palms, and other plantings that appear to date to the period of significance. The most striking element is the grove of coconut palms centered in Cemetery F that is mirrored across Kamehameha Street in front of the row of residences that face the road. It is likely that these stands of trees were more extensive in the past, as individual trees that have died appear not to have been replaced.

Other cemeteries that contain cultural vegetation include the Saint Marianne Cope Grave (Cemetery I), which is edged by shade trees and ornamental shrub and ground cover plantings, and the St. Philomena Church churchyard (Cemetery Q), which contains several ornamental trees and shrubs that provide shade, a sense of intimacy, and texture. These plantings also appear to survive from the period of significance.

Buildings and Structures

There are only four buildings associated with the Kalaupapa and Kalawao cemeteries. These are St. Philomena Catholic Church (Cemetery Q), Siloama Protestant Church and an associated restroom (Cemetery P), and Olivia's Beach House (Cemetery H). All four buildings survive with integrity from the period of significance and contribute to the historic landscape of the cemeteries.

Among the principal structures characterizing the Kalaupapa and Kalawao cemeteries are dry stacked lava rock walls. These walls enclose Cemetery L, frame a portion of Cemeteries C and H, enclose many of the individual burial grounds at Kauhakō Crater (Cemetery N), the entirety of Kahaloko Cemetery (Cemetery O), Siloama Cemetery (Cemetery P), St. Philomena Cemetery (Cemetery Q), and the adjacent field (Cemetery R). These walls remain an important character-defining feature of the cemetery system and contribute to the character and significance of the historic landscape.

Additional structures are present within Cemeteries G and H. These include a concrete or rendered lava rock walled burial plot enclosure, concrete or rendered lava rock piers that mark a former fence or wall system, and

39. Personal communication with park personnel, November 2018. Information provided during a personal conversation between Momi Hooper and Henry Law when Mr. Law spoke with a group from Ka Ohana circa 2015. The extent of the original Java plum tree plantings is not currently known.

iron plot enclosures. Each of these structures survives from the period of significance with integrity and contributes to the historic landscape.

Small-scale Features

The principal small-scale feature type characterizing the Kalaupapa and Kalawao Cemeteries is the grave marker. A total of 1,551 tombs and grave markers have been documented throughout the cemetery system and are listed in the CRIS database. These grave markers range in composition from piled lava stone to aboveground tombs. Grave markers occur in a range of forms and materials. Forms include piled and arranged stone, crosses, upright head and foot stones, ledgers, obelisks, and tombs that range from above ground architectonic features to peaked, vaulted, or mounded structures (Figure B-12 through Figure B-14). Materials include wood, lava rock, basalt, granite, marble, iron, bronze, and concrete (Figure B-15 through Figure B-17).

The grave markers also represent various traditions. Traditional Hawaiian burials were not necessarily marked. Those that were marked featured piled lava rock, rocks placed at the head and/or foot of the buried body, or a circle of rock around the perimeter of the grave. Traditional Hawaiian burials are known to exist at Kahaloko, Kauhakō Crater, Siloama Protestant Church churchyard, Bishop Home, and in several of the West Coast Cemeteries.

Many of the early Kalawao Settlement grave markers are tombs. These are constructed from piled lava rock encased in a render fashioned from lime and sand.⁴⁰ The lime used in the render was initially manufactured by burning of coral or shells. Later, it came from slaking of quicklime. During the early twentieth century, lime could be purchased from vendors in Honolulu. This, however, was likely manufactured from shells and coral.⁴¹ Loose rock was used to fill gaps in the piles of larger rock to create a regular form, and the render was used to coat the rock with a smooth outer coating. The render was also used to fortify the structure of the tombs. To finish the grave marker, a limewash was used to coat the render.⁴² Examples of early tombs are present at Kauhakō Crater (Cemetery N) and within Cemeteries G and H.

Another early grave marker type was the wooden cross. These were used in many of the cemeteries. However, due to the ephemerality of wood, most early wooden crosses have deteriorated and none are extant.⁴³ Later examples of simple wooden crosses exist in several of the West Coast Cemeteries, such as Cemetery J.

By the early twentieth century, grave markers began to be fashioned from concrete, mixed using portland cement and aggregate. The concrete mix was often cast using a reusable mold, evident due to the number of identical markers present in several cemeteries. The process entailed allowing the concrete to cure, and then adding a 1/4- to 1/2-inch coating of plaster to the concrete casting, into which an inscription was incised. It is believed that approximately 75 percent of the existing grave markers were locally fabricated using these techniques.⁴⁴ Concrete has continued to be used to fabricate grave markers to the present. While it continues

40. Based on information provided, the mortar was a lime sand mortar, but no analysis has been performed.

41. Richard Miller, "Living with the Dead: A Socio-Technical Look at Gravemarker Preservation at Kalaupapa" PowerPoint presentation (Winter 2017).

42. Richard Miller and William Chapman, "A Study of the Stone Materials Used to Mark Kalaupapa Burials from the Time of Exile to 1930" (Fall 2010), 2.

43. Miller, *Living with the Dead*.

44. *Ibid*.

to be used to fashion other elements sited within the cemeteries, such as slabs, curbing, and marker pedestals, it is less frequently used to fabricate grave markers.

Although less prevalent, there are also marble, basalt, and granite grave markers present in several of the cemeteries, while porcelain portraits, bronze plaques, and other embellishments were sometimes added to these markers. One of the earliest examples is a marble grave marker at the burial site of Solomon Thompson, who died in 1888, found in Cemetery G. It is likely that the marker was not erected for some time after Thompson's death due to timing of communications, the limited number of deliveries to the peninsula by ship, and the time required to allow the soil to settle.⁴⁵ Based on a review of advertisements for manufacturers and suppliers, marble and granite grave markers were available in Oahu from Honolulu and San Francisco-based companies.⁴⁶

Basalt, a fine-grained stone found in Hawai'i, appears to have first been used for grave markers at Kalaupapa and Kalawao during the 1910s. Many of these markers exhibit fine hand-cut detailing in the lettering, decorations, and shaping of the stone. Polishing the surface of the stone was also possible. By the late 1930s, however, use of basalt for grave markers at Kalaupapa ended, due either to cost or limited availability.⁴⁷ Examples of basalt and granite grave markers are present in the West Coast Cemeteries.

45. Miller, *Living with the Dead*.

46. Miller, *Study of Stone Materials*, 12–14.

47. *Ibid.*, 15–20.

Grave marker forms



Figure B-12. Examples of arranged rock grave markers (Cemetery P, left), and cross (Cemetery Q, right).

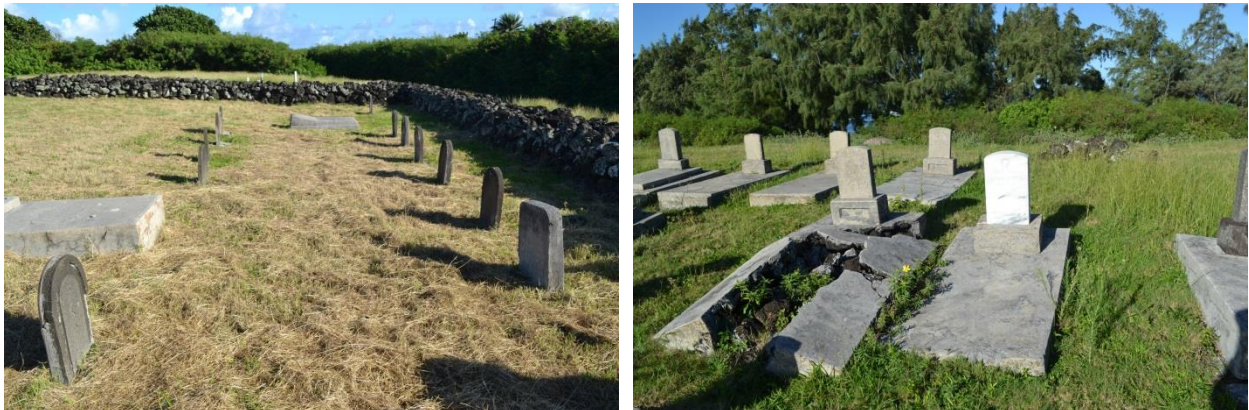


Figure B-13. Examples of concrete grave markers at head of graves (Cemetery M, left), and concrete ledger grave markers (Cemetery K, right).



Figure B-14. Examples of a stone obelisk grave marker (Cemetery G, left), and tomb composed of lava rock with a lime-sand render (Cemetery N, right).

Grave marker materials



Figure B-15. Grave markers composed of wood and lava rock (Cemetery F, left) (Cemetery T, right).



Figure B-16. Grave markers composed lava rock with a lime-sand render and concrete (Cemetery H, left) (Cemetery P, right).



Figure B-17. Grave markers composed of basalt and marble (Cemetery H, left and right).

Several of the cemeteries remain open to new burials. Grave markers added since the end of the period of significance remain important cultural resources that contribute to the significance of the historic landscape.

Later additions that do not contribute include identity signs used to mark the individual cemeteries and wayside exhibits.

Documentation and Analysis by Cemetery

West Coast Cemeteries (Papaloa Cemetery) – Cemeteries A through H

The West Coast Cemeteries are located along the western shoreline of Kalaupapa Peninsula north of the principal developed area of Kalaupapa Settlement and south of Kalaupapa Airport. The West Coast Cemetery system is composed of a linear system of twelve discrete cemeteries, grouped into two areas. The north area contains four discrete cemeteries, referred to as Cemeteries J through M (see below), while the south area contains eight discrete cemeteries referred to as Cemeteries A through H. The south cemeteries edge Kamehameha Street to the west, while the north cemeteries are located west of Beach House Road, an unimproved access road leading to the Beach Houses at ‘Īliopi‘i. The southern cluster of cemeteries occupies a broad upland plateau formed from sand dunes known as Papaloa that overlooks sandy beaches and rocky coastline. Each of the eight cemeteries that falls within the cluster has a cultural or religious affiliation, including Catholic, Protestant, Church of Jesus Christ of Latter-Day Saints, Chinese, Americans of Japanese Ancestry, and “Old” Hawaiian. Grave markers often include inscriptions or exhibit architectural character and ornamentation that are representative of cultural or religious affiliations. Inscriptions can be found in Hawaiian, Chinese, Japanese, Korean, and English. The grave markers are set within a field of mown turf edged along much of the coastline by rows of ironwood pine or coconut palm trees. The ground plane generally slopes west to east toward Kamehameha Street. The grave markers are generally arranged in rows that parallel the coastline.

Set within the cemeteries are limited plantings of coconut palm trees and other lower-growing trees and shrubs. These plantings are concentrated within Cemeteries F through H. A grove of coconut palm trees also edges Kamehameha Street across from Cemetery G. Utility poles and lines also follow Kamehameha Street east of the cemeteries with the poles sited on the west side of the road.

Grave markers vary in size, materials, and style. The forms of the markers include upright, raised, cross, flat, mausoleum, tomb/vault, obelisk, post, pillow, slab (covering the entire grave), hakka (urn house), and temporary signs. Materials include wood, lava rock (either dry stacked or finished with a lime-sand render and/or limewash), concrete (sometimes covered with a render and/or limewash), granite, porcelain portraits, and marble. Bronze plaques are inset in some markers. Plots of grouped grave markers are contained within perimeter markings composed of painted iron or steel pipe, stone, and concrete. Many of the more recent graves are decorated with leis, plastic flowers, rocks, and other found objects and mementos.

The West Coast Cemeteries are open and accessible from Kamehameha Street. Access occurs primarily by foot from the adjacent road as there are no paths located within the cemeteries. An unimproved two-track provides access for maintenance vehicles to Cemeteries E through H. The road arises from Kamehameha Street near Olivia’s Beach House at the junction between Cemeteries G and H and follows the treeline along the western edge of the burial grounds.

Analysis. (See Figures B-20 and B-21) The West Coast Cemeteries possess a high degree of integrity with few changes having occurred within the landscape since the end of the period of significance. The feature that has undergone the most change since 1969 is vegetation, both within the individual cemeteries, as well as along the western shoreline. Circa 1969, rows of trees often served to demarcate boundaries between individual cemeteries. A row of ironwood pine trees divided the Catholic Cemetery (Cemetery A) from the Protestant Cemetery (Cemetery B). Partial rows of trees also formed boundaries between Cemetery C and the Protestant Cemetery (D) to its south, and between Cemetery D and the C.E. Protestant Cemetery (Cemetery E). By the early 1990s, the rows of trees separating these northern cemeteries in Papaloa had been removed,

with only a few trees remaining between Cemeteries D and E. These appear to have been removed by the early 2000s (Figure B-18). Another change that has impacted the integrity of the West Coast Cemeteries was the removal of perimeter fencing, circa 1980, when grazing livestock were removed from the peninsula. The addition of grave markers has continued since 1969. The number of markers added is minimal, although in many cases the character of the grave markers is differentiated from many of the historic markers through the use of more formal materials with more refined finishes.



Figure B-18. Comparison of aerial photographs illustrating change over time related to tree cover in Cemeteries A through E. Views date to 1964 (left), 1972 (center), and 2000 (right). (Source: <http://miles.giscenter.isu.edu.kalaupapa/overview.html>)

Other plantings have changed as well. While the date and coconut palm and ficus trees present within Cemeteries F through H appear to have been present since before 1969, a grove that was formerly present within the Latter-Day Saints Cemetery (Cemetery F) as observed in aerials photos from the 1970s is now nearly completely gone, with only two trees remaining today. Some of the coconut palm trees present in historic aerial photographs in Cemetery H do not remain today. Photographs from the 1970s suggest a thick ground cover layer within the northern section of Cemetery G that is also no longer present. The composition of this vegetation cannot be deciphered from the photographs. A planting visible in aerial photographs from the 1970s near the southern end of the West Coast Cemeteries that included trees, shrubs and groundcover and screened views of a garage at the intersection of Damien and Kamehameha Streets appears to have been removed by the late 1970s, and the garage by the 1990s (Figure B-19).



Figure B-19. Comparison of aerial photographs illustrating change over time related to tree cover in Cemeteries G and H. Views date to 1972 (left), and 2020 (right). (Source: <http://miles.giscenter.isu.edu.kalaupapa/overview.html> [left]; <http://uhmagis.maps.arcgis.com> [right])

Along the shoreline, the extent of woody vegetation has increased since the end of the period of significance, particularly north of Cemetery F. Ironwood trees appear to have been planted along the western margin of cemeteries A through D and J through M by circa 1969, while coconut palms appear to have been present along the shoreline of Cemeteries F and G by 1969. Cemetery H was edged by ficus trees. During the 1970s, views were afforded toward the Pacific Ocean, particularly within Cemeteries E, F and G where the coconut palms were present. Views where the ironwood pines had been planted were filtered. By the early 1990s, the ironwood pine stands had begun to expand, and the views of the Pacific Ocean were increasingly obscured, particularly north of Cemetery E. By the early 2000s, the shoreline north of Cemetery G had taken on an appearance similar to that today, with views to the ocean limited by a thick grove of ironwood pine trees and haole koa.

The only circulation associated with the West Coast Cemeteries is an informal access road system. Aerial photographs from the early 1970s indicated that an unimproved access road led from Kamehameha Street west to Olivia's Beach House (refer to Figure B-19), continuing north and making a loop near the loose grove of coconut palms within Cemetery G before accessing the sandy beach known as Nurse's Beach. By 2000, although the trace of this unimproved access road survived, only the maintenance access route in use today, which includes portions of the earlier route, remains present. There are no other roads or walks currently associated with the West Coast Cemeteries at Papaloa.



Figure B-20. Bird's eye view of the West Coast Cemeteries looking south, with Barrel Field to the left, Kamehameha Street running along the field, and a secondary road edging the walled cemeteries. (Source: KALA archives, #18-AA-213-37).

Kamehameha Street, which edges the cemeteries, has been present since the late nineteenth century. Bird's eye aerial photographs from 1929 indicate the alignment of Kamehameha Street, and a secondary road leading along the margin of the West Coast Cemeteries that is no longer extant (Figure B-18). In the 1930s, the road was paved with a 3-inch-thick layer of asphalt macadam over the natural rocky base that existed in the area as far as the cattle guard east of the north end of Cemetery A.⁴⁸ Since the end of the period of significance, Kamehameha Street has remained similar in appearance, although it has been repaved several times. Most of the utility poles and overhead lines that border Kamehameha Street have also been present since the period of significance, although the line to Olivia's Beach House is carried by a utility pole that post-dates the period of significance.⁴⁹

Many markers, tombs, and walls within the West Coast Cemeteries were impacted by the 1946 tsunami, when the water lifted, twisted, moved, broke, and eliminated an untold number of masonry and wooden grave markers. It is likely that many unmarked graves are present throughout Cemeteries A through M.

Overall, the spatial organization within the West Coast Cemeteries remains relatively consistent in 2020 with that present in 1969, except for sense of containment associated with perimeter fencing used to exclude cattle, removed circa 1980 when livestock were removed from the peninsula. Although burials continue within several of the individual cemeteries, the number of grave markers is few and these additions have not altered the general character or density of individual cemeteries. The character of individual grave markers has become increasingly formal since the end of the period of significance, with the use of imported stone, polished surfaces, and decorative embellishments prevalent. It is often easy to identify the contemporary markers from several feet away because of this difference in character.

48. Linda W. Greene, *Exile in Paradise: The Isolation of Hawai'i's Leprosy Victims and Development of Kalaupapa Settlement, 1865 to the Present* (Denver, Colorado: National Park Service, Denver Service Center, Branch of Planning, Alaska/Pacific Northwest/Western Team, 1985), 513.

49. Johnson, Draft NHL nomination update, 170.

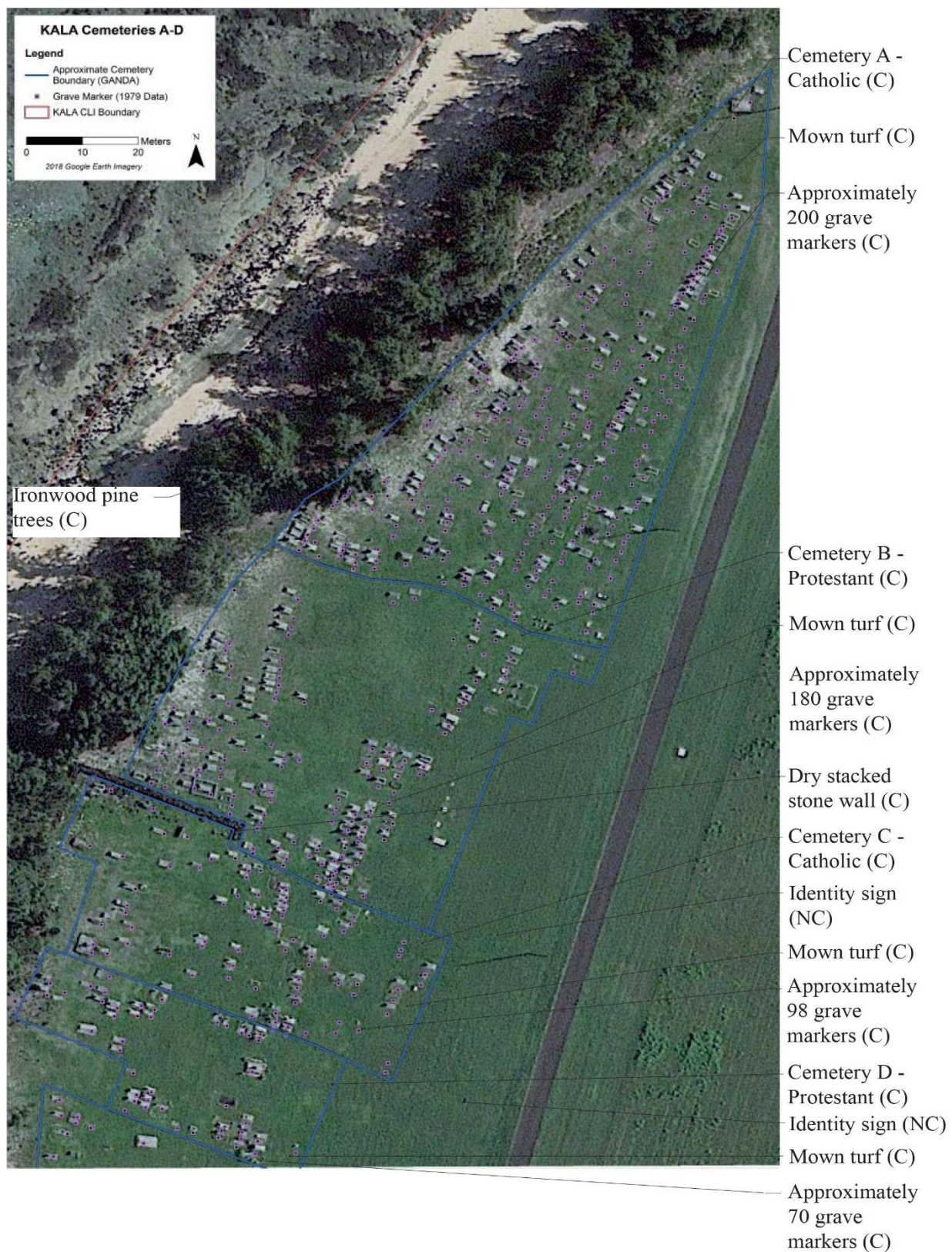


Figure B-21. Contributing and non-contributing features of Cemeteries A through D.

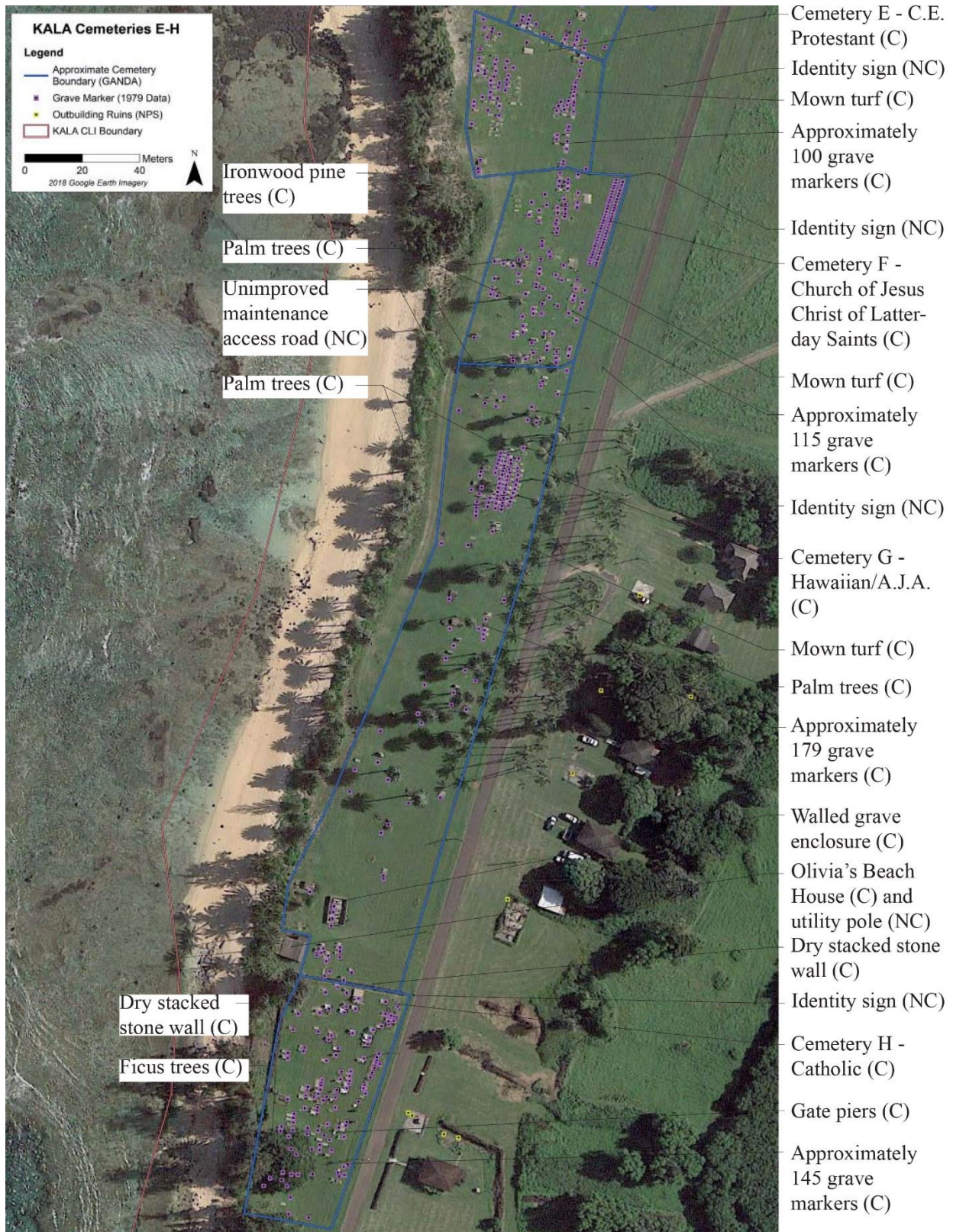


Figure B-22. Contributing and non-contributing features of Cemeteries E through H.

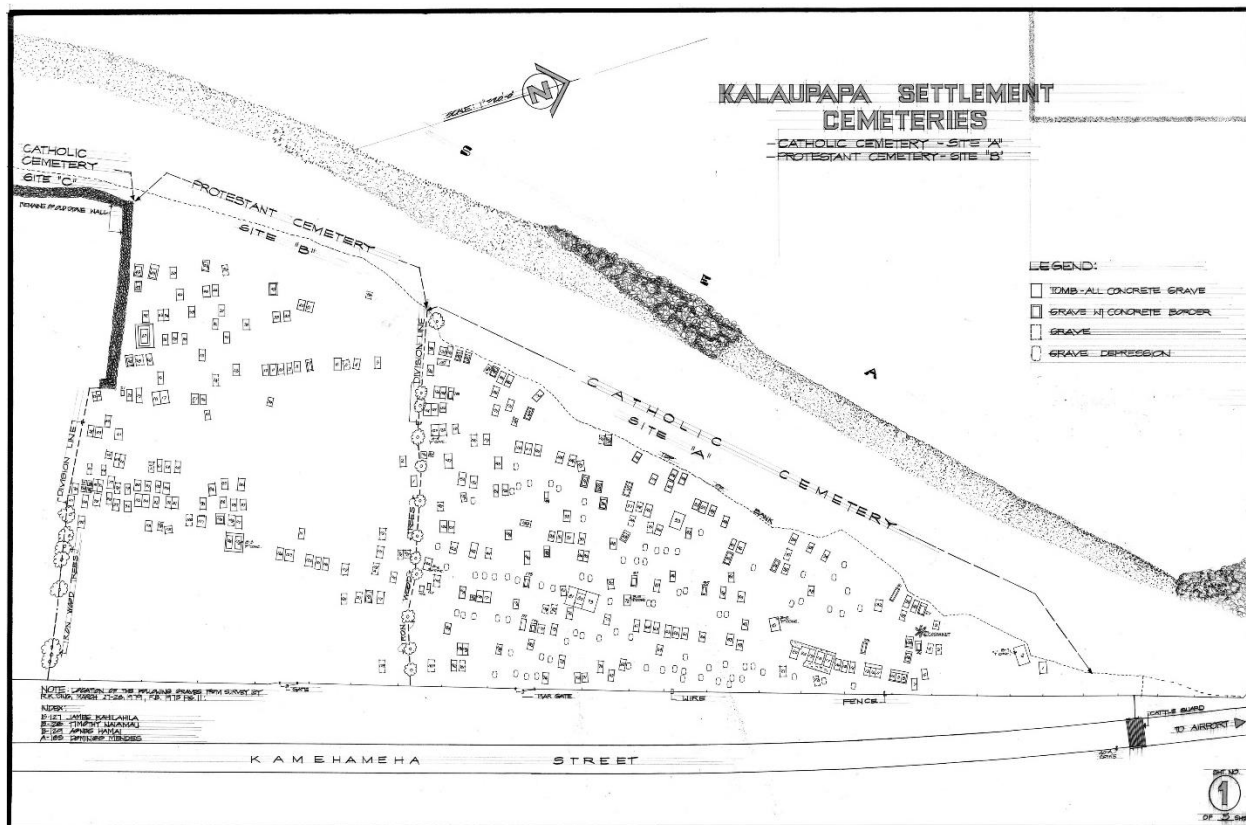


Figure B-23. Map of Cemeteries A (Catholic Cemetery) and B (Protestant Cemetery), 1965. (Source: State of Hawaii Department of Accounting and General Services Survey Division. “Kalaupapa Settlement Showing Catholic Cemeteries – Sites A, C and H; Protestant Cemeteries – Sites B and D; C.E. Protestant Cemetery – Site F; Church of Jesus Christ of Latter-Day Saints Cemetery – Site F; A.J.A. and Old Hawaiian Cemeteries – Site G; Kalaupapa, Molokai, Hawaii, Survey April-June 1965; new grave layout March 1966”)

Cemetery A—Catholic

Catholic Cemetery A is the northernmost cemetery within the south area of the West Coast Cemeteries (Figure B-23). A thick hedgerow of ironwood pine trees edges the cemetery to the west, obscuring views of the Pacific Ocean. Except for mown grass, there are no other plantings associated with Cemetery A. The interior of the cemetery is absent of vegetation other than the grassy plain that is marked by graves, most of which are arranged in rows that parallel the shoreline. Cemetery A can be accessed from Kamehameha Street, but there are no formal or informal access roads present. Although most of the West Coast Cemeteries are demarcated along Kamehameha Street with a low, wood sign, at the time fieldwork was conducted in November 2018, the sign was missing. There are no circulation routes that lead into or through the cemetery.



Figure B-24. View of Cemetery A looking north.

Cemetery A occupies a narrow band between Kamehameha Street and the colony of ironwood pine trees that frame the western shoreline. Graves are generally arranged into rows that extend nearly to the road corridor. Many of the grave markers are ledge style with an upright marker (Figure B-24). There is also a small, roofed mausoleum (Figure B-25), and several individual vaulted graves.



Figure B-25. The small, roofed mausoleum structure in Cemetery A.

The NPS conducted an inventory and survey of Kalaupapa Cemeteries in 2003 that indicated a total of 200 grave markers.⁵⁰ The materials used to fashion the grave markers within Cemetery A range from basalt, to granite, marble, rendered concrete, and rendered lava rock with limewash. The earliest date associated with a marked burial is 1919. The cemetery also contains several late-twentieth-century and early twenty-first-

50. National Park Service, *Kalaupapa and Kalawao Settlements Cultural Landscape Inventory* (CLI) (2005, rev. 2011), 64.

century burials. These are often easy to identify due to their decoration with lei, plastic flowers, and other left objects.⁵¹

Most of the grave marker forms within Cemetery A are described as ledger-type, with the marker covering the entire grave rather than simply serving as a head- or footstone. Some of the ledger-type markers also include upright or slanted headstones. The ledger markers measure from a few inches to a more than two feet in height. Some ledger markers present within Cemetery A are also referred to as kerb memorials. These markers have rocks, plantings, and/or other offerings placed at the center. One example of a kerb memorial located within Cemetery A sits nearly flush with the ground and is edged by a painted iron railing and six metal posts.

Grave markers within Cemetery A exhibit several issues of concern regarding their conditions. These include cracking of the concrete, partial collapse of grave markers, leaning, settling, and chipping. Some of the markers have become dislodged and are now propped against other burial marker elements. Inscriptions on many of the markers has become obscured by biological growth and weathering.



Figure B-26. General view of Cemetery B.

Cemetery B—Protestant

Cemetery B is located south of Cemetery A. Except for mown grass, there are no trees located within Cemetery B. There are also no circulation features that lead into or through the cemetery. Cemeteries A and B were once divided by a row of ironwood pine trees; however, today there is no boundary feature dividing the two cemeteries.⁵² Ironwood pine trees edge Cemetery B to the west along the Pacific Ocean shoreline. These trees limit views to the Pacific Ocean (Figure B-26). Signage that formerly marked the division between Cemeteries A and B was missing at the time fieldwork was undertaken for this project in November 2018. A key feature of Cemetery B is the dry stacked lava stone wall that forms the western boundary abutting Cemetery C (Figure B-27).

51. Ibid., 64.

52. Ibid.



Figure B-27. View toward Cemetery B looking across the wall aligned at the boundary between Cemeteries B and C.

Cemetery B is more open with fewer grave markers than Cemetery A. The grave markers are arranged into irregular rows that parallel the shoreline and are generally grouped in the southwestern corner. Many of the grave markers closely edge the ironwood pine grove at the western edge of the cemetery. At the center of Cemetery B is a large open area devoid of grave markers.⁵³ There is a wide gap between Kamehameha Street and the first row of grave markers to the west.

The 2003 inventory lists 180 graves in Cemetery B.⁵⁴ The earliest date of death indicated on a grave marker within Cemetery B is 1900.

Markers vary to a great degree in terms of form and materials. Forms include ledger-marker and other vault types, some with upright or slanted headstones, kerbs with grassy interiors, upright headstones, and other vault types. Near the dry stacked lava stone wall at the southwest corner of Cemetery B is a vaulted grave surrounded by a concrete wall. Materials used to form grave markers include basalt, granite, marble, lava rock with lime-sand render, concrete with or without render and limewash, and concrete with iron or steel reinforcement. Some markers are decorated with draped lei.

Grave markers within Cemetery B exhibit several condition issues of concern. Primary among them is cracking of concrete and weathered limewash. Erosion of the ground and settling has caused some markers to lean. Others are on the cusp of falling over. Chipping of monuments by mowing equipment is apparent on several markers, particularly those that are low to the ground.

53. Ibid.

54. Ibid., 64.

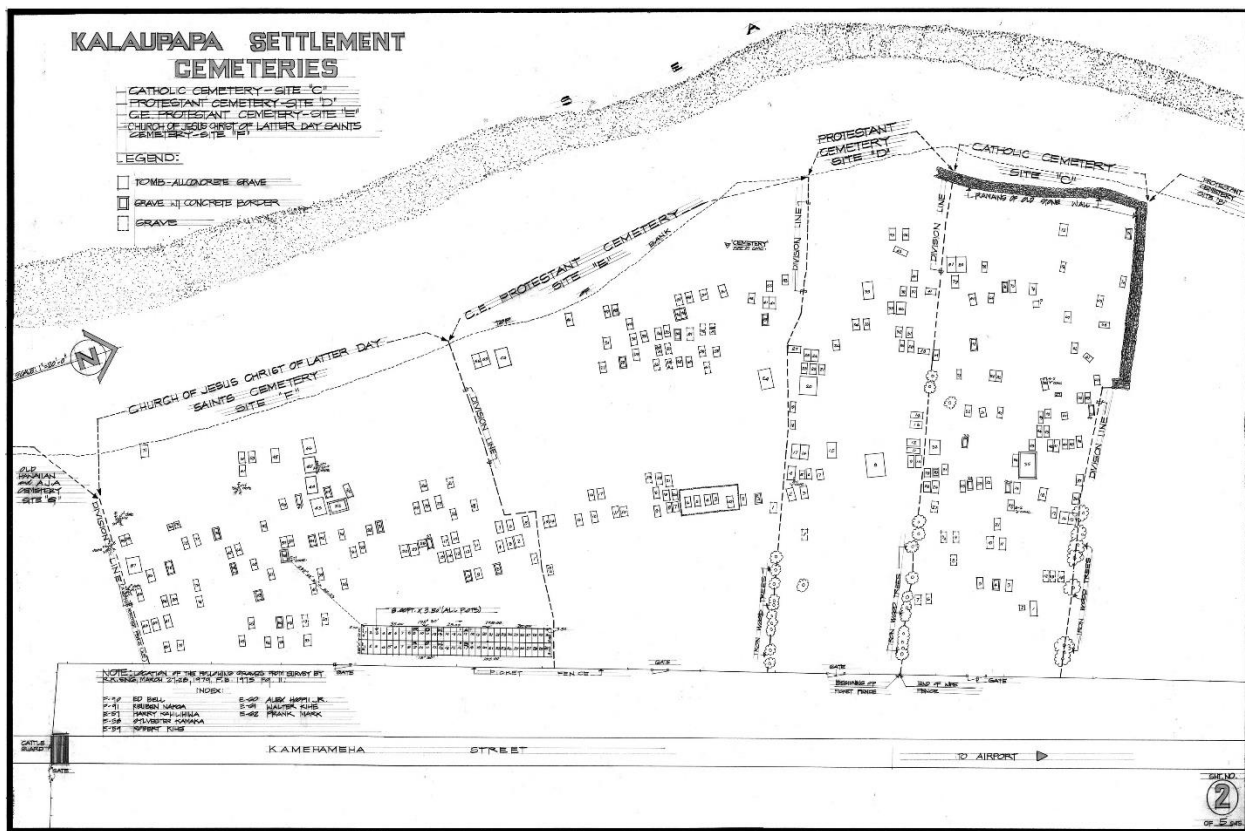


Figure B-28. Map of Cemeteries C (Catholic Cemetery), D (Protestant Cemetery), E (C.E. Protestant Cemetery), and F (Church of Jesus Christ of Latter-Day Saints Cemetery), 1965. (Source: State of Hawaii Department of Accounting and General Services Survey Division. “Kalaupapa Settlement Showing Catholic Cemeteries – Sites A, C and H; Protestant Cemeteries – Sites B and D; C.E. Protestant Cemetery – Site F; Church of Jesus Christ of Latter-Day Saints Cemetery – Site F; A.J.A. and Old Hawaiian Cemeteries – Site G; Kalaupapa, Molokai, Hawaii, Survey April-June 1965; new grave layout March 1966”)

Cemetery C—Catholic

The grave markers associated with Cemetery C are arranged into a relatively narrow band even though the cemetery occurs within an area with a wide expanse of open space located between Kamehameha Street and the western shoreline (Figure B-28). There are no circulation features that lead into or through the cemetery. Except for mown grass, there are no plantings located within Cemetery C. The western margin of the cemetery is edged by a thick grove of ironwood pine trees that limits views to the Pacific Ocean. An L-shaped dry stacked lava stone wall marks part of the northern edge of the cemetery and abuts Cemetery B. The wall may be the surviving remains of a larger rectilinear enclosure of which only half survives. The wall is in deteriorated condition. Several of the rocks have fallen from the structure and are strewn on the ground nearby and farther afield. The division between Cemeteries C and D is marked near Kamehameha Street by a small routed wooden sign.

The 2003 inventory recorded 98 graves in Cemetery C.⁵⁵ The earliest year of death indicated on grave markers in this cemetery is 1897.⁵⁶

55. Ibid., 65.

56. Ibid.



Figure B-29. View west toward Cemetery C, right.

Graves associated with Cemetery C extend much closer to Kamehameha Street than those associated with Cemetery B although most are grouped near the western end of the cemetery near the tree line (Figure B-29). The graves are generally clustered into small groups of three or more markers.

The markers that identify the individuals buried at Cemetery C vary in form and material. The majority are ledger-style, some with upright headstones, while others feature slanted or beveled upright slabs. Most are relatively low and are either flush with the ground or elevated a few inches above the ground. At least one headstone is in the shape of a cross. Grave markers are composed of concrete with or without lime-sand render, granite, and marble.

Conditions identified in association with Cemetery C relate include soil erosion and settling that has caused markers to lean or to become unstable. Others exhibit damage from mowing equipment or cracking of concrete and render and erosion of limewash.

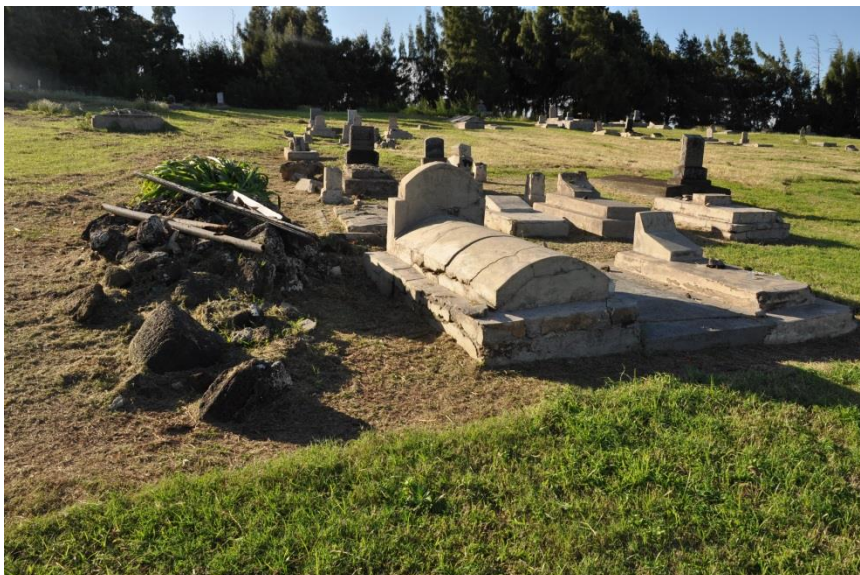


Figure B-30. View northwest across Cemetery D.

Cemetery D—Protestant

Cemetery D is located to the south of Cemetery C. The landform associated with Cemetery D slopes gently to the east. Views to the Pacific Ocean to the west are limited by the rising topography and a dense grove of ironwood pine trees that sits at the top of the slope overlooking the shoreline. Historic aerial photographs indicate that a row of ironwood pine trees once marked the boundary between Cemeteries C and D. The trees are no longer present. Aside from mown turf and the grove of ironwood pines, there are no plantings located within Cemetery D. Stumps indicate that there were trees present at one time (Figure B-30). A small wooden sign set near Kamehameha Street indicates the division between Cemeteries D and E. There are no circulation features associated with the cemetery. At the southern end of the cemetery is a pile of rock that may be the remains of a wall or a traditional Hawaiian gravesite.

Cemetery D is the narrowest of all West Coast Cemeteries. It forms a linear strip between Cemeteries C and E, with most grave markers located relatively far west from Kamehameha Street and clustered in the center of the rising topography near the ironwood pine grove. Although some of the grave markers are arranged into rows, most occur in small groups or clusters.

The 2003 inventory identified 70 graves within Cemetery D.⁵⁷ The earliest death recorded on a grave marker is 1895.

Most of the grave markers within Cemetery D are ledger-type markers that cover the entire burial and are either flush or raised slightly. Some of the ledger markers include upright, beveled, or slanted headstones. A few headstones are unusual in that they are oriented to face south. Some of the markers are more ornate, with a large ledger vault punctuated by a central obelisk and columns marking the corners. There are also several large vaults located within the cemetery. These are set apart from the other grave markers. A small mausoleum set most of the way into the ground is located at the western end of the cemetery. Materials used to compose grave markers within Cemetery D include concrete with and without render/limewash, granite, and marble.

Condition issues of concern include a low point within the cemetery that contains several graves and may be subject to ponding.

57. Ibid.



Figure B-31. View northwest across Cemetery E.

Cemetery E—C.E. Protestant

Cemetery E, the C.E. Protestant Cemetery, is centrally located within the southern cluster of West Coast Cemeteries. As of 2011, this cemetery remained in active use.⁵⁸ It occupies the broadest part of the Papaloa landform, which rises along the western edge of the cemetery forming a small ridge that parallels the shoreline. The topography otherwise declines to the east towards Kamehameha Street. Views to the Pacific Ocean from Kamehameha Street are limited due to the rising topography and thick grove of ironwood pine trees along the shoreline (Figure B-31). The burial area itself is devoid of trees. A maintenance access road follows the treeline along the western edge of the cemetery. The road ends at the northern end of Cemetery E. Small wooden signs face Kamehameha Street that identify the boundary between Cemeteries D and E to the north, and Cemeteries E and F to the south.

Cemetery E is wedge-shaped. The grave markers are arranged into two clusters, one on the rising landform near the western edge, and the other centrally-located within the open space to the east. Both clusters contain grave markers arranged in rows, as well as grouped markers of two to three graves.

The 2003 inventory identified 100 graves within Cemetery E.⁵⁹ The earliest death recorded on the markers is 1892.

Markers within Cemetery E vary by size and style and include upright or beveled headstones, crosses, and raised and flush ledgers. A few of the ledger markers are kerb-style with grass growing in the center. Various materials are associated with grave markers located within Cemetery E, including lava rock, concrete with and without render and limewash, granite, marble, and wood. Several of the grave sites are traditional Hawaiian graves with stacked lava rock. Some of the upright headstones are decorated with draped leis. Many of the markers have inscriptions. One of the concrete beveled markers has been inscribed in cursive script.

58. Ibid., 65.

59. Ibid.

Condition issues include the fact that many of the ledger-type vaults have significant cracks down the center, are leaning, and appear to be collapsing. Markers extending only a few inches off the ground have been subject to mowing-related damage.



Figure B-32. View west across Cemetery F.

Cemetery F—Church of Jesus Christ of Latter-day Saints

Cemetery F, the Church of Jesus Christ of Latter-day Saints Cemetery, is centrally located within the southern group of burial grounds comprising the West Coast Cemeteries. As of 2011, this cemetery was still open and in active use. The topography associated with Cemetery F slopes gently toward Kamehameha Street from a high point overlooking the western shoreline. Views of the Pacific Ocean from the adjacent road, as well as from the cemetery interior, are partially obscured by the lower portion of a grove of ironwood pine trees along the shoreline and the rising topography. Cemetery F also features a few scattered coconut palm trees and a row along the shoreline (Figure B-32). The presence of coconut palm trees conveys a more formal feel in Cemetery F that is not present within Cemeteries A through E. In 2011, a row of palm trees marked the division between Cemeteries F and G.⁶⁰ This row is no longer present. The surviving palm trees have been present since the period of significance.

Cemetery F is rectangular in form. Many of the grave markers are arranged into scattered clusters of three or four, although there is a large double row of markers located at the northeastern corner of the cemetery. An unimproved access road follows the western edge of the cemetery.

The 2003 inventory recorded 115 graves within Cemetery F.⁶¹ The earliest death recorded on the grave markers located within Cemetery F is 1888.

Grave markers vary by size, material, and style. There are several large elaborate markers, such as one composed of a square concrete base that has been engraved by hand and embellished with a cross composed of small colored marbles. There are also more modest headstones composed of concrete with and without render and limewash, granite, and marble that range from flat, upright, and beveled markers, to flat and raised ledgers, and wooden crosses. The ledgers are predominately fashioned from concrete. Some ledgers are kerb-

60. Ibid.

61. Ibid.

style with grass growing in the center. Others encircle planters and places where offerings can be left within the marker. One unadorned flat marker indicates the final resting place of a baby who was born and died at Kalaupapa.

Maintenance issues of concern relate to the erosion of the sloping topography, which has buried the uphill side of several markers at the western end of the burial ground. Eroding soil has also caused several markers to lean. Elsewhere, many of the flush markers have become partially to completely overgrown and obscured by grass and soil. Offerings left on these markers, such as shells, rope, vases, figurines, necklaces, and artificial flowers, are similarly hidden by the grass and at risk of damage from maintenance equipment. Wooden crosses are subject to leaning and deterioration of the wood. Several have been propped against markers until they can be reset.

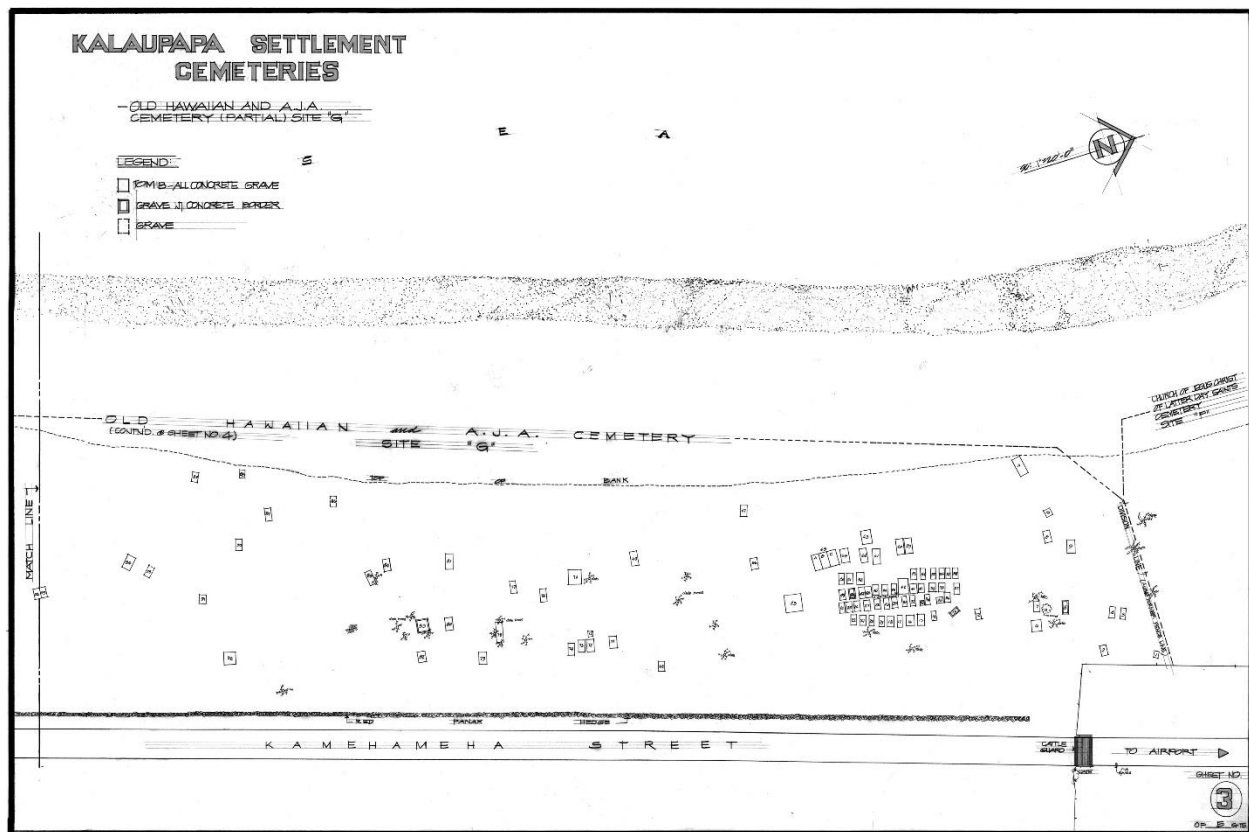


Figure B-33. Map of Cemetery G (Old Hawaiian Cemetery), 1965. (Source: State of Hawaii Department of Accounting and General Services Survey Division. "Kalaupapa Settlement Showing Catholic Cemeteries – Sites A, C and H; Protestant Cemeteries – Sites B and D; C.E. Protestant Cemetery – Site F; Church of Jesus Christ of Latter-Day Saints Cemetery – Site F; A.J.A. and Old Hawaiian Cemeteries – Site G; Kalaupapa, Molokai, Hawaii, Survey April-June 1965; new grave layout March 1966")

Cemetery G—Hawaiian / A.J.A.

Cemetery G is the largest of the West Coast Cemeteries at Papaloa (Figure B-33). It extends over a broad sloped terrace with topography that slopes gently downward from the shoreline toward Kamehameha Street. The western edge of the cemetery is composed of a narrow, elevated ridge that parallels the shoreline near the center of the cemetery. The rising topography limits views of the Pacific Ocean from the cemetery interior and the adjacent road. A grove of coconut palm trees follows the western edge of the cemetery. To the east of the trees is an unimproved maintenance access road. A small grove of ironwood pine trees and shrubs also follow the shoreline west of Cemetery F. Coconut palm trees are also scattered within the center of Cemetery

G, while rows of coconut palms edge Kamehameha Street east of the cemetery. Although the trees provide welcome shade, they have also contributed to the damage of several grave markers through dropped fronds and coconuts, and disturbance caused by root and trunk growth.

Olivia's Beach House is located at the southwest corner of the cemetery. A concrete-surrounded enclosure contains a large group of graves near the southern end of Cemetery G (Figure B-34). Small wooden signs mark the boundaries between Cemeteries F and G and G and H along Kamehameha Street. The sign marking the division between Cemeteries G and H is located at the base of a dry stacked lava rock wall that edges the cemetery to the south. Also present along Kamehameha Street to the east of the cemetery is a sign welcoming visitors to Kalaupapa with a Lion's Club insignia, and speed limit and road safety signs.



Figure B-34. Group of grave markers set within a walled enclosure within Cemetery G.

Cemetery G occupies one of the largest plots within the West Coast Cemeteries. It is rectangular in shape. Grave markers are clustered at the northern and southern ends, with only scattered groups between. The arrangement of grave markers in the A.J.A. Cemetery is distinctive for their tight spacing that may reflect Japanese cultural practices.⁶²

The 2003 inventory recorded 179 graves in Cemetery G.⁶³ The earliest death date found on a grave marker is 1888.

Grave markers vary by size and style and include ledger-style, upright, and beveled headstones. One unusual headstone includes a figurative bust. Other graves are composed of irregular stacks of dry lava rock, some accompanied by upright headstones. Several elaborate tomb/vault style markers are located in Cemetery G. One tomb is surrounded by four concrete columns connected by iron bars. At least one ledger includes a slender upright monument with a cross at its top. Some of the ledgers are open in the center.

62. Ibid.

63. Ibid.



Figure B-35. Materials used to fashion grave markers in Cemetery G include concrete, marble, granite, as well as lava rock arranged in Traditional Hawaiian fashion as shown.

Materials utilized in fashioning grave markers include dry stacks of lava rock (Figure B-35), concrete with and without render and limewash, marble, and granite. Epitaphs are both hand engraved and machine-etched. Many of the grave marker inscriptions are written in Japanese or in Hawaiian.

Several of the flush markers in Cemetery G have been damaged by maintenance equipment. Some of the grave markers are so badly damaged that their original forms are difficult to discern. Others are broken into small pieces and only slightly resemble their original forms. Graves located near coconut palm trees are frequently split or have been uplifted by the trees. Many of the arched vaults are in poor condition and are cracking, breaking apart, and collapsing. Some of the vaults appear to have settled over time or been buried by soil.

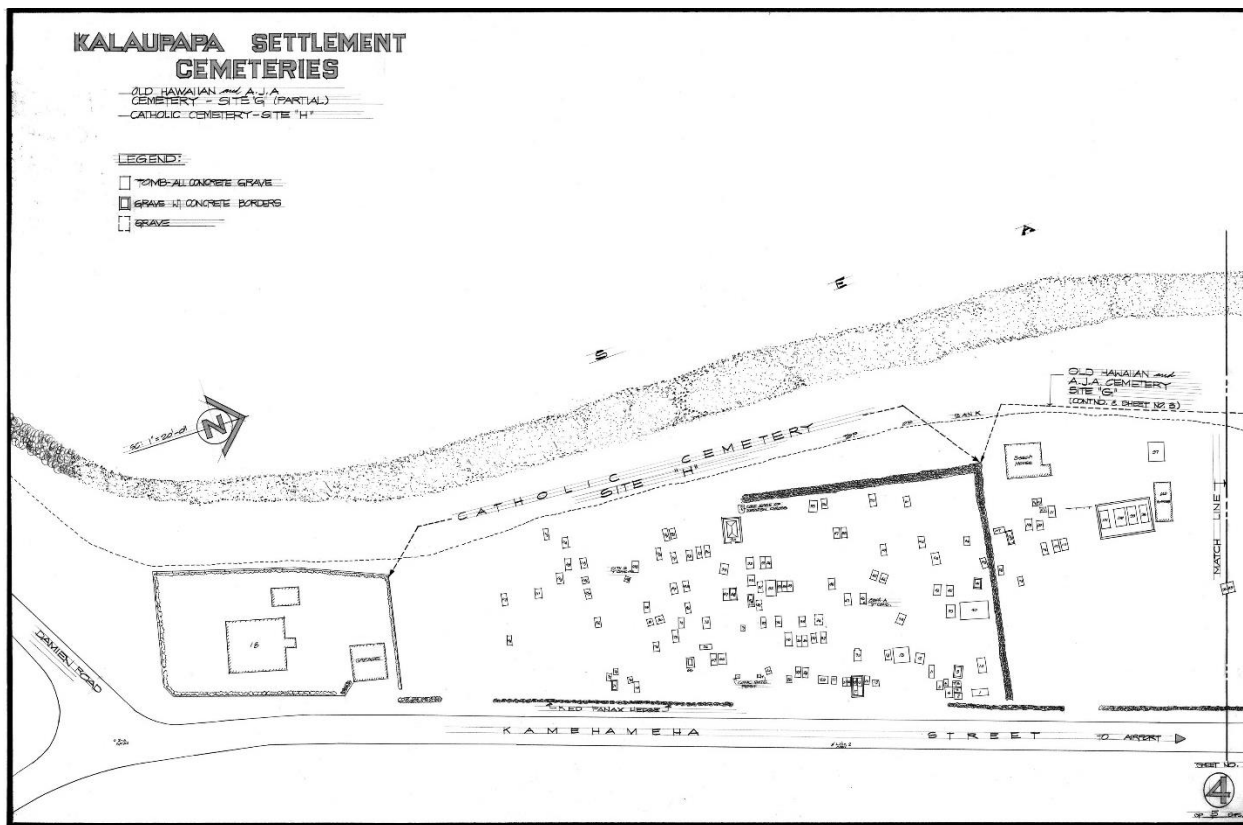


Figure B-36. Map of Cemetery H (Catholic Cemetery), 1965. (Source: State of Hawaii Department of Accounting and General Services Survey Division. "Kalaupapa Settlement Showing Catholic Cemeteries – Sites A, C and H; Protestant Cemeteries – Sites B and D; C.E. Protestant Cemetery – Site F; Church of Jesus Christ of Latter-Day Saints Cemetery – Site F; A.J.A. and Old Hawaiian Cemeteries – Site G; Kalaupapa, Molokai, Hawaii, Survey April-June 1965; new grave layout March 1966")

Cemetery H– Catholic

Cemetery H is the southernmost of the West Coast Cemeteries (Figure B-36). It features the earliest burials. The cemetery is partially edged by a well-maintained dry stacked lava rock wall, which follows the western edge of the cemetery as well as the northern edge as bounded by Cemetery G. Topographically, Cemetery H occupies a broad terrace that slopes downward from a high point at the northwestern corner to the southwestern corner, with a change of elevation of about 2-1/2 feet. There are intermittent views to the Pacific Ocean from within the cemetery afforded through a grove of ficus trees and mixed with coconut palms and ironwood pine trees along the western shoreline. Within the cemetery there are only a few trees, most notably two ficus, one very large, and the second encircling and growing over a grave vault.



Figure B-37. Concrete or rendered lava rock piers located within Cemetery H.

Two free-standing gate piers fashioned either from concrete or lava rock with render and limewash face Kamehameha Street within the cemetery (Figure B-37). The piers are square and decorated with etched patterns, including an inscribed cross, and pyramidal tops. Historic maps and aerial photos illustrate how the piers were formerly associated with a dry stacked lava rock wall that followed the eastern edge of the cemetery at one time (Figure B-38).



Figure B-38. Late nineteenth century view of Cemetery H, with the piers and associated wall visible (blue arrows). (Source: KALA Historical Society Album H PG19 #841)

The 2003 inventory indicated the presence of 145 graves in Cemetery H.⁶⁴ The earliest recorded death on a grave marker is 1891.

64. Ibid.

Grave markers range from ledger-style forms, with both beveled and sloped headstones, to small erect monuments, stone crosses, and upright headstones. Ledgers are both fully covered and kerbed. One of the ledgers is set apart from the rest of the graves, and oriented east/west at the northeastern corner atop a pile of loose stone. There are at least two vaults and one large monument surrounded by small columns. Headstones are fashioned of granite, marble, and concrete, some with render and limewash. There is a single zinc headstone present. It is located near a corroded ferrous metal fence.

Many of the headstones in Cemetery H are leaning sufficiently to be unstable. Some are cracked with vegetation growing between the ledger and the headstone. Grave markers that are set low to the ground have been damaged by maintenance equipment.

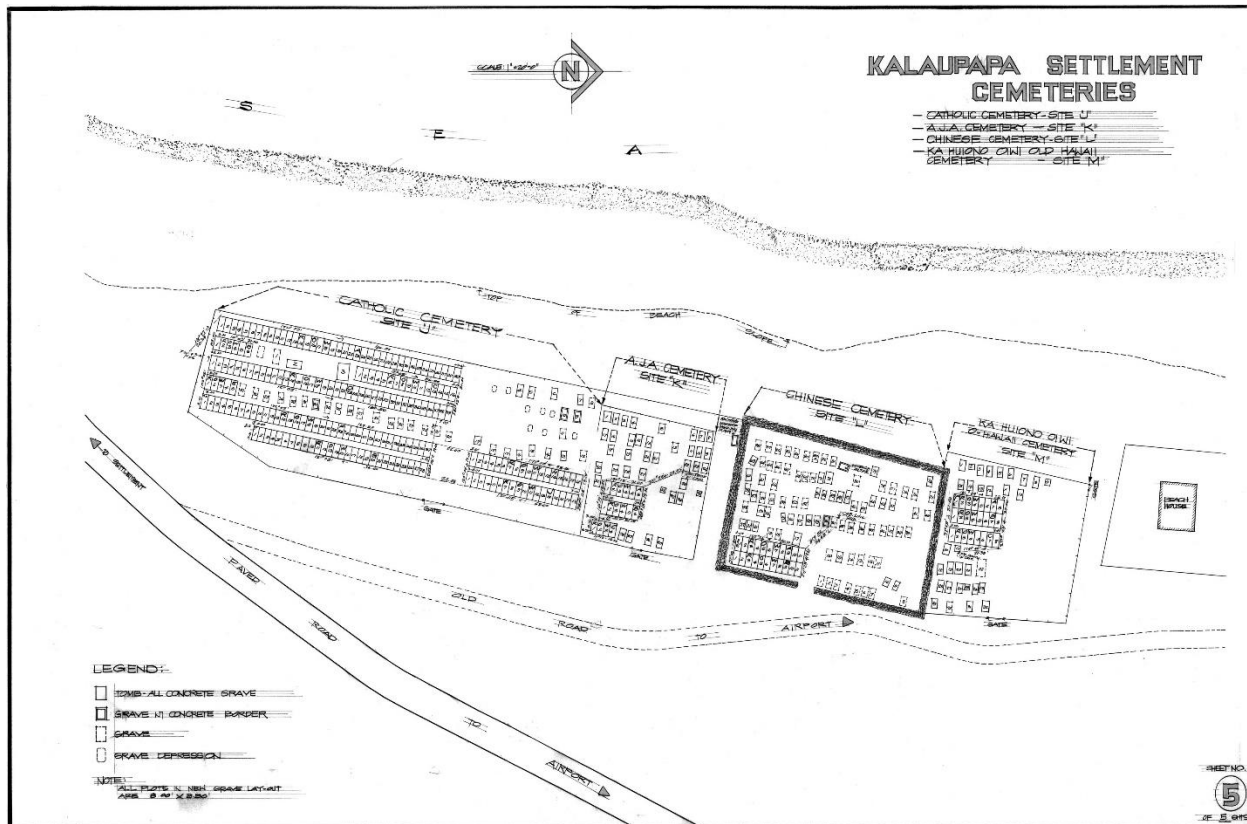


Figure B-39. Map of Cemeteries J (Catholic Cemetery), K (A.J.A. Cemetery), L (Chinese Cemetery), and M (Ka Huiono O'iwi O Hawai'i Cemetery), 1965. (Source: State of Hawaii Department of Accounting and General Services Survey Division. "Kalaupapa Settlement Showing Catholic Cemeteries – Sites A, C and H; Protestant Cemeteries – Sites B and D; C.E. Protestant Cemetery – Site F; Church of Jesus Christ of Latter-Day Saints Cemetery – Site F; A.J.A. and Old Hawaiian Cemeteries – Site G; Kalaupapa, Molokai, Hawaii, Survey April-June 1965; new grave layout March 1966")

West Coast Cemeteries (ʻĪliopiʻi Cemetery) – Cemeteries J through M

The north cluster of West Coast Cemeteries (J through M) are located on the ocean side (makai) of Kamehameha Street and Beach House Road (Figure B-39). The north cluster is located approximately one-third of a mile north of the cattle guard that frames the south cluster, and south of Kalaupapa Airport and the beach houses. Beach House Road edges the cemeteries to the east, while an unimproved two-track access road parallels the cemeteries to the west that skirts a dense grove of ironwood pine trees. The trees limit views of the Pacific Ocean from the cemeteries.

Similar to the south cluster, the cemeteries follow a linear arrangement with each of the four individual burial grounds abutting one another to the north or south. Each cemetery is affiliated with a distinct religious or cultural affiliation. Rows of graves are typically oriented north to south to align with the coastline. Burials are generally oriented east to west with the headstone to the east of the grave. Each of the cemeteries is characterized by level to gently sloped topography, and a comprehensive cover of mown turf. Historic maps and photographs indicate that fences formerly enclosed this group of cemeteries similar to the fences used to the south. The fences were originally intended to exclude livestock, but were removed after the pasturing of cattle ceased circa 1980.⁶⁵ The cemeteries are now open and accessible from the adjacent roads, although there are no formal circulation routes that provide access to the interiors of the cemeteries. One of the prominent features of the ‘Īliopi‘i Cemeteries is the dry stacked lava rock wall that encloses Cemetery L. The cemetery is accessed through a pair of gate piers.

Analysis. The West Coast Cemeteries possess a high degree of integrity with few changes having occurred within the landscape since the end of the period of significance. The modest changes that have occurred since the period of significance include an expansion of the grove of ironwood pine trees along the shoreline and the eastern margin of the system and associated changes to patterns of spatial organization such as a greater sense of enclosure than was present historically; and the removal of post and wire fencing used to exclude livestock and other animals from impacting the burial sites. The fencing was removed by 1992. A dry stacked lava rock wall that surrounds the Chinese Cemetery (Cemetery L) is the only surviving cemetery enclosure associated with the West Coast Cemeteries today. The wall is believed to have been constructed in 1966.⁶⁶ It was repaired in 2014.⁶⁷

Beach House Road that edges the cemeteries evolved during the period of significance from its original role as the first road to the airport. After Kamehameha Street was formalized in the 1930s, Beach House Road became a spur used to provide access to the cemeteries and the nearby beach houses. The informal two-track that edges the cemeteries to the west appears to post-date the period of significance.

65. Ibid., 30.

66. Ibid.

67. Johnson, Draft NHL nomination update, 171.



Figure B-40 Comparison of aerial photographs illustrating change over time related to tree cover in Cemeteries J through M. Views date to 1972 (left), and 2019 (right). (Source: <http://miles.giscenter.isu.edu.kalaupapa/overview.html> <http://miles.giscenter.isu.edu.kalaupapa/overview.htm> [left]; <http://uhmagis.maps.arcgis.com> [right])

Aerial photos indicate that in the 1930s through the 1970s, vegetation within the cemeteries was limited to scrubby, low plants. By the 1970s, woody plants are present along the western and northern margins of the northern cemetery cluster, suggesting that the ironwood pines present today were planted around the end of the period of significance. A 1992 photograph indicates that there was a single tree in Cemetery L. The tree is no longer extant. Beyond this tree, no additional woody vegetation appears to have been associated with Cemeteries J through M (Figure B-40). The stand of ironwood pines that edge the cemeteries has expanded since the period of significance, while trees have also grown up between the cemeteries and Kamehameha Street, an area that was open during the period of significance. The ironwood pine trees now block views of the Pacific Ocean, the beach houses, and Kamehameha Street. Maps from 1966 appear to show significantly more grave markers within Cemetery M than are present today. The reason for this discrepancy is not clear.

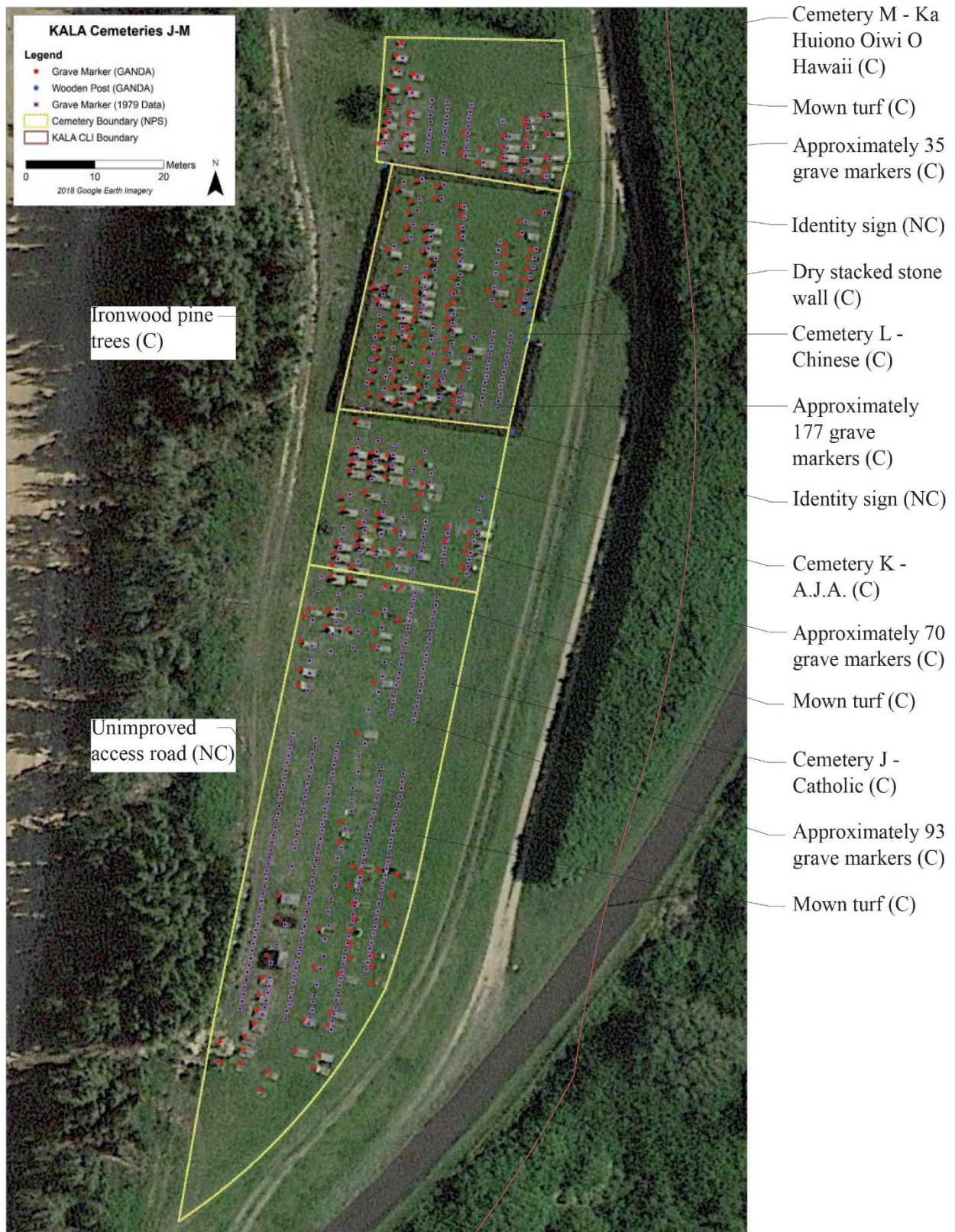


Figure B-41 Contributing and non-contributing features associated with Cemeteries J through M.



Figure B-42. View northwest across Cemetery J.

Cemetery J—Catholic

Cemetery J is the southernmost cemetery of the cluster. As of 2011, this cemetery was still in active use.⁶⁸ Cemetery J is accessed from the unimproved road that arises from Kamehameha Street south of its intersection with Beach House Road, and from Beach House Road. The cemetery is devoid of woody vegetation but is edged to the west by a dense thicket of ironwood pine trees. The cemetery is otherwise characterized by mown grass (Figure B-42). The grave markers occur in two clusters, one at the southwest corner, and the other at the northwest corner.

The 2003 inventory listed 93 graves within this cemetery.⁶⁹ The earliest date found on a grave marker is 1899. However, this grave marker is an anomaly since the remainder of the markers postdate the 1930s.⁷⁰ There are several contemporary graves present. These are recognizable from a distance due to the presence of draped lei, plastic flowers, and other mementos placed by friends and family members.

The grave markers are arranged in rows. Within the rows, many of the grave markers are grouped according to familial relations, such as married couples, who are buried adjacent to one another.

The grave markers vary in terms of size and style. Types include upright, raised, cross, flat, tomb/vault, and ledger. Materials represented in the fabrication of the markers include wood, concrete with render and limewash, lava rock with render, granite, marble, and bronze plaques set in concrete and stone. The markers also vary in terms of ornament and finish. The least formal are irregularly fabricated concrete markers with rough hand-incised text, while the more formal markers consist of polished and professionally engraved granite headstones.

The primary condition issues identified in association with Cemetery J include the vulnerability of wooden crosses, some of which are leaning, or have decayed at the base and are now propped on stone or concrete markers. The wooden crosses are also difficult to see when the grass is allowed to grow taller than a foot in

68. National Park Service, Kalaupapa CLI, 66.

69. Ibid., 66.

70. Ibid., 66.

height, as are other markers that are low to the ground. This potentially subjects the markers to damage by mowing equipment.



Figure B-43. View north across Cemetery K.

Cemetery K—A.J.A. Cemetery

Cemetery K, also known as A.J.A. Cemetery, is north of Cemetery J and south of Cemetery L. Cemetery K closely edges the western shoreline. A thick stand of ironwood pine trees marks the western boundary, obscuring views to the ocean (Figure B-43). The cemetery itself is a grassy plain devoid of woody vegetation.

The 2003 inventory recorded a total of 70 graves within Cemetery K.⁷¹ The earliest death recorded on a grave marker in Cemetery K is 1932.

The cemetery is accessed via Beach House Road, located to the east, and an unimproved grass two-track maintenance road that follows the eastern margin of the ironwood pines.

A wooden sign with routed text marks the boundary of Cemeteries J and K. At the time fieldwork was conducted in November 2018, the sign was propped against the wall surrounding Cemetery L.

Like Cemetery G, graves in Cemetery K are closely spaced, likely indicating a Japanese cultural practice.⁷² The markers are also similar in scale and design. Nearly all the markers are concrete with render and limewash in the ledger style with headstones. The headstones themselves, however, vary in size and materials.

71. Ibid., 66

72. Ibid., 65.

Individual headstones are fashioned from concrete, granite, and marble. Most of the ledgers are raised markers, with some set higher than others. Many of the inscriptions are in Japanese characters.

Most of the graves within Cemetery K are in poor condition. Condition issues of concern include cracking of both headstones and ledger bases, as well as leaning. Many also appear to be leaning and in danger of falling over.



Figure B-44. View west across Cemetery L to the perimeter rock wall with several ledger style markers shown.

Cemetery L—Chinese Cemetery

Cemetery L is the only cemetery on the west side of the peninsula that is completely enclosed by a dry stacked lava rock wall. The enclosure is believed to have been built in 1966.⁷³ The wall measures approximately 3 feet in height and is 4 feet wide. Stone piers mark an opening in the wall along the eastern face that serves as the entry into the cemetery. The piers are approximately 6 feet tall, square in plan, and topped by a circular finial. Three notches are set into each pier indicating where a gate was supported. The stone adjacent to the piers is roughly mortared, ostensibly to add structural support. Wooden signs are located at the southern corners of the cemetery. These identify Cemeteries K, L and M. The signs are painted brown with white hand-painted lettering.

The 2003 inventory documented 177 graves within Cemetery L. The earliest death recorded on a grave marker within the cemetery is 1903. Most of the markers do not include dates, however.⁷⁴

Within the walls of the cemetery, the graves are aligned in neat rows oriented north-south, with the individual graves sited parallel to one another. There is a single headstone that is oriented in the opposite direction to the rest. The grave markers are predominantly narrow upright concrete with render and limewash headstones and appear to have been created using a similar mold. Each is arched and contains vertically aligned inscriptions in stylized and formal Chinese characters. There are also a few ledger markers with upright or slanted headstones (Figure B-44). Some of the inscriptions were added by hand and appear not to be written in Chinese. The ledger markers are elevated 6 to 12 inches above grade. There is also one larger decorative

73. Ibid., 30.

74. Ibid., 66.

monument that marks the burial site of three individuals, and one flush marble grave marker with an inscription.

Grave markers within Cemetery L display damage similar to other cemeteries along the western shoreline. Some of the ledger markers are not plumb and are either settling or have become partially buried by soil from erosion of the ground above to the west. Maintenance equipment appears to have chipped some of the lower-lying markers. One large ledger marker is cracked into two pieces. Evidence of coconut palm trees that may once been present exists in the form of trunks within the cemetery.



Figure B-45. View west across Cemetery M.

Cemetery M—Ka Huiono Oiwi O Hawai‘i

Cemetery M is the smallest of the four cemeteries within the north cluster of the West Coast Cemeteries. The graves in Cemetery M are arranged in rows, with several clustered tightly along the stone perimeter wall of Cemetery L (Figure B-45). There is a large open area between some of the rows.

The 2003 inventory recorded only 35 graves in this cemetery.⁷⁵ The earliest death recorded on a grave marker is 1937.

Most of the grave markers are ledger type with upright or beveled headstones fashioned primarily of granite. Some of the concrete ledgers are flush with the grade, while others are raised approximately 3 to 6 inches above grade. There is a small ledger with a beveled headstone that appears to be that of a child. Some of the ledger grave markers are open in the center by design. Others appear to be fairly new or are replacements for older markers. The inscriptions on the grave markers are in English.

Condition issues include subsidence that has resulted in ledger and upright headstones being partially sunk into the ground throughout the cemetery. Stumps are present, suggesting that trees were formerly present but have been removed. The bases of many grave markers are cracked and spalling.

75. Ibid., 66.

Kalaupapa Settlement



Figure B-46. View west toward features associated with Cemetery I.

Cemetery I—Saint Marianne Cope Grave

An elaborate grave marker indicates the original burial place of Saint Marianne Cope, a beloved figure who administered the Bishop Home for Girls between 1888 and her death in 1918. The grave site edges Puahi Street on the grounds of Bishop Home. In 1974, petitioners began efforts to promote Mother Marianne to sainthood, which was granted by the Sacred Congregation of the Causes of Saints. Cope was exhumed from the grave site in January 2005, the year she was beatified, and reinterred in Syracuse, New York, the home of the Sisters of Saint Francis, the order of which she was a member. In 2012, Mother Marianne was canonized. The grave site continues to honor Saint Marianne Cope.

The Saint Marianne Cope Grave is accessed via a small concrete stair from Puahi Street to the west and from a narrow sidewalk that extends from Bishop Road to the east. A pair of 8-foot tall chamfered painted or limewash piers with square capitals flank the entrance through a perimeter dry stacked lava rock wall along Puahi Street. In front of the wall is a rectangular wooden sign set on two thin steel posts that identifies the grave site. The sign is painted black with white and light blue letters painted by hand. A small boulder located near the upper riser of the stair, with hand painted lettering, is inscribed “Peace to all who enter here.”

Saint Marianne Cope Grave features a central concrete kerb gravestone that measures 5 by 9 feet and is surrounded by a raised concrete sidewalk, turf lawn, and plantings (Figure B-46). Shrubs mark each corner of the gravestone, while evergreen groundcover is at each end. An iron chain supported by a series of 3-foot-tall painted or limewashed concrete posts surrounds the tomb. The posts are mounted onto the raised sidewalk that edges the tomb on three sides. A 6-foot-tall white-painted concrete statue of Jesus and John the Baptist set on a pedestal with a bronze plaque marks the head of the grave. At the foot of the grave is a painted concrete pedestal with a beveled bronze marker encircled by two strands of rosary beads. At the southwest corner of the area contained by the chain edging is a mortared lava rock marker with a bronze plaque with a porcelain inset in the top left corner in the center that is canted for legibility.



Figure B-47. View toward Saint Marianne Cope's grave, Cemetery I, ca. 1920s. (Source: Bishop Museum; Greene, 666)

Plantings have been added to the grave site since its establishment in 1918. Once fairly open (Figure B-47), the grave is now an intimate space edged by mature tree and shrub plantings and ground covers.

The primary condition issues of concern associated with the Saint Marianne Cope Grave include the cracked and uneven nature of the surrounding concrete sidewalk and the walk that connects to Bishop Road, and the need for paint at the base of the statue and the posts that support the chain that surrounds the monument.

Cemetery I - Saint Marianne Cope grave site (C)

Includes:

Identity sign (NC)

Dry stacked stone wall and gate piers (C)

Stairs at entrance through wall (C)

Concrete walk (C)

Concrete bollards and chain enclosure (C)

Grave stone (C)

Statue of Jesus and John the Baptist (C)

Plaster pedestal and rosary beads (C)

Stone marker and plaque (NC)

Ornamental plantings (C)



Cemetery T - Kalaupapa Field #3 (Bishop Home) (C)

A total of 3 grave markers (C)

Figure B-48. Contributing and non-contributing features associated with Cemeteries I and T.

Cemetery T—Kalaupapa Field #3 – Bishop Home

A single concrete ledger grave marker is located in the field along the eastern side of the Bishop Home property that is edged by McKinley Street. The grave marker is located within an area maintained under mown grass cover.

Two additional graves are located along Bishop Road. Both are marked by irregular, but nearly circular, piles of lava rock (Figure B-49). The graves are located along the northern edge of the road, within view of the road. These piles of rock reflect the work of volunteers amassing stones used to mark burials, but not historically within the present configuration.⁷⁶ It is not known whether there were other grave markers present in the past.



Figure B-49. View of one of the graves along the entrance road to Bishop Home that comprise Cemetery T. The stones are not an original grave marker, but lava rock piled by volunteers to mark a burial.

Isolated Graves

There are several isolated graves located within the Kalaupapa and Kalawao Settlements that are not part of named cemeteries. The isolated graves include four tomb graves near the recycling center, other tomb graves at the southern edge of the clearing along Damien Road associated with the Ambrose Hutchison House site, and a child's grave near the Molokai Light Station. The grave markers include one approximately rectangular stone masonry tomb with a basalt base slab and no inscription that has been damaged by a tree growing up through the slab; a rectangular concrete tomb with a triangular top and three rounded headstone pieces without inscriptions; a rectangular stone and concrete tomb with a cylindrical top and no inscription; another rectangular concrete tomb with a cylindrical top that lacks a marker and is threatened by a tree growing into the structure; and a concrete bale tomb with an underground chamber, also lacking an inscription, that is caving in on itself.

76. Richard Miller, comments on 90% draft, November 5, 2018.

Damien Road Corridor



Figure B-50. View of one of the enclosed burial grounds on the western slopes and rim of Kauhakō Crater that are part of Cemetery N.

Cemetery N—Kauhakō Crater

Cemetery N is located along the western rim of Kauhakō Cemetery to either side of an access road that leads to the site from Damien Road. The graves associated with Cemetery N are grouped into areas enclosed by rock wall enclosures. Several graves at the top of the rim are grouped together but not enclosed by walls.

The 2003 inventory identified a total of twenty-two graves within Cemetery N.⁷⁷ The graves are thought to be associated with members of the Church of Jesus Christ of Latter-day Saints.⁷⁸

Most grave markers are ledger style and cover the entire grave. Otherwise, the markers vary in form, scale, and materials. Several are comprised of stacked lava rock. Of these, some are covered with render and limewash. Others range from elaborate tomb crypts or vaults (Figure B-50) up to 4 feet in height, with subterranean interment, to upright slabs made of granite, concrete with render and limewash, or marble. Some markers include headstones and/or small crosses. One large concrete marker near the concrete cross has thick edging, a brick pedestal, and a marble headstone that indicate a death date of 1890 etched on the marble headstone. It is similar to the marble marker associated with Samuel Thompson's grave at the southern end of Papaloa Cemetery. Some of the markers are inscribed with text and/or Christian symbols, while others have inscriptions in Hawaiian.

The walled enclosures are formed from dry stacked lava rock and stand approximately 3 to 4 feet in height and width. A 20-foot-tall concrete cross erected in 1956 is located near the grave sites. The cross can be seen from the settlement below.

The primary changes to the Kauhakō Crater cemeteries since the end of the period of significance has been in the surrounding vegetation where plantings of ironwood pine trees have grown into large groves that include

77. Ibid., 66.

78. National Park Service, Kalaupapa National Historical Park website, "Cemeteries" Available at <https://www.nps.gov/kala/learn/historyculture/cemtrs.htm> (accessed June 26, 2019).

volunteers arising from suckering and seeding. A photograph of the concrete cross being erected near the crater from 1956 shows an open landscape devoid of trees, as does an aerial photograph from 1972 (Figure B-51). Woody growth has since begun to encroach on the burial areas and to block views to Kalaupapa Settlement (Figure B-52).

The principal condition issue of concern at Kauhakō Crater Cemetery is the expanding colony of ironwood pine trees located near the graves located near the rim of the crater, and other invasive species located near the walled cemeteries further to the south. The NPS repaired many of the walls associated with Cemetery N in 2014.

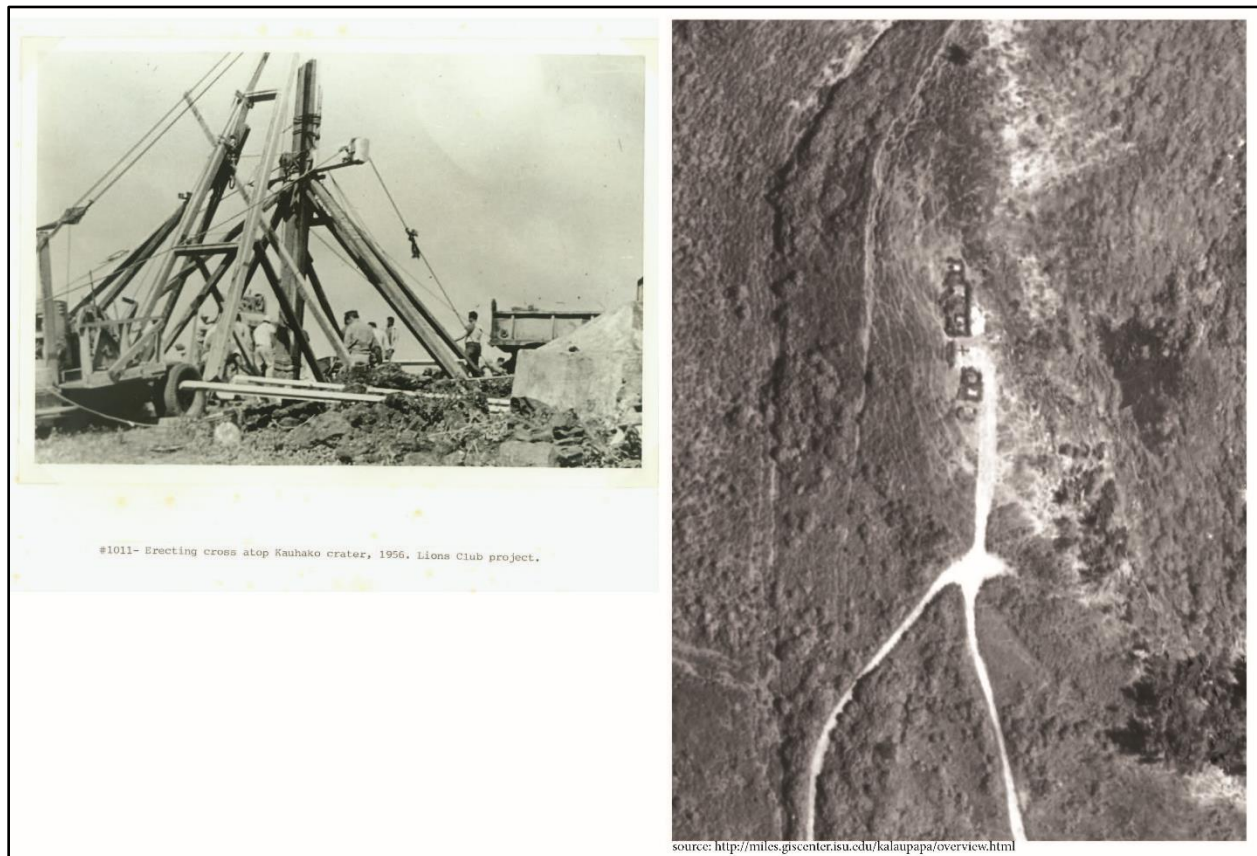


Figure B-51. Views of the cross being erected near Kauhakō Crater (Cemetery N), 1956, by the Lions Club (left) and aerial photograph of the crater rim and associated burial grounds, 1972 (right). (Source: KALA Historical Society Album K PG 14 #1011 (left), and <http://miles.giscenter.isu.edu/kalaupapa/overview.html> (right))



Figure B-52. Comparison of aerial photographs illustrating change over time related to tree cover in Cemetery N. Views date to 2000 (left), 2005 (center), and 2020 (right). (Source: <http://miles.giscenter.isu.edu.kalaupapa/overview.html> [left and center]; <http://uhmagis.maps.arcgis.com> [right])

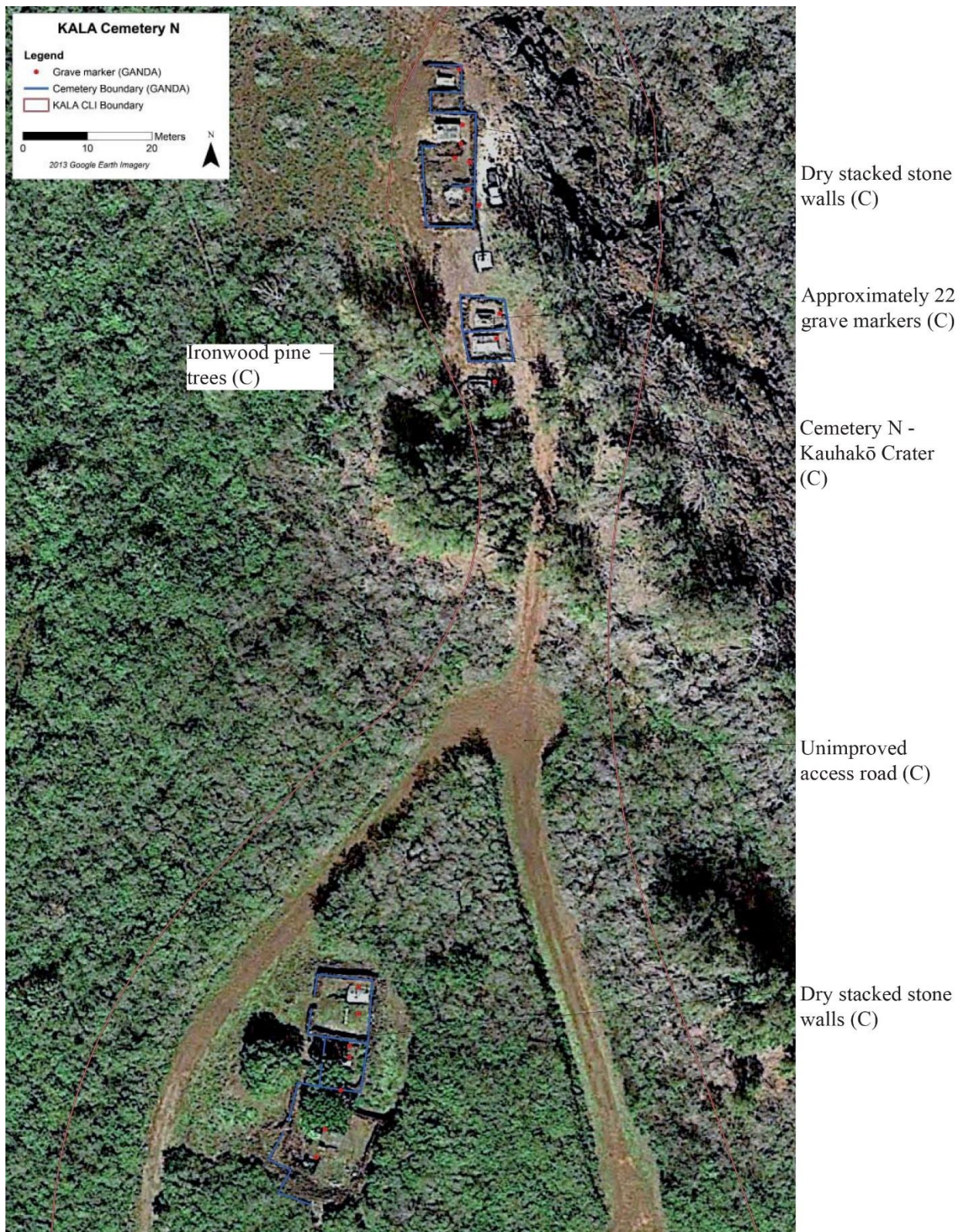


Figure B-53. Contributing and non-contributing features associated with Cemetery N.



Figure B-54. View west of Kahaloko Cemetery (Cemetery O), with barrel vault grave markers and the perimeter rock wall.

Cemetery O—Kahaloko

Cemetery O, also known as Kahaloko Cemetery is located within the Makanalua ahupua'a (land division) along Damien Road. The cemetery was used for Settlement residents between 1887 and 1921 but may also contain earlier traditional Hawaiian graves.⁷⁹ These rock-marked graves, primarily located in the southwestern quadrant of the cemetery, are an important resource not found elsewhere within the cemetery system. It is likely that not all burial sites within the cemetery have been identified.⁸⁰ Graves may have been marked by wooden markers that have deteriorated. The cemetery became overgrown with Java plum trees and lantana during the twentieth century and nearly forgotten. Estimated at approximately 200 trees, the NPS began to clear the dense colony of Java plum in the 2000s to reveal the walled enclosure and grave markers and to protect the grave markers and walls from damage by roots, fallen limbs, and other hazards.

As inventoried in 2003, there are thirty-seven graves associated with Cemetery O.⁸¹ An iron pipe associated with a former dairy site to the south extends through the cemetery. The approximately 1-acre cemetery is enclosed within a dry stacked lava rock wall that stands 3 to 4 feet in height and width. The entrance is on the north side and occurs as a break in the wall. The NPS has placed a carved wood identity sign set within a stacked lava rock along Damien Road to mark the cemetery.

Within the cemetery there are several prominent and well-marked graves, as well as several more modest markers. There are also likely unmarked grave sites represented by sunken areas or shafts.

Grave markers vary in size and style and range from concrete or lava rock with render/limewash barrel vault structures (Figure B-54) to other enclosures, carved headstones, upright stones, and single and stacked lava rock. Markers have incised text written in either Hawaiian or English.

79. National Park Service, Kalaupapa National Historical Park website, "Cemeteries" Available at <https://www.nps.gov/kala/learn/historyculture/cemtrs.htm> (accessed June 26, 2019).

80. National Park Service, "Scope of Work for Removal of Forty Trees around and in Kahaloko Cemetery, Kalaupapa, NHP" undated.

81. National Park Service, Kalaupapa CLI, 66.

Kahaloko Cemetery exhibits several condition issues of concern. Java plum trees remain within the cemetery that are causing stress to the grave markers, with branches and trunks sometimes falling on the markers and damaging them. Rooting feral pigs have rooted within the cemetery and damaged the grave markers by dislodging stones and cracking render. Pipe scaffolding is currently present in an effort to protect some of the grave markers from further damage associated with tree fall.

An undated document titled “Mortarless Wall Repair and Reconstruction Kahaloko Cemetery” provides detailed documentation for work done to address various condition issues of concern within the cemetery. Photographs and a sketch map indicate where specific repairs have occurred.

Other than the removal of numerous trees within the northwest corner of the cemetery and repair of grave markers and the perimeter wall, it appears that there have been no changes made to the cemetery since the period of significance.



Figure B-55. Contributing and non-contributing features of Cemetery O.

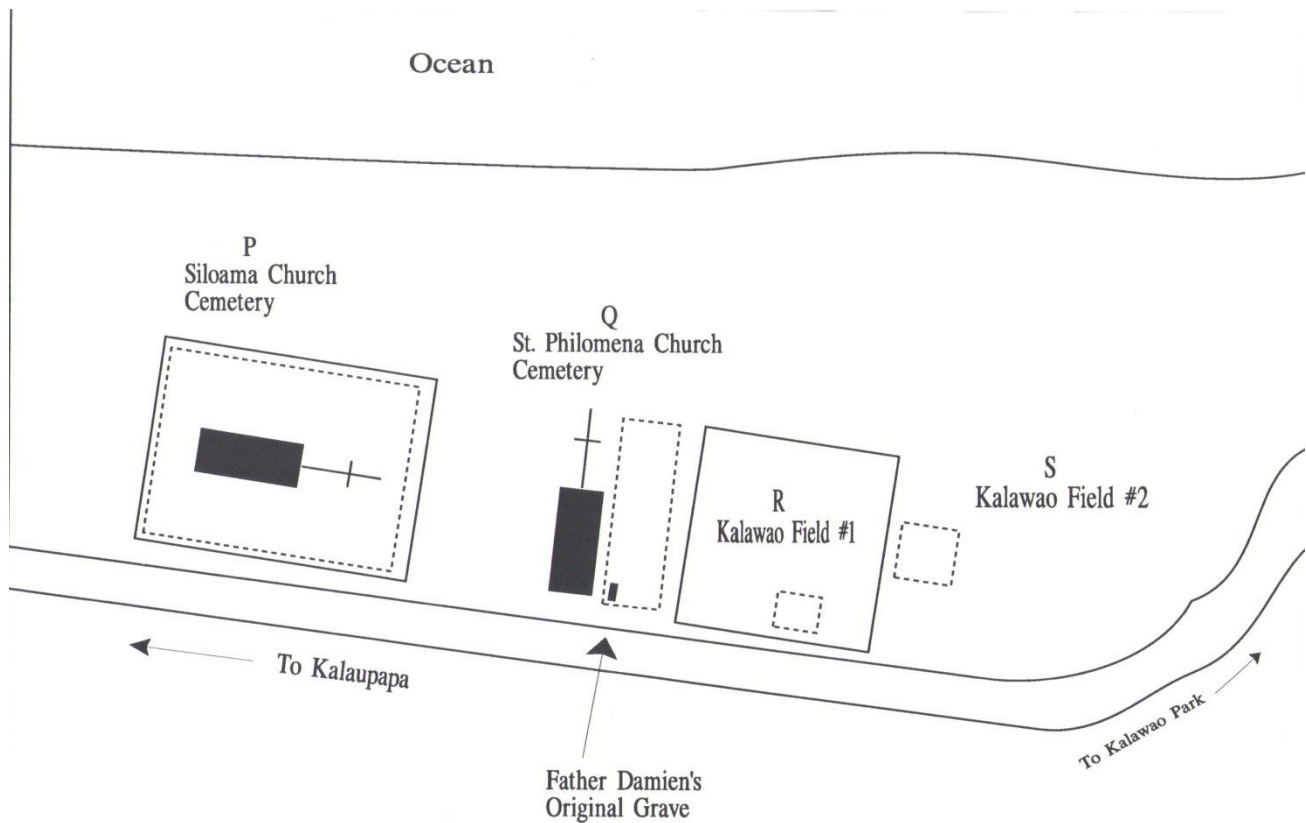


Figure B-56. Map of Cemeteries P, Q, R, and S. (Source: National Park Service)

Kalawao

At Kalawao there are four cemeteries associated with the two surviving churches—Siloama Protestant (Cemetery P) and St. Philomena Catholic (Figure B-56). St. Philomena Catholic Church is edged by a churchyard cemetery (Cemetery Q), as well as two additional burial grounds to the east (Cemeteries R and S). These burial grounds, while not entirely marked, contain thousands of graves associated with early Kalawao Settlement residents.⁸²

82. National Park Service, Kalaupapa National Historical Park website, “Cemeteries” Available at <https://www.nps.gov/kala/learn/historyculture/cemtrs.htm> (accessed June 26, 2019).



Figure B-57. Comparison of aerial photographs illustrating change over time related to tree cover in Cemeteries P through S. Views date to 1964 (top left), 1972 (top right), 2000 (bottom left), and 2020 (bottom right). (Source: <http://miles.giscenter.isu.edu.kalaupapa/overview.html> [top left and right and bottom left]; <http://uhmagis.maps.arcgis.com> [bottom right]).

The cemeteries in Kalawao have not changed substantially since the period of significance. Near the end of the period of significance, Cemeteries R and S contained more woody vegetation than is present currently (Figure B-57). The cemeteries are now maintained through regular mowing and no longer contain many stands of trees.

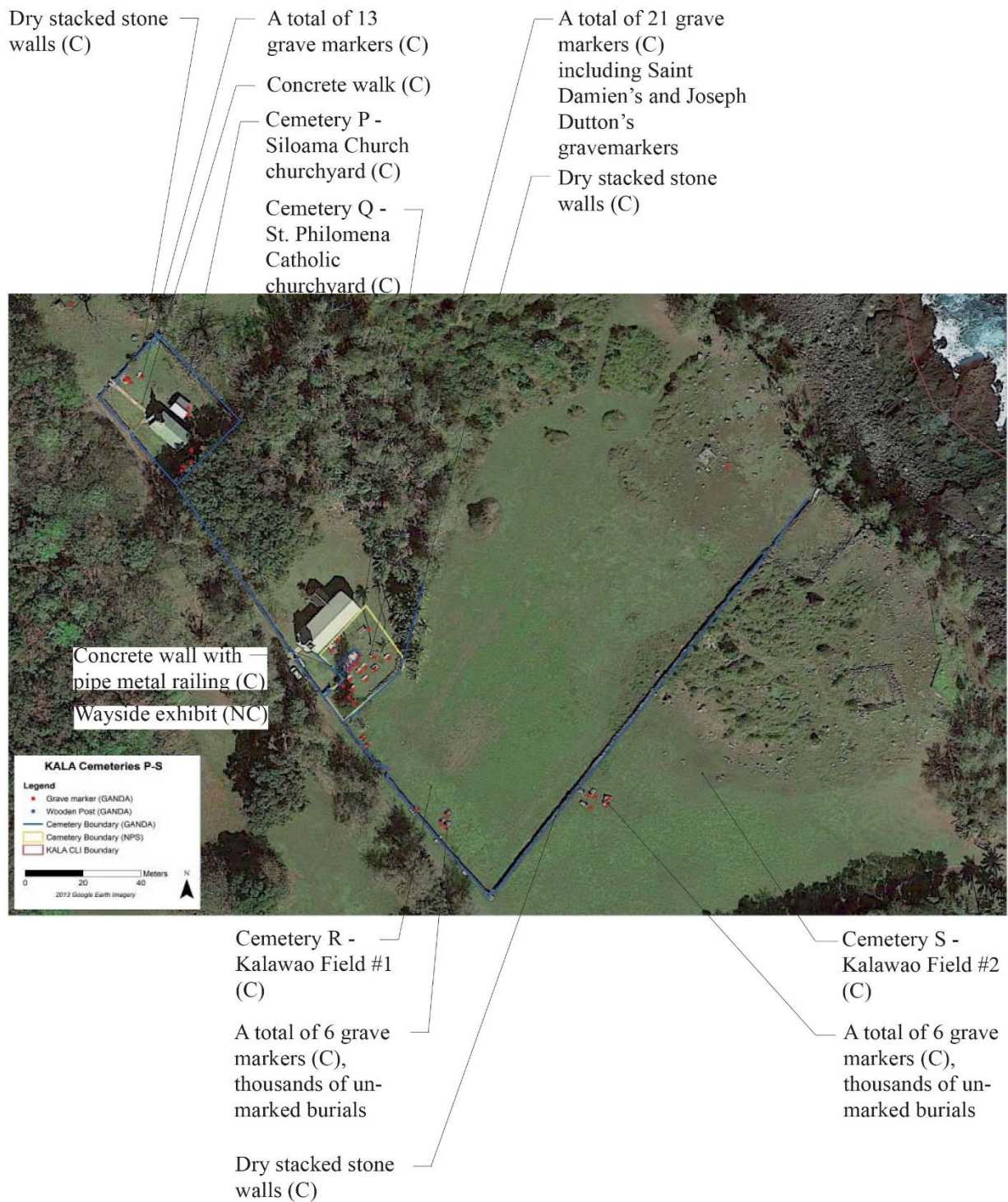


Figure B-58. Contributing and non-contributing features associated with Cemeteries P through S.

Cemetery P—Siloama Congregational Church

Cemetery P surrounds Siloama Congregational Church in Kalawao (Figure B-58). The cemetery occupies the churchyard, which is marked by a perimeter dry stacked lava rock wall approximately 3 feet in height (Figure B-59). The churchyard was initially surrounded by a picket fence, later replaced with the present-day dry stacked lava rock wall. A map of the two churches prepared in 1968 by the State of Hawaii Department of Accounting and General Services indicates the presence of the wall (refer to Figure B-61). The churchyard

measures approximately 200 by 300 feet. The cemetery is believed to have stopped being used for active burials circa 1927.⁸³



Figure B-59. View north across Cemetery P toward the perimeter rock wall.

The 2003 inventory identified thirteen graves at Siloama.⁸⁴ The grave markers vary in size and style but include rendered lava rock barrel vaults and other encasements. The barrel-vaulted grave markers within the southeast corner of the churchyard include upright carved concrete headstones. The two graves north of the church are vaulted without headstones. The three graves west of the church are concrete ledger style. One contains an upright concrete headstone in the form of a cross.

The graves located in the southeastern portion of the churchyard are largely shaded by trees that have grown along the lava rock wall. Many of the gravestones are covered in biological growth, presumably fostered by shady conditions.

Located outside the churchyard is the Kanakaokai Tomb, a lava rock marker covered with a render and featuring an arched top that measures 6 by 10 feet and is 2 feet high. The structure marks the grave of a prominent kama'aina—Kanakaokai—who was a resident of the peninsula at the time the Settlement was established. The tomb was repaired in the early 2000s. Aside from repairs to the grave markers and the perimeter wall, the cemetery appears not to have changed since the period of significance (refer to Figure 55).

83. Greene, *Exile in Paradise*, 590.

84. National Park Service, Kalaupapa CLI, 66.



Figure B-60. Views of Saint Damien's grave and St. Philomena Church and picket fence circa 1895. (Source: reproduced in the 1985 St. Philomena HSR)

Cemetery Q—St. Philomena Catholic Church

The St. Philomena Catholic Church churchyard edges Damien Road in Kalawao. A dry stacked lava rock wall parallels the road, with entrances into the churchyard occurring west and south of the church. Concrete piers mark the entrance into the churchyard from Damien Road. Piers also mark a transition through a section of rock wall that extends south from the churchyard wall into Cemetery Q. The churchyard wall continues east along the margin of Damien Road to frame Cemetery Q. The wall is 3 to 4 feet in height. The north and west boundaries are marked by woody vegetation rather than walls. The dry stacked lava rock wall was present by 1905. Prior to the wall, the churchyard and cemetery were edged by a picket fence (Figure B-60). Together with Cemeteries R and S, Cemetery Q is part of a complex of contiguous burial grounds known as Moku Puakala.



Figure B-61. View of cemetery at St. Philomena Church with the pipe rail associated with the concrete wall visible, undated but by circa 1935. (Source: reproduced in the 1985 St. Philomena HSR)

East of the church is Cemetery Q, which includes the grave markers associated with Saint Damien and Brother Joseph Dutton located near the church. From the southeast corner of the church, a low concrete wall delineates a slight declining grade change and serves as a retaining wall. The wall extends eastward about halfway across the open area to the dry stacked lava rock wall continuing south from the churchyard wall noted above. The concrete wall is divided by a gateway marked by concrete piers, but the gate is missing. The wall is topped by iron pipe railing, painted black. Historic photographs (Figure B-61) and a map prepared in 1968 indicate the presence of the wall during the period of significance (Figure B-62). In 1985, the Historic Structure Report indicated that the pipe rail was deteriorated, with a portion missing. The HSR recommended that the entire railing be replaced, which appears to have been completed.

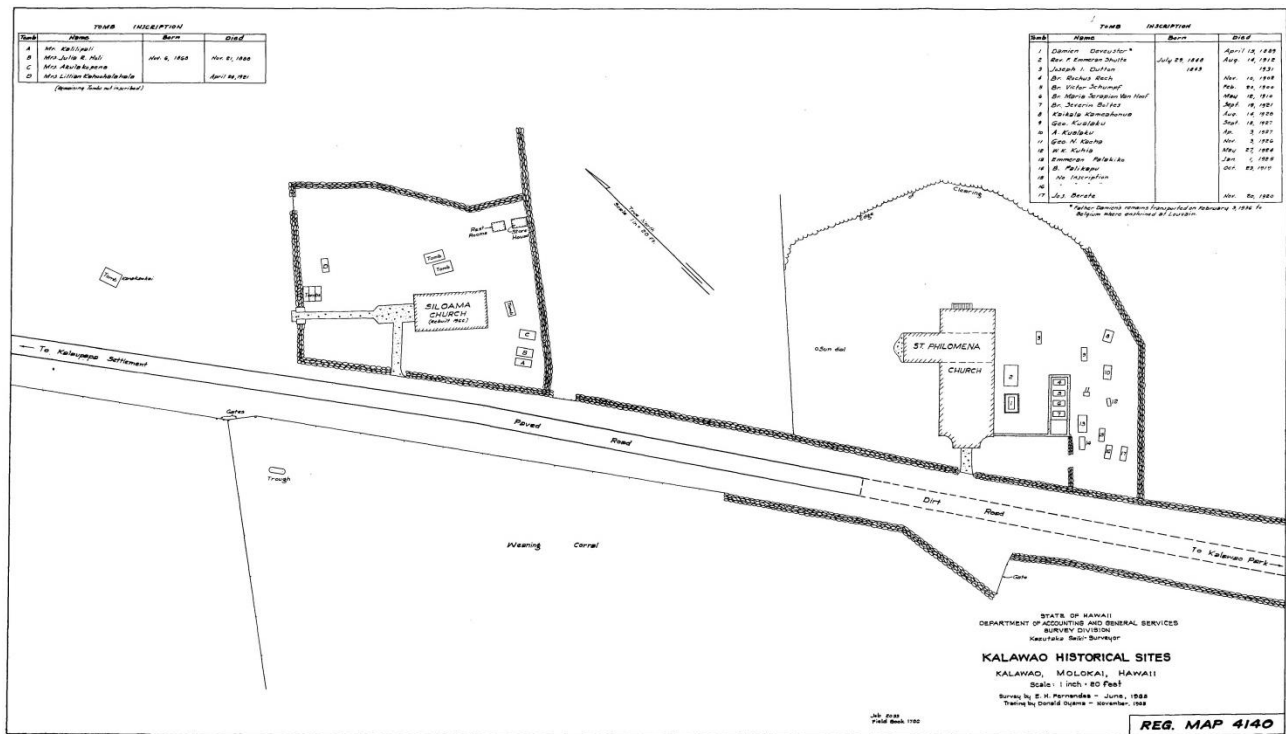


Figure B-62. Map of Siloama and St. Philomena churchyards, circa 1968. (Source: State of Hawaii, Department of Accounting and General Services)

The 2003 cemetery inventory identified twenty-one graves in Cemetery Q. Among these are the grave sites of two notable clergymen who were instrumental in providing aid to Hansen's disease patients at Kalawao—Saint Damien and Brother Joseph Dutton (Figure B-63).

Saint Damien was buried in 1889 beside the church beneath the pandanus (puhala or screw pine) tree under which he spent his first nights at Kalawao. According to Joseph Dutton, a little flower garden was planted around it, and the grave itself, a mound of earth, was sown with numerous growing plants.⁸⁵ On July 1, 1935, the Damien chapel at Kalawao and its premises and graveyard were declared a public memorial to Father Damien. Circa 1936, Saint Damien's remains were removed and placed in a national shrine in his native Belgium. In 1994, Damien was beatified, after being attributed with one of the two requisite miracles for sainthood. At the beatification mass in June 1995, Pope John Paul II presented a small casket containing Damien's right hand for reburial at St. Philomena to Bishop Francis X. DiLorenzo, Father Bukoski, and Edward Kato, a resident of Kalaupapa. The small casket was interred on July 22, 1995 in Saint Damien's grave site next to St. Philomena Church.⁸⁶

Both graves feature highly refined grave markers that are also regularly decorated by visitors. Saint Damien's grave site is marked with a black stone cross set atop a 3-foot-high stone pedestal set atop 4 inches of concrete added later to stabilize the broken grave makers (Figure B-64). The cross was erected by the Catholic mission of Honolulu by 1895.⁸⁷ The inscription:

V.C.J. S.

Sacred to the Memory
of the Revd. Father

85. Greene, *Exile in Paradise*, 585.

86. Flexner, 77.

87. Greene, *Exile in Paradise*, 585.

DAMIEN DEVEUSTER

Died a Martyr to his Charity

For the Afflicted Lepers

April 15, 1889

R.I.P.

is painted gold. The grave marker is surrounded by a 3-foot-tall, black painted iron fence fashioned from vertical rails with spike-shaped finials.⁸⁸ The fence appears in historic photographs by the early twentieth century but appears to have deteriorated and been lost at some point during the mid-twentieth century. Marines from Kaneohe Marine Corps Air Station restored the fence around Saint Damien's grave in 1969.⁸⁹ By 1983, a Collections Preservation Guide prepared by the National Park Service indicated that the wrought iron fence was severely corroded with flaking and pitting. A Historic Structure Report prepared in 1985 included construction documentation for replacing the fence in kind that appears to have been implemented (refer to Figure B-63).

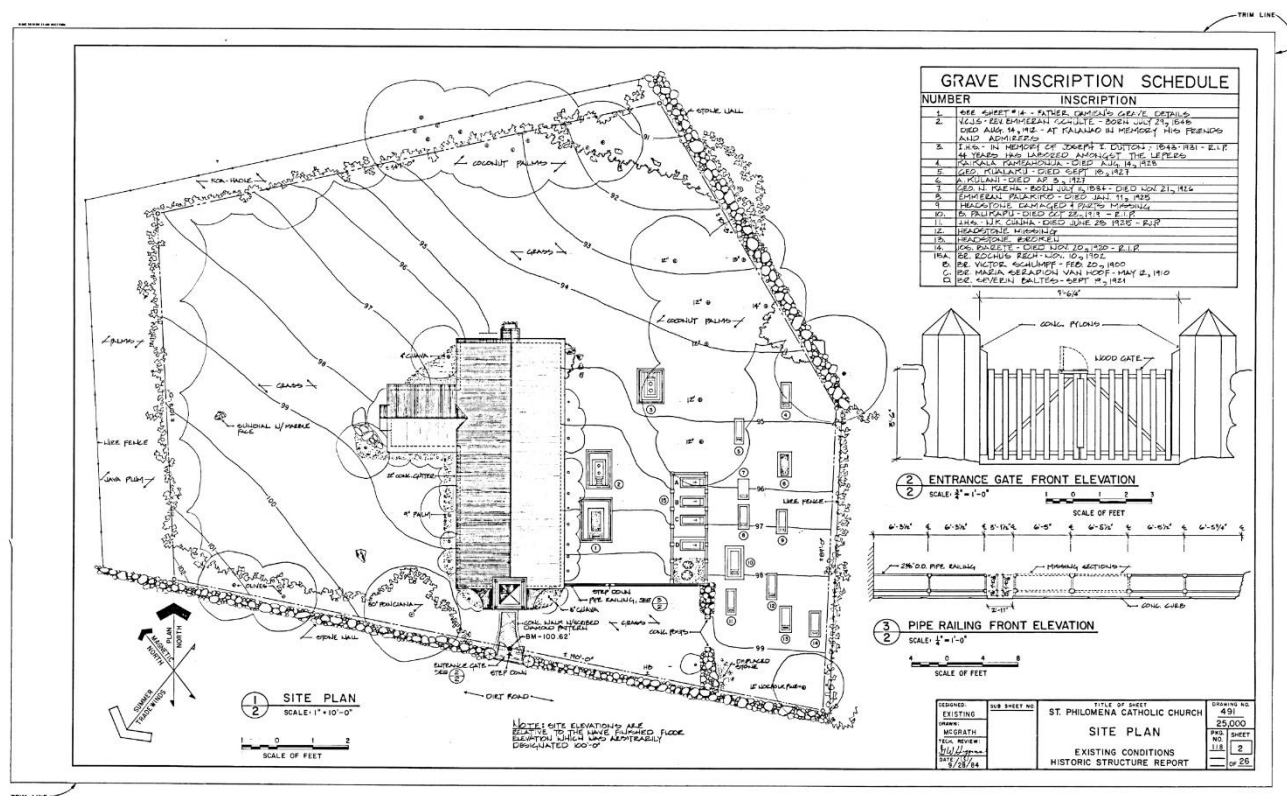


Figure B-63. Site plan of St. Philomena Catholic Church and churchyard, indicating the arrangement of grave markers, from the 1985 St. Philomena Catholic Church Historic Structure Report. (Source: NPS Drawing No. 491/25,000, sheet 2 of 26)

88. Saint Damien was originally buried at the graveyard adjacent to St. Philomena Catholic Church but was reinterred in the crypt of the Church of the Congregation of the Sacred Hearts in Leuven, Belgium. A relic of Saint Damien was returned to the grave at St. Philomena in 1995.
89. Robert L. Carper, H. Thomas McGrath, Paul C. Cloyd, Linda W. Greene, Catherine H. Blee, and Gary F. Somers, *Historic Structure Report: St. Philomena Catholic Church (Father Damien's Church) Kalaupapa National Historical Park Molokai, Hawaii* (Denver, Colorado: National Park Service, Denver Service Center, January 1985), 97.



Figure B-64. View north of Cemetery Q including Saint Damien's grave marker.

The Brother Joseph Dutton grave site, which is near the Saint Damien grave site, is marked with an elaborate stone marker on a stepped concrete tomb and curb, edged by a painted iron railing set in the curb. The 1985 HSR suggests that the pipe railing around Brother Dutton's grave was also deteriorated and in need of replacement.

Just north of Saint Damien's grave is that of Father Emmeran Schulte, SS.CC., who labored on Kaua'i between 1884–1907.⁹⁰

Many of the headstones mark the burial sites of several Catholic brothers who labored and died on Kalaupapa (refer to Figure B-64). These include Brother Charles Roch, who spent only twenty-five days at the settlement before drowning in a bathing pool at the foot of the pali in 1902. South of Brother Roch's grave is that of Brother Victor Schumpf, who died of typhoid fever in 1900. Located to the south of Brother Schumpf's grave is the final resting place of Brother Serapion Van Hoof, who died in 1910, and Brother Severin Boltes, who died at Kalawao in 1921, after serving patients in the settlement for twenty-six years.⁹¹

Condition issues of concern associated with Cemetery Q include subsidence of grave markers and biological growth on markers.

90. Greene, *Exile in Paradise*, 585.

91. *Ibid.*, 590.



Figure B-65. View east toward and across Cemetery R.

Cemetery R—Kalawao Field #1

Cemetery R is a large open field located to the southeast of the St. Philomena Catholic Church churchyard and Cemetery Q. The burial ground is edged to the south by Damien Road, to the west by the wall that separates it from Cemetery Q, and to the east by another dry stacked lava rock wall, 3 to 4 feet high, which marks the boundary with Cemetery S (Figure B-65). This wall was repaired by the NPS in 2014. Cemetery R is one of the oldest Kalawao Settlement cemeteries on the peninsula. The burial ground was laid out and enclosed by Saint Damien, with the perimeter wall built to prevent encroachment by animals. The consecrated burial ground was open to all members of the Settlement, including non-Catholics. Saint Damien is known to have served as undertaker and gravedigger for several years.⁹² Although it is believed that many of the graves associated with the cemetery are not marked, Joseph Dutton remarked in a letter in 1887 that the cemetery held approximately 2,000 graves.⁹³

The 2003 inventory noted a total of only six grave markers within the cemetery, all of which are located along the margin of the rock wall at the southern boundary of the cemetery. Three of the gravesites are grouped together and are similar in their form and arrangement. These are rock and concrete ledger style grave markers with headstones at their southern end. Two of the graves are located closer to St. Philomena and are similarly arranged although the headstones are thinner. Free-roaming horses and cattle are believed to have knocked down many of the headstones and obliterated other traces of gravesites. The remainder of the burial ground is maintained in open mown turf cover. Thickets of woody vegetation edge the burial ground along the cliffs that mark the northern Pacific Ocean shoreline (refer to Figure B-65).

Condition issues of concern associated with the cemetery include cracked, broken, and leaning grave markers.

92. Greene, *Exile in Paradise*, 108.

93. Greene, *Exile in Paradise*, 584.



Figure B-66. View north of Cemetery S, which contains only a few grave markers in close proximity to the rock wall that surrounds Cemetery R, and many unmarked burials.

Cemetery S – Kalawao Field #2

Cemetery S is located to the east of Cemetery R and to the north and west of Damien Road. Thickets of vegetation occupying the steep slopes and cliffs of the Pacific Ocean shoreline edge the burial ground to the north. Views of the Pacific Ocean are limited by the dense woody vegetation along the shoreline. Most of the burial ground is an open field believed to contain numerous unmarked graves. There are 6 grave markers located within the cemetery. These are all in close proximity to the wall that surrounds adjacent Cemetery R (Figure B-66).⁹⁴ Much of the cemetery is maintained in mown turf. The grave markers are lava rock coated with render, constructed in barrel vault form with a thick rounded concrete headstone. The text is hand-inscribed.

Condition issues of concern associated with the cemetery include cracked markers due to settling and the loss of legibility of some text on grave markers.

Condition Issues

The condition of grave markers and other features at Kalaupapa’s cemeteries ranges from good to poor depending on the age of the feature, its material construction, and its location. Many grave markers have been repaired relatively recently. Work has been conducted in several cemeteries since the mid-2000s to address repair needs. These efforts are documented, and the relevant information has been placed in the park archives for reference.

Several types of condition issues occur in association with the grave markers located within the Kalaupapa and Kalawao cemeteries. These are documented below and form the basis for many of the treatment recommendations provided in the chapter that follows. These condition issues were observed during field investigations completed in November 2018 and collected from the documentation of preservation efforts conducted beginning in circa 2008.

94. National Park Service, Kalaupapa CLI, 66.



Figure B-67. Example of a leaning grave marker within Cemetery L.

Leaning or fallen grave markers

There are several examples of leaning or fallen grave markers within the cemeteries at Kalaupapa and Kalawao (Figure B-67).

Displacement of grave markers from soil movement and erosion

Some markers are out of plumb or not level. Causes may include soil settlement, insufficient footings, erosion, or soil movement such as downhill creep. This may lead to damage of concrete or stone above-ground tombs and markers, where these features are affected by differential settlement (Figure B-68).



Figure B-68. Example of a grave marker subject to differential settlement in Cemetery L.

Biological growth

Biological growth is unwanted vegetative growth that adversely affects the grave marker or other cemetery feature (Figure B-69). Biological growth, including lichen, appears on the surface of the markers, resulting in staining, deterioration, and increase in surface roughness. Larger plants with roots also caused damage.



Figure B-69. Example of grave marker with lichen growth in Cemetery P.

Soiling of grave markers

Soiling is caused by foreign matter, inorganic or organic, which accumulates on the surface of the features over time. Soiling, especially in the form of biological growth (algae), was observed on markers and tombs. In addition to soiling from biological growth, soiling at the base of some grave markers is likely a result of rainwater splashing adjacent soil onto the surface of the marker (Figure B-70).



Figure B-70. Example of biological soiling on markers and tombs in Cemetery N.

Loss of inscription detail

Several grave markers are at risk of diminishment or loss of inscriptions on the face of the marker due to erosion or cracking of the material (Figure B-71).



Figure B-71. Example of grave marker inscription at risk of being lost in Cemetery H.

Erosion and surface wear

Marble grave markers are exhibiting erosion (Figure B-72). This is likely due to natural weathering from exposure, biological growth, and cyclic salt crystallization.



Figure B-72. Example of erosion and surface wear on a horizontal grave marker in Cemetery N.

Deterioration of lime-based setting mortar

Many of the lava rock tombs have lime sand renders with limewash coatings. As the renders and limewashes weather and crack, water enters the masonry system. The water infiltration has led to the erosion of the mortar paste (i.e., carbonated lime). With less paste, the mortar becomes sandy, and the lava rock is no longer held firmly in place, leading to failure of the structural integrity of the tombs (Figure B-73).



Figure B-73. Example of deteriorated lime-based mortar exposing lava rock below at a grave marker in Cemetery K. (Source: Garcia and Associates, 2018).

Rising damp

Rising damp is the movement of moisture from the wet ground through permeable building materials by capillary action. Salts may be deposited in the voids, pores, and cracks of the material at the point where the water is evaporated, which can lead to cyclic salt crystallization damage and corrosion of metals. (Figure B-74).



Figure B-74. Example of grave markers with signs of rising damp in Cemetery B.

Ponding

When water collects in pools on flat surfaces, the porous materials absorb water, which can lead to cyclic salt crystallization damage, biological staining, and corrosion of metals (Figure B-75).



Figure B-75. Evidence of ponding at a flat surface within Cemetery G.

Cracking and chipping

Many grave markers exhibit problems with chipping at the edges (Figure B-76). Some of this can be attributed to lawn maintenance.

Grave markers exhibit varying degrees of cracking, including horizontal cracks at the base of the markers, and vertical cracks at the top of the markers. Cracking and crazing is evident in association with the render applied to some markers.

Cracks of varying widths exist in marker surfaces and in some cases extend through the thickness of the underlying substrate. These cracks can promote loss of material strength and further deterioration through moisture penetration. Previous repairs performed with inappropriate materials or techniques may be contributing to this problem.



Figure B-76. Example of grave marker with severely cracked and chipped concrete within Cemetery G.

Cracks and spalls resulting from corrosion of embedded ferrous metal

Cracks and spalls result from corrosion of ferrous metal setting pins or ferrous metal reinforcement (Figure B-77). Cracks and spalls can also occur from impact damage, such as falling tree limbs.



Figure B-77. Example of spalls resulting from corrosion of embedded ferrous metal within Cemetery C.

Corrosion of concrete reinforcement due to airborne salt and sea spray

Salt spray and airborne salts can accelerate corrosion of embedded reinforcing steel and associated deterioration of the concrete (Figure B-78). The salt can also cause damage to porous materials, such as concrete or renders, as a result of cyclic salt crystallization.



Figure B-78. Example of grave markers with cracking that may be due to corrosion of reinforcing steel within Cemetery G.

Broken markers

Breakage can occur from markers falling onto the ground, their support structures, or other cemetery structures (Figure B-79).



Figure B-79. Example of a broken grave marker within Cemetery H.

Collapsed vaults

Vaulted features exhibit cracks, displaced stone or concrete, and loss of design features and detailing (Figure B-80). The slab-type markers were often installed over a coffin or directly over remains, using lava rock with a thin 1 to 1-1/2 inch render and minimal setting mortar. As the remains and coffin deteriorated, a void was created, and the marker was no longer supported. Without support, many of these types of markers have cracked and collapsed.



Figure B-80. Example of a collapsed vault within Cemetery G.

Lava rock tombs with cracked and spalled lime-sand render and limewash coating

Many of the lava rock tombs, many of which are located in Cemetery N (Kauhakō Crater), have extensive cracking and spalling of the lime-sand render and limewash coating, as well as underlying cracks to the substrate (Figure B-81).



Figure B-81. Example of cracked and broken lime render and limewash coating within Cemetery R.

Lava rock tomb deterioration resulting from previous incompatible repairs

Use of incompatible mortars as part of previous repairs has resulted in deterioration in some of the lava rock tombs, especially where the repair material is harder or less porous than the adjacent substrate. Some of the previous repairs are also visually intrusive. These tombs can be repaired by removing the incompatible materials and reconstructed using compatible mortars. Hydraulic lime-sand mortars have been used successfully to repair many of the markers.



Figure B-82. Example of deterioration from previous incompatible repairs within Cemetery G.

Corrosion of iron fences and deterioration of coatings

Some of the West Coast cemeteries contain iron fences as plot surrounds. The ferrous metal associated with the plot surrounds is exhibiting surface corrosion. In addition, pitting of the surface has occurred due to corrosion of the exposed metal after the loss of protective coating (Figure B-83). Exposure to chlorides has accelerated the corrosion.



Figure B-83. Example of iron plot surrounds with corrosion and pitting within Cemetery H.

Deterioration of wooden crosses

Many wood crosses are decayed, broken, leaning, or falling away from their original locations (Figure B-84).



Figure B-84. Example of deteriorating wooden cross within Cemetery J.

Tree fall

Grave markers and tombs exhibit the damaging effects of falling tree limbs or trunks (Figure B-85). For example, on the crater, a fallen tree branch led to breakage of a large vaulted stone and render tomb.



Figure B-85. Example of damaging effects of tree trunks damaging adjacent tomb within Cemetery O.

Root and trunk damage

Root and trunk growth adjacent to and around markers have caused displacement and cracking of the markers (Figure B-86).



Figure B-86. Example of grave marker impacted by root and trunk damage within Cemetery G.

Cemetery Management and Treatment

Introduction

The chapter that follows provides specific recommendations for actions to be undertaken to address the goals, issues, and concerns conveyed by the National Park Service, as well as design guidelines, maintenance protocols, and suggested practices to be followed in implementing the recommended actions. The chapter is composed of a discussion of the park goals, issues, and concerns to be addressed by the plan; the regulatory considerations related to cemetery management; the treatment approach recommended to guide all aspects of the plan; cemetery-wide treatment recommendations and guidelines; a list of prioritized action items and projects to be considered by the National Park Service for initial implementation; a table indicating cyclical maintenance tasks and schedule; and references.

Goals, Issues, and Concerns

The National Park Service conveyed goals, issues, and concerns to be addressed in the Kalaupapa and Kalawao Cemetery Management Plan in several ways. The first was as part of a workshop conducted at Kalaupapa in November 2018. The second was through the development of a statement of work for the plan that summarized the need for the project and the desired outcomes. The third was through informal discussions conducted on site in December 2017 and November 2018 and during conference calls conducted on behalf of the Cultural Landscape Report. The goals, issues, and concerns recorded by the CLR team through these processes are summarized below.

Graves lacking grave markers. The park as well as the Department of Health is often asked by patient descendants and family members for permission to install grave markers for those who do not currently have an identified grave marker. The park can cite at least two examples where such a request has been approved by the Department of Health. Additional requests continue to be received. With approximately 7,000 burials likely unmarked, this request could easily become a challenge and an expectation that would be difficult to meet. Recommendations for future policies regarding the addition of new grave markers, and their appearance, are needed.

Future burials. The park is also concerned that additional individuals who were born at Kalaupapa, descended from someone born at Kalaupapa, or with another type of connection to the Settlement might request to be buried with a parent or relative. To date, this has occurred only once, and was a cremation burial. The park has considered establishing a policy for this occasion. One option would be to require that individuals follow Hawai'i State law by filing for a disinter permit to allow for cremation burial. Another possible option is to close the cemetery to new burials in the future following the death of the last patient. Recommendations for policies related to future burials are needed.

Views. Over time, large trees have grown up within several of the cemeteries, obscuring historic patterns of spatial organization and viewsheds. Guidance is needed regarding the maintenance of historic views.

Environmental conditions. Cultural landscape features are at risk as a result of the local marine environment, high winds, pest infestations, and invasive vegetation. Conditions have led to a steady degradation in condition. Recommendations for maintenance protocols that address the specific issues associated with Kalaupapa's environmental conditions are needed.

Tree stewardship. Trees provide shade and visual interest in several of the cemeteries. However, trees can fall or drop branches (which can damage grave markers), and expand their area of influence as they mature, dislodging grave markers and sending out roots that can also damage grave markers. Recommendations for maintaining trees are needed.

Invasive vegetation. Several invasive plant species have colonized portions of the Kalaupapa and Kalawao cemeteries. Invasive plant species are often aggressive and become increasingly difficult to control over time. Maintenance recommendations for removal of invasive vegetation area needed.

Turf care. Turf is a character-defining element of the cemeteries that has been an integral part of the cemetery landscape since early establishment. Turf is currently and was historically the primary ground cover used within many of the cemeteries. Maintaining the health and character of turf can be challenging but is critical both from an aesthetic viewpoint and as part of the care of grave markers, which are subject to soiling where turf is missing, and to damage caused by mowing equipment. Guidelines for appropriate care and maintenance of turf are needed.

Damage caused by animals. Several animals are known to cause damage to cemetery resources due to digging, urinating, and grazing on plant material. Mongooses and feral pigs have the potential to damage the cemeteries due to digging activities. Other animals that pose a threat to cemetery resources are dogs and deer.

Cyclical maintenance. The types of cyclical and deferred maintenance, frequency of cyclical maintenance, and appropriate maintenance techniques for managing each cemetery are also needed.

Grave marker repair and maintenance protocols. The Kalaupapa and Kalawao cemeteries contain a wide range of grave marker types. The condition of many grave markers is of concern. Condition is affected by environmental conditions, inherent aging of materials, mechanical actions such as mowing, and plant growth. Grave markers stabilization, repair, and maintenance protocols are needed to address the various condition issues and actions impacting condition.

Walls and gate piers repair and maintenance protocols. The Kalaupapa and Kalawao cemeteries contain features such as dry stacked lava rock walls, fences, gate piers, and iron plot surrounds. Each of these features requires specific maintenance and repair protocols, taking into consideration factors such as the materials used and location. Stabilization, repair, and maintenance protocols are needed to address the various condition issues and actions impacting condition.

Guidelines for new features. For recommended additions to the historic cemeteries, guidelines are needed to ensure that new features are compatible with the character of the individual burial ground and overall sense of place of Kalaupapa and Kalawao Settlements.

Accessibility. None of the cemeteries have accessible routes to accommodate visitors with disabilities. Consideration should be given to how accessibility might be addressed in the future.

Site furnishings and signage. The cemeteries currently include limited signage and no site furnishings. Consideration should be given to how signage might be improved and the need for site furnishings addressed in the future.

Interpretation. The cemeteries currently include limited interpretive information. Consideration should be given to how interpretation might be improved.

Ethnographic association management. The park is interested in identifying ethnographic association management strategies are needed.

Regulatory Considerations

Regulations

State of Hawai‘i laws regulate prehistoric and historic Native Hawaiian burial sites as outlined in the Hawai‘i Revised Statutes and Hawai‘i Administrative Rules. The state maintains a burial council to address questions related to prehistoric and historic Native Hawaiian burials. The role of the burial council is part of a collaborative process involving the Department of Land and Natural Resources, appropriate burial council, descendants, and Native Hawaiian groups. There are five island burial councils, including one on Molokai. Each council consists of nine members, except Molokai’s, which consists of five members. Related to management of the cemeteries at Kalaupapa, the Department of Land and Natural Resources, Historic Preservation Division, consults with the councils regarding burial treatment and preservation plans, and the councils make recommendations regarding appropriate management, treatment, and protection of Native Hawaiian burial sites and on any matters related to Native Hawaiian burial.⁹⁵

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 is a Federal law that recognizes that human remains of any ancestry must be treated with dignity and respect at all times.⁹⁶ The burial grounds at Kalaupapa are subject to the provisions of NAGPRA in how Native Hawaiian graves are treated, including the potential for remains to be repatriated.

The burial grounds at Kalaupapa National Historical Park are also subject to the provisions outlined in the National Historic Preservation Act of 1966, which requires that the National Park Service identify and assess the effects its actions may have on historic properties under the Section 106 review process, and established inventory and assessment requirements for cultural resources under Section 110.

Authorizations, Cooperative Agreements, and Partnership Agreements

Work conducted to stabilize and repair grave markers must be completed in conformance with authorizations related to leasing of the cemetery lands and cooperative agreements with respective land owners and partners.

95. State of Hawai‘i, State Historic Preservation, “Summary of Hawai‘i Burial Laws.” Available at <https://dlnr.hawaii.gov/shpd/about/branches/ibc/hawaiian-burials/> (accessed August 6, 2019).

96. National Park Service, “Native American Graves Protection and Repatriation Act.” Available at <https://www.nps.gov/subjects/nagpra/index.htm> (accessed February 9, 2020).

The National Park Service holds a lease agreement with the State of Hawai‘i Department of Hawaiian Home Lands to manage the Kalaupapa cemeteries. The lease agreement references Public Law 96-565, Section 102, which outlines the principle purposes of Kalaupapa National Historical Park. The lease agreement indicates that the National Park Service, as lessee, will use the property according to the purposes outlined in the Public Law as follows:

- (1) to preserve and interpret the Kalaupapa settlement for the education and inspiration of present and future generations
- (2) to provide a well-maintained community in which the Kalaupapa leprosy patients are guaranteed that they may remain at Kalaupapa as long as they wish; to protect the current lifestyle of these patients and their individual privacy; to research, preserve, and maintain the present character of the community; to research, preserve and maintain important historic structures, traditional Hawaiian sites and cultural values, and natural features; and to provide for limited visitation by the general public

The lease agreement covers all cemetery land not located in direct association with the Siloama and St. Philomena churchyards.

A cooperative agreement between the National Park Service and the State of Hawai‘i Board of Land and Natural Resources also stipulates that the National Park Service will “Operate and maintain all Park facilities, including utilities, roads, trails, cemeteries, historic structures, and public grounds, except those facilities on portions of Palaa State Park within the boundaries of Kalaupapa National Historical Park which shall continue to be operated and maintained by the Board. . . .”⁹⁷

For the cemeteries located in the churchyards of Siloama Church of the Healing Spring, owned by the Hawai‘i Conference Foundation, and St. Philomena Catholic Church, owned by the Roman Catholic Church in the State of Hawai‘i, the National Park Service holds cooperative agreements outlining roles and responsibilities related to care.

Both cooperative agreements indicate that the National Park Service agrees:

To provide other technical assistance in a variety of fields associated with the management of historic sites, such as maintenance, interpretation, general management, curatorial management and research, and the like as mutually agreed to by the parties.

To cooperate for the common purpose of protecting and preserving the historical integrity of the three structures [St. Philomena, St. Elizabeth’s Chapel, St. Francis] and other portions of the historic site. Changes may be made by mutual agreement to restore features to an earlier period; i.e. removal of non-historic fabric or features and the like by mutual agreement of the parties, provided such major alterations or major repairs shall be made in accordance with the provisions of Section 106 [of the National Historic Preservation Act of 1966, as amended].

Additionally, the National Park Service holds a cooperative agreement with the State of Hawai‘i Department of Health entitled “Preservation of Historic Structures.” This agreement indicates that the National Park Service will maintain old cemeteries if appropriations are available.

Summary information related to ownership and cooperative agreements provided by the National Park Service also indicate:

97. Article II: Statement of Work, Section B.2.a.

It is recognized that there are potential conflicting issues of ownership when comparing the language found in the agreement with DOH and the lease agreement with DHHL, and with DOH and DLNR. In all cases, however, the existing cooperative and lease agreements include language that authorizes NPS to perform preservation and maintenance activities on the cemeteries within Kalawao County.

It has also been understood that DLNR has deferred much if not all of their jurisdictional administrative rights to DOH for the time that DOH maintains a physical presence at Kalaupapa as the on-site administrator of Kalawao County. All affected agencies and/or land owners will be consulted on the proposed work and on any issues of concern prior to the start of project work within cemetery areas respective to their jurisdiction. Work will not be performed on a grave marker if disallowed by the respective owner.

Treatment Approach

The preservation, conservation, interpretation, and management issues associated with the Kalaupapa and Kalawao Settlement cemeteries are numerous and interconnected. The management and conservation strategies presented in this Cemetery Management Plan are intended to guide National Park Service personnel in their efforts to maintain the cemeteries in appropriate condition. Treatment recommendations for the cemeteries at Kalaupapa and Kalawao Settlements need to be consistent with the legislative framework established by the federal government for cultural resources, burial grounds, and federal historic preservation guidelines.

The strategies provided in this plan have been developed in accordance with several policy documents, such as the Secretary of the Interior's *Standards for the Treatment of Historic Properties* and Director's Order 28, the park GMP, as well as Hawaiian policies.

Secretary of the Interior's Standards for the Treatment of Historic Properties

Management and treatment of the cemeteries at Kalaupapa is also guided by the mission of the National Park Service "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."⁹⁸ The application of this mission to cultural landscapes is articulated in the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and the *Guidelines for the Treatment of Cultural Landscapes*.

The Secretary of the Interior's *Standards for the Treatment of Historic Properties* offers an overarching approach to the treatment of historic resources, as well as a philosophical framework supporting application of treatments to designated National Historic Landmark properties such as Kalaupapa and Kalawao Settlements. A primary focus in applying the Secretary of the Interior's Standards is to determine a treatment approach from four options. The choice is based on several factors, such as management and interpretation objectives, historical significance, integrity, and condition issues. The selected approach ensures the proper retention, care, and conservation of cemetery features and landscape elements.

For the Kalaupapa cemeteries, the recommended overarching treatment approach is preservation. This approach will allow the park to implement the most effective treatment measures to protect the character, composition, and features of the cemeteries, while addressing the threat of invasive plant species, future

98. National Park Service Organic Act, 16 U.S.C. 1, 3, 9a, 460 1-6a(e), 462(k) (1916).

environmental impacts of sea level rise and anticipated future increases in storm severity and frequency, and better accommodating the needs of visitors.

The Secretary of the Interior's Standards for **Preservation** are as follows:

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Director's Order #28

As a cultural resource, the cemeteries are also addressed in federal regulations by 36 CFR Part 2: Resource Protection, Public Use and Recreation, section 2.1: Preservation of Natural, Cultural, and Archeological Resources. The application of these regulations to cultural landscapes is considered within National Park Service *Management Policies 2006*, *Director's Order No. 28: Cultural Resource Management*, and *NPS-28: Cultural Resource Management Guideline*.

Kalaupapa National Historical Park General Management Plan

Guidance regarding cemetery preservation is afforded in the park GMP, including the following:

The idea that more visitors will detract from the sacredness and special ambiance of Kalaupapa has merit. Some people value the calm and peace at Kalaupapa, particularly in the cemeteries and Kalawao. The NPS would work to maintain this type of experience and ambiance in these important places.⁹⁹

All visitors wishing to enter the settlement and other areas of the park would be directed to Paschoal Hall or other facility to receive a required entry pass and orientation to the park. The orientation would include introducing visitors to the purpose and significance of Kalaupapa and conveying rules and regulations so that visitors are respectful, especially in sensitive areas such as cemeteries and archeological sites, and safe during their visit.¹⁰⁰

The NPS would continue stabilization, preservation, and active management of known cemeteries and gravesites.¹⁰¹

The NPS would expand an already active cemetery preservation program that may include conducting formal investigations to identify and quantify additional gravesites, marking cemeteries, and marking gravesites and continuation of stabilization efforts.¹⁰²

For building maintenance standards, NPS follows the Secretary of the Interior's Standards and provides relevant trainings. NPS provides training opportunities for employees and topside Molokai residents to participate in rock wall repair training, historical preservation training, museum, and cemetery preservation...¹⁰³

The 26 marked cemeteries in the park display relatively consistent use of materials, construction styles, and techniques.¹⁰⁴

At least 1,180 grave markers are present, varying in size, style, material and condition. Marked cemeteries are cared for by clearing vegetation and maintaining the ground cover, enabling easier access. Grave markers are restored by repairing broken markers, restacking stone rubble masonry, resetting tilted markers, leveling settled grave slabs, clearing overgrown vegetation from tombs, and repairing damage from roots.¹⁰⁵

99. National Park Service, Kalaupapa GMP, 170.

100. Ibid., 26.

101. Ibid., 11.

102. Ibid., 22.

103. Ibid., 159.

104. Ibid., 35.

105. Ibid., 38.

Overarching Treatment Recommendations

General Recommendations

- Maintain all landscape features associated with the historic cemeteries and burial grounds in good condition.
- Protect all historic resources to the extent possible from damage that will lead to condition problems or the need for replacement in the future. Protection entails the application of appropriate management and maintenance strategies as well as measures implemented to anticipate conditions that might lead to damage, such as the exclusion of digging animals or the removal of trees with trunks or roots that are damaging grave markers.
- Avoid reconstructing missing historic features or introducing conjectural features into the historic landscape of Kalaupapa's historic cemeteries and burial grounds.
- Avoid adding new features within the historic landscapes of Kalaupapa's cemeteries and burial grounds unless carefully considered to meet a specific need. Potential exceptions include limited wayfinding, identity, and interpretive signage and site furnishings; grave locator information; accessibility features, and authorized new burials.
- Continue to review and refine cemetery feature inventories and to assess individual resources on a cyclical basis. The park has indicated that this work is completed every six years. Each marker should be uniquely identified, and materials generally documented and photographed, along with the identification of deterioration issues and their potential to become major concerns. Use collected information to update Cultural Resources Inventory System (CRIS) database records. Maintain CRIS database records electronically in a centralized location that allows for access by park personnel, and authorized preservation teams and researchers. All records of assessments and treatment should be uploaded to the CRIS database as part of the resource record.
- Employ available technology, such as Geographic Information Systems (GIS), Global Positioning System (GPS), as well as remote sensing and related archeological methodologies potentially including ground penetrating radar (GPR), in inventorying, documenting, and recording information relating to the cemetery resources.
- Prioritize treatment of burial ground resources based on the cyclical assessments performed and the condition of the individual resources. Assess resources based on the NPS categories, and address maintenance needs based on the guidance of the assessment category:
 - *Poor.* The resource exhibits a condition issue of concern that requires intervention within the next year to address a potential irreplaceable loss of the resource. Examples might include a damaged or dislocated marker likely to topple resulting in damage or a threat to the safety of visitors. Immediate maintenance might include temporary stabilization as part of a two- or more-step repair approach.
 - *Fair.* The resource exhibits condition issues of concern with may lead to the irreparable damage to the resource if not addressed. Work is needed to address relatively major repair needs, or the unique conditions of vulnerable materials such as wood that require more frequent care. Work to address conditions assessed as fair should be carried out within one to three years.

- *Good.* The resource appears relatively stable, is serviceable, and is likely not to require more than minor maintenance within the next six years. There are no immediate safety or material degradation concerns. Minor maintenance of the resource may be needed to protect against future loss or degradation. This is also the category for issues that are only cosmetic.
- Repair, rather than replace, damaged or deteriorated historic resources whenever possible. Replace severely deteriorated features in kind whenever possible. Replacements should match the original in design, color, texture, materials, size and scale, and appearance. Existing materials should be reused to the greatest extent possible. If replacement in kind is not possible, select replacements that are compatible in character with the historic and site them to maintain historic spatial patterns.
- Base all maintenance and repair work on historical documentation and evaluation of the performance of previous treatments.
- Document all maintenance procedures, and changes made to the cemetery landscapes. Document alterations to historically significant features through scaled drawings, notes, and photographs, and include in the CRIS database.

Operations

- All maintenance and repair work to landscape or grave markers should be conducted by supervised, trained, and qualified people.
- With the remoteness of the site and the aggressive marine environment, consider ordering sufficient quantities of materials to last between yearly barge runs. If adequate storage is lacking, consider storing cement and hydraulic lime in tightly sealed 5 gallon buckets to prevent materials from setting prior to use.

Training

- Supervise and train park staff and other personnel for maintenance of vegetation.
- Supervise and train park staff and other personnel to perform the initial survey.
- Supervise and train park staff and other personnel to perform the condition assessments of each grave marker.
- Supervise and train park staff and other personnel to perform limited treatments where appropriate or hire conservators to implement treatments.¹⁰⁶

Patient and Family Issues

- **Ethnographic association management.** Items left at grave sites will need to be addressed by the park in a more holistic document through consultation that includes how to manage all items and offerings within the park in a culturally appropriate manner. This document is forthcoming.
- **Future burials.** Requests for burials should be considered carefully by the appropriate decision-making authority.

106. For example, on June 1, 2016, thirty-five students and professionals from around the Hawaiian Islands and the Pacific Rim gathered at Kalaupapa National Historical Park (KALA) to learn the art of cemetery preservation.

- **Genealogical research.** Ensure that information useful to those conducting genealogical research is accessible.
- **Replacement markers.** Requests from family members or descendants for replacement of damaged or other grave markers should be considered carefully by the appropriate decision-making authority. Decision regarding the need to replace markers should reflect the condition of the marker and the potential for successful repair. Repair of original grave markers should be explored, and replacement considered only if repair is infeasible.
- **New markers.** The Kalaupapa Memorial in Kalawao is anticipated to record the names of and honoring the individuals who rest at Kalaupapa in marked and unmarked burial areas.¹⁰⁷ New monuments, statuary, signs, or markers of individual gravesites should generally be discouraged except for the allowable future burials as indicated above.
- **Rubbings.** Do not permit grave marker rubbings. Indicate the policy with materials provided to visitors regarding rules and responsibilities associated with visiting the cemeteries.

Resource Management

Spatial Organization and Views

- Ensure views from the burial areas to the surrounding landscape remain open by clearing and thinning trees where they are encroaching on historic views, such as along the western shoreline adjacent to the West Coast Cemeteries, at Kahaloko Cemetery, and near Kauhakō Crater.
- Maintain low growing grass or groundcover vegetation on the ground plane of the cemeteries, which will allow the grave markers to remain visible.
- Preserve the configuration of grave markers, walls, plantings, and other features associated with each cemetery as documented. For example, preserve and maintain the linear arrangement of the West Coast Cemeteries as well as the walled precincts of Kahaloko Cemetery, the burial grounds at Kalawao, and the clusters of burials near Kauhakō Crater.
- Respect the historic boundaries of the cemeteries, including the individual denominational and ethnic cemeteries associated with the West Coast Cemeteries where the boundaries are not necessarily marked by a wall or other landscape feature.

Circulation

- Avoid adding new circulation within the burial grounds. Ensure compliance with accessibility codes when undertaking rehabilitation measures that entail the provision of vehicular parking areas and walkways to ensure accessible routes are provided to all improved areas and facilities.
- Maintain existing concrete walks associated with individual burial grounds, such as the Siloama and St. Philomena churchyards, and Saint Marianne Cope's grave.

107. Ka'Ohana O'Kalaupapa, "The Kalaupapa Names Project," Available at <http://kalaupapaohana.org/names-project.html> (accessed August 15, 2018).

- Consider means for enhancing accessibility within the cemeteries such as designating a lightweight vehicle, such as a golf cart, for use in transporting visitors to the burial grounds and specific burial locations.
- Restrict use of existing unimproved access roads associated with the West Coast Cemeteries to maintenance use, and the provision of visitor access via light-weight vehicles such as golf carts.

Vegetation

- Ensure that mowing equipment does not damage grave markers. Avoid the use of chemical pesticides, herbicides, and fertilizers around historic grave markers. Employ smaller and hand-held equipment where necessary to protect markers from damage. Also employ special equipment and techniques, such as the use of bumpers on mowing equipment to protect grave markers from damage. Use the smallest machinery possible for conducting vegetation maintenance operations to reduce the potential for damage to grave markers, walls, piers, and plantings. Maintenance should include hand removal or careful use of hand tools and string trimmers to maintain vegetation near or on grave markers. (See the guidelines for turf care below.)
- Inventory the vegetation within each cemetery. The inventory can be used to address replacement needs in the future.
- Fill deep depressions or sink holes that might be a trip hazard, after evaluating their potential to be associated with a grave site. Avoid filling depressions associated with grave shafts or grave sites.
- Address soil erosion by identifying the underlying cause and correcting it to the extent possible. Fine-grade eroded areas to be smoothly sloped, and seed with turf grasses.
- Preserve and maintain historic cultural vegetation including specimen trees unless they pose a safety threat to visitors, are in advanced decline, or present a risk to grave markers, walls, and other historic resources. Make every reasonable effort to treat or stabilize a historic tree that is diseased or damaged prior to considering removal.
- Maintain historic vegetation by stabilizing and pruning to protect against structural failure caused by wind, storms, or age.
- Monitor and control invasive species that have been used in the cemeteries as plantings, such as ironwood pine, Java plum, haole koa, lantana, and date palms. Remove volunteers that arise from cultural plantings as seedlings or suckers to prevent their spread.
- Consider replacing trees that require removal due to their condition, or the threat they pose to safety or historic resources, in kind and in nearby locations that are no closer than 10 feet from a grave marker (Figure B-87). To avoid unmarked burials, work with the park archeologist to investigate for unmarked burials prior to replanting.

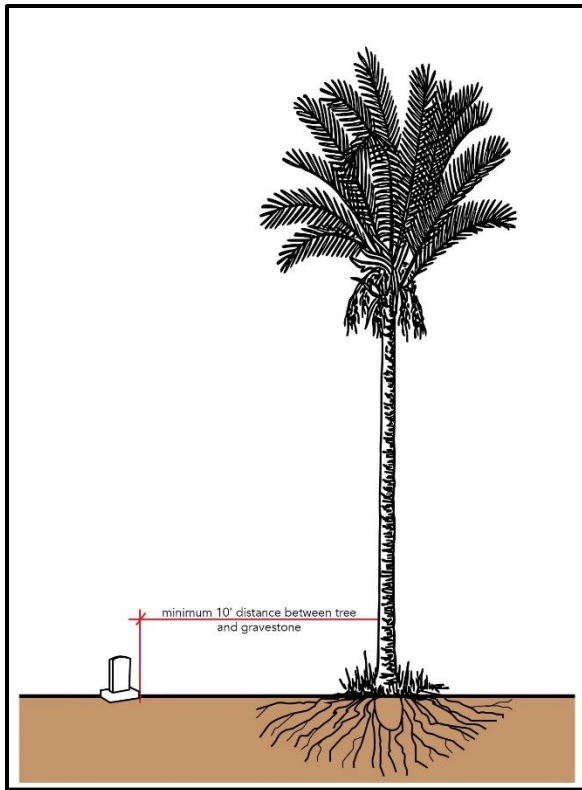


Figure B-87. When replanting trees to replace those that are lost or pose a threat, locate the new planting no less than 10 feet from grave markers.

- Replace historic specimen trees in kind when they do not pose a threat to grave markers or other resources.
- Limit other new plantings in the cemeteries.
- Implement a cyclical maintenance program that includes periodic inspection of all trees every six months for damage, disease, and or evidence of decline in order to prevent deterioration or loss of plant material. Treat each condition appropriately and ensure that maintenance actions are documented for the CRIS database record.
- Thin and clear volunteer vegetation that infringes on historic views. Monitor cemeteries approximately every six months for conditions and volunteer vegetation that need to be thinned or cleared. Remove limbs that are dead or otherwise threaten grave markers. (See the guidelines for tree care below.)
- Protect existing vegetation, especially trees, in areas impacted by new burials or other excavation activity, and closely monitor through the disturbance period. Tree roots typically extend well past the drip line of the tree. At a minimum, the area within the drip line should be protected from soil compaction from heavy equipment, which will inhibit air and water penetration to the root zone and threaten the health of the tree, but if possible extend the area of protection as far as three times the drip line of the tree canopy. If major roots are to be affected, use an air spade to clear soil from those roots so that the mass can be tied back away from the area of excavation. Once the work is completed, replace the roots at their original level and back fill.
- Preserve and maintain the use of turf grass as the primary groundcover and ground plane treatment.

- Maintain turf grasses at a height not to exceed 12 inches.
- Consider establishing field grasses in Kaholoko Cemetery as Java plum trees and lantana is controlled.

Vegetation Management Guidelines

Protection of masonry grave markers and monuments, while caring for the living, growing plantings around them, presents several challenges for those overseeing the Kalaupapa cemeteries. For example, maintaining turf lawn through mowing poses a threat to grave markers, walls, signage, and other historic resources from being struck or chipped by equipment. Trees can drop limbs or fail, leading to damage. While maintenance of the Kalaupapa cemeteries to careful standards of care is a critical mission to honor the residents of the Settlements, it must be undertaken in a way that limits potential damage to historic features. This challenge is best approached in two ways: by encouraging healthy vegetative growth, and following specific care protocols for mowing, pruning, tree removal, and tree planting that presents the least opportunity for damage to grave markers and other historic features.

Issues to be considered in developing a strategy for maintaining vegetation at Kalaupapa include ensuring that activities are technically successful while also consistent with park maintenance capabilities. Also of importance is implementing strategies that maintain historic character and do not negatively affect integrity of the resource.

Work conducted to maintain vegetation in the Kalaupapa cemeteries should be tied to a detailed survey of each individual site that includes an inventory of cultural vegetation. This inventory is recommended in the CLR treatment plan. The inventory should include information such as species, location, approximate age, trunk diameter, height, and condition. Record keeping related to treatment is an important component of cemetery management. The inventory should provide a location to record treatment information.

Turf Care Guidelines

Turf is a key, character-defining element of most of the cemeteries at Kalaupapa. It serves as the milieu that unifies the linear system of West Coast Cemeteries, and maintenance of turf through mowing allows the grave markers to remain visible. Turf is also characteristic of the Kalawao cemeteries, and surrounds the individual graves at Baldwin Home. Proper turf care is essential to maintaining the character, health, and visibility of the cemeteries.

- Turf used in the cemeteries should be a grass species or mix of species that meets visual, physical, and environmental criteria identified in the CLR and by the park and is adapted to the growing conditions associated with each cemetery including microclimates and mixed sun and shade conditions. The lush turf that characterizes the West Coast Cemeteries and the cemeteries at Kalawao is not recommended for Kahaloko Cemetery and the burial grounds on Kauhakō Crater. Consideration should be paid to establishing a sparser field grass to serve as the ground cover planting in these locations.
- Grass should be kept neatly trimmed around all grave markers, trees, roads, and other objects.
- Cut grass to a height of 3 inches unless unique considerations require a different height that is agreed to prior to mowing. As a rule of thumb, no more than a third of the grass height should be cut during a single mowing. Grass may need to be cut every seven days depending on the nature of the grass and amount of moisture received.

- Use a combination of riding mowers with turf wheels for open areas where there are no grave markers and walk-behind mowers in areas where there are grave markers. Exclude mowers from a zone within 12 inches of grave markers or other cemetery features.
- Equip all mowers with rubber bumpers on the decks, axle assemblies, or other feature that might come into contact with a marker while mowing. Bumpers can be fabricated out of old inner tubes or tires and can be riveted on. Loose cell foam can also be used as a bumper.
- Include and use discharge guards on all mowers used in the cemeteries to protect grave markers and workers from propelled debris. Direct the discharge chute away from grave markers while mowing near markers and other features.
- Avoid contact with grave markers when using mowing equipment.
- Cut turf around grave markers and trees using hand-held shears and string trimmers with rotating nylon filament, used with extreme care. The nylon string in the trimmers should be lightest gauge possible – no heavier than 0.09 inch.
- Rake up all large clumps of grass debris left by the mowers.
- **Shade.** Heavy shade will result in poor turf growth and could lead to erosion. Shade may be the result of encroaching invasive volunteer vegetation that is recommended for removal. Elsewhere, where shade results from desirable cultural vegetation, turf species adapted to shady conditions should be used to maintain a comprehensive turf cover within the cemeteries.
- **Fertility.** Where poor soil fertility is suspected of contributing to poor turf growth, soil testing should be used to determine if soil additives, including lime, may be necessary to be added to enhance turf growth. The West Coast Cemeteries are located on sand dunes. Specific consideration should be paid to addressing poor turf growth under these conditions, which might include the use of specific grass species suited to sandy soil.
- **Depressions.** Depressions may be present where subsidence has occurred in association with a burial, from the decay of a tree trunk and root system, or from sloughing of soil. Depressions, sunken, or low areas require careful evaluation prior to filling. Where depressions are relative shallow and may indicate an unmarked burial, these should be marked and maintained as a record of a possible burial location. Other depressions or sunken or low areas resulting from erosion and other ground disturbance should be filled to prevent trip hazards and protect against further damage. These areas should be adjusted through the addition of fill, rather than cutting. It may also be necessary to raise the grade of low areas to create positive drainage.
- **Erosion control.** Where erosion is found to be occurring due to runoff, steep slopes, or lack of vegetation, turf grass needs to be established following correction of the problems leading to the erosion. In areas where stormwater flow may hinder or interfere with grass germination, an erosion control fabric should be placed over exposed soil to afford temporary stabilization and protection. These fabrics can include geotextile matting and blankets. Erosion control materials used to protect the soil from erosion after repair should be biodegradable. Geotextile matting is a fabric made of either natural or man-made material manufactured in many forms. Blankets block the force of the rain, prevent wind erosion, and

sometimes act as a degradable mulch. Alternatively, Kalaupapa National Historical Park could cultivate its own sod for turf repairs and replacement in the cemeteries.

Tree Care Guidelines

Many trees are historic features that help convey the unique character, grace, and spatial order of the cemeteries at Kalaupapa. Preservation, care, and maintenance of these trees are critical for protecting the integrity of the historic cemeteries. Maintenance of the trees requires strategies for preservation, removal, re-planting, and developing horticultural practices for proper nutrition and growth.

- **General maintenance.** Implement a cyclical maintenance program that includes regular, periodic inspection of all trees for damage, disease, and or evidence of decline in order to prevent deterioration or loss of plant material. Inspection should occur at least annually. Treat each condition appropriately and ensure that maintenance actions are documented for the record. Frequent and careful maintenance of vegetation will also prevent damage to adjacent and nearby resources, such as grave markers. Inspect trees to make sure that trunks and root systems are not impacting grave markers.
- **Tree protection.** Protect existing vegetation, especially trees, in areas impacted by new burials or other excavation activity, and closely monitor throughout the disturbance period.
- **Root protection.** Ensure that the root zones of historic trees are not compacted by parking, heavy vehicle use, or equipment. Tree roots typically extend well past the drip line of the tree. At a minimum, the area within the drip line should be protected from soil compaction from construction equipment, which will inhibit water penetration to the root zone and threaten the health of the tree. If major roots are to be affected, use an air spade to clear soil from those roots so that the mass can be tied back away from the area of excavation. Once the work is completed, replace the roots at their original level and back fill.
- **Pruning.** A five-year cycle of pruning is advised for normal maintenance. Prior to pruning, erect plywood protective structures over nearby grave markers and monuments to protect them from damage. Pruning should be conducted according to a three-pronged prioritization strategy. The highest priority for pruning is to address safety considerations by removing hazardous limbs and trees. The next priority is to prune to preserve the health of a tree, including improving its internal structure, and to allow passage beneath limbs, maintain sight lines, and to encourage air circulation that will lessen the growth of biological growth on grave markers. The lowest priority for consideration is to prune for aesthetics that are intended to enhance the natural form and character of a tree or to promote flowering. Inspect trees regularly, and after damaging storms, for pruning needs to ensure that the trees are healthy do not present a hazard. Pruning is an important part of preventing tree fall.
- **Tree removal.** Remove historic vegetation only when it poses a hazard to humans, cultural resources, or natural resources due to its potential to drop limbs, fall, or transfer disease to other plants. Replace in kind unless the tree poses a threat to historic resources. In those instances, consider planting the same species in a nearby location that is not anticipated to lead to damage of grave markers and other historic resources. Ensure that the removal and replacement of historic trees is noted in the tree inventory.
- Remove felled trees and large shrubs without dragging, which can gouge the ground surface.
- Utilize hand removal with small tools, or section trees and lower limbs and trunks to the ground, to remove vegetation that is close to other historic features. Minimize the use of heavy vehicles in or around

the root zone of nearby trees in order to limit soil compaction; restrict use to times when soil is firm to reduce erosion potential.

- Field-check clearing locations prior to tree removal with an archeologist, natural resource specialist, and/or historical landscape architect to ensure that other natural or cultural resources will not be adversely affected.
- Cut all tree and shrub trunks to be removed flush with the ground.
- Consider whether to allow the stump to decay rather than grinding or removing it mechanically based on nearby conditions. Allowing the stump to decay is the least invasive technique and will cause negligible disturbance to the surrounding area. The stump may take from between 12 and 36 months to decay, depending on the tree species and local conditions.
- To promote decay, remove trees using the following procedures:
 - Flush cut the tree trunk as close to the ground as possible and remove bark from the stump.
 - Drill a series of holes 3/4 inch to 1 inch in diameter, 6 inches deep, and 2 to 3 inches apart into the stump.
 - Fill holes with a mix of 1 part screened compost, 1 part screened topsoil, and 1 part slow release organic high nitrogen fertilizer such as feather-meal or cottonseed-meal.
 - Keep the stump moistened during dry periods and re-fill holes as needed with compost/soil/nitrogen mix.
 - Check the stump periodically. Within 12 to 36 months, the stump should be adequately decayed to remove remaining material with hand tools. After removal, backfill the hole with soil that matches the texture and composition of the original soil as closely as possible and reseed the area.
- Seed and cover immediately with erosion control material, such as straw, or use hydromulch, to reduce the potential for soil erosion.
- Follow an overall planting plan when addressing the need for tree planting replacements that is based on the cultural vegetation inventory. Development of a planting plan for the entire cemetery would provide a strategy for selecting appropriate locations for new or replacement plantings. The plan would delineate where trees could be planted to retain the historic design intent. Planting in existing stumps is recommended when the stumps have decayed to the extent that replacement trees with small root balls can be accommodated. This allows replacement in kind and in the same location as historic trees.
- Install new plantings to minimize adverse impacts to the grave markers, walls, and monuments, and to protect the character and integrity of the cultural landscape. Engage a qualified archeologist to monitor new planting efforts in areas that may contain subsurface cultural resources.
- Elevate the top 2 to 3 inches of the rootball above the surrounding grade when planting new trees. Backfill the hole with soil that matches the texture and composition of the original soil as closely as possible.

- Replace dead or damaged historic plant materials in-kind, whenever possible, using specimens of the same species, variety, and form. Plant the right tree in an appropriate location and maintain it properly so that it thrives and does not cause harm to other historic features or visitors. Replace the original with species of similar size, shape/habit, texture, and color if in-kind replacements are not available or appropriate (due to disease, hardiness, maintenance requirements, etc.).

Guidelines for Ground Disturbance

- Use the smallest machinery possible for excavation of graves. Ensure that ground-disturbing activities are monitored by a qualified archeologist. Involve archeologists in early planning for new projects that require ground disturbance.

Guidelines for Treatment of Invasive Species

Kalaupapa cemeteries are currently being impacted in three specific locations by invasive species. However, invasive species in general will remain a threat to all cemeteries if they are not maintained.

The locations where invasive species are already impacting Kalaupapa cemeteries include the graves along the western rim of Kauhakō Crater, within Kahaloko Cemetery, and along the western margin of the West Coast Cemeteries. Ironwood pine trees, which appear to have been planted in some areas along the shoreline during the period of significance, have expanded their presence through suckering and seeding of volunteer trees and now form dense colonies at the edge of the West Coast Cemeteries and near the burial grounds on the western rim of Kauhakō Crater. Many of the Java plum trees that once completely obscured Kahaloko Cemetery have been removed. However, these are likely to spread unless controlled along with lantana present within the cemetery. Although the extent of the original planting is not known, the current stand should not be allowed to expand. Control of the Java plum and clearing of lantana is recommended. Where Java plum trees are damaging grave markers, consideration should be paid to removing the individual tree causing the damage. Ironwood pine trees along the western shoreline are dislodging and causing other damage to grave markers located at the far western edge of the West Coast Cemeteries.

The selective and limited use of herbicides may be needed to address initial control of invasive species; herbicides would need to be very carefully applied to avoid damage to grave markers.

After control protocols are introduced, the cemeteries should be managed under field grasses and other low growing non-invasive cover, or swept earth as is present in Cemetery N. Lantana, however, cannot be controlled solely through mowing. Herbicide application is necessary to treat lantana, which is especially sensitive to glyphosate when it is applied to the leaves. This may be the best strategy for targeted control of specific stands or spot treatments. Hand-pulling for isolated plants can be successful if care is taken to remove all of the plant's roots.¹⁰⁸

Herbicide is also the recommended treatment for Java plum. The tree is sensitive to foliar application of triclopyr and picloram. Herbicides applied to cut surfaces or drilled holes of the tree are also effective, including triclopyr and glyphosate.¹⁰⁹

108. P. Motooka et al., "Largeleaf lantana," in *Weeds of Hawai'i's Pastures and Natural Areas: An Identification and Management Guide* (Manoa, Hawai'i: University of Hawai'i, College of Tropical Agriculture and Human Resources, 2003) Available at https://www.ctahr.hawaii.edu/invweed/WeedsHI/W_Lantana_camara.pdf (accessed August 1, 2019).

109. Ibid.

Herbicide is also the recommended treatment for ironwood pine. Ironwood pine is sensitive to foliar applications of triclopyr and to cut-surface applications of glyphosate and other herbicides.¹¹⁰

With the ironwood pine trees, establishing a distinct line for control will be necessary whereby trees are not permitted to colonize beyond. Ironwood trees can sucker and send up shoots that will grow into trees. Suckering needs to be controlled.

Alternatively, consideration should be paid to removing most, if not all ironwood pine trees along the shoreline following an adaptive management strategy to replace sections of the colony with low-growing native coastal strand plant communities that will better hold the shoreline. As a section is converted to grass, natural resources personnel can evaluate the efficacy of the replacement planting and determine whether additional areas should similarly be converted. Trees of some kind should be considered to remain to serve as monk seal habitat in locations where the shoreline is edged by sandy beach suitable for birthing and pupping.

For invasive species control, monitoring and recordation are an important part of an overall adaptive management strategy that constantly evaluates the effectiveness of the control measures employed. In general, invasive species populations should be mapped before treatment and monitored afterwards to determine effectiveness. An in-the-field, trial-and-error approach to invasive species control can be highly valuable.



Figure B-88. Monk seal resting on the beach north of Cemetery M.

- **Monk seals.** Hawaiian monk seals are among the most endangered seal species in the world. The population of monk seals has been declining for more than fifty years. The rate of decline, however, has slowed over the past ten years due to protection and recovery efforts. Monk seals are endemic to the Hawaiian Islands, including Molokai, and occur nowhere else in the world. They are protected under the Endangered Species Act, the Marine Mammal Protection Act, and State of Hawai‘i law. Although monk seals do not live in colonies, they often reside near one another on beaches. They sleep on beaches (Figure B-88), sometimes for days at a time. Otherwise, monk seals spend much of their time at sea, foraging in reefs and deep-water coral beds. Monk seals use land for breeding, resting, giving birth, and molting. Sandy, protected beaches surrounded by shallow waters are desirable for pupping. The western shoreline of Kalaupapa Peninsula is ideal monk seal habitat. Further study should be conducted to determine how to manage shoreline vegetation to control the spread of invasive species while retaining conditions suitable

110. Ibid.

to protect this monk seal habitat. Shade may be an important component of beach habitat. Consider options for maintaining or improving vegetation for monk seal habitat.

Buildings and Structures

- Preserve and maintain the buildings including Olivia’s Beach House and Siloama and St. Philomena Catholic Churches.
- Preserve and maintain historic structures including dry stacked stone walls such as those in Cemeteries C, H, and L in the West Coast Cemetery clusters, Kahaloko Cemetery, the burial areas near Kauhakō Crater, and the churchyards and cemeteries at Kalawao. (See the guidelines for stabilizing and maintaining dry stacked stone walls below).
- Preserve and maintain gate piers, iron plot surrounds, and a wall and iron railing at St. Philomena Catholic Church churchyard.

Grave Markers

- Perform a condition assessment of each grave marker. Use a rating scale and associated list of actions to guide the assessments and to prioritize future actions. Provide prompts for assessments to include information about markers with significant deterioration that may cause accelerated deterioration (i.e., a leaning grave marker). Include photographs, sketches, and locations of distress in the assessment documentation.
- Develop a treatment plan for each individual resource based the assessment that addresses the conditions observed, as well as an understanding of the rate of deterioration, previous treatments, and other potential threats to the grave marker. Prepare treatment plans before physical work is undertaken.
- Date replacement on the back side of the grave marker and store the original fragments or grave marker in an on-site storage repository.
- Document treatments in the CRIS database through written narratives and photographs that indicate new or replacement materials used.
- Complete treatments in a timely fashion to avoid further damage.
- Monitor markers and treatments based on materials and conditions and following an accepted assessment schedule that ensures that all burial ground features are assessed at least every six years.

Grave Marker Guidelines and Recommended Practices

After the assessment and development of treatment recommendations, treatments for the grave markers and monuments should comply with the Secretary of the Interior’s Standards for Preservation and the American Institute of Conservation (AIC) *Code of Ethics and Guidelines for Practice*. Guidance offered by National Park Service National Center for Preservation Technology and Training (NCPTT) was referenced in development of the following recommendations. Specific guidelines have been adjusted to address common materials identified at the cemeteries at Kalaupapa and Kalawao settlements.

All repair and maintenance efforts should be approached using the least intrusive methods to limit repairs that may permanently alter the historic fabric. In keeping with the AIC Code of Ethics, treatments should be

suitable, consistent with accepted practice, balanced; be implemented by qualified and trained individuals; and be documented upon completion. The following summary of treatments is based on previous treatments performed at the site that were reported to WJE. The treatments should be viewed as a guideline for approach, but specific treatments for each monument should be based on the assessment and prioritization of each individual monument.

The wide range of historic materials, range and complexity of deterioration and its causes, and array of possible remedies make it especially important that persons working on the markers and landscape have extensive training and experience in the preservation of historic materials. Future preservation treatments within the Kalaupapa and Kalawao cemeteries should be conducted with the greatest care and professional acumen possible to ensure that one of the most important features of the cultural landscape is protected.

Overall Treatment Strategy

Continue to perform and update condition assessment and treatment information for each monument and marker, and record and maintain this information in the Cultural Resource Inventory System (CRIS) database. Use field notes and photographs to aid in the understanding of specific conditions, and date assessments to achieve a better understanding of the rate of deterioration over time. Many of the assessments have been completed and are included in the CRIS database, formerly the List of Classified Structures (LCS).

- Add prioritized recommendations for treatments to the records of individual resources as follows:
 - Priority one: treatment to address resources in Poor condition. This type of treatment involves work required to address safety of visitors or irreparable damage to the resource, and should be implemented as soon as possible. Examples of conditions requiring priority one treatment include a damaged or dislocated marker that appears likely to topple or otherwise is a threat to safety or the resource. Severely tilting markers can be stabilized with wood bracing until they can be reset. Similarly, immediate measures may be needed to stabilize or protect resources from erosion, burrowing animals, or falling tree limbs .
 - Priority two: treatment to address resources in Fair condition. This work involves major repairs that should be carried out within the next one to three year period. Examples of priority two treatment include monuments that need frequent maintenance such as wood elements, or concrete or masonry that are cracked, or monuments located near tree roots.
 - Priority three: Treatment to address resources in Good condition. This work does not have immediate life safety or risk to the resource, and can be carried out in three to six years. Conditions requiring priority three treatment are frequently associated with weathering rather than events and may include surface erosion, surface corrosion or patina, chalking of coatings, or stable cracks. These conditions should typically be monitored and treated if the rate of deterioration accelerates or progresses significantly enough to place the monument at higher risk of irreparable damage. This is also the category for issues that only affect cosmetic conditions.

Recommendations and Recommended Practices for Metal Components (Bronze, Zinc, and Cast Iron)

- Replace metal components that are beyond repair and broken pieces with reproduction metalwork. Match the existing historic elements in material type, size, thickness, configuration, and details.

- Examine metal assemblies for loose fasteners and tighten using hand tools. If excessively corroded, replace fasteners with new stainless-steel fasteners or fasteners matching original, if highly visible.
- Clean components with nylon or natural bristle brush and non-ionic surfactant to remove soiling and salts.
- Consider using acrylic or urethane coatings, or waxes, to protect bronze components from corrosion.
- Maintain and re-establish protective coatings on ferrous metals. Perform color finishes analysis and review archival documentation to determine the original colors.
- Remove poorly adhered paint using appropriate methods, including hand scraping, wire-brushing, or chemical paint removal. Remove corrosion without removing fabrication marks. Test first, to assure that the surface preparation method will not damage the metal. Elements with severe corrosion may be removed to a shop for repair and recoating.
- If feasible, rinse surfaces of metal components with clean water regularly to remove chloride contamination, which will deter corrosion.

Temporary Procedures to Protect Cracked, Damaged or Spalled Markers

Carefully document all fragments in the location they are found prior to removing them for storage. Record by notes, descriptions, and photographs. Note fragments that are missing but not yet located. Establish a secure area for storing broken and displaced material.

Resetting Displaced or Damaged Markers

- Reset a marker if it is in danger of toppling or breaking because of severe leaning.
- Remove monuments and markers to be reset using appropriate lifting equipment, taking care not to concentrate lifting loads or cause abrasions. Use woven nylon straps or other padding. (Documentation indicates that at Papaloa Cemetery, previous lifting has been aided with the use of an air jack.)
- Excavate marker to expose the base.
- Place 2 inches of clean, graded sand in the excavated hole for drainage. Tamp dampened sand to compress.
- Set marker back down using appropriate lifting equipment.

Multi-piece markers

- Remove ferrous metal pins in entirety, using a drill (or core drill if necessary). Replace pins with new threaded stainless-steel (316 alloy). Documentation indicates Type 304 and 316 have been used previously but given the marine environment Type 316 is recommended. (Documentation indicates that nylon pins have been used for repair of markers in these cemeteries in the past. Nylon and carbon-reinforced plastic can also be considered, depending on the repair required. NPS and WJE conservators recommend the use of stainless-steel pins). If the pins are insufficient to provide a long-term repair, develop a different anchoring approach. Set new pins in hydraulic lime-sand grout. (We understand that epoxy has been used to set pins in some previous repairs.)

- Remove existing mortar with a hammer and chisel without causing damage. Power tools may be used if trials indicate that mortar can be removed by this method without damage to the base stone.
- Make sure that the base stone is stable and plumb and squarely rests on the foundation.
- Place the upper stone on the base stone using shims and monument setting compound or hydraulic lime-sand mortar. Install upper stone plumb and level. Use hoisting equipment for medium to large stones.
- Brace the stone while the setting material cures.

Stone Markers

Identify the type of stone and document the condition of the marker before treatment. It is important to understand that different types of stone (or stone masonry) have different physical properties and deterioration mechanisms, and therefore require material-specific treatments. Based on available documentation regarding NPS-performed repairs, repairs to stone monuments have not been performed to date.

- Not all cracks in stone markers require repair. Cracks may simply be a part of the natural weathering process for some stone units. Cracks should not be repaired unless they significant enough promote instability, support plant growth, or lead to erosion of the stone.
- For markers in need of crack repair, install stainless steel or nylon pins for reinforcement along broken fractured surfaces. Set stainless steel pin in hydraulic lime grout or epoxy. Place spots of epoxy along crack and clamp until epoxy has cured.
- Install compatible repair materials (such as a hydraulic lime-sand mortar patch) to match adjacent form, color and texture of materials at areas of stone loss. Consider using an integrally-colored mortar similar to the color of the stone.
- Areas of stone that are severely damaged may be repaired by installation of a dutchman. In this procedure, the deteriorated portion of the stone is cut away and a new piece of stone (the dutchman) is installed to match the existing. The dutchman unit is anchored to the parent stone with stainless steel pins and set in mortar. A dutchman repair is a much more durable repair than a mortar patch repair. A mortar patch may need to be replaced after ten to fifteen years, while a properly installed dutchman will last as long as the parent stone. Dutchman repairs require skill to install correctly and should not be attempted by inexperienced personnel.

Parge coats

- Replace missing or damaged areas of parge coats using a natural hydraulic lime sand mix.
- Apply thickened limewash to parge coats surface to fill in cracks.
- Apply multiple coats of limewash to parge coated surfaces.

Concrete

- Do not repair small cracks in concrete. Cracks should not be repaired unless they significant enough promote instability, support plant growth, or lead to erosion of the concrete.

- Remove corroding steel reinforcement and replace with stainless-steel threaded bar or stainless-steel reinforcing bars. Steel reinforcing that cannot be removed without causing severe damage should be exposed, cleaned, and coated.
- Install stainless steel pins for reinforcement along fractured surfaces. Set stainless steel pin in grout or epoxy.
- At large areas of loss, and large spalls or cracks, install formed patch using compatible materials. For concrete, a cementitious (portland cement-lime-sand) patch mix is compatible and more durable than a hydraulic lime-sand patch. Patch should match adjacent material in color, texture, and finish.
- Apply parge coat and limewash, if there is evidence it was originally parged.

Wooden Crosses

- If wooden crosses have decayed, replacement of decayed material may be necessary.
- Wooden crosses should be recoated periodically using an alkyd primer and an acrylic finish coat to protect them from the weather.

Mortar-Set Rock Monuments and Walls

- Reinstall loose stones in the same location and orientation using hydraulic lime sand mortar. Original stone locations can be sketched on clear acrylic sheet with marker to aid in relocation.
- Repoint deteriorated masonry joints with hydraulic lime sand mortar. Unsound mortar should be removed to a depth of 2-1/2 times the width of the joint, or to sound mortar, whichever is greater, without damage to the adjacent masonry.
- New work should match historic mortar joints in color, texture, joint size, profile, and tooling.

Dry Stacked Rock Monuments and Walls

- Reinstall loose or dislodged stones. Use original stones wherever possible.

Cleaning of Markers or monuments

In the past, cleaning has not been performed for the markers unless it has been conducted concurrent with other treatments or as part of a specific effort, such as a conservation workshop. Cleaning has been limited to removal of algae, lichen, and other biological growth.

- ***Protect Adjacent Surfaces prior to Cleaning.*** Protect adjacent surfaces not intended to be cleaned. Some cleaners that are suitable for one substrate can damage or stain another substrate.
- ***Pre-wetting the stone.*** Prewet the stone liberally with clean water before applying the cleaner with a hand or backpack sprayer. Stone is a porous material and will absorb the cleaner. By thoroughly wetting the stone beforehand, the cleaner will stay on the surface of the stone and minimize penetration of the cleaner into the stone.

- ***Apply D2 Biological Solution.*** Keep the stone wet during cleaning and thoroughly rinse afterwards. Do not allow the cleaner to dry on the stone. Apply the cleaner according to the manufacturer's recommendations.
- ***Agitating the surface.*** Agitate the surface gently in a circular motion using a soft bristle brush. Work in small areas, starting from the bottom and moving toward the top of the marker. Agitation will loosen soiling from the surface of the stone.
- ***Rinsing the marker.*** After cleaning, thoroughly rinse the entire marker and adjacent materials with low pressure water.

Other Resources

- **Unmarked graves.** Work with *Ka'ohana O Kalaupapa*, park partners, anthropologists, archeologists, and other preservation professionals as appropriate, to determine the location, or probable location, of undocumented burials and gravesites within each cemetery. Retain shallow grave depressions where they occur. Consider installing stainless steel identification tags to locate unmarked graves placed so that they are not visible but can be relocated using a metal detector. Include discrete identification systems on the tags for reference.

New Features

- **Grave locators.** Provide information that allows visitors to locate specific marked graves such as signage, a brochure, or a web site after evaluating the potential for the provision of this information to comply with Health Insurance Portability and Accountability Act (HIPPA) requirements. Establish a grid system to aid in the location of grave markers (Figure B-89).
- **Parking.** Enhance accessibility by providing a new parking pull-off, surfaced with stabilized turf, at the south ends of both the Papaloa and 'Īliopi'i sections of the West Coast Cemeteries for visitors (Figure B-90). Provide limited new signage that conveys historical information about the burial grounds, and information to help visitors locate a specific grave or graves. For the cemeteries along Damien Road, establish gravel parking pull-offs at the base of the road to Kauhakō Crater, near the identity sign associated with the Kahaloko Cemetery, and between Siloama and St. Philomena Churches to provide access for visitors. Connect the parking space between the two churches at Kalawao with accessible walks that provide access to the churchyards.
- **Exclusion of animals.** Ensure that fencing established to exclude axis deer from many of the developed areas on the peninsula is maintained in good condition and continues to protect cemeteries and other areas from these animals. Feral pigs, dogs, and mongooses are also potential threats to Kalaupapa's cemeteries due to their destructive practices that include digging. Consider options for controlling populations of these animals and continuing to exclude them from areas where they are known to cause problems within burial grounds. Consider adding a low wire fence, designed to have the least visual impact, around Cemetery S, for example, where rooting by feral pigs has been known to occur.

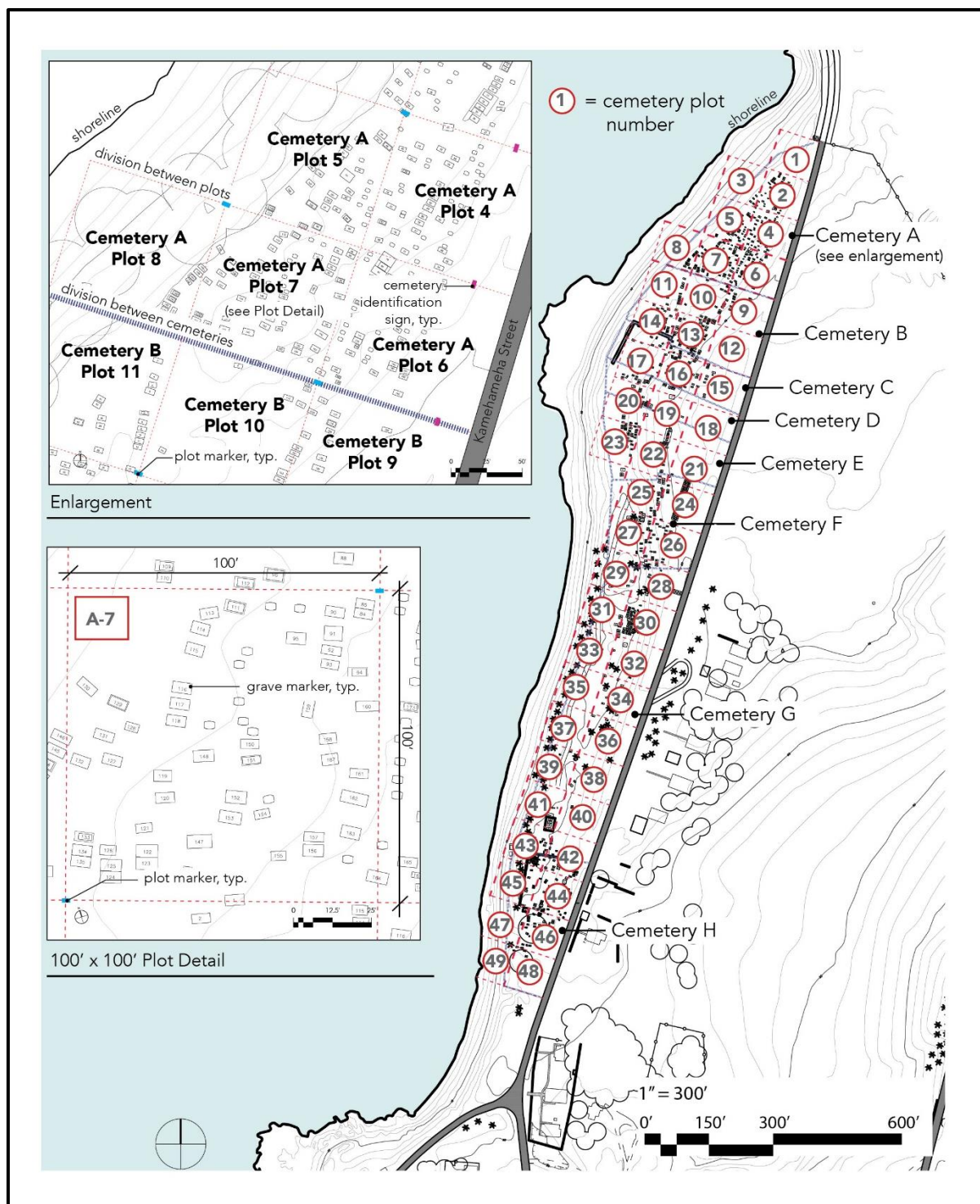


Figure B-89. Consider establishing a grid to assist visitors with locating graves.

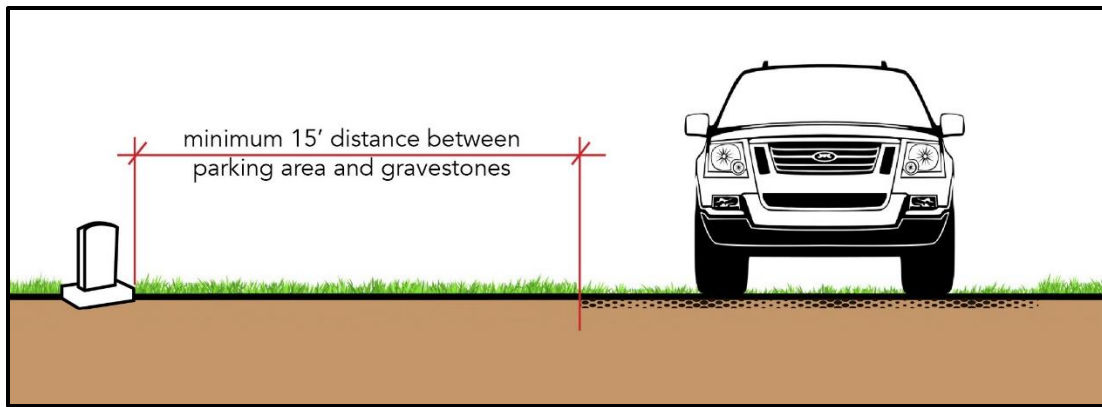


Figure B-90. Consider adding parking for visitor access to the West Coast Cemeteries that is no closer than 15 feet from a grave marker.

- **Signage.** Provide new identity signage to mark each of the cemeteries. Consider applying a consistent approach to marking each cemetery. The small shared identity signs that currently mark the West Coast Cemeteries should be replaced with a more attractive, larger sign panel with text that is easier to read from Kamehameha Street and Beach Road (Figure B-91). Follow the guidance afforded in the Harpers Ferry Center Programmatic Accessibility Guidelines for National Park Service Interpretive Media when designing and developing new signage.

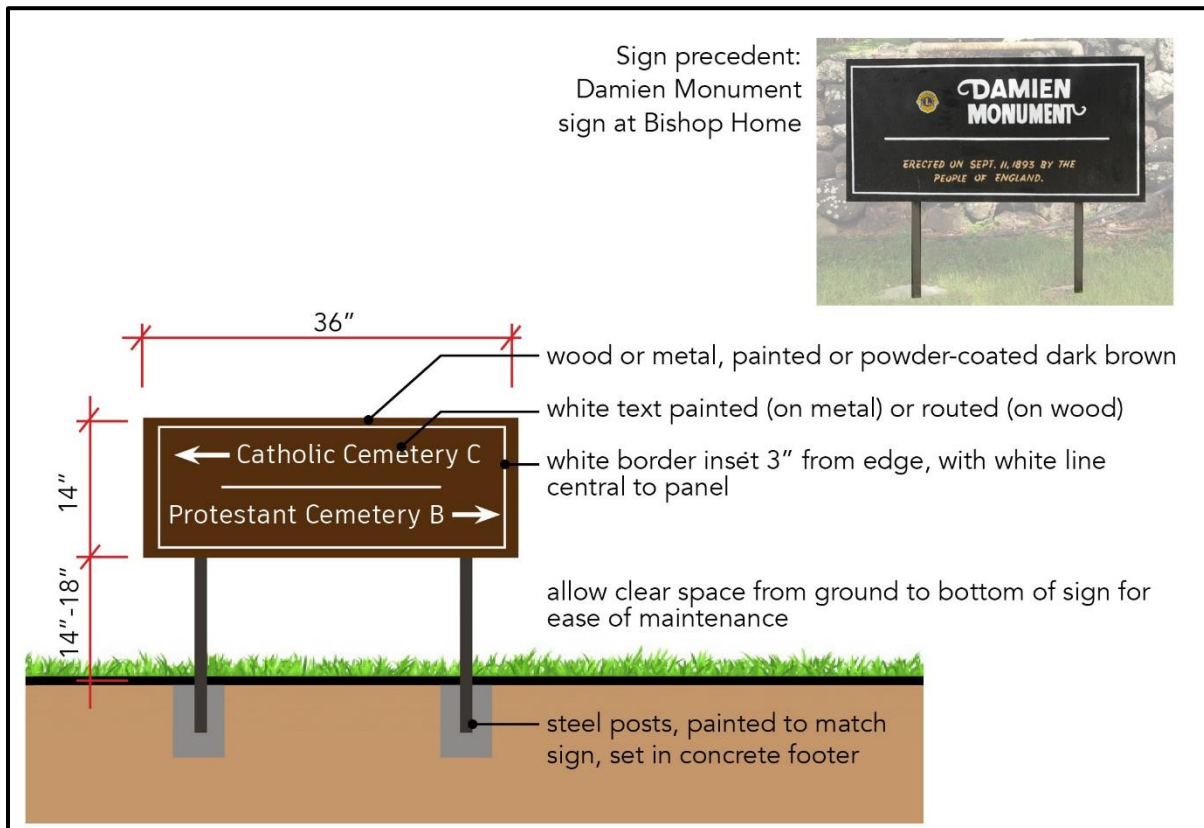


Figure B-91. Consider a consistent palette for new signage to mark Kalaupapa cemeteries.

- **Interpretation.** Provide additional interpretive information about the cemeteries using a recyclable pamphlet, virtual exhibit, or single wayside exhibit panel in association with the parking pull-offs recommended herein. Interpretation could focus on the history of the cemeteries, the lives of the people

interred, traditional funerary practices, and how the cemetery has changed over time. Historic and contemporary photographs could be used to illustrate the panels.

Prioritized Action Items

- Develop an electronic repository for cemetery archive material.
- Draft and adopt cemetery procedures, policies, and guidelines including allowable activities, new burials, types, materials, and styles for replacement or new grave markers, grave ornamentation, types and styles of enclosures, and allowable plot covers.
- Identify unmarked graves using evidence from historic photographs, remote sensing, LiDAR, and other techniques.
- Determine appropriate parking and access location for visitors.
- Develop interpretive materials for visitors.
- Develop a grave locator dissemination system for visitors.
- Update inventory and assessment of markers periodically including prioritized treatment recommendations and transfer this information to the Cultural Resource Inventory System (CRIS) database.
- Implement treatments based on assessments. Document treatments and upload the information to the CRIS database.
- Complete plans for grave marker conservation methods and approach.
- Continue to conduct research on burials and the history of the cemeteries.
- Determine a method for marking currently unmarked graves.
- Establish a monitoring protocol to ensure regular evaluation of condition issues of concern.

Cyclical Maintenance

The various types of maintenance activities required for resources within the cemeteries are organized below by type of resource, material, and task. The duration of time between maintenance activities is based on past observation of similar materials in similar environments, and on information provided by the park. Future climatic conditions, weather trends, and animal exposure could affect the life span of an individual resource. Therefore, a program of ongoing monitoring and inspection is essential to identify deterioration and to determine the maintenance work required. For example, ongoing inspection may reveal that a longer interval between specific repairs is appropriate, although monitoring should continue even if maintenance work is deferred.

The length of time between major work items is determined assuming that the more frequent minor maintenance items recommended are performed on schedule. If basic maintenance activities are deferred or neglected, more intensive repair work may be required earlier than scheduled. Frequent and conscientious

monitoring and maintenance activities can sometimes postpone or eliminate the need for more extensive work.

This cyclical maintenance plan was developed based upon review of documentation, limited observations made on site, and available information about prior repairs and maintenance. The following table summarizes cyclical maintenance tasks and schedule/intervals for their implementation.

Cyclical Maintenance Tasks and Schedule

Cyclical Maintenance Task	Schedule / Interval	Comments
Mow grass	Every 7 to 10 days	Do not allow grass to exceed a height of 12 inches before mowing. Ideally, no more than 1/3 of the height of a stand of grass should be cut with a single mowing.
Trim grass around grave markers and other structures using equipment that avoids damage to masonry and concrete features	To occur with mowing regime every 7 to 10 days	
Inspect trees in and adjacent to cemeteries to determine need for pruning, removal, or other care that promotes tree health, and visitor and resource safety	Every 6 months and after major storms	Identify hazardous conditions that require immediate response. Record results of inspection within 1 month of completion.
Prune trees identified through inspection as requiring specific care	Every 12 months	Address hazardous conditions as soon as possible. Record results of repairs within 1 month of completion.
Inspect plantings composed of invasive species, indicated in the plan to be controlled, to identify volunteers established through suckering or seeding	Every 12 months	Record results of inspection within 1 month of completion.
Thin and clear evidence of volunteer growth within plantings composed of invasive species	Every 12 months	Record results of thinning and clearing efforts within 1 month of completion.
Inspect cemeteries and burial grounds to evaluate effects of erosion or burrowing animals	Every 6 months	Record results of inspection within 1 month of completion.
Repair evidence of erosion and address issues related to burrowing animals	As soon as possible following identification of problem	Record results of repairs within 1 month of completion.
Inspect and assess the condition of dry stacked lava rock walls for repair needs	Every 12 months	Record results of inspection within 1 month of completion.
Conduct repair of dry stacked lava rock walls	Every 12 months	Record results of repairs within 1 month of completion.
Inspect and assess the condition of iron pipe features for repair needs	Every 12 months	Record results of inspection within 1 month of completion.
Conduct repair of iron pipe features	Every 12 months	Record results of repairs within 1 month of completion.
Assess the condition of each grave marker, including review and documentation of distress and evaluation of previous treatments	Every 6 years	Inspection and monitoring can consist of review of approximately 16 percent of the grave markers each year over the course of 6 years (or another percentage of the total assessed every 2 or 3 years), rather than inventorying all grave markers every 6 years.
Update CRIS database with new information related to inspection and assessment of grave markers and other cemetery features	As needed following each condition assessment or treatment	Data for individual resources should be updated between assessments, if particular resources are treated, affected by storms or other conditions, etc.
Implement and document conservation Priority 1 treatments	Every 12 months	Record results of repairs within 1 month of completion.
Implement and document Priority 2 treatments	Every 1 to 3 years	Record results of repairs within 1 month of completion.
Implement and document Priority 3 treatments	Every 3 to 6 years	Record results of repairs within 1 month of completion.

References

- Association for Gravestone Studies. (www.gravestonestudies.org)
- Chicora Foundation, Inc. “Best Practices for Cemetery Lawn Maintenance.” (www.savinggraves.org)
- Save Our Cemeteries. (www.saveourcemeteries.org)
- Strangstand, Lynette. “Preservation of Historic Burial Grounds.” National Trust for Historic Preservation, Preservation Booklet, 1995.
- Striegel, Mary. “Stopping the Hands of Time: Nine Tips for Cemetery Preservation.” NCPTT Notes No. 39 [2001]. (www.ncptt.nps.gov/NCPTT-Notes/Issue-39)
- National Park Service preservation briefs, (www.nps.gov/tps/how-topreserve/briefs.htm)