HISTORIC STRUCTURE REPORT

ST. PHILOMENA CATHOLIC CHURCH
(FATHER DAMIEN'S CHURCH)

KALAUPAPA NATIONAL HISTORICAL PARK
Molokai, Hawaii

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PREFACE

This Historic Structure Report was undertaken to develop preservation treatment recommendations for St. Philomena Catholic Church at Kalaupapa National Historical Park, Molokai, Hawaii. Commonly known as Father Damien's Church, it is located in the Kalawao portion (east side) of the Kalaupapa peninsula on the north side of the island. This structure, along with Siloama Protestant Church (a reconstruction), are the only two remaining buildings of the Kalawao Settlement.

The structure represents the early history of the settlement and the internationally known efforts of Father Damien and others to provide care for the people afflicted with Hansen's Disease. The first portion of St. Philomena's (most of which was later removed) was constructed in 1872 by Brother Victorin Bertrand, prior to Fr. Damien's arrival. Father Damien added the west nave in 1876, and after its steeple collapsed in a wind storm, began construction of the masonry and wood main nave in 1888. He died in 1889 before the church was fully completed.

Kalaupapa National Historical Park was established on December 22, 1980, by Public Law 96-565, to provide for the preservation of the unique nationally and internationally significant cultural, historical, educational and scenic resources of Kalaupapa. The act authorized the Secretary of the Interior, with the approval of the owner of a non-federally owned property, to undertake critical or emergency stabilization of historic structures. The Secretary is also directed by this specific legislation to seek and enter into cooperative agreements with such owners to "... preserve, protect, maintain, improve, and interpret resources of historic, architectural and cultural significance." Pursuant to the legislation a cooperative agreement between the National Park Service and the Roman Catholic Church in the State of Hawaii was entered into on August 22, 1984.

The structure is a primary resource and major element in the interpretation of Kalaupapa and is the most important building in the
National Historical Park. It is on the List of Classified Structures and listed in the National Register of Historic Places as part of the Kalaupapa Leprosy Settlement, a National Historic Landmark, approved on January 7, 1976. The structure is of national significance (social and humanitarian movements) and also considered to be of international significance. It is the highest priority for preservation in the National Historical Park General Management Plan and the Cultural Resources Management Plan.

This report includes documentation of the history of the structural changes which have occurred during its history, structural and material condition analyses, photographs and drawings to record the present appearance, details and condition of the building and its site and recommendations for emergency structural stabilization and preservation treatment to assure continued stability and protection of this important resource.

Appreciation is extended to the many people involved in this project, from those in the Western Regional Office, such as Tom Mulhern, Chief, Park Historic Preservation, and in the Pacific Area Office, including Bryan Harry, Pacific Area Director, and Al Baldwin, Assistant Pacific Area Director, for their support and actions to initiate the project. Superintendent Henry G. Law, Kalaupapa National Historic Park, provided a great deal of guidance and support from the beginning, not only in developing treatment approaches but also in logistical matters for providing accommodations, equipment and transportation on-site for field investigations during May and August 1984. We thank the staff at the Hawaii State Board of Health at Kalaupapa and Father Fernandez for their support and assistance. Most of all, we thank the people of Kalaupapa for their friendly sharing of a very special place.

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1. Name and Number of Structure

St. Philomena Catholic Church, Structure No. 711, (NPS & Hawaii State Board of Health), Kalaupapa National Historical Park, Island of Molokai, Kalawao County, Hawaii. The structure is owned by the Archdiocese (Catholic) of Hawaii. The structure is located within the site of the Kalawao Leprosy Settlement (1866-1911).

2. Proposed Use of Structure

The structure will continue to be used on a daily basis to interpret the significant history of the Kalaupapa settlement, its part in the history of Hawaii, the life and contributions of Fr. Damien and other important persons of Kalaupapa history, and the history and treatment of Hansen's Disease.

3. Justification for Such Use

Use of the building is in accordance with the park General Management Plan, Cultural Resources Management Plan, and the legislation which established Kalaupapa National Historical Park.

4. Proposed Activity

The proposed activity which this study addresses is the need for emergency structural stabilization and preservation of this structure and its immediate site. Detailed recommendations are included in this report for treatment of the resource to correct serious structural problems and deterioration and to eliminate conditions which are a threat to this nationally significant building and the safety of the public.
5. Estimated Costs for Proposed Construction

Detailed information is provided in a later section of this report.

6. Statement of Significance

The structure and grounds are a nationally and internationally significant cultural resource representing the history of the Kalaupapa settlement, Fr. Damien's life, and Hansen's Disease. It is listed on the National Register of Historic Places with national significance and in the List of Classified Structures, Category A.
I. History of Leprosy (Hansen's Disease)

Throughout history, leprosy has been one of the most dreaded of all diseases. It is not known when the disease first appeared in Europe, but it was not widely recognized until after the Romans invaded Egypt. It had spread to Greece and was probably carried from port to port along the Mediterranean by sailors as well as ultimately being brought to Italy by returning soldiers. It went with the Roman legions further into Europe. During the Crusades leprosy spread significantly and during the Middle Ages numerous hospitals for the sick were established. Very strict rules were promulgated governing the movement of leprosy victims. In the twelfth and thirteenth centuries, outbreaks of leprosy assumed monstrous proportions. It was estimated that at one time at least a quarter of the population of northern Europe was afflicted. The disease flourished because of the state of sanitary conditions in Europe at that time. Personal cleanliness and urban sanitation were in a lamentable state and the crowded conditions of medieval towns assured that diseases spread quickly.

Although it was the lower classes that were hardest hit, even the higher social strata often fell victim. The lot of a leprosy victim was an unfortunate one, for those afflicted were regarded as no longer alive. The disease was not treatable under the limited medical knowledge of that time, and its victims were cast out from society. Isolation was early considered the best and only solution to the problem. Victims who entered the hospitals certainly did not receive extensive or good medical care, but were provided with a place in which they could slowly die, out

of the sight and mind of the general populace. Others received permission to wander as beggars. Cast from their families, homes, and towns, they had to subsist as best they could. Forced to wear black cowls, they were forbidden to enter public places and had to announce their presence by ringing bells wherever they went so that people could avoid coming near them. Because of the seriousness of the disease, it was regarded as an expression of the wrath of God and was left primarily to the ministrations of priests, whose only answer was divine compassion through prayer.

By the fifteenth or sixteenth centuries, the number of leprosy cases had decreased. By the beginning of the seventeenth century, the disease had faded out in large parts of Europe, due probably to the development of an immunity in the rest of the population, strict health precautions, rising standards of living, improvements in cleanliness, nutrition, and general hygiene, and the ravages of the plague and other contagious diseases that had decimated those already weakened by leprosy.²

II. Leprosy in Hawaii

A. The Threat of a Contagion is Slowly Perceived

It is unclear when leprosy was first introduced into the Hawaiian Islands. As early as the 1820s, when Protestants entered the missionary field in Hawaii, cases of scrofula and elephantiasis were noted.¹ Some of these may actually have been leprosy. A Board of Health was first organized in Hawaii on December 13, 1850, by order of King Kamehameha III, who reigned from 1824 to 1854. This group of men was charged with protecting the public health and with taking measures to cure epidemic diseases, such as cholera, which Hawaiians had come in contact with as a result of Honolulu harbor's busy international trade. In 1862 Dr. W. Hillebrand, surgeon of the Queen's Hospital in Honolulu, devoted a wooden house on the hospital grounds to the reception of patients suffering from leprosy. No formal discussion of the disease took place in the legislature prior to Kamehameha III's death in 1854.

In April 1863, toward the end of the reign of Kamehameha IV, Dr. Hillebrand called the rapid spread of the new disease to the attention of the board. He recognized Mai Pake (Chinese sickness), as it was called by the natives, to be the "genuine Oriental leprosy,"² and recommended that the legislature devise some efficient and humane measure to isolate the afflicted. The disease was associated with the Chinese either because some of them were noted as carrying it or possibly because they were most familiar with it, having seen its progress in their own country. Some also think it might have been brought by Chinese laborers imported for work on Hawaiian plantations. It could easily, however, have been imported by any of the numerous sailors and merchants who entered Honolulu harbor after having visited any one of a number of seats of endemic leprosy across the ocean.


2. "Report of Dr. W. Hillebrand, Surgeon to the Queen's Hospital, April, 1863," in Hawaiian Kingdom Board of Health, Leprosy in Hawaii (Honolulu, HI, 1886), pp. 4-5.
Again in December 1863 the Board of Health discussed the Mai Pake threat, but not until February 1864, almost a year after Dr. Hillebrand had raised the alarm, did the Board decide to move at once to adopt measures to check the spread of the disease. A census of those afflicted in and around Honolulu was ordered, as well as a study to determine the disease's origin, causes, and hereditability. On August 10 Dr. Hillebrand expressed the opinion that isolation was the only course by which the spread of the disease could be arrested and recommended some valley as the most likely place to serve the purpose. 3

B. Isolation of Leprosy Victims Becomes Official Government Policy

On January 3, 1865, King Kamehameha V and the Legislative Assembly of the Hawaiian Islands passed "An Act to Prevent the Spread of Leprosy," whereby the identification and segregation of leprosy victims became an official government policy. The legislation stated that for the better protection of the public against the scourge that was spreading so rapidly, the Minister of the Interior (who was also the president of the Board of Health) was authorized to reserve any land or portion thereof now owned by the government for a site for an establishment to secure the isolation and seclusion of leprous persons. On this site the board could confine any persons deemed capable of spreading the disease. It would be the duty of every policeman and district justice, when requested by the board, to arrest and deliver to them any person alleged to be a victim so that he could be medically inspected. A hospital would be established where persons in the incipient stages of the disease could be treated in order to attempt a cure, but the board could send into isolation all patients considered incurable or capable of spreading the disease. 4


III. The Kalawao Leprosy Settlement is Established

A. The Island of Molokai is Selected for Leprosy Colony

On March 17, 1865, the Board of Health purchased some land on Oahu on which it intended to establish temporary hospitals and dwellings for a leprosy settlement. Because of protests from nearby residents who feared pollution of the water supply in the area, that Palolo Valley site was never developed. A final solution resulted in establishment of a hospital for light cases in Honolulu and selection of a large tract on another island on which to isolate incurables. A lot at Kalihikai, about two miles from Honolulu and adjacent to the sea, was decided upon as a treatment center for incipient cases and as a temporary detention station for severe ones. This complex on a twelve-acre lot was known as the Kalihi Hospital and Detention Station and opened for admission of patients on November 13, 1865. There all persons thought to be stricken would be inspected and medically treated with a view towards effecting a cure. All patients in an advanced stage of the disease, who were considered a health menace to the general population, would be required to move to a place of isolation.

The site chosen for the isolation colony was a peninsula midway along the northern coast of Molokai where, by September 20, 1865, the kingdom had acquired through purchase or exchange 800 acres of land at Kalawao and Waialeia. A third land division, Makanalua, to the west, was also purchased around this time, but the ahupuaa (a landholding unit) of Kalaupapa was not acquired until 1873. The land was considered excellent for cultivation and grazing, there was thought to be an abundance of water, and fifteen to twenty houses of the former inhabitants were available for the use of the sick. A promise was made to the former residents to remove them free of charge, and most were resettled in other sections of the island. About forty of them refused to leave, however, and grouped together in a small colony in the area of Kalaupapa at the foot of the pali (cliffs). For the next thirty years they

had a negative impact on the segregation policy by wandering freely around the peninsula and aiding well friends of the sick in their clandestine visits to the settlement. These kamaainas (old residents) were finally ejected in January 1895.

B. Living Conditions at Kalawao Are Unbearable

The first exiled leprosy victims were transported to Molokai by boat in January 1866. They immediately fell into almost complete despair. There were not enough houses to go around and the few deserted fields remained unworked. Many of the patients were too sick or disabled to farm, and others were so crushed by the loathsomeness of the disease and their isolation that they had no incentive to work. Subsequent arrivals, therefore, found no shelter or food source. Scarcely able to obtain the bare necessities of life, the settlement often grew violent. The strong stole from the weak, women and children were enslaved in return for room and board, and men passed their time drinking and playing cards. There was no decent employment, no government, little medical care, and only limited religious activity. (Siloama, "The Church of the Healing Spring," was erected by Protestant residents and dedicated in 1871).
IV. The Catholic Mission in Hawaii

A. The Congregation of the Sacred Hearts of Jesus and Mary Begins Its Work

The Hawaiian Mission was entrusted to the Congregation of the Sacred Hearts of Jesus and Mary, an order founded in 1800 and often referred to as the Picpus Fathers. The first Catholic priests--six of these French Fathers--came to Hawaii in 1827 during the reign of Kamehameha III. Although they made converts quickly, their labors were slowed by antagonism from non-Catholic missionaries who had earlier attained religious ascendancy in the islands. After several years of persecution, during which time Catholic Hawaiians had to practice their religion in secret, the French government took action and sent a frigate to force guarantees protecting the religious rights of French nationals. In ensuing years the Hawaiian Kingdom proclaimed religious freedom and established a parliament. The number of Catholics in the islands trebled under Kamehameha IV (1855-1863) and the Hawaiian archipelago became a Vicariate Apostolic headed by Msgr. Maigret.

The Honolulu Catholic Mission, although severely handicapped by a lack of personnel, did what it could to minister to the faithful on Molokai as well as other places. No resident priest was stationed on the island at first, but visiting priests often came from Oahu or Maui to administer the Sacraments. As the number of exiles increased, priests visited more frequently. Prior to 1872, Catholics had no church on the island, services being held in temporary "chapels" of grass.

B. St. Philomena Chapel Is Built

Because of the obvious need by Catholics at Kalawao settlement for the comfort provided by organized religious worship, and because of

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1. Gavan Daws has stated that "The Protestant leaders regarded the Sacred Hearts Fathers in particular as interlopers, and the early New England ascendancy over the ruling Hawaiian chiefs meant that the Catholics in their first years faced opposition which rose every so often to outright persecution of converts and expulsion of priests." Gavan Daws, Holy Man: Father Damien of Molokai (New York: Harper and Row, Publishers, 1973), p. 43.
the presence of a ready-made congregation, Bishop Maigret decided to build a chapel on the peninsula. According to Father Victorinus Bertrand, the Catholics among the Kalawao residents appealed to fellow Catholics throughout the islands for financial help. Natives and foreigners alike contributed a total of $400, to which the Catholic Mission added. None of the Catholic priests skilled at carpentry were available for the construction, so Brother Bertrand, a printer, and a native assistant collected the materials and went over to Molokai in 1872. Six weeks later they had erected a chapel. It was blessed by Father Raymond on May 30, 1872, in honor of St. Philomena, and the dedication was marked by twelve baptisms. After Father Raymond left, the chapel became a popular place for the Catholics, without a priest, to gather, recite the Mass and Rosary, and give prayers. The patients even asked for the Stations of the Cross so that they could learn patience from contemplation of Christ's suffering. What was really needed now, however, was a resident priest to console the afflicted in their suffering and assist them in their hour of death.

C. Joseph De Veuster Becomes a Catholic Priest

Joseph De Veuster was born January 3, 1840, at Tremeloo, Belgium, the son of pious farmers. It was while in school at Braine-le-Comte, studying toward a future as a grain trader, that he heard the calling to a higher life. He became extremely anxious to devote himself to the service of God. His elder brother, Pamphile, was studying for the priesthood in the Congregation of the Sacred Hearts at Louvain, and it was decided between the two that Joseph would enter the congregation as a postulant in January 1859. His lack of knowledge of the classical languages seemed to preclude his ever becoming an ordained priest, but his aptitude for learning was quickly recognized by his superiors. By diligent study he learned enough Latin that he was

2. Vital Jourdan, The Heart of Father Damien, rev. ed. (New York: Guild Press, 1960), p. 110. The reason for naming this chapel after St. Philomena is not known. Vatican II could not determine who this saint was. She is probably a mythical personage.
allowed to begin his novitiate as an aspirant for the priesthood. On October 7, 1860, he pronounced his final vows and, laying aside his baptismal name, adopted as his patron Damien, the physician of Cilicia who, after a lifetime of serving others, endured a martyr's death in the fourth century.

In 1863, while Damien was still in minor orders, his brother Pamphile, then a priest, was ordered by his superiors to prepare for departure to the Hawaiian Islands. As he was making the necessary preparations, Pamphile was struck by typhoid fever and rendered unable to travel. Damien went to his bedside and asked if it would be a consolation to him if he went in his place. Pamphile assented eagerly and Damien resolved to instantly apply for the appointment. He wrote the Superior-General at once, and his request was granted. Full of joy at this opportunity for service, Damien sailed for Hawaii, arriving in Honolulu on March 19, 1864. There he was ordained to the priesthood on May 21. Father Damien began his missionary life on the island of Hawaii—the Big Island—serving the districts of Puna, Kohala, and Hamakua.

D. A Request Is Made for a Resident Priest at Kalawao

On May 4, 1873, at the dedication of a church at Wailuku, Maui, many priests gathered from various points to greet their Bishop. Father Damien was among them. On this occasion His Lordship mentioned the need for a resident priest at Kalawao. Father Damien offered himself and almost immediately accompanied the Bishop to the peninsula. Although the original intention was that Damien would only stay two or three weeks and then be relieved by another, it soon became clear to the priest that this would be his life's work. It was generally understood by the press that Father Damien had gone to the settlement to stay and his arrival there generated much favorable publicity in Honolulu. He was acclaimed as a Christian hero for selflessly thrusting himself among the unfortunate outcasts of Molokai. Because of this outpouring of support for his work, and because Damien himself wrote his Provincial offering to remain permanently, his wish was granted.
V. Father Damien's Early Years at Kalawao

A. Father Damien Becomes Immersed in the Life of the Settlement

Living conditions in the early days of Kalawao settlement were extremely difficult. At first the government had expected the patients to grow their own food and construct their own shelters. When these expectations were unfulfilled, the Board of Health found it necessary to send in supplies. For many years thereafter food was inadequate, housing poor and unsanitary, medical care spasmodic, and water difficult to attain. Father Damien was the first white worker to live permanently at Kalawao, arriving on Molokai with nothing but his breviary. While awaiting lumber to build a house, he lived under a pandanus tree by the side of St. Philomena chapel. During the day he immersed himself in work necessary for the improvement of the colony. His immediate concern of course, the reason for his placement there, was attending to the people's spiritual needs. This he accomplished by visiting them in their huts and administering the Sacraments at their deathbed.

Damien realized that before future efforts could be made to improve the lot of these luckless people, a firm spiritual foundation had to be laid. Both Catholics and non-Catholics were welcome at Mass. Knowing the Hawaiian love of ceremony, he conducted elaborate religious services. Sunday High Mass became the highlight of the week. The nuns in Honolulu sent red soutanes and lace surplices for the altar and choir boys. Damien revived interest in music and singing. Membership in the choir became a great honor for both children and adults, and choir practice frequently took place in the evenings under the trees. A band was organized, whose primitive instruments were soon replaced with better ones from Honolulu. Many religious processions and fiestas were instituted, the biggest event of the year being on the feastday of Corpus Christi. This celebration was prepared for weeks in advance. Flowers were gathered and woven into wreaths, and on the feast day, while Damien carried the Blessed Sacrament through the village, children strewed petals along the way and other parishioners joined in hymns. Damien conducted religious services with as much pomp and sacred music as possible, and by his earnest and constant preaching endeavored to win
more souls to God. At the same time, he was continually at the service of all the unfortunate inmates, whatever their religion, in a variety of ways.

Damien's position at the settlement was as the Bishop's delegate, serving as priest and pastor of the Catholic population, both patients and non-patients. He needed official authorization to stay in the area and had to respect the governmental administration. In addition to his spiritual duties, however, Damien became a leader in other areas and was responsible for a great number of improvements, partly through his own efforts and partly through his influence on others. Damien seldom requested the civil authorization needed for many of his actions. His daily contact with the patients gave him an understanding of their needs that the authorities would never have. It was not long before the Board of Health, a majority of whose members were Protestant ministers, realized that he was a force to be reckoned with.

Damien's first few months were spent begging public charity in order to get the patients some of the smaller necessities of life. He became a champion of the poor and unfortunate and sought to fulfill their needs as best he could. From the beginning he challenged the perverse elements in the settlement and impressed upon the people that order and discipline were mandatory. He had a prodigious capacity for manual labor and an innate ability for leadership and organization. He had a storeroom of his own on the Mission grounds, from which provisions were supplied gratis to the poor. He cheerfully dispensed tea, biscuits, sugar, and clothes to Catholics and Protestants alike, replenishing his supply periodically from gifts sent by the Mission in Honolulu and later by clergymen and interested persons in other countries.

In addition to supplying extra food and clothes, Damien built houses and also functioned as an infirmarian. Because there was no resident physician in the settlement until 1879, Damien tried as much as possible to alleviate much of the suffering. He daily dressed sores, amputated diseased members, bathed and bandaged wounds, visited
patients in the hospital, and dispensed medicines and sedatives. He also tried to get samples of remedies and furnished them to patients in hopes of finding a cure or a way to stop the pain. Although his unyielding attitude on many affairs outside what was considered his proper sphere of work brought him many times into conflict with the Board of Health, a fairly good working relationship eventually developed between the two parties. Damien's firsthand knowledge of needs was indispensable to the government, which cooperated in providing for them within the limits of its power and funds. From November 1877 to February 1878, he functioned as under-superintendent of the settlement, a responsibility he did not enjoy because it altered his relationship with his people and cut into his ministry time. In 1879 he wrote that the government every week sent him his part of the provisions just as they did for the patients.  

Soon after his arrival at Kalawao, Damien grew lax in his precautions against infection, so immersed was he in his devotion to his people and concern for their welfare. He allowed patients to enter his house, dined with them from the same pot, and smoked the same pipe in the cool of the evening. He was kind and friendly, accepted readily by most people, and generally shared their life without fear or much thought of future implications. His acceptance of them and the gradual improvement of conditions every day raised morale and renewed interest in life. Internal jealousies, fighting, and immorality gave way to a healthy and relatively happy Christian community life.

B. A Rectory Is Built

Because he had no home or other accommodation for his use when he first arrived at Kalawao, Father Damien spent his first nights under the branches of a Puhala (Screw Pine or Pandanus) tree next to St. Philomena chapel. Before long the whites of Honolulu assisted him with subscriptions and he was able to build a small sixteen by ten-foot hut by November 1873. In 1878 his Provincial gave him permission to

1. Englebert, Hero of Molokai, p. 149.
build a better residence, costing between fifty and seventy dollars. The two-story structure measured twenty-one by twenty-four feet and had an outside stairway leading to the upper verandah where were found Damien's bedroom and a study filled with shelves of books and a map of the world. The ground floor was evidently used as a dispensary, consulting room, and general work space and office. It is thought that this structure was located west of the present church. Damien wrote his brother that "The cemetery, church and my house form one enclosure; thus at night time I am the sole keeper of this garden of the dead, where my spiritual children lie at rest." This rectory can be seen in Illustration 1 taken in 1884, just west of the enlarged St. Philomena Church. By 1886, when Illustration 2 was taken, Damien's house had been moved east of the church. Brother Joseph Dutton, in describing this scene in 1908, stated that Damien's house had stood about where the cross mark is (cross mark can be seen as dark slash in center of picture). The location of Damien's cottage beside the church and the cemetery was convenient for officiating daily at graveside and for gravedigging. For relaxation, Damien indulged in poultry raising, and he had a great number of hens and chickens around the Mission. Eggs were an important part of his diet and he also gave freely of them to the patients.

C. St. Philomena Chapel is Enlarged

After Father Damien's arrival, the soul of the colony, at least for the Catholics, seemed to be the tiny chapel of St. Philomena. As the


4. Joseph Dutton file, 1890-1912, MS 266.2, D95, Hawaiian Historical Society Archives, Honolulu.
Illustration 1.

Kalawao settlement, looking east, 1884. William Studio of Damon picture. Siloama Church is the first structure to the left, before its alteration in 1885. To its right are Father Damien's rectory (small structure with dark roof) and St. Philomena Church after its alteration in 1876. Courtesy Hawaii State Archives, Honolulu.
Illustration 2.

Kalawao settlement, looking east, early in 1886. St. Philomena has been enlarged (1876) to the west and a belfry added. Note the lack of vegetation around the structure and the absence of any decoration around or above the church entrance. The large white house to the right was the one used by Father Damien as a Girls' Home. The Brothers' cottage at Baldwin Home (originally built to house the Franciscan Sisters) later stood on that site. Courtesy Hawaiian Historical Society, Honolulu.
patients became happier with their situation, more fun and celebration took place, primarily around the rectory. As soon as Damien allowed the sick to enter his dwelling, it became a focal point for many social activities, and was an especial attraction for the children of the settlement. As more converts were made, the congregation overflowed, and it became obvious to Damien that "the church of St. Philomena . . . must at all costs be enlarged ten feet at least. The most urgent demands are made for it. . . ." 5 Assisted by his flock, Damien enlarged Brother Bertrand's 1872 chapel in 1876 by adding a nave and tower. Illustration 2 shows the church in early 1886, after these alterations. In describing the scene, Joseph Dutton remarked that the gate had been moved and the walls changed so as to enclose much more ground. The cross part of the structure, he said, was first built by a Brother and in use as a chapel before Damien came: "There was a door at your right hand. Father Damien closed it and put this nave and steeple on, the chapel forming the transepts. The steeple was afterwards blown down in the severe storm about 1887 or 1888." 6

This first remodeling of St. Philomena was undertaken in the winter of 1876. Afterwards Damien supposedly painted the building on the outside in a variety of bright colors and decorated it within in accordance with the native Hawaiian taste for color. In April 1877 he wrote, "During the winter I worked hard to enlarge my church and build a pretty tower." 7 The altar at the east end was fashioned by Father Damien from materials at hand. Tradition holds that Damien cut the holes in the floor near the pews into which patients could spit and used brown paint on the walls up to waist height so that blood stains and other secretions would not show on the walls. No written documentation on this has been found by the writer.

5. Farrow, Damien the Leper, p. 123.
D. Other Construction by Father Damien

Damien's skills as a carpenter that he had acquired during his youth stood him in good stead at Kalawao. Whereas prior to his arrival the residents had had only small damp huts to sleep in, Damien managed to get building material from the Board of Health and from private and charitable sources so that many small houses could be erected. Rolling up his sleeves and grabbing hammer, saw, rule, and compass, he did most of the carpentry work himself. By early November 1873 Damien had built another chapel, again largely by himself, at Kalaupapa, which was even then becoming something of a branch settlement. At first consisting only of a few native huts, the village began to attract the leprosy patients because of its better climate and proximity to the boat landing. Under Damien's direction, the residents improved the old rutted path that led to Kalaupapa, and this new road undoubtedly precipitated more movement there. The Kalaupapa church was a frame building, thirty by sixteen feet, with a steeple. In 1881 this church also had to be enlarged. Damien was commissioned to add to the old chapel three arms, so as to form a cross. He did all the carpentry with the aid of a few residents. 8

Father Damien left proof of his carpentry skills not only on the peninsula, but elsewhere on the island of Molokai. His priestly jurisdiction varied from only the settlement to encompassing the entire island, depending on whether he had other clergymen to assist him in his work. Because he felt guilty that he was not able to minister to Catholics on the rest of the island, Damien suggested to the Bishop that another missionary be sent to care for those people so that he could devote all his time to the Kalawao settlement where he was most needed and where his presence caused less alarm to the Board of Health. Monsignor Maigret obliged by sending Father Andrew Burgermann in February 1874. By the beginning of 1875 Damien had built a chapel,

rectory, and school at Kaluaaha on south Molokai. By the end of that year he had built or was in the process of constructing six chapels on Molokai, three for his use and the rest for Father Andrew.9

VI. Later Changes in Mission Grounds

A. The Early Cemetery Is Improved

The Catholic graveyard at Kalawao abutted St. Philomena Church. The cemetery seen today is only a small portion of the original burial grounds. In 1887, after Brother Joseph Dutton's arrival, he noted that the principal graveyard back of his cabin contained about 2,000 graves. Burial practices in the first years of the settlement had been extremely haphazard:

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 over saturated with the soluble products of the corpses, and the percolating rain drowned the maggots and other grubs; hence decomposition went on very slowly . . . 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. . . .

When the leprosy victims were first transported to Kalawao, most were in an advanced stage of the disease. This condition, coupled with a lack of sanitation and medical help, resulted in a high annual mortality rate. Many of the dead were buried without benefit of coffin, being wrapped only in a blanket and dumped into a shallow grave.

One of Damien's main efforts at the settlement was to remove the horror from death and reinstill in the community a sense of future glorification. He tirelessly preached to the people that their present painful condition was but a preparation for a new everlasting life in which suffering and despair would have no part and in which their now deformed bodies would be gloriously transfigured. Burial associations were formed and processions marked by music and banners accompanied the dead to the grave, imbuing this activity with an air of solemn festivity. Father Damien also formed coffin associations to provide a common fund for proper interment. Death became less excruciating and a more meaningful

Illustration 3.

Construction work to extend St. Philomena Church to the south in 1888. Note burial ground stretching away to the east and enclosed by a low stone wall. Photo courtesy Anwei V. Skinsnes.
Illustration 4.

Baldwin Home for Boys and Helpless Men between 1905 and 1909. To the extreme left of the picture is Damien's old two-story rectory, lowered to one story and made into a singing house after Damien's death. Courtesy Hawaii State Archives, Honolulu.
Illustration 5.

U.S. Leprosy Investigation Station, ca. 1913. In foreground is enclosed Catholic cemetery. Courtesy St. Louis-Chaminade Education Center, Honolulu.
rite of passage. Damien also laid out a larger, better enclosed cemetery near St. Philomena that was fenced to keep out animals. Illustration 3 gives some idea of the extent eastward of the cemetery by 1888. Illustrations 4 and 5 show a large grassy field enclosed by low stone walls containing one or two burials. Illustration 4 was taken prior to construction of the federal Leprosy Investigation Station, between 1905 and 1909, while illustration 5 was taken about 1913. It is not clear whether any distinction was made in burial places between Catholics and non-Catholics. Emma Gibson, wife of the pharmacist at the Leprosy Investigation Station, stated that outside the stone wall surrounding St. Philomena were the graves of those who could not be buried in holy ground. These graves ended up on the federal reservation. These then may be beyond the stone wall shown in Illustration 5. In the early years, many of the sick became Catholics, on their deathbeds, if not sooner, and were buried within the Catholic churchyard.

B. Orphanages for the Children Built  
Many of the young boys and girls who were sent to Kalawao under the segregation law were forced to leave their families. Upon arrival at the settlement, those who had no one to care for them and who were still relatively healthy were quickly "adopted" by older patients, who made virtual slaves of them. They were forced to clean houses, take care of animals, gather firewood, cook, and also serve for immoral purposes. When so ravaged by leprosy that they were no longer useful, they were thrown out and forced to subsist as best they could until death provided a welcome release. These orphan children sent to the colony became one of Father Damien's special concerns. He loved them the best of all the patients and, alarmed at the moral dangers to which they were exposed, determined to protect them and assure them a decent home.

Damien's first effort to house these frightened and lonely children resulted from a donation by his Bishop of some wood, which was

shipped to Kalaupapa by boat and hauled to Kalawao in oxcarts about mid-1879. In 1880 Damien wrote that he had

a small orphanage for young leper girls. An aged widow, who is not sick, is their cook and mother. Although their houses are separated from mine, we have meals in common and share our rations.

In addition to the orphanage for girls, Damien had a boys' school where he gave religious instruction. When the Board of Health objected to this, Damien built an asylum or home for boys. Because Damien liked having the children around him, and because it enabled him to keep a watchful eye on their well-being, the boys' home was housed in two buildings, one about a dozen yards from the priest-house, the other about eighteen yards away. Damien occasionally allowed into these homes adults who had neither funds nor friends to care for them. Damien supported these institutions in the early days by begging door to door and by raising vegetables for sale. The children became farmers and grew sweet potatoes, onions, cabbage, and bananas for exercise and also to bring in money.

The exact location of various structures during the 1880 to 1890 period is somewhat unclear due to a dearth of photographic evidence. Joseph Dutton, in pointing out St. Philomena to the publisher of his memoirs, Howard D. Case, noted:

To the right of the church, in the large pasture lot, are the wash houses, drying houses and the cart house. The old home used to be over there; two, in fact. The first group of cabins, and then the first regular houses—the large ones—were built under the direction of Father Damien, assisted by me.


4. Englebert, Hero of Molokai, p. 179. Originally the boys' home consisted of a kitchen and dormitory for a dozen boys. Later Damien had to build a larger dormitory, twenty by forty feet, north of the first one. Jourdan, Heart of Father Damien, p. 234.

5. Howard D. Case, ed., Joseph Dutton [His Memoirs]: The Story of Forty-four Years of Service Among the Lepers of Molokai, Hawaii
In 1881 King Kalakaua departed on a tour of the world. Queen Kapiolani, a shy and retiring individual, did not wish to assume the royal duties in his absence. His sister, Princess Liliuokalani, therefore, became Regent. She had for several years been curious about the leprosy settlement on Molokai, and during her brother's absence decided to visit it. After her visit she mentioned that at one point

The next subject which engaged the attention of the party was an inspection of the schools under the charge of Rev. Father Damien. The buildings occupied for this purpose are supplied by the Board of Health, one of which is used for a boys' school and the other for girls, being situated in near proximity, and on the opposite sides of the road. Both are within the vicinity of the mission church.

In the girls' school are sixteen pupils in all. In the boys' school were twenty-six pupils.

The pupils of each school are separately lodged and fed. They are all either orphans or friendless, and under the immediate care of Father Damien and a native woman named Kuilia, not herself a leper.

From 1886 to 1888, the children's orphanages at Kalawao consisted of a cluster of rude huts and cabins grouped around the priest's house and the church. There was a school of sorts and a choral society and band were organized. The boys' home, according to Dutton, was just a little group of shanties scattered around Damien's house, housing some twenty to thirty boys in 1886. A year later the number had risen to sixty. Damien did most of the construction work himself on the early boys' home, using some money from the Mission account. It was not long before the Boys' Home became an accepted part of the settlement establishment, and boys were routinely placed there who were not with

5. (Cont.) (Honolulu: Press of the Honolulu Star-Bulletin, Ltd., 1931), p. 110. Ira Barnes Dutton was a former military man who came to Kalawao in 1886 specifically to aid Father Damien. Dutton was an alcoholic who in 1874 had vowed to abstain from drink, become a Catholic, and devote his life to good works. Dutton managed the Baldwin Home for Boys until his death in 1931.

6. Jourdan, Heart of Father Damien, p. 177.
parents or some close relative. To replace dilapidated buildings in 1887, the Board of Health furnished Father Damien material with which to erect two large dormitories for his orphans, each one to house 100 children. Many of the poorest cabins were then destroyed. Damien also erected dining halls of the same proportions. This enlargement was sufficient until 1890 but actually had to do until 1894, when a new and better home, subsidized by a wealthy Protestant sugar planter, opened in May 1894 as the Henry P. Baldwin Home for Boys. 7

An inspection visit by the Board of Health in 1890 included Father Damien's Boys' Home. It was noted that Damien's cottage was on the opposite side of the church from his grave, and that the church, cottage, and grave were all enclosed by a fence. The front line of the fence was bounded by the government road. The other three sides of the fence faced the old buildings constituting the Boys' Home. Its site was unfortunate, the President of the Board of Health stated, because it was on an old graveyard and below the road and subject to flooding. All the buildings were old with the exception of the kitchen and dining room. 8

C. St. Philomena Church Enlarged

The addition that Father Damien made to St. Philomena in 1876 sufficed for a while to accommodate the larger congregation. Charles Warren Stoddard, a friend of Damien, a convert to Catholicism, and a professor of English literature at Notre Dame University, visited the settlement in 1868 and again in 1884. He kept a diary during his 1884 visit and described the interior of St. Philomena:

8. "The Molokai Trip," in Hawaiian Gazette (Honolulu), March 25, 1890, in Father Damien Clippings, 1890, MS Group 165.4, Bishop Museum, Honolulu.
As I entered, the natives were chanting a litany; I went to the altar rail and knelt; the priest was kneeling within it; shortly he came to me and said: "Will you please kneel there," pointing to a small, raised seat, quite apart from the others, in one wing of the transept. I was in a semicircular enclosure just large enough to surround me, and all the others in the church--altar boys and all save only the priest and I--were lepers.

I felt not the slightest fear; the place was dingy and dirty; the stations were tilted; the little interior painted in bad taste; the holy water font was a tin cup; some rosaries were scattered about, and a few torn catechisms. The priest's robes were singularly clean and beautiful, without being extravagant. The chalice was small, the altar decorations cheap and tawdry; the candles tilted all ways. The acolytes--two--wore no robes, although there were several of the scarlet ones hanging within the church.

In one of Joseph Dutton's early letters, in 1887, he mentioned that he was painting the church and building a fence around it. He mentioned later that he had painted the church thoroughly inside and built a neat fence and planted a few trees, shrubs, and flowers.  

In 1886 Father Damien wrote the Reverend Father Daniel E. Hudson at Notre Dame, Indiana, to ask if he could procure one or two tabernacles of some light material or metal to prevent insect infestation, measuring fourteen to sixteen inches wide and deep and two feet high. Damien also requested a few six-branched candlesticks to suspend in the nave of the church. Evidently the planting that Brother Dutton did around the church in 1887 utilized seeds and plants that were sent by Father Hudson from Indiana. In a letter requesting such items, Dutton


remarked that various alterations about the buildings and grounds of the mission gave opportunity for making the effort to cultivate some flowers and grow some trees. He requested a general assortment of vegetable seeds, some Catalpa trees, some Fucheia, Hibiscus, Lilies, Roses, Canna, and other assortments.\textsuperscript{13}

Father Damien received the new tabernacles by May 1888 and immediately put the one into position at St. Philomena:

According to advice from the manufacturers I have built a solid pillar in stone--3 feet square, 8 feet high--part of it being under the floor of the church.

We had some difficulty in lifting up the interior tabernacle on account of the heavy weight of the metal part (not far below 2000 pounds), the elaborated wood-work which incloses the safe, fits perfectly well over it, and the canopy, though a little too high for our rather low church--comes right up at a few inches below the ceiling, it has a true monumental appearance and if I succeed to make the new altar, just now commenced, to correspond with the loftiness of the tabernacle, we will have a real beautiful place to consecrate and preserve the blessed Sacrament.\textsuperscript{14}

Illustration 6 is a view of Father Damien's original altar on the east side of the church. It was shipped back to Louvain at about the same time Damien's body was removed to Belgium. Illustration 7 shows the present altar. The altar at the north end of the church is shown in Illustration 8, which is undated but probably 1890s or very early 1900s. Illustration 9, tentatively dated 1904, shows that an interior architectural change has taken place. The areas projecting from the ceiling, supported by columns to the west and east of the altar in illustration 8, on which are hung pictures of Jesus and Mary, are gone by the 1904 (?) picture. Neither the exact date of the alteration nor the reason for it are as yet known. A different tabernacle, and the one existing today, is shown in illustrations 10 and 11. This new altar and tabernacle was in place by

\textsuperscript{13} Letter dated April 21, 1887, in \textit{ibid.}, pp. 410-11.

\textsuperscript{14} Letter dated May 17, 1888, in \textit{ibid.}, pp. 411-12.
Illustration 6.

Father Damien's original altar, now in Louvain, Belgium. Courtesy Damien Museum, Honolulu.
Illustration 7.

Altar that replaced Damien's original one, east side of St. Philomena Church. Courtesy Anwei V. Skinsness.
Illustration 8.

Interior of St. Philomena, looking north, no date, but between 1889 and ca. 1904. Note short columns supporting dropped ceiling to right and left of altar. Courtesy, Pacific Marianist Archives, St. Louis-Chaminade Education Center, Honolulu. This is the new altar installed about 1888.
Illustration 9.

Interior of St. Philomena, 1904? Note structural differences over archway to left and addition of decorative columns. Courtesy Damien Museum, Honolulu.
Illustration 10.

Sanctuary and altar in St. Philomena on festival day, April 1918. Courtesy State Historical Society of Wisconsin.
Illustration 11.

Interior, St. Philomena, no date, but has much the same furnishings as in Illustration 10. Courtesy Damien Museum, Honolulu.
1918, the date of illustration 10, but might date from several years earlier, the time of the interior alteration.

For the last several years of his life at Kalaupapa, Father Damien was ravaged by leprosy. During that time he had long contemplated replacing Brother Bertrand's chapel with a more permanent church. With the new altar now taking up more floor space and the congregation again being on the increase, it seemed a propitious time to make some arrangements to enlarge the structure. A new steeple, also, was needed, because a windstorm had blown down the old one.15 Brother Dutton describes this event:

My first cabin stood behind--close by the Lauhala (plant) that you can partly see [Illustration 2]. The storm came in the night and seemed about to take possession of the little cabin, which opened into the sacristy. . . . [steeple then fell]. I got the door open and went over to Father Damien's house. In the large room down stairs (that I was using as a drug room) Father Gregory, a leper, had a temporary bed. . . .

After that, the steeple being down, Father Damien was going to at once make the nave some ten feet longer, putting a new steeple further along. . . . I persuaded Father Damien to wait a little while. The Irish stone mason had just then come. We hunted, and found some fairly good rock near the old crater. Then I labored with Father Damien--advocating a new church in rock. In about a month he agreed to this. It was built over the old transepts, these old parts being taken out later. This rock church (partly wood) is our church at present, and the old nave is connected with it, as seen in the later pictures--the steeple gone--a little work over the doorway added.16

Illustration 12 is an undated photograph (possibly 1922), but has an inscription on the back written by Joseph Dutton. It says:

15. Ibid., p. 412.

16. Joseph Dutton file, 1890-1912, MS 266.2, D95, Hawaiian Historical Society Archives, Honolulu. This description of St. Philomena was written by Dutton in May 1908.
The present church at Kalawao. The attached smaller part is the nave of Fr. Damien's old church. For greater convenience in combining the two—the Sanctuary & Sacristy part of present church—was also made in wood, but the forward part & tower are in heavy rock work. Of the two rear entrances—the upper one leads into the sacristy—and the lower to a still lower room—or cell, that I used while looking after the construction work—and intended occupying it regularly—making an area in cement 3 ft. wide—and deep as the floor—but this plan was broken up. From the floor base a rock tower is built to support the altar in sanctuary. While this was going on Fr. Damien died.

Dutton's words seem to indicate that it was he who persuaded Father Damien to erect a much more substantial church out of rock. Money for this construction came in large part from abroad. While the charitable donations of American Catholics furnished the tabernacle, English Catholics and Protestants alike donated money for the enlargement of St. Philomena. Because plenty of stone was at hand, and also because of the presence among the patients of a professional mason, the addition to the church was built with stone. It was to have Gothic-style pointed arches, a square tower surmounted by a balustrade, and sheet-metal roofing. Residents of the settlement helped quarry stones, haul them, mix mortar, and perform carpentry work. When unloading the sheet metal that had arrived from England, the skiff overturned and its cargo of metal roofing sank to the ocean bottom. Damien had to substitute a makeshift roof covering. The time when the permanent roofing was obtained and its type is unknown; but it was probably corrugated metal.

Dutton noted that Father Damien took an intense interest in the construction work:

On one occasion he went to Honolulu to consult builders in order to find out how to strengthen the tops of the walls so that they would support the roof, and brought back with him a lot of two-inch planking with which to make a "cap" over the top of each wall. The rafters rested upon this cap. The two

17. Description of St. Philomena by Joseph Dutton on back of Illustration 12, no date, courtesy Damien Museum, Honolulu.

Illustration 12.

St. Philomena Church from the northwest, possibly 1922. The reason for the eventual removal of this lovely decorative entrance is not known. Courtesy Damien Museum, Honolulu.
wings of the original church served as "wings" to the reconstruction edifice, and in these the Damien altar, and the benches which were used in his day, are preserved. A new and splendid altar occupies the sea end of the present building.

Damien, although disfigured with leprosy, with swollen face, enlarged ears, and red eyes, directed the construction work wholeheartedly, dispensing orders to masons, laborers, and carpenters as needed. Damien described the structure to Rev. Hudson as being seventy by thirty feet, eighteen feet high, to be covered with iron. The belfry was above the entrance, forty feet of the building was in stone, and the rest in wood. An Irish stone mason was at work, and Damien and two of his boys were doing the woodwork. 20

In 1889 Joseph Dutton wrote Reverend Father Hudson requesting that a bell of about 400 or 500 pounds be sent by McShane & Co. of Baltimore for the church. All the work on the structure except for completion of the tower would soon be finished and Damien wished to have the bell before completion to ensure that sufficient space was provided in the belfry. Dutton added that

The new church is quite imposing (for this place) and the new altar, all say, presents a really fine appearance. The old one is also retained and both are used at the same time through the week. . . . 21

D. Furnishings of St. Philomena

Little has been found by this writer on interior furnishings of St. Philomena. All of the chandeliers were sent to Brother Dutton by

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George W. Woods, a former medical director in the United States Navy.\textsuperscript{22} According to several observers, the highlight of church services was High Mass at St. Philomena:

The church tastefully adorned, the altar bright with candles and flowers, the many choir boys in red cassocks and lace surplices, the music, the singing, community prayers recited aloud by everyone, the dignity and gentleness of the celebrant, the true father of his leprous family calling down God's blessing on them: all this, on that speck of land set in a vast ocean, constituted a spectacle which fascinated Kanakas and brought tears to the eyes of visitors from the world outside.\textsuperscript{23}

Englebert notes that the leprosy victims had a special devotion to the Way of the Cross and to Our Lady, Comforter of the Afflicted. Much time was spent in walking the fourteen stations of the sorrowful way leading from the Pretorium to Calvary, and they annually decorated the altar of the Blessed Virgin with flowers. Charles Stoddard, who attended Mass at Kalawao, was placed by Damien to the left of the altar in the place usually reserved for the priest, surrounded by a little railing. He noticed the sacred vessels of gold sent by the pastor of St. Roch in Paris and used only at High Mass.\textsuperscript{24}

Edward Clifford, an English artist, visited the settlement in December 1888, stayed for a short visit, and afterwards wrote a book on Father Damien. Clifford brought with him to Kalawao a variety of gifts:

First came an engraving of Mr. Shields' "Good Shepherd" from Lady Mount Temple; then a set of large pictures of the Stations of the Cross from the Hon. Maude Stanley; then a magic-lantern with Scriptural slides; then a number of colored prints; and, finally a grind-organ which could play about forty tunes by simply having its handle turned and this was given by Lady Caroline Charteris. Before he had been at the settlement half an hour, Father Damien was showing his boys how to use it; and I rarely went through Kalawao afterwards without hearing the grind-organ active.

\textsuperscript{22} Case, ed., \textit{Joseph Dutton}, p. 122.

\textsuperscript{23} Englebert, \textit{Hero of Molokai}, pp. 193-94.

\textsuperscript{24} Ibid., p. 193-95.
There were beautiful silver presents from Lady Grosvenor and Lady Airlie, and several gifts of money. And, most valuable of all, there was a water-color painting of the Vision of St. Francis by Mr. Burne Jones and sent by the painter. . . .

Many of these donations undoubtedly ended up in St. Philomena.

E. Housing for the Catholic Mission

One of the most difficult chronologies to trace at St. Philomena is the location of various priest-houses and Brother Dutton's quarters. Father Damien's first shelter at Kalawao was under a pandanus tree, which was located in the graveyard east of St. Philomena Chapel and under which he was buried in 1889. The rectory that he built in 1878 was evidently located west of the chapel, because a structure appears there in the clearing between the Catholic church and Siloama Protestant Church as shown in Illustration 1 (1884). No close-up views of this building have been seen by the writer. In a notation regarding Illustration 2 (early 1886), Brother Dutton said that Damien's house stood about where the cross mark is (dark spot on ground just behind rock in foreground). Dutton's first days were spent in Damien's house, a small cottage beside the church. He later moved to a house of his own a few yards away, which he stated that Damien built for him, adjoining the church. Dutton said that it stood behind (east of) the church, close by the "Lauhala" tree showing in Illustration 2. It opened by a little passageway into the sacristy of the old church. The later church was built over that part of the old one. "Where the cottage, or cabin, stood," he said, "the Father Damien pandanus--the palm under which he slept before his own cottage was built--swept the roof. Father Damien's grave is just in front of where it stood."26

There is no doubt that Dutton always lived east of St. Philomena. One of his early letters, in 1887, noted that the principal


graveyard was back of his cabin. The residence measured ten by fourteen feet, was painted inside and whitewashed outside, and connected with the passageway to the church. He also mentioned a crowd of boys playing ball under his window, near the edge of the graveyard. On Christmas of 1888, Damien invited the newly arrived Franciscan Sisters to join him for dinner. Sister Vincentia recalled later that

The Father invited us into the new Church [St. Philomena]. He had been assisting the workmen in plastering the inside wall from there to his dispensary, a little cottage in charge of "My Joseph" as he called Brother Dutton.

By 1886, then, Damien's rectory appears to have been moved east of St. Philomena, and was in close proximity to the cottage of Brother Dutton. In the first part of 1889, as the interior remodelling of St. Philomena was winding up, Joseph Dutton mentions that because of the presence of Father Conrardy, who had come from Oregon to help Father Damien in 1888, a new house was being built for him. No information on its location is given. Brother Dutton later had the cottage Damien built for him, adjoining the church, moved across the road and utilized it as a paint shop at the Baldwin Home. As mentioned earlier, in 1890 Damien's cottage was noted by a Board of Health group as being on the opposite side of the church from his grave.

The chronology of building construction, relocation, and removal around St. Philomena appears to fall into the following pattern. Illustration 13, although undated, appears in Jourdain's 1955 edition as


28. "Notes on Father Damien," from the original notes of Sr. Mary Vincentia McCormack of the Franciscan Sisters, in Appendix 2 in ibid., p. 422.


Illustration 13.

Kalawao settlement, 1894. The Baldwin Home is to the right, St. Philomena Church and Damien's old rectory are to the left. The houses in the meadow at the base of the pali (cliff) were removed about 1906-07. Courtesy Hawaii State Archives, Honolulu.
being taken in 1894. It is prior to 1906-07 when the line of cottages in
the field beyond were removed for construction of the U.S. Leprosy
Investigation Station. It will be noted that no structures are present in
the grassy area west of St. Philomena. In Jourdain's book the structure
to the right of the church is identified as Father Damien's rectory, where
he died. Brother Dutton stated in his memoirs that around 1904 Damien's
house stood to the right of St. Philomena Church:

This was at one time a two-story structure, but the lower story
was cut out, the top part dropped down upon sills, and moved
to where it now stands, being used as a singing house, and for
other purposes. It used to stand on the other side of the
church, about half way between the church and the present
house of the priest. . . . Just beyond the priest's house is
the Calvinist church. . . . The Catholic church and house
have large yards and are surrounded by stone walls. 31

Illustration 14 is reproduced in Joseph Dutton's memoirs and is
said to be taken about 1900. It again shows Damien's rectory to the
right but also present now is what must be the new priest's house in the
area between St. Philomena and Siloama. It appears as a single structure
with a roofed porch surrounded by a railing on the east end. Illustration
15 was labeled as the Catholic rectory, taken about 1895. Because it
shows additions being made to the rectory, however, it would seem to
postdate Illustration 14. Or Illustration 14 might have been taken as
early as 1894, immediately after the Baldwin Home for Boys opened. In
the later picture the porch to the east has been enclosed, a second
building to the west is being built, although some paneling and the
windows are still missing, and a connecting way between the two cottages
is being constructed. It is clear that the larger structures in 14 and 15
are the same because of the distinctive roof design and the presence of
the sundial in Illustration 15, which still stands today.

Illustration 16 is dated July 11, 1905. It shows the west side of St. Philomena and looks up the road into the area that would soon become part of the federal reservation for the leprosy investigation station. Beyond the church is Damien's rectory and another building east of that. Dutton remarked in 1904 that the old and helpless patients at the Baldwin Home were ultimately removed to the house for the dead: "This house for the dead is near the church, just below the singing house. Those who are taken to that house have finished their life of pain and trouble." The little work over the doorway of the church that Dutton mentioned in 1908 must be this decorative arch surmounted by a cross.

Illustration 17 is a view taken about 1908 during construction of the U.S. Leprosy Investigation Station. The rectory buildings still appear to be present beyond the church and the two buildings just east of it also appear to be standing, although they are hard to discern. Illustration 18, taken about 1909, still shows the rectory beyond the church but the presence of the two structures east of it is questionable. Illustration 19 is undated but from a file of records in the National Archives dated 1897 to 1923. A tentative date of about 1913 had been attached to it by the writer because it appears to be about the same time period as a similar photograph in Dutton's memoirs. A closer inspection of the west side of St. Philomena, however, shows that the rosette window has been added to the west side of the church. If the 1922 date for Illustration 12 is correct, then the removal of the decorative entrance and insertion of the circular window were done about 1923. In this picture, with the use of a magnifying lens, one can see some type of structure just north of the west entrance. It is nearly impossible to discern what this might be. Illustration 20 again shows a structure north of the church, which appears, by its roof slope and configuration, to be the same one shown in Illustration 19. This picture is undated, but thought to be pre-1927.

32. Ibid., p. 113.
Illustration 14.

Baldwin Home for Boys, Kalawao, between 1894 and 1900. St. Philomena and Damien's rectory are across the road from the home and visible in the area west of the church is a new Catholic rectory.

Illustration 15.

Catholic rectory, said to be taken about 1895. Notice building to the left appears to be under construction as is a walkway connecting it to the earlier building. Photos courtesy Hawaii State Archives, Honolulu.
Illustration 16.

St. Philomena Church, looking east, July 11, 1905. Beyond church, on left side of road, are Damien's old rectory, now singing house, and white structure that is possibly House for the Dead. Courtesy Gartley, Bishop Museum, Honolulu.
Illustration 17.

View from east of U.S. Leprosy Investigation Station under construction about 1908. St. Philomena Church and white rectory beyond are visible in middle of picture. Courtesy Bishop Museum, Honolulu.
Illustration 18.

Completed U.S. Leprosy Investigation Station, about 1909. St. Philomena Church and the rectory are visible in the left background. Courtesy Hawaii State Archives, Honolulu.
Illustration 19.

View of Baldwin Home, federal leprosarium, and St. Philomena Church. No buildings appear to the right of the church. To the far left is the rectory. Just to the left of the palm that brushes the roof of the church can be seen the gable roof of the west entrance with its rosette window. To the left of it is a structure whose use is unknown. Photo courtesy National Archives.
Illustration 20.

Fathers Maxime Andre' and Martin Dornbush in front of west entrance to St. Philomena. Father Dornbush was pastor of Kalawao from 1919 to 1929. Note structure in background, north of church. Courtesy Damien Museum, Honolulu.
Illustration 21.

St. Philomena Catholic Church, possibly ca. 1923. Decorative facade has been removed, although the cross, which is not there today, remains. Use of round concrete (?) supports to the left is unknown. Sundial is in right foreground. Courtesy Hawaii State Archives, Honolulu.
Illustration 22.

Interior of original Father Damien Church at Kalawao, looking toward west. Courtesy Damien Museum, Honolulu.
Illustrations 23-26 are all undated. They are assumed to be later pictures because of the mature and rather lush vegetation surrounding the buildings. Illustration 23 shows the present western facade, with the cross gone from the doorway pediment. Two structures are shown to the right whose function is unknown. The small tower to the right front almost appears to be a weather station. The building behind it, also shown in Illustration 26, is a small cottage facing north. The sundial is in the foreground. Illustration 24 is another view of the rectory. The porch to the east has been removed, and appears to have been gone since at least 1908. Illustration 25 is another later picture of the northwest corner of the church and Illustration 26 is a view northwest showing, from left to right, the small white building in Illustration 23, the rectory, which appears to be as shaded as in Illustration 24, the church, and then another behind the church to the right, use unknown. It is unclear when the rectory was removed from this location, but it may well have been torn down when the Baldwin Home was finally burned about 1935-36, after all its functions had been relocated to Kalaupapa in 1932.
VII. Status of St. Philomena Church Today

A. Cemetery

Father Damien ultimately died from the debilitating effects of leprosy in 1889. He had had the disease for several years. Rather than being downcast by his fate, he felt an even closer bond to his flock. He died April 15, 1889, a few days before Easter. His body, clothed in his cassock, lay in state in St. Philomena for a day, surrounded by tearful leprosy victims. A funeral Mass was held the next day and then a procession headed by the cross moved slowly to the cemetery, composed of musicians, members of the confraternities Damien had established, the Sisters and women of the Bishop Home, the coffin borne by eight patients, followed by two priests and their acolytes, and then Brothers James and Joseph with their orphans and the rest of the male population.33

Father Damien's grave was dug under the pandanus tree, which had first sheltered him on Molokai, as he had wished. The Catholic Mission by 1895 had installed a black marble cross above his grave bearing the inscription:

V.C.J.S.
Sacred to the Memory
of the Revd. Father
DAMIEN DE VEUSTER
Died a Martyr to his Charity
For the Afflicted Lepers
April 15, 1889
R.I.P.

V.C.J.S. stands for Vivat Cor Jesu Sacratissimum: Live forever the Most Sacred Heart of Jesus—the motto of the Congregation of the Sacred Hearts of Jesus and Mary.34 Brother Dutton was named as one of the

Illustration 23.

West side of St. Philomena, no date. Sundial in left foreground, unknown structures to right. Courtesy Anwei V. Skinsness.

Illustration 24.

Catholic rectory west of St. Philomena. Enclosed porch to east has been removed. Courtesy Damien Museum, Honolulu.
Illustration 25.

Northwest corner of St. Philomena, no date but probably late 1920s or 1930s. Courtesy Anwei V. Skinsness.

Illustration 26.

View to northwest of St. Philomena. Note church and two other structures in addition to the rectory. Courtesy Hawaii State Archives, Honolulu.
Illustration 27.

Father Damien's grave, looking south toward Baldwin Home, about 1895. Notice attractive wooden picket fence enclosing cemetery.

Illustration 28.

St. Philomena churchyard from southeast, probably about same time period. Damien's grave is visible in the middle of the picture. There is also a picket fence north of Damien's grave. Photos courtesy St. Louis-Chaminade Education Center, Honolulu.
Illustration 29.

Father Damien's grave, July 11, 1905. Brother Joseph Dutton is gentleman with arm across his chest. Note the pandanus tree is now gone. Courtesy Gartley, Bishop Museum, Honolulu.
Illustration 30.

Graveyard of St. Philomena, showing grave of Father Schulte north of Damien's, and across the yard, the graves of Brothers Roch, Schumpf, Van Hoof, and Boltes. No date, but prior to 1935. Courtesy Damien Museum, Honolulu.
executors of Father Damien's estate, and in 1893 was requested by the Fathers at Kalaupapa and in Belgium to put Damien's effects in order, fumigate them, and send them to the Damien Institute near Louvain, Belgium. 35

On February 3, 1936, Damien's remains were exhumed and his body returned to Belgium at the personal request of King Leopold III. His remains were finally laid to rest in a crypt in St. Joseph's Chapel, a national shrine dedicated to Damien's patron in Louvain, Belgium, and directed by the Fathers of the Sacred Hearts. Just north of Damien's gravesite in the churchyard of St. Philomena is the resting place of Father Emmeran Schulte, who worked on Kauai between 1884 and 1907. He comforted the afflicted at Kalawao for almost five years before suffering excruciating abdominal pains. He died on August 14, 1912.

Brother Charles Roch (Rech) came from Germany and arrived at Kalawao in October 1902. After only twenty-five days at the settlement, he drowned in a pool at the foot of the pali while bathing, on November 10, 1902. Brother Victor Schumpf is buried south of Brother Roch. He was also a German, arriving at the settlement in June 1899. He worked as a tailor and handyman at the Baldwin Home until he was stricken with typhoid fever. He died on February 20, 1900. Brother Serapion Van Hoof is buried south of Brother Schumpf. He was from the Netherlands and worked in the infirmary at Baldwin Home for a while. He was ultimately diagnosed as having leprosy and was sent by the Catholic Mission to Japan for treatment. He returned in a year with a bad case of tuberculosis. He finally died of that disease at Kalawao on May 12, 1910. Brother Severinus Baltes, buried south of Van Hoof, was one of the first Sacred Hearts Brothers to come to Kalawao. He was an infirmary worker and tailor, and made the black suits worn by the priests and Brothers. He died on September 19, 1921. See Illustration 31 for a plot plan of the St. Philomena churchyard.

The St. Philomena cemetery once had many visible gravesites, but many have since been obliterated by the passage of time and by grazing and browsing animals. Some of the later graves of leprosy victims are still discernible.

B. The Historical Significance of Father Damien and St. Philomena Church

St. Philomena Church is an integral part of the Kalaupapa Leprosy Settlement National Historic Landmark. It was the focal point of Father Damien's activities and a source of inspiration and hope to the afflicted. Father Damien began his labors at Kalawao as an obscure parish priest, but left it upon his death acclaimed by the public worldwide as a Christian hero and martyr. His missionary work on Molokai has been called one of the greatest examples of humanitarianism in history. In his position as parish priest, he acted as liaison between the settlement and the Hawaiian Board of Health. During his tenure, a variety of reforms in medical treatment were instituted and improvements were made in the quality of living facilities, food, and clothing.

While many foreign people in Hawaii believed that aspects of the native Hawaiian culture made Hawaiians more susceptible to the disease, others realized that leprosy threatened all of mankind. Damien's time at Kalawao coincided with new medical discoveries that defined more precisely the bacillary origins of the disease and with renewed efforts to find a medical cure. He pressed for the compassionate care of patients and attempted to alleviate their suffering by trying every cure that was offered. The attention periodically accorded his activities created worldwide interest that resulted in both increased aid from the Hawaiian government and private charitable donations from abroad.

Damien's work at Kalawao coincided with a new era of leprosy research and treatment, beginning with discovery of the leprosy bacillus in 1873. His tribulations and triumphs, new medical theories and advances, and the missionary work of others kept nations cognizant of their responsibilities in the field of leprosy care and treatment. Damien's death showed that, contrary to the belief of some members of the medical profession, the disease was infectious rather than hereditary, and that it
Illustration 31.

State of Hawaii, Department of Accounting and General Services, Survey Division, Kalawao Historical Sites, June 1965.
was not a result of first contracting syphilis. His death proved that anyone who maintained prolonged intimate contact with leprosy sufferers was susceptible to the disease. Damien helped ensure that leprosy was perceived as a universal health problem with a possible cure, whose manifestations, horrible as they sometimes were, had to be accepted and dealt with in a humane as well as scientific manner.

The importance of Damien's story to the Catholic Church is evident from his exhumation and removal to a national shrine in Belgium. Beatification proceedings were begun in 1938. After fourteen years of research and study, the Church in 1969 initiated the first major step toward the canonization of Joseph De Veuster as Saint Damien. On July 7, 1977, Damien was declared Venerable, the last step before beatification. Father Damien was also one of two persons selected by the State of Hawaii to be represented in the National Statuary Hall of the United States Capitol building, the other being Kamehameha I, unifier of the Hawaiian Islands.

On July 1, 1935, the Damien chapel at Kalawao and its premises and graveyard were declared a public memorial to Father Damien. In January 1950 repairs were begun on the church with legislative funds. The structure was renovated and rededicated on June 16, 1950. In 1969 Marines from Kaneohe Marine Corps Air Station repainted Father Damien's church, inside and out. Termite-damaged wood was replaced and masonry work done on the belfry. They also restored the fence around Damien's grave.


37. Daws presents an excellent discussion of the significance of Damien's life and works in *ibid.*, passim.

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Books


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Kalaupapa is a National Historic Landmark listed on the National Register of Historic Places as a historic district. One of the reasons it is considered significant is the abundance of archeological remains. These remains are extensive and virtually uninventoried. Kalaupapa's archeological resources may be some of the most important in the Hawaiian Islands, as it is a large area of land that has escaped agricultural and resort development. Kalaupapa's archeology has been minimally impacted in the last 50 years.

The Kalaupapa peninsula contained a sizable Hawaiian population long before the leprosy settlement was established. In 1853, there were about 140 people in the area of the settlement, 60 in Kalawao and 140 in Waikolu. When the leprosy settlement was established in 1865, many of these people refused to leave their homes. By the 1870s, there were still as many as 100 people native to the peninsula living there. These people lived apart from the patients on their own kuleana (small piece of property).

The peninsula is literally covered with remains of the pre-leprosy occupation. House platforms, religious enclosures (heiau), agricultural walls, and other similar structures can be found everywhere. The people farmed sweet potatoes mostly, although taro and tree crops were raised in the stream valleys and close to the pali. Kalaupapa was renowned for its sweet potatoes before the settlement was established.

Very few archeological investigations had been carried out at Kalaupapa before 1984. John F. G. Stokes (1909) made a site survey of heiau on the island of Molokai. This survey included Kalaupapa peninsula. In 1966 and 1967 Richard Pearson led a crew of students from the University of Hawaii in limited excavations of Kaupikiawa Cave near the northern coast of the peninsula (Pearson, et. al. 1974). Catherine
C. Summer's 1971 publication *Molokai: A Site Survey* was an overview of the state of knowledge of the archeology of the island of Molokai and included a discussion of sites at Kalaupapa.

In 1974, a Bishop Museum survey team, as part of the State-wide inventory of historic places, attempted to relocate previously recorded archeological sites on Kalaupapa peninsula. In 1978, William Barrera, Jr. conducted archeological excavations at Site 50-60-03-515 in the settlement of Kalaupapa prior to construction of a new hospital facility (Barrera n.d.)

A comprehensive survey inventory was begun in 1984 by the National Park Service in preparation for the renovation of the settlement water system (Somers 1984). A systematic, detailed survey and mapping program was undertaken along a corridor about 100 meters wide on each side of the proposed water lines from Waihanau Valley to the settlement area. Archeological remains were found in every 100 by 100 meter quadrant surveyed; only in areas disturbed by bulldozer clearing were no resources found. Areas not surveyed appear to have an equal density of archeological features. Any ground disturbing activities are likely to impact archeological resources from either prehistoric or historic time periods.

It is probable that archeological remains exist in the immediate vicinity of the church. Damien's residence stood first to the west and later to the east of the church. Brother Dutton's cottage stood behind the church and close enough that it was connected by a passageway. Stone walls around the church were moved in 1886 to enclose more of the yard; remains of the original walls may still be found. The graveyard to the north and east of the church contained as many as 2000 graves by 1887, some of them fairly shallow, and few of them marked with permanent markers. In the 1880s, a girl's orphanage, two houses for the boy's orphanage, wash houses, a drying house and a cart house were located near the church.
Some subsurface physical remains of these structures may still exist. It is very likely that artifact concentrations, in the absence of solid structural remains, could reveal the locations of these several structures. Some early photographs reveal clues to structures near the church, although what buildings they might be is not known. Concrete footings can be seen in Illustration 21, suggesting the presence of another building in the area before 1922.

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980, and National Park Service policy (NPS-28), complete archeological inventory and subsurface investigation will be required if any of the proposed actions will result in ground disturbance activities. Construction will not begin until an archeological clearance has been completed. As outlined above, the likelihood of finding historical archeological resources in the immediate vicinity of the church is high. There may also be prehistoric resources in the church area.
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PHYSICAL HISTORY AND ANALYSIS

I. Summary of Construction History

Commonly known as Father Damien's Church, St. Philomena Catholic Church was constructed in three major stages (see diagram, following page). The first building was erected in 1872 by Brother Victorin Bertrand, the year before Father Damien's arrival. That small chapel was dedicated to St. Philomena on May 30, 1872. It was a simple rectangular structure with a gable roof. Then, in 1876, Damien built an extension to the west of the first chapel. This extension remains today (without the steeple), and is variously referred to as the "west wing," "1876 nave" or "transept." The first building was largely removed during a third stage of construction in 1888-89.

The ridge lines of the gable roofs of the first (1872) chapel and the 1876 addition were both at the same level. Towering above the west entry door was a wood framed steeple. This had a low square base, a square belfrey section, and a thin, high octagonal spire, topped with a cross. The earliest photographs show the spire, belfrey and building roofs finished with wood shingles, (Illustrations 1 and 2). The wood siding, round-arched doorway and the windows of the 1876 addition appear much the same today. There was, however, no porch at the west entry nor round window in the west gable end. The tower toppled in an 1888 windstorm, and a short time later, Father Damien began major enlargement of the church. From the south wall of the 1876 addition, he built a stone extension, which became the nave, the original nave becoming a transept. The addition was not completed until after Father Damien's death in 1889. This stone structure is wider than the first building and has a much higher ridge line. This same width and height was carried through the enlargement of what is now the rear of the church, but was done in wood frame construction (Illustrations A1 and A2). The 1872 building was, for the most part, removed.
II. Existing Conditions and Materials Analysis

A. Roofing

The 1872 and 1876 roofs were wood shingled, and the portion which became the west transept was kept shingled until sometime after the porch and round window were added at its west end (Illustrations 12, 16, 20 and 21). The original roof of the west transept had a slight flattening of pitch at the eaves, which was eliminated when the transition from wood shingle to metal roofing was made. The roof of the 1888-89 construction has always had corrugated metal roofing, although it is not known how many replacements have occurred. A possible exception was when the stone addition was built, as it was reported that it had thatch roofing, possibly a temporary measure until the "iron" roofing Father Damien intended could be obtained.

The existing corrugated aluminum roofing, painted green, allows some water leakage because nails have loosened and flashing is in poor condition. The paint coating has deteriorated to a state of extreme chalkiness.

The poorly flashed junction of the main roof at the tower (Illustration A38) has allowed water to penetrate the building, causing deterioration of the anchoring of the wood cornice across the south nave wall and damage of two stations of the cross. The flashing at the intersection of the low roof ridge to the high roof is not secure and will become a major leakage point if not repaired (Illustrations A39 and A40). The roofing of the west portico is no longer secured due to extreme wood deterioration of the roof structure (Illustration A13).

B. Masonry

The masonry of Father Damien's 1888-89 major addition is of cours ed rubble stone with a hard, white lime-type mortar. The finished walls, including those of the tower, are approximately 28 inches thick. Without the benefit to date of a mortar analysis, it is speculated that the mortar may likely be a coral lime.
Except for exposed portions of the masonry in the attic and in the crawl space, both the exterior and interior wall faces are plastered with a very hard, white mortar, which again may be of coral lime. The exterior is slightly tooled to present the appearance of rectangular blocks of stone (Illustrations A20 and A21). This tooling was done "free-hand", but was carefully laid out, since the spacings are quite regular, at 14 inches vertically and 18 inches horizontally.

The exterior plastered masonry is painted a light yellow, as are all the building's exterior walls. The masonry, plaster coat and paint are all in good condition with only minor repairs required at specific locations, except the tower parapet.

Over many years, the masonry developed some cracks, which were repaired with plaster from time to time. The repairs appear to be stable, with very few showing any shrinkage or movement cracking.

C. Tower Parapet and Roof

The top of the bell tower is enclosed with a square pyramidal roof, framed with 2 by 4s, covered with sheet copper. The framing appears to be from repairs accomplished in 1950 or ca. 1969. This roof system is in good condition except for rot of the base plate of the wood framing (Illustrations A66 and A67).

Around the perimeter of the tower is a parapet, consisting of a base of projecting masonry stringcourse, a masonry pinnacle at each corner, connected with masonry parapet walls. These walls each have four openings containing a masonry "X". Each pinnacle has a small iron or steel cross, facing east/west. The pyramidal roof supports a large iron cross, facing north/south. (See Illustrations A22 through A25).

It appears that the only pinnacle and cross retaining their original materials and forms are the ones at the southwest corner of the tower (Illustration A26). The other three small crosses and the uppermost
portions of the pinnacles are replacements, possibly done ca. 1969-70 (Illustrations A27, A29 and A30). The original parapet construction was plastered stone, (and possibly brick). Considerable replacement material is visible, consisting of concrete block in the cap and "X" units (Illustrations A27-A29). The re-plastering of the parapet and the pinnacle repairs was done with cement mortar rather than an attempt to match the original.

The parapet is in poor condition, with cracks being exacerbated by vegetation growth. A major horizontal crack is very visible along the base of the west and south parapets and through the two southerly pinnacles (Illustrations A22 and A25). This cracking might be of earthquake origin, but just as likely could be the result of root penetration from the vegetation. The southwest pinnacle is unstable, a possible hazard. Vegetation growth in these cracks and in exposed masonry joints of the back sides of the parapet is causing additional loosening of the masonry and allows considerable water penetration into the masonry (Illustration A26). A plastered drainage gutter between the parapet and the base of the pyramidal roof is in need of re-forming to achieve more positive drainage (Illustrations A27 and A28).

The metal crosses exhibit various degrees of deterioration, the major one being the most advanced with rust and exfoliation causing the loss of 30 to 50 percent of the material.

D. Exterior Wood

The 1876 portion of the building (Illustrations A9-A11) and the rear frame portion of the 1888-89 building are finished with horizontal bevel siding, except, however, the rear or north wall of the later structure is finished with vertical tongue and groove siding. The exposure of the bevel siding varies from 3-3/4 inches to 4-1/2 inches.

The rear wall of the later building is reported to have collapsed in a wind storm, ca. 1969-70. Most of the wall and rear entry enclosure
is replacement material. This rear wall has an appearance similar to the previous wall but the shield shaped element below the ridge is a more simplified shape than the previous one. This consists of an additional layer of vertical siding, (compare Illustration 25 with A3 and A32). The purpose of this element is unknown, but speculatively, might have been the location of a window, perhaps round, similar to or the same window as later installed over the west portico, or the Sacred Heart motif as seen in Illustrations 9 and 11. As noted above, the present siding is tongue and groove, whereas the previous siding was vertical board and batten. The rear entry enclosure now projects about half as far from the building wall as it had at an earlier time (Illustrations 12, 25 and A3). Formerly, this also contained a doorway providing access to the cellar. Present access to the cellar is a hinged panel at the rear of the entry enclosure (Illustrations A32 and A33). Whether the entry enclosure projection was reduced during the wall replacement work or at an earlier time is not known at present, but the former is likely.

Wood trim on the building is unembellished except on the 1876 portion, where window head trim forms a slight pediment, the west gable end contains a dentil molding beneath the soffit, and the west entry portico contains moldings on the columns and in the pedimented roof element (Illustrations A12-A16 and A18).

Exterior wood (except window sash and sills) is finished with sand textured light yellow paint (Illustration A17). The texture of the rear building wall, however, does not match that of the earlier finish, containing a much lower density of sand particles.

The majority of the paint finish is in good condition, and in some areas hides extensive wood deterioration. Significant deterioration was found in the west portico structure, especially the roof framing and boarding, but in trim and columns as well (Illustration A14). Siding and trim at this (west) end of the 1876 building also contain rot and termite deterioration.
Historic photographs show a series of changes which were made to the west end of the 1876 nave (see Illustrations 2, 12, 16, 20, 21, 23 and 25). The existing entry door appears to be the original, but there was no portico. During the 1888-89 expansion of the church, a decorative portico was constructed with a gothic design motif. Later, this was removed (after 1922?) and the much simpler portico built, and a round window added in the gable end. Both of these elements still exist. Note that the roof of the 1876 nave remained wood shingle until after this second portico and the round window were constructed.

E. Interior - 1876 Nave
The west 1876 nave (Illustrations 22, A7 and A8), later functioning as a transept, has a barrel (semi-circular) vault with a wood cornice at its base, supported by two pairs of wood columns. The components of the columns at the crossing are seven-sided, with plain bases, fluted shafts and decorative capitals (Illustrations A44 and A45). About two-thirds of the distance to the rear are two square wood columns with beaded trim bases and square capitals built up of moldings (Illustrations A42 and A43).

The flat ceiling portions at either side of the vault form "side-aisles". The term "side-aisle" is used here, not in its true sense, but to distinguish the interior building space defined by the flat-ceilinged portions along each side of the vaulted ceilings, and which are also defined by the columns. The side walls each contain three double hung windows; the rear (west) wall contains an arched wood door set in a rectangular frame and the circular window above in the end wall of the vault.

The entire interior is finished in painted wood. The vault, "side-aisle" ceilings and walls above approximate window sill level are light blue, with decorative elements in white (cornices, pilasters and fluted columns). Windows and their trim, the door and surround, the shafts of the square columns, the lower portions of the walls, the pews and the floor are brown.
Flooring is nominal 1 inch by 6 inch tongue and groove (7/8-inch thickness, 5-1/2 inches exposed face) laid in the longitudinal direction directly on the floor joists. In front of each pew are two 1-1/4 inch by 2-1/4 inch rectangular holes, their purpose unconfirmed, the subject of several stories. Three coats of brown paint are evident, the latest being the lightest value, then the darkest of the three, the earlier being an intermediate value.

Some flooring has been replaced at the entry, and a section at the crossing is inadequately supported. The paint is somewhat worn from use.

Walls are horizontal tongue and groove boarding, with the exposed face being 5-1/4 inches, finished with a 1-inch by 5-inch beaded base trim and a cove molding of the same profile as the pilasters at the crossing. The brown paint wainscot is to the top edge of the first board above the window sills (approximately 2 feet, 11 inches above the floor). The wall boarding appears to be in good condition.

The "side-aisle" ceilings are approximately 9 feet 4 inches and the center of the barrel vault is 14 feet 2 1/2 inches above the floor. The horizontal boarding of the vault is similar to that of the walls, but the "side-aisle" ceiling boarding is wider. The boarding on the north side is recent replacement material. (1 by 8s) as is that on the south side at the rear. The remainder of the south side has earlier boarding, several are 15-1/2 inches wide, hand planed, possibly original. The "side-aisle" ceiling boarding appears to be in reasonably good condition, but that of the vault contains termite damage, the extent as yet unknown as it is difficult to inspect. The wall of the west end of the vault has horizontal boarding like the vault, on an additional layer of framing, resulting in the lower edge of the cornice being flush with the projecting doorway architrave. The circular window in this vault end wall has muntins radiating from the center, creating eight segments—a simplified "rose" window. The segments are glazed in green, magenta, white and blue (this sequence from the 12 to 6 o'clock positions, repeated in the
remainder of the circle). The white glass is frosted with a small flower pattern.

On the lateral alignment of the rear columns, there appears to be a framing member—like a collar beam—projecting 11-1/2 inches into the interior space at the top of the vault. This may be a remnant of the 1876 tower base framing. A hole for a bell rope still exists in the vault boarding.

Three windows in each side wall have six-over-six light double-hung sash. The meeting rails of the upper and lower sash are not closed; a space of approximately 1/2 inch allows air circulation without water intrusion. This same detail is found in several Hawaiian churches. Trim is simple 3/4 inch and 7/8 inch by 4 inch and 4-1/4-inch boards and a 1 inch thick stool. There are no aprons and no moldings.

Repair work is needed on the sash. Upper sash need to be re-secured, and some sash members should be replaced. Two lights are broken, one is missing, and all glazing should be re-puttied. New stops are needed in portions of all windows. Trim appears to be in good condition.

The west double-leaf entry door, with its arched head, repeats the vault form. It is constructed of two layers of planking, the interior vertical, the exterior set diagonally to form a diamond at the center with horizontal plank. The exterior boards are beaded on one edge. The door is hung with strap hinges at the interior, two of which are replacements, smaller than their predecessors. Another hinge has been reset at a slightly different height (Illustration A56). Part of a wood latch remains on the inner face of the door, which was replaced with a box lock (Illustrations A57 and A58). At the top of the door is a latch pin operated with a pull chain.

The door is in reasonably good condition but hardware needs to be cleaned and repaired. A section of surround at the head is missing and a strike plate is needed for the pin latch.
F. Interior - 1888 Nave

This interior space is very imposing, the feeling of space enhanced by tall, narrow lancet windows, slender columns, vertical trim elements, and the false ribs of the ceiling vault (Illustrations A5 and A6). The 1888 nave is the stone portion, the crossing and vestry is wood frame, but the entire structure's roof and vault framing is wood.

A fairly significant change occurred in the appearance of the crossing and 1888 nave, probably sometime between 1889 and ca. 1904. A historic undated photograph (Illustration 8) shows that the barrel vault of the 1876 nave and that over the east altar were retained in the 1888-89 construction to the main column lines of the 1888 nave. Also, all the columns were square, like those that still exist toward the west end of the 1876 nave. Sometime during the 1889-1904 period, the ends of the barrel vaults were removed and the pilasters at the corners of the projections on either side of the crossing extended up to the ceiling level of the 1888 nave. Further, the columns were changed to the present octagonal fluted shafts with the decorative capitols.

The ceiling vault is a pointed arch of horizontal tongue-and-groove boarding with trim applied to create false ribs. The base of the vault is defined with a wood cornice at the column lines (Illustrations A41 and A46). Columns consist of a wood post core with a built-up octagonal enclosure, plain base, fluted shafts, and decorative capitals (Illustrations A46-A49).

Flat ceiling sections between the column lines and exterior walls of the nave create "side-aisles", while the nave is visually separated from the crossing by a column pair and projecting wall sections enclosing inward returns at the ends of the stone walls.

The main altar is set off by a curved apse, made up of straight wall segments of horizontal boarding and vertical trim at the intersections (Illustration A77). The east altar (as seen from the 1876 nave) is framed by a short section of barrel vault with a pair of the smaller decorative
columns like those of the 1876 nave (Illustration A76). The crossing is further defined with a wooden communion rail (Illustration A95) on a raised floor, with the altars set on additional platforms, the east altar one level up, the north main altar three levels above the crossing.

As to color scheme, flooring and pews are brown; plastered stone walls are white; wooden walls and ceiling vault are light blue; columns, pilasters, vertical trim and cornices are white. The white plastered stone walls are decorated with a well-laid out pattern of red lines painted free-hand to read like joints of stone block masonry.

Ceiling vault false ribs are flat trim boards with a center molding. Two configurations were used, the primary directly across the vault at column points, secondary ones diagonally with bases at column points, and their intersection at the peak of the vault at span mid-points. These intersections are also decorated with wooden medallions painted with various motifs. The various surfaces and edges of the rib members are painted with light blue, dark blue, red and yellow (Illustrations A97 through A103).

Tongue-and-groove ceiling vault boarding appears to be redwood, which accounts for its significantly better condition, as in other portions of the building, than other species of lumber used originally or more recently. The redwood has not been attacked by termites whereas fir or pine has suffered extensively.

"Side-aisle" ceiling boarding is also tongue-and-groove material, set perpendicular to the side walls and flush with the bottom of the vault bearing plate, with no trim at either walls or at cornice edge. At least 50 percent of the boarding at the west "side-aisle" ceiling has been replaced, either in 1950 or ca. 1969.

The structural cores of the columns appear to be in the order of 4 inches square and have been attacked by termites, although both material and condition are difficult to assess, since access is very limited.
Column base material is worn but not to the extent that will require replacement, but portions of the molding at the floor need to be replaced due to breakage as a result of the floor settlement (Illustration A49). The built-up fluted shafts seem to be sound. Capitals are built-up of wedge-shaped wood pieces, a background piece alternating with an acanthus leaf type design (Illustration A48). The leaves are painted white and the ground in light lime green. The background panels contain stylized crosses, painted white, those of the two columns at the front of the crossing being different than the others. The capitals exhibit some past repair efforts.

The stone wall plaster is very hard and although cracks and chips have been repaired during the years, it appears to be stable. At the two south window openings, cracks extend upward from the tops of the arches (Illustration A52) and hairline cracks occur below the openings along previously repaired cracks. There is a small crack above the second opening from the south end, west side. These cracks are reported to have occurred in a recent earthquake, and have been monitored for some time with grided gauges. No movement has been detected, indicating the structure and its foundations are stable. Along the side walls at floor level and corresponding to the rear column pair, wall plaster had broken loose, probably related to the floor settlement which was greatest in this area (Illustrations A50 and A51). A cement plaster had been used for repair, which has subsequently broken loose, probably due to poor bond between differing types of cementitious material.

The south wall of the church, including that of the vault end above the cornice line, is also plastered, but without the painted block delineation above the cornice. The plaster appears to be in good condition but has water and dirt stains from leakage at the roof to tower joint, mostly along the vault edge.

The ends of the vault boarding are rotted due to this leakage, and the cornice along this wall has lost most of its anchorage (Illustration
Most nails have completely rusted away which secured the cornice to a 2 by 4 anchor plate set into the plastered wall. This plate is also rotted. Near the vault apex, the end wall has a vertical opening, approximately 2 inches wide and 17 inches high.

Flooring in the nave itself is replacement material, apparently installed in 1950 or ca. 1969. Laid in the north-south direction, it is 5-1/8 inch exposed face tongue-and-groove. At the north corners of the nave, at its juncture with the crossing, are approximately 2-foot by 4-foot portions of earlier flooring, also tongue-and-groove but slightly wider, having a 5-3/8 inch exposed face. Flooring is painted brown, with the older portions showing three hues as in the 1876 section. The flooring of the raised platforms of the crossing and altars is earlier material than the nave.

Local flooding in 1981 was channeled through the stone wall openings along the road in front of the church and directly into the building through the front door. Stain on the walls can still be seen, indicating a depth of 16 inches on the main nave floor. This weight, and possibly soil saturation in the crawl space, caused the floor system to settle, the rock footings of the floor support posts inadequate to support the load. The greatest settlement of approximately 2 inches was at the southeast column in the main nave, where the flooring was broken. The floor framing system is independent of the column support, and there is no evidence of failure of the floor framing.

The floor of the main entry appears to be concrete and is painted brown, previously gray. The exterior entry paving is similar, but is cracked and shows slight upward movement.

The high, narrow lancet-shaped window openings (Illustrations A31, A54 and A55) contain a fixed arch sash with blue, green and magenta glazing (from left to right as seen from the interior). The three sash units below are set in the hung window manner, the upper two fixed. Each of these sash contain six lights, and again, meeting rails are
constructed to leave an open gap for ventilation. Frames are set into and flush with the masonry plaster, with stops let into the frames. There is no trim and no hardware. Plastered masonry sills have very little slope, allowing water to collect under the wood frame, some of which are missing. Some stops are deteriorated or missing, and some sash are replacements or have replacement members. The two double hung sash flanking the east altar are replacements, some possibly early (Illustration A35).

G. Cellar

Beneath the sacristy at the northeast corner of the building is a space referred to as a "cell" by Brother Dutton, which he had occupied for a time during the 1888 construction. Access is from the exterior, with a hinged panel at the bottom of the north wall of the rear entry enclosure (Illustration A33). As previously noted, this enclosure formerly projected approximately double its present dimension; defined by the stone and concrete stoop. Historic photos show a doorway on the west side.

Stone and concrete steps extend down to a 3-foot 6-inch wide entryway to the east of which is the "cell" space, approximately 11 feet square. The dirt floor is about 6-1/2 feet below the bottom of the floor joists above. The rubble stone walls of the church and tabernacle foundations were plastered. At the south side of the entryway the stonework was offset to create a 12-inch ledge about 5 feet above the floor.

The two openings, one each in the north and east walls, provide some light and ventilation. Each opening is louvered with nine 2×4s (1-7/8" x 3-7/8") set vertically and spaced at 1-7/8 inches, embedded in cement plaster at the bottom and nailed to a 2×4 rail at the top.
The church floor above has had additional framing added, probably in 1950 or ca. 1969. Additional 2x6 joists were installed, supported with 4x6 beams and posts (Illustration A34).

Although it is evident that wind driven rain enters the space, the ventilation is adequate to keep it sufficiently dry. There are no apparent material degradation problems and no work of an immediate nature is needed here, except to repair the access door and its hardware. This space should not be used for any storage and should be checked regularly and kept clean and dry.

H. Sacristy
The rear portion of the 1888 building, behind the sanctuary, consists of small unfinished spaces for the sacristy (vestry). Framing and exterior siding are exposed and unfinished. Wood flooring is also unfinished. The closet and west wall of the west sacristy have unfinished interior boarding that is re-used material, whether from the first church building or another building is not known.

Also in the west sacristy is a storage cabinet all of wood, and containing some small drawers at the bottom of the wall cabinet section.

The exterior siding and some framing of the north wall of the church is replacement material, this rear wall having collapsed in a storm (ca. 1969). Most material in these spaces is in fairly good condition except some termite damaged boarding in an open closet in the east sacristy and above the doorway from the altar area.

Double hung windows of the sacristy contain either entire sash units of a later period or replacement members (Illustration A36). All these windows need repair work, including some replacement members, re-glazing, refinishing and re-hanging. Doors are wood panel and need some minor repairs. Door hardware needs restoration.
I. Belfrey

Above the south entrance vestibule, a wood board platform on three 2x4s provides a ceiling and separation from the belfrey. A small hinged panel provides access to the four by five and one-half foot belfrey space, open to the top of the tower except for the bell, its wood supporting cage and a working platform. The stone walls are roughly finished with a light parging of plaster.

The bell is located at the approximate level of the louvered openings in the upper portions of the east and west walls. This bell (presumed to be a bronze alloy) was manufactured by the McShane Bell Foundry, Henry McShane & Co., Baltimore, Maryland, in 1889 (Illustration A68).

It is approximately 28 inches in diameter at the lower lip, and some 20 inches in height. The supporting yoke (probably iron judging from the deterioration characteristics) is seated on 6 x 8 wood beams at the north and south sides of the belfrey. The loads are then transferred downward through a network of wood framing to various points in the stone belfrey walls. One short post bears on a small stone ledge in the northeast corner, just below the bell assembly. Otherwise the loads are carried by 2x3 and 2x4 vertical members to horizontal members of similar sizes, some seated in pockets in the masonry. Some members are of early date, others are recent, perhaps ca. 1969. The system is now assymetrical, as some members are missing.

Just below the bell and its immediate supporting beams is a lightweight working platform, about half consisting of a hinged access panel, which is now disconnected and laying on the fixed portion (Illustration A74). On this platform, at the northwest corner, is an iron rope guide consisting of two small wheels in a housing (Illustration A69). The pull rope and wheel are of recent date. The wheel, the axle being an extension of the bell yoke, is constructed of wood spokes and rim and plywood to keep the rope gathered around it.
Above, near the top of the belfrey space, a beam (approximately 6 x 8) appears to have provided for lifting the bell into place. It is also used to secure the lower end of the tower central cross, which extends downward through the center of the roof structure (Illustration A67).

Another feature of the belfrey is an opening in the north wall, near the peak of the main nave vault (Illustration A75). Constructed in the form of an embrasure with splayed side walls, the belfrey side of the opening is about 23 inches wide and 17 inches in height. The nave side is about 8 inches wide, 17 inches in height. The top and bottom stone surfaces of the opening are horizontal. The wall and thus the opening depth is $27\frac{1}{2}$ inches. The nave side of the opening was at some time partially filled with brick and plastered at the nave end wall side, leaving an opening of about 2 inches wide, 17 inches high.

Although the bell itself is in fairly good condition, the yoke, connectors, axles and clapper mechanisms are extremely rusted and exfoliated, rendering the bell not only inoperable but potentially dangerous as the deteriorated axles or connections could fail (Illustrations A69-A71). In addition, the wood supporting cage members exhibit deterioration, particularly at ends of members, in the form of both termite damage and rot. Any movement from a minor failure at any point in the network could cause the entire assembly to fall to the vestibule below.

In that these conditions were assessed in June of this year (1984), and all investigators (DSC, park, A/E consulting engineer) were in agreement that a dangerous condition existed, temporary support cribbing was installed in August. Four by fours were used to form cribbing on 4 x 6 timbers set on the sills of the east and west louvered openings. The bell is shimmed snug against the cribbing. No fastening devices were required (Illustrations A72 and A73).
III. Structural Systems
A. Roof and Ceiling Vault Framing

Although built at two different times, both the 1876 west nave and 1888 main nave were constructed utilizing the same structural concept. Gable roof rafters and the curved vault ribs are cross-tied with light framing members to form, in theory, a truss system supported by the exterior walls and along the column lines within the building (see Illustrations A60 through A64).

Rafters of the 1876 roof are 2x4s spaced unequally, ranging from 3 to slightly more than 4 feet, therefore not in opposing meeting positions at the ridge. Purlins supporting the roofing are a combination of 2x4s and 2x6s. Ribs of the semi-circular ceiling vault are not equally spaced, nor are their positions uniform with respect to corresponding rafters. Loads from the rafters and ceiling vault are transferred to the exterior walls and interior columns through 3-inch by 6-inch wall plates and beams.

Rafters of the 1888 roof are, with some exceptions, 2x8s at a spacing varying from 4 feet 3 inches to 5 feet 5 inches, except at the north end of the structure where the spacing is greater, at approximately 7 to 8 feet. As to exceptions, several rafters were found to be only 1 inch thick. Wood gusset plates tie rafter ends together at the ridge. Longitudinal purlins supporting the roofing are generally 2-inch by 3-inch members, although a 3-inch by 3-3/4-inch purlin was noted. In contrast to the 1876 nave, purlins in the later section are set with the greater dimension (3 inches) perpendicular to the rafters. Purlin spacing varies, ranging from approximately 2 feet 6 inches to more than 3 feet.

Except at the southwest corner of the building, 2 x 6 diagonal roof braces are nailed to the bottom edges of the rafters. From a point corresponding to the corner of the tower, these extend to the wall plate approximately 12 to 15 feet from the building corners. At the northwest building corner is a horizontal brace at the level of the vault base.
Beginning at the fifth rafter pair from the south end of the roof, rafters on both sides have a notch at about one-third of its length from the ridge as if for a collar tie. One of two explanations for this seem plausible. If a semi-circular vault similar to that of the 1876 nave had been contemplated during the initial construction, it may have cleared such collar ties, but the higher form of the existing vault would not. If such a design change occurred, the collar ties were eliminated or removed. Otherwise, the existance of the notches would imply that these rafters were re-used material salvaged from another building.

Although not positioned accurately, ceiling vault ribs are more or less set to correspond to rafter positions so that ribs and rafters can be interconnected with hangers (or web members as in a truss). At the north end of the structure, the rib spacing is continued more uniformly than the rafters, that is, there are vault ribs mid-way between the widely spaced rafter positions. Vault rib spacing throughout the structure varies from 3 feet 5 inches to 5 feet 8 inches. Vault ribs are of miscellaneous 1 inch thick material, some cut to the curvature of the vault, others not, each generally of two or three lap-spliced pieces between base and apex of the vault.

Hangers or web members, generally three on each side of the vault, are of 1 inch thick material and of various widths, positioned approximately perpendicular to the rafters. A fourth 2x4 (2-inch x 3-3/4-inch actual) hanger is connected into the vault base framing.

The primary member of the vault base framing is a 2-inch by 10-1/2-inch plate along the east side (2 inches by 12 inches along the west side). A 2x4 along the top of this plate at the vault edge provides a nailer for the cornice and is the starting edge for the vault boarding.

Rafter bearing consists of a double 2-inch by 8-inch plate, continuous along both the stone and frame wall sections. There is, however, no visible evidence that the plates are anchored to the stone walls.
"Side-aisle" ceiling boarding is attached to nailers along the stone wall and at the edge of the vault bearing plate. These nailers consist of various 2x4 and 1x2 material between an occasional 3-inch by 4-inch joist between the vault bearing plate and the stone walls, where they are set in pockets in the stonework.

At the column locations, 4x4s extend vertically to the rafters, and at the mid-points of the southerly two vault bearing plate spans, vertical steel tie-bars were installed because of deflection of the bearing plates. This deflection is as much as 3 inches, caused in part because the vault bearing plate is not oriented to act as a structural member, and in part because this plate is extremely deteriorated from air-born termite infestation. The loss of wood fiber is so great that the member has the appearance of a sponge and is not capable of carrying any load. Whether originally intended or not, the weight of the ceiling vault appears to be now carried by suspension from the roof rafters.

Roof purlins, rafters and rafter bearing plates appear to be sound. Localized termite damage was found in some ceiling vault boarding and vault ribs, but are otherwise sound. However, vault base framing as described above, column cores, 'side-aisle' boarding and trims are extensively damaged from air-born termite infestation prior to 1970s and ca. 1981 fumigation treatments.

As previously noted, part of the west 'side-aisle' ceiling boarding has been replaced; at the same time part of the vault bearing plate was replaced with a 2x12, and some of the 'side-aisle' ceiling framing was replaced with 2x4s. This repair work is located in the southerly section, and appears to have been done as part of the ca. 1969 work. This lumber is treated Douglas Fir, standard and better grade.

In various locations, it was noted that some lumber, both structural and finish, is redwood and has not been attacked by air-born termites. On the other hand, other lumber probably from various time periods, is fir and it is this material which is preferred by termites.
Returning to the 1876 nave roof and vault framing, assessment of material conditions here was incomplete because access is difficult with the risk of causing damage. Vault boarding has been attacked by termites, as had been the 'side-aisle' ceiling boarding and joists, most of which have been replaced. The 1x8 ceiling boarding and 2x4 joists along the north side, and a section at the west end, south side, appear to be part of the ca. 1969 repair work. However, there does not appear to be serious deterioration in the primary roof and vault framing.

The most critical situation is the extreme deterioration of the 1888 vault structural system. Restoration of the structural integrity should be given top and immediate priority. Detailed recommendations are described later. Also the reader is referred to separate engineering analysis reports. ¹

B. Walls

The masonry walls and their condition has been previously described and will not be repeated here. The remaining portions of the building walls are of wood stud construction. Although enclosed by exterior siding and interior boarding, the framing of the 1876 nave walls are presumed to be 2x4 studs. Their condition cannot be determined without removal of finish material, which is not recommended until it becomes necessary to replace material which fails. Siding will probably be the first to fail.

Most wall framing of the sacristy section of the 1888 structure is exposed, and consists of 2x4 and 2x6 studs. The north wall is, at least in part, replacement framing. This and the other walls do not

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exhibit deterioration. However, the system is deficient in its ability to resist lateral loading and anchorage to the foundation walls may be deficient.

C. Floor Framing and Foundations

Floor framing, in general, consists of wood joists on timber beams, supported by timber posts set on stone footings (Illustration A65). The existing framing consists of a considerable variety of material, including some remains of the first building as well as ca. 1969 repairs.

In the 1876 nave, the existing earliest joists are typically 2x4s, a 3x4 and a 4x4 being two exceptions. In 1969, additional framing was inserted, consisting of 2x6 joists (a 4x6 in one case), a new center beam, and some new posts under the center beam and the new joists. Blocking was used at the center beam to provide bearing of the older 2x4s on the new beam. At the north and south wall lines, the building is supported on posts varying from nominal 4x4s to 6x6s. All posts bear on stone footings of various sizes, the tops of which are usually set at or slightly above grade. The west end wall is supported on a rubble stone foundation.

This framing appears to be in good condition. Engineering analysis indicates that the joist system does not meet the requirements of modern design criteria; however, this does not mean that the floor is subject to collapse. Additional calculations indicate that it is still safe for the seating capacity.

In the 1888 nave, the flooring system is (probably) a 1969 replacement, consisting of 2x6 joists at 2 feet on center on 4x6 beams. Post supports under the beams are spaced at approximately 4 to 6 feet and bear on stone footings.

In ca. 1981, localized flooding of a drainage course to the south or southeast of the church caused damage to the floor system. Across
the road an open area slopes gradually downward from the steep slopes of the pali toward the ocean. The road has a stone wall along both sides, with the gate to the church immediately in line with the south entrance and another large opening in the wall across the road. This configuration caused the water to be channeled directly into and through the front door of the church. The soil in the crawl space shows evidence of the intrusion of a considerable amount of water, which could only occur by either being backed-up into the 1888 nave space from the open northwest part of the building or from seepage through the flooring, or both. It appears that the soil in this area became saturated, and in combination with the weight of 16 inches of water above floor level, the stone post footings supporting the floor system provided inadequate bearing area to carry such a load. The entire floor system thus settled, breaking and pulling away column base trim and plaster along the intersection of the floor and stone walls. The columns generally have quite large stone footings and do not appear to have settled, and the floor system of the 1888 nave is independent of the wall and column construction. No evidence of failure of floor framing members was observed, therefore the subsidence of the system is not a threat to visitor safety or to the rest of the building structure.

Again, however, engineering analysis indicates that this section of the floor system is not adequate to carry a full design live load but appears to be adequate for the existing seating capacity.

At the crossing section of the church, and just to the east of the intersection of the 1876 nave and the 1888 construction, a row of stones delineate what is probably the remains of the foundation of the west wall of the first church building. Some of the floor framing in this section appears to be from this first construction also.

The lowest level of framing in the crossing section consists of 2x6 joists at 16 inches on center supported by 4x6 beams at about 6 feet on center, and 4 x 6 posts approximately 10 feet on center. Just how much of this framing remains from the 1872 and 1876 construction is not
yet ascertained. Some may also be from the 1888 construction and other material from repairs including those of ca. 1969.

There is flooring on the lower level framing and the existing platform of the crossing was built on top of this. The platforms at the principal altar are additional layers of framing and not directly observable.

Floor framing above the cellar consists of additions to earlier framing, installed either in 1950 or ca. 1969. New 2x6 joists were set adjacent to earlier 2x6 joists, and the whole supported on new 4x6 beams and posts set along the north and south walls of the cellar space.

All of the floor framing appears to be in reasonably good condition. Some termite damage was observed, but most was probably removed and replaced in the repair work of recent years.

Although not critical, future strengthening of the floor systems may be necessary if there is a significant increase in visitation. An alternative would be to limit the number of people at any one time in the building. Since the floor of the 1888 nave is recent (ca. 1969) material, it could be sacrificed for a more economical and stronger system. The remainder of the building floors contain, in part, early material and it is strongly recommended that the flooring be left intact and all strengthening and repair work which may be undertaken be accomplished by insertion from below.

Until such time as strengthening may be considered necessary, it is recommended that the public not be permitted in the sacristy. Also it is recommended that consideration be given to restricting public access in the crossing/altar section of the church, although only in part out of consideration of floor capacity; equally or perhaps more important is protection of furnishings and statuary.
IV. Mechanical and Electrical Systems

The building has no plumbing or heating systems, and there is no evidence that it ever did. It does have, however, the remains of an electrical system which appears to have been entirely for special purpose lighting, that is, for Christmas decoration and for night services. The service drop and equipment, such as breaker and fuse boards, have been removed. The remains of knob and tube wiring exist in the attic spaces along the base of the vault, with leads at various points projecting through the vault boarding back of the cornice or in cornice members (Illustration A48).
V. Furnishings

Wooden pews in the 1876 nave are affixed to the floor, but are not in the 1888 nave, although the design of the two groups is similar. The ends and seat are of 1 inch thick material, 11-1/2 to 14 inches in width. Back rails and cleats are also of 1 inch thick lumber. Some small pieces, such as floor cleats, have been replaced, but otherwise the pews are in good condition. There also are wood kneelers, not fixed, in the 1888 nave, but none in the 1876 nave. One of these needs to be repaired. At the rear of the 1888 nave is one choir bench, a pew incorporated into a low platform, with a wood rail and hymnal shelf along the front.

The altars appear to be in good condition except for some termite damage noted in the support work at the back of the principal altar. Some of the statuary, however (Illustrations A78 through A84 and A86 through A93), has suffered some damage, several pieces need repair and reconstruction of broken and missing parts. Some repair and painting work is needed on pedestals.

The most critical need in this category is repair and conservation work on the stations of the cross at the rear of the 1888 nave which have been damaged and discolored from the water leakage occurring at the junction of the tower wall and roof.

The three metal chandeliers (Illustration A96) need conservation treatment, as they have considerable deposits of corrosion. The metal cruxifix (Illustration A85) in the tabernacle of the principal altar should be assessed to determine any necessary treatment, as should metal candelabra.

The two small organs in the church also require considerable attention. One is at the rear of the 1888 nave, the other stored in the west sacristy. The latter is so deteriorated, however, that restoration or even stabilization may not be economically warranted, depending on the importance of the instrument.
VI. Site

The church site is delineated on the south by a rubble stone wall, dry-laid, with concrete pylons marking the gateway immediately to the south of the front entry (Illustrations A1 and A19). The gate is wooden. The east boundary is also a dry-laid stone wall, but the north and west is more of a visual boundary created by the trees surrounding the open lawn area, although there is a wire fence a short distance inside the tree line.

The lawn area to the east of the church is the cemetery and contains Father Damien's grave site and marker, as well as the grave of Brother Dutton.

From the southeast corner of the church, a low concrete wall delineates a slight grade change, extending eastward about halfway across the open area to connect with a section of dry-laid stone wall which connects with that along the road. This short wall is divided by a gateway, also having concrete pylons but the gate is missing (Illustrations A104, A105 and A107).

The concrete wall has a pipe rail set into the top of the wall but it is deteriorated and part of the railing is no longer in place. The entire railing should be replaced.

The stone walls also need some attention, primarily removal of vegetation which has grown over and into the stone, and re-laying displaced stone. A new fence is needed along the north and west portions of the site to keep cattle, horses and feral pigs off the site as they have caused damage to the grave markers.

The grave markers (Illustrations A104-A108 and A121-A138) were constructed predominantly of concrete, with reinforcing being whatever was available. Where cracking of the concrete has occurred, water has caused rusting and exfoliation of metal reinforcing, and in turn, concrete
failure. Nearly all grave markers need some form of treatment, varying from minor repairs to partial reconstruction.

Father Damien's grave marker (Illustrations A108-A120) should be first priority for treatment. Here the most immediate need is to replace the decorative iron railing. The existing railing is so deteriorated that it is beyond repair, but can be used as a patten for replication.

Two other graves, including Brother Dutton's (Illustrations A122 and A123), are enclosed by pipe railings, which are also extremely deteriorated and need to be replaced. In addition to concrete repairs or reconstruction of parts of the graves markers, the application of a waterproofing treatment may be considered. The sundial west of the building needs minor repair (resetting loose stone) and cleaning.

The coconut palms to the east of the building and at the perimeter of the site present a safety problem. Falling coconuts are a hazard to visitors but warning signs would be a visual intrusion and are not desirable, nor recommended. Short of having someone available to periodically pick them, oral warnings should be routinely practiced. At such time as a printed brochure is done and made available, a warning could be included. Meanwhile, experimentation could be undertaken to, for example, adapt a tree pruning tool for this situation.

General site maintenance has been good, although additional attention is needed in pruning shrubs so they do not brush the building during the nearly continuous northeast trade winds. Also the drainage gutter along the base of the west wall of the 1888 nave needs repair and to be kept clear of vegetation.
VII. Alternative Treatments and Evaluation of Alternatives

In the case of such a significant structure as St. Philomena's, the no treatment alternative would be most ideal, thus maintaining the historic integrity of the building's materials and its feel of history. Unfortunately, such an ideal situation does not exist, for material deterioration is more persistent than even the best maintenance can overcome. In this case, the risks of the no treatment alternative are great. Because of the extreme deterioration caused by air-borne termites in the 1888 nave vault base framing, the greatest single threat to the building is the failure of this structural system. Without treatment, other deteriorated components will also fail, and this resource could be seriously damaged or lost. It is obvious that the no treatment alternative is not recommended. Allowing continued deterioration or the loss of such a significant resource is in violation of National Park Service policy.

Since the building is of national significance (in fact also international) and must be preserved, and since there is serious deterioration which must be dealt with in order to preserve the building, the evaluation is not whether treatment is necessary, but rather the methods and degree of treatment needed to preserve this significant structure.

Returning again to the 1888 nave vault, considered the most serious deterioration problem, a conventional approach is to replace the deteriorated structural components and add other structural units so the system's original design faults are overcome. Labeling this as the replacement alternative, evaluation results in the conclusion that it is not recommended. Major deteriorated elements are visible from the church interior, and replacement would also require removal of related fabric, also visible. The process and the results would be a major intervention, requiring removal and replacement of historic fabric, an adverse effect on the church interior. If the results of the replacement work did not exactly duplicate the existing and historic appearance, the results would be highly adverse.
In conjunction with the evaluation of the approach to be taken to restore the building's structural integrity was the question of timing and funding availability for full treatment. Consideration was given to providing temporary repairs or installing temporary support for the vault until funds were available for full treatment. Temporary support in the nave would be a visual intrusion; temporary framing in the attic would introduce the additional risk of damage from installation. Both would cause additional intervention and added risk of damage to this fragile structure. Thus interim repairs are not recommended.

The result of these considerations is the recommendation that treatment consist of preservation of the maximum historic fabric, to strengthen the structural system and to replace only that material which is so deteriorated that treatment would not protect structural integrity. Because of the fragility and significance of the building, the proposed treatment concept consists of in-situ treatment of termite damaged material with a polymer consolidant and installation in the attic of additional framing and anchors to remove the stresses from the base of the vault, and transfer the loads to the rafters and out to the exterior walls.

For the bell yoke, the tower crosses, and the railing at Fr. Damien's grave, deterioration of the metal is so great that replacement is seen as the only alternative. The bell and its yoke will have to be removed from the tower to accomplish treatment. The wood supporting cage also requires basic structural strengthening and replacement of deteriorated members, but there is an alternative to extensive structural redesign and the addition of members and anchors. It is recommended that the two primary beams directly supporting the bell be replaced with longer members of the same cross section and set into pockets in the masonry, thus relieving the loads from the existing framing network, most of which can then be preserved with minor replacement, repair and anchoring to assure its stability.

Because of the loss of material and structural integrity and deep penetration of vegetation root growth into the masonry of the bell tower
parpets, partial dismantling and rebuilding of these components appear to be the only prudent alternative.

Replacement of the building roofing is recommended since flashings and fasteners are failing. This replacement should be done in sections as the framing work progresses so that a minimum area of roofing is removed at any one time. Resecuring the existing roofing and replacing flashing was considered, but leaving it in place would make the roof and vault framing work more difficult. Also, the existing roofing material is not original material and can be sacrificed.

Alternative roofing material was also considered. The existing is aluminum, the original was "iron". Since the appearance would be the same, replacement with aluminum is recommended, (factory finished with the same green color as the existing) since it would have a longer life.

All other recommended repairs are not of a magnitude such that a detailed enumeration of treatment alternatives is considered necessary. The alternative to some work would be no treatment which has already been discussed and recommended against.

The building has no plumbing, heating, climate control or electrical systems. It is recommended that such systems not be installed, for the following reasons:

1. The building is a fragile structure, most particularly the frame portions, and the installation of other systems would put additional strain on the structural systems.

2. Preservation of the historic appearance of the building is important in its interpretation and presentation to the public. The components of mechanical and electrical systems which would be visible would be an adverse intrusion with respect to this presentation.
3. The building does not have spaces suitable for housing mechanical equipment or for restrooms. Should restrooms become necessary in the future, it is strongly recommended that they be provided at another location outside of the church site.

4. In this climate, heating is not necessary, nor is it usually provided. Also the climate is sufficiently moderate that climate control is also unnecessary. In fact, the building (and its contents) have survived remarkably well without induced controls and it is expected to continue to do so. Climate control is strongly not recommended (most damage has been caused by termites and water leakage). Electrical service is probably not necessary, even for maintenance. Lighting is not necessary, assuming no night use is contemplated.

It is, however, important to evaluate building protection: fire detection and suppression, and intrusion detection. Although a fire detection system alone could be designed to minimize visible intrusions, it would not offer any protection to the building. By the time anyone could reach the site from Kalaupapa Settlement, it would be too late.

Protection from loss by fire could only be accomplished, therefore, with a fire suppression system in conjunction with detection. The system would need to be water, which is available, rather than a gas system such as Halon. The building is not sealed (and it should not be) so a gas system would not be effective. However, fire is not regarded as a significant threat since there is no electrical system or other sources of fire within the building. Lightning or naturally caused forest fires are apparently rare, nor is vandalism considered to be a threat. At this time, therefore, fire detection and suppression systems are not recommended, but in the future if use and visitation patterns change, protection should be considered. It will be important to conceal piping and utilize detection and suppression heads and locate them to minimize the visual intrusion. Controls and equipment should be located in a separate structure, preferably outside the church site.
Similarly, an intrusion detection system would not presently provide protection nor is it regarded to be necessary, and is not recommended at this time. Should future conditions change, a system should be considered.

Finally, the method of accomplishing the proposed construction is an important consideration. Of paramount importance is protection of the fabric of this internationally significant structure. This will require careful and skillful craftsmanship and close supervision. Close and continual control of the work and evaluation of unknown and differing conditions requires professional supervisory decision-making on site. Fabric inspection, conditions analysis and treatment decisions will be required during the progress of the work. Scaffolding set-up and building protection will also be critical. Also because of the remote site the logistics and high cost of material and equipment delivery is an important factor. Full-time on-site supervision is necessary by a professional qualified in highly specialized historic preservation techniques. It is therefore recommended that construction be accomplished by day labor rather than by contract.
VIII. Recommended Treatments

Note: All lumber (for structural, finish work and trim) to be clear heart redwood, which resists attack by airborne termites, or pressure treated Douglas Fir. Items are numbered by recommended priority. See drawing sheets 23 through 26 included in this report for recommended structural details.

1. Structural stabilization, roof and ceiling vaults.

   a. The process of stabilizing and strengthening the ceiling vault structural systems also includes replacement of the roofing. The existing roofing should be removed in sections as the work progresses to provide protection from rain of the portions not being treated. Additional temporary cover should be provided for rain protection during progress of the work, at night and on weekends.

   b. Provide temporary protective support within the nave so that any vibration, pressure or accidental impacts will not cause damage to existing materials.

   c. Provide a scaffolding system which will allow access to the work without requiring workmen to be on the existing framing or ceiling materials.

   d. Vacuum clean all surfaces in the attic to prepare for consolidant application. Apply polymer consolidant of appropriate type to existing vault boarding, ribs, bearing plates, column cores and related deteriorated members.

   e. Inspect existing vault boarding for firm anchorage. Resecure to vault ribs where necessary with adhesive or nails.
f. Install new vault frame supporting members, connectors, rafters, purlins, and wall anchors as detailed on consulting engineers drawings included in this report. This system is designed to remove the vault load from the existing base plate and columns, transferring the loads through the roof rafters to the exterior walls. The existing vault base plate will then only have to carry its own weight and the interior of the church will remain undisturbed.

g. Replace roofing and flashing, both 1888 and 1876 portions of building. Correct flashing detail at tower. Use heavy gauge corrugated aluminum roofing, factory finished (primed and finish painted). Use roofing nails with neoprene washer.

h. Structural treatment of the 1876 (west) nave vault, similar to the main vault, does not appear to be necessary. However, this roof and vault system is to be inspected and repaired as required, including polymer consolidation of deteriorated material and the addition of new framing members adjacent to deteriorated existing members.

i. Brace frame walls at rear of main section of building to resist wind and earthquake loads. Use internal diagonal bracing.

j. Repair main nave cornice as required utilizing polymer consolidant for deteriorated portions. Except for the cornice section at the south end of the nave, conduct this work with the cornice in place. Re-anchor where required.

k. Remove and restore cornice section at the south end of the main nave. Replace 2x4 nailer in masonry wall. Reinstall and re-anchor cornice section. Repaint if required.

l. Restore west portico. Replace roofing, flashing, sheathing and all deteriorated framing, trim and moldings, including columns if
required. Reproduce all members and moldings to match existing profiles. Repaint to match existing.

2. Conduct paint, mortar and plaster analysis. Emphasis should be on sand textured painting technique, historic paint types, plaster and mortar composition and paint colors. Research and recommendations are needed to determine what types of paint should be used for future maintenance and repainting of the plastered stone masonry as well as the wood portions of the building. It appears that the historic paint was an oil base, whereas recent paint is a latex type. Include analysis of concrete repair methods for grave markers and paint analysis for Fr. Damien's grave. It is suggested the study be conducted by a Hawaii A/E familiar with historic paint systems.

3. Bell tower repairs.
   a. Dismantle south and west parapets and southwest pinnacle. Remove all vegetation. Remove all vegetation in masonry of north and east parapets, dismantling as little as possible. Remove concrete block material from all parapet sections. Remove concrete caps on southeast, northeast and northwest pinnacles and remove all crosses.
   b. Rebuild parapets and pinnacles, replace crosses. Use stone and brick to reproduce apparent original configuration. The southwest pinnacle appears to be original and can be used as a pattern. Reinforce masonry with highly corrosion resistant stainless steel pins. Replace parging and repaint masonry at both exterior and interior of parapet. Install new crosses, to match original detailing, of stainless or other rust and corrosion resistant metal, finished in dark metallic gray or black. Reform drainage gutter between parapets and tower roof for positive drainage to south corners and provide scuppers which project only slightly beyond top edge of parapet stringcourse to reduce volume of direct drainage on tower wall. Replace wood framing
sills of tower roof, framing as required, and copper roofing. (Note: Coordinate tower parapet repairs with bell assembly repairs).


d. Replace existing deteriorated 6 x 8 bell support beams and modify support so beams are seated in pockets in masonry walls so loads are transmitted directly into masonry rather than through shear connections in existing support system. Provide termite shields at beam ends. Replace deteriorated members of existing wood support system in-kind to retain historic system for in-place record. Repair, replace or strengthen, as required, bell lifting beam above bell so it can be removed and reinstalled. Retain historic configuration as much as possible.

e. Restore bell rope guide. Reinstall bell and components and restore to operable status.

f. Clean masonry of water stains and repaint, east and south walls of bell tower exterior.

4. Replace railing, Father Damien's grave. Reproduce railing of corrosion resistant metal using existing railing as a pattern and historic photographs to verify details. Repair or treat concrete and stone to prevent water intrusion. Paint scheme restoration to be determined from study evidence, masonry protection requirements and appearance. Place the existing railing in the park architectural artifact collection following conservation treatment.

5. Conduct a curatorial condition survey of the furnishings to determine conservation and repair needs and methods. Then accomplish
treatment of the objects as indicated. Furnishings requiring treatment include stations of the cross, statuary, two organs, and chandeliers. Pews and altars need minor repairs.

6. Conduct annual termite inspections and periodic treatment as required, or on at least a three year basis.

7. Repair windows and exterior doors.
   a. Replace missing and deteriorated sash stops.
   b. Replace missing and deteriorated wood sills. Repair or replace deteriorated wood jamb members (to the extent possible, polymer consolidation would be preferable, assuming deterioration is predominantly at the lower ends).
   c. Repair and re-paint sash.
   d. Re-putty glazing.
   e. Replace missing and broken glazing.
   f. Replace counterweight ropes.
   g. Repair or replace door hardware, south and west entries. Repair and refinish doors as required.

8. Grave repairs, replace railings.
   a. Repair concrete and masonry of all other graves.
   b. Replace pipe railings at two graves and on low wall to east of building.
   c. Install fencing to keep cattle, horses and feral pigs out of church site.
9. Interior repairs.
   a. Relevel floor system, 1888 nave, to correct breakage and offset of flooring at southeast column.
   b. Minor flooring repairs, various locations.
   c. Repaint floor at south entry and repaint 1876 nave flooring.
   d. Repair column base trim and repaint, two columns, 1888 nave.
   e. Repair wall plaster and repaint, 1888 nave at floor, two locations (east and west walls).
   f. Repair plaster cracks and repainting at two windows each side, south end of main nave.
   g. Repair column capitals, main nave, as required. This work will involve consolidation, in-fill and refinishing by a conservator.
   h. Clean masonry wall of stains from water intrusion and repainting, south wall, main nave interior.
   i. Repair or replace interior door hardware, repair and refinish doors as required (three doors).

10. Site work
   a. Repair dry-laid stone walls.
   b. Remove vegetation from stone walls.
   c. Clear site of non-historic, uncontrolled vegetation and institute a vegetation control program.
   d. Replace identification sign posts.
11. Replace siding and trim, exterior walls of 1876 (west) nave, including sand textured painting. Replace only when necessary, as failure of existing material and finish occurs.

12. Miscellaneous repairs

   a. Repair and refinish wood louvers in the three bell tower openings.

   b. Repair access door to cellar, repair or replace hardware, and rehang.

   c. Repair and reanchor communion railings at crossing.

   d. Repair cabinets and shelving in sacristy, replacing deteriorated wood.

   e. Replace rear exterior door and hardware.

   f. Provide access gate to crawl space.
IX. Effect of Recommended Treatments

Because of the significance of St. Philomena Church, the objective is to stabilize, repair and preserve the deteriorated materials and components of the building in such a way as to cause the least intervention to the historic fabric. The proposed treatments will have an effect on the building, but the intent is that there be no adverse effect, rather beneficial results in preservation of the structure.

The purposes of the recommended treatments are to restore basic structural integrity, preserve and restore deteriorated fabric, eliminate the deteriorating effects of water intrusion, and eliminate safety hazards.
X. Recommendations for Further Study

1. Conduct a curatorial condition survey and accomplish conservation treatment as indicated for historic objects, including paintings, statuary, organs and chandeliers.

2. Paint, mortar and plaster analysis, with emphasis on sand textured painting technique, historic paint types, plaster and mortar composition, paint types to be used in preservation work and maintenance, and paint colors. Much of this information will be needed for the recommended treatment work. A paint study of Fr. Damien's grave is also needed to establish recommendations as to the advisability of restoring the paint scheme.


Additional recommendations:

5. During the time the stabilization work is being accomplished, protection of the historic furnishings will be necessary. It is recommended that they might be stored at the church in Kalaupapa. At St. Philomena's, a temporary exhibit could be set up to explain the work and show the appearance of the furnished building.

6. An investigation should be made to determine by what means it might be possible to protect the site from flooding. The source of heavy storm run-off needs to be identified and whether control can be accomplished at some point removed from the church site itself. Alternatives must also be evaluated to determine what would least impact archeological resources.
7. Significant architectural artifacts need to be preserved in a secure park collection. Examples are the railing of Fr. Damien's grave, and the southwest pinnacle and cross of the church tower. These are too deteriorated to restore to a functional in-situ condition but are significant fabric that could be utilized in future museum exhibits.
XI. Cost Estimates
ST. PHILOMENA CHURCH, KALAUPAPA N.H.P.
PROPOSED TREATMENTS AND CONSTRUCTION COST ESTIMATES

Estimate based on work proposed to be done by day labor and 1984 costs.

<table>
<thead>
<tr>
<th>Item/Action</th>
<th>Materials</th>
<th>Quantity</th>
<th>Units</th>
<th>Cost/Unit</th>
<th>Est. Cost</th>
<th>Priority</th>
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</thead>
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<tr>
<td>1. General Requirements</td>
<td>Scaffolding, purchased</td>
<td>2400 sq. ft. surface coverage</td>
<td></td>
<td></td>
<td>2400.00 sq. ft.</td>
<td>2.40</td>
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<tr>
<td>2. Site Work</td>
<td>Replace railing at Fr. Damien's grave. Use reproduction based upon historic photographs and existing railing.</td>
<td>corrosion resistant metal flat black finish 1/2&quot;x16&quot; 52 pieces 1/2&quot;x34 1/2&quot;x 68 pieces 1 1/2&quot;x1 1/2&quot;x36&quot; 7 pieces small caps 120 pieces large caps 7 pieces 1 3/4&quot;x3/8&quot; 132 lin. ft.</td>
<td></td>
<td></td>
<td>45.00 lin. ft.</td>
<td>560.00</td>
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<tr>
<td></td>
<td>Termite treatment, soil poisoning</td>
<td>water emulsion type toxicant 1 gal/10 sq.ft. x 2800 sq.ft. = 280 ga</td>
<td></td>
<td></td>
<td>2800.00 sq. ft.</td>
<td>2.00</td>
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<tr>
<td></td>
<td>Clearing</td>
<td>1000 sq.ft.</td>
<td></td>
<td></td>
<td>1000.00 sq. ft.</td>
<td>2.00</td>
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<tr>
<td></td>
<td>Identification sign, replace post</td>
<td>4&quot;x4&quot; redwood</td>
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<td></td>
<td>12.00 lin. ft.</td>
<td>100.00</td>
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<td></td>
<td>Pipe railing, replace in total</td>
<td>2&quot; dia. pipe, 200 lin.ft 90 degree elbows, 2 pieces tees, 6 pieces four way cross, 4 pieces</td>
<td></td>
<td></td>
<td>60.00 lin. ft.</td>
<td>200.00</td>
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<tr>
<td></td>
<td>Pipe railing, replace at Rev. Shulte &amp; Br. Dutton graves</td>
<td>72.00 lin.ft.</td>
<td></td>
<td></td>
<td>72.00 lin. ft.</td>
<td>200.00</td>
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<tr>
<td></td>
<td>Replace wire fence</td>
<td>steel posts, galvanized wire</td>
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<td></td>
<td>270 lin. ft.</td>
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<tr>
<td>3. Concrete</td>
<td>Fr. Damien's grave, clean and repair</td>
<td>approximately 22.5 sq.ft. of surface on marker</td>
<td></td>
<td></td>
<td>22.50 sq. ft.</td>
<td>30.00</td>
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<tr>
<td></td>
<td>Repair other graves</td>
<td>partially reconstruct</td>
<td></td>
<td></td>
<td>11.00 each</td>
<td>500.00</td>
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<tr>
<td></td>
<td>Sign post footings</td>
<td>.25 cu.yd/post x 2</td>
<td></td>
<td></td>
<td>0.50 cu.yd.</td>
<td>550.00</td>
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<tr>
<td>4. Masonry</td>
<td>Tower parapet, dismantle, remove all vegetation and remove all non-historic materials. Reconstruct with reinforcement to resist wind and seismic loads. Reshape pinnacles to match southwest pinnacle. Reshape gutter and install new scuppers.</td>
<td>stone to match historic corrosion resistant reinforcing</td>
<td></td>
<td></td>
<td>1.00 lumpsum</td>
<td>10000.00</td>
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<tr>
<td></td>
<td>Dry laid stone fences to be relaid where collapsed.</td>
<td>10'-0&quot;x3'-0&quot; area of fence</td>
<td></td>
<td></td>
<td>10.00 lin. ft.</td>
<td>120.00</td>
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<td></td>
<td>Remove vegetation from stone fence.</td>
<td>80 lin.ft. of fence</td>
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<td>80.00 lin. ft.</td>
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<tr>
<td></td>
<td>Mortar and plaster analysis</td>
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<td></td>
<td></td>
<td>1.00 lumpsum</td>
<td>5000.00</td>
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<td>Section</td>
<td>Description</td>
<td>Cost Breakdown</td>
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<tr>
<td>5. Metals</td>
<td>Structural connections &amp; beam</td>
<td>see M&amp;E Pacific phase 3 report</td>
<td>1.00</td>
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<tr>
<td></td>
<td>Bell tower crosses</td>
<td>replace in kind, factory finish</td>
<td>5.00</td>
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<tr>
<td>6. Wood and Plastics</td>
<td>Polymers to consolidate portions of vault ribs, plates, boards, portions of columns and cornice and other deteriorated members.</td>
<td>see M&amp;E Pacific phase 3 report</td>
<td>1.00</td>
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<td></td>
<td>Main roof and vault frame strengthening</td>
<td>extent to be determined during construction phase. contingent amount</td>
<td>1.00</td>
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<td></td>
<td>1876 roof and vault repairs, as required</td>
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<td></td>
<td>Access gate to crawl space</td>
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<td></td>
<td>Roof sheathing, framing, trims, and moldings, replace at west portico</td>
<td></td>
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<tr>
<td></td>
<td>Flooring and floor framing, relevel in 1888 nave</td>
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<tr>
<td></td>
<td>Frame walls, brace to resist wind and seismic loads</td>
<td></td>
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<td></td>
<td>Floor at 1888 nave, repairs at column base and wall junctions.</td>
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<td></td>
<td>1876 portion, replace siding and trim when required</td>
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<td></td>
<td>Column capitals, repair</td>
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<td>Cornice, south interior wall, remove existing nailer/replace.</td>
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<td></td>
<td>Bell tower roof framing, replace</td>
<td></td>
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<tr>
<td></td>
<td>Bell tower, wood louvers</td>
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<td>7. Thermal and Moisture Protection</td>
<td>Flashing, install metal flashing roof to bell tower junction</td>
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<td>Metal roofing, remove as structural work progresses and replace in kind.</td>
<td>64 lin.ft. with 6&quot; lap typical</td>
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<td>Bell tower roofing, remove and replace</td>
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</table>
8. Doors & windows
   Missing or cracked glazing to be replaced. Dismantle/refurbish all windows, repair sashway, replace counterweight ropes and repute beads.
   Door hardware, refurbish/replace Repair and refinish doors
   North ext. door and hardware
   North cellar door, repair door, replace/refurbish hardwr/rehang
   Interior doors, repair hardware, refinish as required
   4.00 each 25.00 100.00 7
   4.00 each 500.00 2000.00 7
   2.00 set 250.00 500.00 7
   2.00 each 750.00 1500.00 7
   1.00 each 750.00 750.00 12
   1.00 each 200.00 200.00 12
   3.00 each 750.00 2250.00 9

9. Finishes
   South wall interior, clean & paint at staining
   Parapet wall, parge and paint reconstructed wall to match existing.
   Paint analysis
   Bell tower, south and east sides remove water stains and paint
   1888 nave, wall plaster repair at window openings and floor line
   Floor, repaint at 1876 nave and south entry
   Reconstructed west portico, paint
   1 gallon
   lime mortar parging
   primer 2 gallons
   finish 3 gallons
   proposed A/E contract
   finish 2 gallons
   lime plaster
   floor paint, four gallons
   sand textured paint
   1.00 lumpsum 1100.00 1100.00 9
   260.00 sq.ft. 11.00 2860.00 3
   1.00 lumpsum 25000.00 25000.00 2
   100.00 sq.ft. 11.00 1100.00 3
   1.00 lumpsum 1250.00 1250.00 9
   420.00 sq.ft. 5.30 2226.00 9
   1.00 lumpsum 1250.00 1250.00 1

10. Specialities
    Cabinets and shelving at sacristy, repair as required
    Communion rail, repair/reanchor
    1.00 lumpsum 2500.00 2500.00 12
    1.00 lumpsum 1000.00 1000.00 12

11. Equipment
    not applicable

12. Furnishings
    Stations of the cross, statuary, pews and organs
    curatorial condition survey and conservation treatment
    1.00 lumpsum 10000.00 10000.00 5

13. Special construction
    Bell, yoke and bell cage; restore to operational condition
    bell conservation, replace yoke, repair bell cage
    1.00 lumpsum 25000.00 25000.00 3

14. Conveying Systems
    not applicable

15. Mechanical
    not applicable

16. Electrical
    not applicable

GRAND TOTAL 351210.00
# Subtotals by Priority

<table>
<thead>
<tr>
<th>Project</th>
<th>Priority</th>
<th>Cost</th>
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<tbody>
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Appendix A. Record Photographs

Note: At the end of each caption the date (month and year) of the photograph is given and the initials of the photographer (R.L. Carper, Paul C. Cloyd or Henry G. Law, National Park Service).
Illustration A1.

St. Philomena Catholic Church. View from south. (For the purpose of this report, the longitudinal axis of this portion of the building was used as the north-south orientation and all directional references hereafter are with reference to that "building north". Thus this view would be from the "southeast"). This portion of the church was built in 1888-89. 6/84. R.L.C.
Illustration A2.

'East' elevation. The front portion of the building is plastered coursed rubble stone masonry, the rear portion wood frame. The present roofing is corrugated aluminum, which replaced earlier corrugated metal roofing. The first was corrugated iron. 6/84. R.L.C.
Illustration A3.

View from 'northwest.' The projecting wing was constructed in 1876 by Fr. Damien, an addition to the first building built by Brother Bertrand in 1872, which was within the 1888 portion and removed after the later section was built. The projecting wing is referred to in this report as the 1876 nave. The roofing was originally wood shingle. The date of conversion to corrugated metal is not known. The porch and round window are later period modifications, dates unknown. The rear entry enclosure was recently rebuilt. The former enclosure was larger and had another doorway to the cellar. Compare these details with historic photos. 6/84. R.L.C.
Illustration A4.

'West' elevation. 6/84. R.L.C.
Illustration A5.

1888 nave as seen from the south entrance. 8/84. P.C.C.
Illustration A6.

The 1888 nave as viewed from the crossing. The plastered masonry walls are painted white with the stone block pattern painted on in red. The flat 'side-aisle' ceilings and vault are of wood boarding and painted light blue. Columns and cornices are white. Water and dirt stains at the junction of the vault and wall are due to leakage at the roof to tower flashing. This leakage has damaged the stations of the cross on the south wall. 8/84. P.C.C.
Illustration A7.

Altar attributed to Father Damien at the 'east' side of the crossing, as viewed from the 1876 nave. Wood boarding of the walls, ceilings and vaults are painted light blue; columns, cornices and trims are white. 8/84. P.C.C.
Illustration A8.

The 1876 nave as seen from the crossing. The painted wood flooring, wall wainscot, windows, doorway, the rear columns and the pews are brown. 8/84. P.C.C.
Illustration A9.

1876 nave. The portico is the latest of two that were built. Initially there was no portico at this 'west' entrance. The round window is also a later addition. Compare with historic photos. 6/84. R.L.C.
Illustration A10.

'West' elevation, 1876 nave. 6/84. R.L.C.

Illustration A11.

'North' elevation, 1876 nave. 'South' elevation similar. 6/84. R.L.C.
Illustration A12.

Detail of window in gable end of 1876 nave. Also note dentil molding beneath the eaves. 6/84. R.L.C.

Illustration A13.

Detail of portico roof at 'west' entry of 1876 nave. Deterioration of the framing and sheathing no longer will hold the roofing nails. 6/84. R.L.C.
Illustration A14.

Detail at 'northwest' corner of 'west' portico roof, 1876 nave. Framing, sheathing, trims and moldings are extremely deteriorated due to air-borne termite damage and rot. Note the sand-textured paint. All of the wood sections of the building are finished in this manner. 6/84. R.L.C.

Illustration A15.

Detail at 'southwest' corner of 'west' portico roof, 1876 nave. 6/84. R.L.C.
Illustration A16.

Eave detail at 'northwest' corner of 1876 nave. 6/84. R.L.C.

Illustration A17.

Detail of sand textured painted siding at 'west' elevation of 1876 nave. 6/84. R.L.C.
Illustration A18.

Detail of windows at 'north' elevation of 1876 nave. 6/84. R.L.C.
Illustration A19.

'South' elevation of 1888-89 stone masonry portion of church. 6/84. R.L.C.
Illustration A20.

'South' entrance doorway of 1888-89 portion. Note scoring of masonry plaster to create the impression of stone block joints. 6/84. R.L.C.
Illustration A21.

Detail of wood louvered opening in 'south' wall of bell tower. 6/84.
R.L.C.
Illustration A22.

'South' parapet of bell tower. Note especially the crack along the base of the parapet and pinnacles. The 'southwest' pinnacle and cross (at left) appears to be the only original material and form of the four. 6/84. R.L.C.

Illustration A23.

'East' parapet of bell tower. 6/84. R.L.C.
Illustration A24.

'North' and 'west' parapets of bell tower. Note repair caps on pinnacles resulting from replacement of crosses. 6/84. R.L.C.
Illustration A25.

View of parapet of 'west' elevation of bell tower. Note base crack here also. The 'southwest' pinnacle is not secure.
6/84. R.L.C.

Illustration A26.

'Southwest' pinnacle showing vegetation growth in masonry which forces masonry work apart and allows water intrusion.
5/84. H.G.L.
Illustration A27.

'Southeast' pinnacle of bell tower. 5/84. H.G.L.

Illustration A28.

'East' parapet. Note concrete masonry units used for repairs. The copper roofing is in reasonably good condition but the drainage gutter around the base of this square pyramidal roof does not drain well and the base plate of the roof framing is rotted. All crosses are rusted and exfoliated. 5/84. H.G.L.
Illustration A29.

Pinnacle at 'northwest' corner of bell tower. 5/84. H.G.L.

Illustration A30.

Pinnacle at 'northeast' corner of bell tower. 5/84. H.G.L.
Illustration A31.

Typical lancet window of masonry portion of church. 6/84. R.L.C.
Illustration A32.

Rear ('north') elevation of 1888-89 portion of building. This wall was replaced after collapse during a storm. The sand density in the paint on this wall does not match that of the other siding of the building. 6/84. R.L.C.
Illustration A33.

Detail of rear steps and access door to cellar. 6/84. R.L.C.

Illustration A34.

View of cellar toward 'southeast' corner. 8/84. P.C.C.
Illustration A35.

Window of 'east' wall, frame portion of 1888-89 section of church. 6/84. R.L.C.

Illustration A36.

Window of 'north' wall, frame portion of 1888-89 section of church. 6/84. R.L.C.
Illustration A37.

Detail of one of the inverted 'U'-shaped iron elements in the upper part of the 'east' wall masonry. If any exist in the 'west' wall, they are not visible. Their purpose has not been determined. 8/84. P.C.C.

Illustration A38.

Detail at juncture of main roof and bell tower. Numerous attempts to seal this joint are evident. Leakage here is the cause of damage to the stations of the cross. 6/84. R.L.C.
Illustrations A39 and A40.

Details of flashing at juncture of 1876 and 1889 roofs. Also note the vertical siding which is at both sides of the 1876 roof. 6/84. R.L.C.
Illustration A41.

View of 1888 nave from above principal altar. 8/84. P.C.C.
Illustrations A42 and A43.

Details of capital and base of one of two columns toward 'west' end of 1876 nave. 8/84. P.C.C.
Illustrations A44 and A45.

Details of capital and base of column at intersection of 1876 nave with crossing. The two columns at this intersection are seven-sided, whereas the larger columns of the 1888 nave are octagonal. Some column capitols have been repaired with a fiberglass filler. 8/84. P.C.C.
Illustrations A46 and A47.

Details of capital and base of column at 'northwest' corner of crossing. 8/84. P.C.C.
Illustration A48.

Capital of column at 'northwest' corner of crossing. The holes in the bottom of the cornice were for wiring decorative lighting. 8/84. P.C.C.

Illustration A49.

Base of 'southeast' column of 1888 nave showing subsidence of floor structure, which damaged base trim. 8/84. P.C.C.
Illustrations A50 and A51.

Details showing subsidence of floor of 1888 nave. The greatest settlement occurred in the area of the two 'southern-most' columns. Repairs to the wall plaster have failed as the cement plaster mix did not bond to the earlier lime plaster. 8/84. P.C.C.
Illustration A52. Earthquake damage at 'south' window of 1888 nave, west wall. Similar damage occurred at the window on the opposite side of the building. There has been no movement recorded since the tell-tale was installed. 8/84. P.C.C.
Illustration A53.

Top of cornice at 'south' wall of 1888 nave. The nails which formerly secured it to the wood nailer set in the masonry wall are completely rusted away, and it is held in place only by the ends of the cornice members at the base of the vault. 8/84. P.C.C.
Illustrations A54 and A55.

Window details, 1888 nave. Only the lower sash units of these windows are operable. There is no hardware, nor does it appear that there ever was, so they must be propped open. Some glazing is missing, as illustrated here, or broken. Sash, sash guides, wood jambs and sills need refurbishing, and in some cases, elements need replacement. 6/84. R.L.C.
Illustration A56.

Interior of 'west' entry door, 1876 nave. The door is built-up of two layers of one-inch thick tongue-and-groove boarding. Note the repositioned and replacement hinges. 6/84. R.L.C.
Illustration A57.

Hardware detail, interior of 'west' entry door, 1876 nave. Three periods of hardware are evident, the missing rim lock probably the intermediate set. Part of the wood slide-latch is obviously missing. 8/84. P.C.C.
Illustration A58.

Hardware detail, exterior, 'west' entry door, 1876 nave. This lockset is inoperable. 8/84. P.C.C.
Illustration A59.

Hardware detail, 'south' entry, 1888 nave. This lockset is only partially operable. 8/84. P.C.C.
Illustration A60.

Attic at 'west' side of 1888 nave vault. The 'east' end of the 1876 nave vault is visible here. The flat 2x12 base plate of the 1888 vault is at the extreme lower right of the photo. 8/84. P.C.C.
Illustration A61.
Attic along 'west' side of 1888 nave vault, view toward south. Part of the flat 'side-aisle' ceiling boarding has been replaced, probably ca. 1969. There are no visible anchors securing the double 2x8 rafter bearing plate to the stone wall. 8/84. P.C.C.

Illustration A62.
1888 nave ceiling vault as seen in 'west' attic. 8/84. P.C.C.
Illustration A63.

Attic along 'east' side of 1888 nave vault, view toward south. Most rafters and vault ribs are sound, but the vault base plates, a flat 2 inch by 10\(\frac{1}{2}\) inch member on this side (lower center of photo), are extremely deteriorated from air-borne termite infestations. Most of the weight of the vault is probably carried in suspension from the rafters. The end of the stone wall is also visible in this photo. 8/84. P.C.C.

Illustration A64.

Attic along 'east' side of 1888 nave vault, view toward 'north', showing wood frame portion of building, open to the east sacristy below. The deteriorated vault base plate is at lower left. 8/84. P.C.C.
Illustration A65.

Crawl space beneath the crossing, view toward 'southeast'. 8/84.
P.C.C.
Illustration A66.

Detail of deteriorated base plate of bell tower roof at 'southeast' corner. 8/84. P.C.C.

Illustration A67.

View from below of bell tower roof framing. The lower end of the main cross is within the vertical framing members. 8/84. P.C.C.
Illustration A68.

The bell was manufactured by the McShane Bell Foundry, Henry McShane & Co., Baltimore, Md., in 1889. 6/84. R.L.C.

Illustration A69.

Secondary clapper and lower portion of rope wheel, which is not the original. The rope guide is visible in the far corner on a line halfway between the clapper ball and rope wheel. 6/84. R.L.C.
Illustrations A70 and A71.

Details of the deteriorated bell yoke. The bell is frozen because of the rust and exfoliation of the iron. 6/84. R.L.C.
Illustration A72.

Detail showing cribbing installed in August, 1984 as a safeguard against failure of the deteriorated shafts and connections of the bell yoke. 8/84. P.C.C.
Illustration A73.

View of bell from above after temporary cribbing was installed. Cribbing is supported on sills of louvered openings. 8/84. P.C.C.
Illustration A74.

View from below of platform beneath bell, prior to installation of temporary cribbing. 6/84. R.L.C.

Illustration A75.

Opening in wall between bell tower and main nave, partially closed with brick. 6/84. R.L.C.
Illustration A76.

Altar at 'east' side of crossing. The original altar built by Fr. Damien was taken to Belgium in 1936. 8/84. P.C.C.
Illustration A77.

Principal altar. The photographs following are of the statuary of this altar. 8/84. P.C.C.
Illustrations A78 and A79. Angel candelabra on principal altar. 8/84. P.C.C.
Illustration A80.

Unidentified statuette, possibly St. Aloious, at base of principal altar. 8/84. P.C.C.

Illustration A81.

Immaculate Heart statuette. 8/84. P.C.C.
Illustration A82.
Sacred Heart statuette. 8/84. P.C.C.

Illustration A83.
St. Joseph statuette. 8/84. P.C.C.
Illustration A84.

Blessed Mother with St. Anne statuette at base of principal altar. 8/84. P.C.C.

Illustration A85.

Crucifix in tabernacle of principal altar. 8/84. P.C.C.
Illustrations A86 and A87.

Statue of St. Philomena and base at left corner of main nave and crossing. 8/84. P.C.C.
Illustrations A88 and A89.

Sacred Heart statue and base at left of principal altar. 8/84. P.C.C.
Illustration A90 and A91.

Immaculate Heart statue and base at right of principal altar. 8/84. P.C.C.
Illustration A92 and A93.

St. Joseph statue and base at right corner of main nave and crossing. 8/84. P.C.C.
Illustration A94.

Offering box built into 'west' wall of entry vestibule, 1888 nave. 6/84. R.L.C.
Illustration A95.
Detail of communion rail. 8/84. P.C.C.

Illustration A96.
One of three metal candelabra of the 1888 nave. 8/84. P.C.C.
Illustration A97 and A98.

Ceiling medallions, 1888 vault. Sequence is from sanctuary to 'south' nave wall. 8/84.
P.C.C.
Illustrations A99 and A100.

Ceiling medallions. 8/84. P.C.C.
Illustrations A101 and A102.

Ceiling medallions. 8/84. P.C.C.
Illustration A103.

Ceiling medallion at 'south' wall, 1888 nave. 8/84. P.C.C.
Illustration A104.

View of site at 'east' side of church. 6/84. R.L.C.
Illustration A105.
View toward south of church site 'east' of church. 6/84. R.L.C.

Illustration A106.
View toward sea of northeast portion of site. 6/84. R.L.C.
Illustration A107.

View of southeast corner of site. 8/84. P.C.C.
Illustration A108.

Fr. Damien's grave. 6/84. R.L.C.
Illustration A109.
Fr. Damien's grave, from 'east'. 6/84. R.L.C.

Illustration A110.
Fr. Damien's grave, from 'south'. 6/84. R.L.C.
Illustration A111.

Fr. Damien's grave. Note deterioration of decorative railing and missing elements. Part of gate still exists. 8/84. P.C.C.

Illustration A112.

Fr. Damien's grave. Although some stone was used, concrete was used extensively for the grave markers at St. Philomena. 6/84. R.L.C.
Illustration A113.

Corner post of railing, Fr. Damien's grave. 6/84. R.L.C.
Illustration A114.

Detail at center rail, Fr. Damien's grave. 6/84. R.L.C.
Illustrations A115 and A116.

Details of railing, Fr. Damien's grave, showing deterioration of metal. 6/84. R.L.C.
Illustrations A117 and A118.

Details of intermediate and corner post at bottom rail, Fr. Damien's grave. 6/84. R.L.C.
Illustrations A119 and A120.

Gate pintle details, railing of Fr. Damien's grave. 6/84. R.L.C.
Illustration A121.

Grave of Rev. F. Emmeran Schulte, July 29, 1848 - August 14, 1912, (No. 2 on Site Plan drawing). 8/84. P.C.C.
Illustration A122.

Illustration A123.

Detail of deteriorated pipe railing of Br. Dutton's grave. 6/84. R.L.C.
Illustration A124.
Grave of Kaikala Kameahonua, died Aug. 14, 1928 (No. 4 on Site Plan drawing). 8/84. P.C.C.

Illustration A125.
Grave of Geo. Kualaku, died Sept. 18, 1927 (No. 5 on Site Plan drawing). 8/84. P.C.C.
Illustration A126.

Grave of A. Kulani, died Apr. 3, 1927 (No. 6 on Site Plan drawing). 8/84. P.C.C.

Illustration A127.

Grave of Geo. N. Kaeha, born July 11, 1884, died Nov. 21, 1926 (No. 7 on Site Plan drawing). 8/84. P.C.C.
Illustration A128.

Grave of Emmeran Pulakiko, died Jan. 11, 1925 (No. 8 on Site Plan drawing). 8/84. P.C.C.

Illustration A129.

Grave of W. (K?)uhia, died May 27, 1924 (No. 9 on Site Plan drawing). 8/84.
Illustration A130.

Grave of B. Palikapu, died Oct. 23, 1919 (No. 10 on Site Plan drawing). 8/84. P.C.C.

Illustration A131.

Grave of W.K. Cunha, died June 28, 1925 (No. 11 on Site Plan drawing). 8/84.
Illustration A132.

The person buried here was unidentified as the headstone is missing (grave No. 12 on Site Plan drawing). 8/84. P.C.C.

Illustration A133.

Also unidentified as headstone is broken (No. 13 on Site Plan drawing). 8/84. P.C.C.
Illustration A135.

Grave of Br. Rochus Rech, Nov. 10, 1902 (No. 15A on Site Plan drawing).
8/84. P.C.C.

Illustration A136.

Grave of Br. Victor Schumpf, Feb. 20, 1900 (No. 15B on Site Plan drawing).
8/84. P.C.C.
Illustration A137.

Br. Maria Serapion Van Hoof, May 12, 1910 (No. 15C on Site Plan drawing). 8/84. P.C.C.

Illustration A138.

Grave of Br. Severin Baltes, Sept. 19, 1921 (No. 15D on Site Plan drawing). 8/84. P.C.C.
Appendix B. Existing Conditions and Proposed Treatment Drawings
ST. PHILOMENA CATHOLIC CHURCH
EAST ELEVATION
EXISTING CONDITIONS
HISTORIC STRUCTURE REPORT

NOTES:
1. SMALL CROSS TROUBLELD
2. IZZI PEDASTAL, 2 PLACR.
3. BRICK BRICK PLASTER 2NT
IN WALLS, 3 PLASRS.

EAST ELEVATION
SCALE: 1/4"=1'-0"

- 0 1 2 3 4 5 6 7
SCALE OF FEET

- NOTE: DRAWN TO SCALE AND EXACT PER HISTORIC ELEVATION.
- MATERIALS AND DIMENSIONS SHOWN ARE APPROXIMATE.
- CHANGES TO EXISTING CONDITIONS SHOWN ON ATTACHED SHEETS.
NOTED:
1. CONCRETE CALLAUD OF 4'-4'-11" STRUCTURAL GIRDLE WITH 2'-11" DEEP BY 12'-10" WOOD PLUTED DECORATIVE TRIM.
2. CONCRETE CALLAUD SUPPORT 4'-10" OF 8'-5'-10" VAULT ON 4'-10" STRUCTURAL GIRDLE WITH 2'-11" OF 13'-10" INTRAL, WOOD PLUTED DECORATIVE SMITH.
3. BASE ALTAI REPEATED TO HAVE BEEN ORIGINAL IN ANOTHER CHURCH ON THE ISLAND OF MAJORCA, BUILT BY THE NAVALS.
4. BASE ALTAI REPEATED TO HAVE BEEN BUILT BY THE NAVALS.
5. EXCEPT FOR Pews, Altars, Chandeliers, Furniture and Fixture are NOT SHOWN.
NOTES:

1. EXISTING FRAMING INDICATED IN RED HATCH AND CROSSHATCH PORTION OF BUILDING IS ORIGINAL.

2. EXISTING FRAMING INDICATED IN CROSSHATCH PORTION AT LOWER LEVEL EXISTING PLATFORM ABOVE APPEARS TO HAVE BEEN CONSTRUCTED ON BASELINE LEFT-HAND PLACE FLOORING. MASONRY IN THIS PORTION MAY BE FROM VARIOUS TIME PERIODS INCLUDING ORIGINAL CONSTRUCTION, 1839 AND 1941 REPAIRS.

3. FRAMING OF THE WING (WEST) HAVE INCLUDED 1 3/4" REPAIRS AS WELL AS EXISTING MATERIAL.

4. CELLAR
   - 6' 1" EXISTING FLOOR TO BOTTOM JOISTS
   - PLASTERED RUBBLE STONE WALLS

5. FLOOR FRAMING ABOVE CELLAR:
   1. NEW 4x6 BEAM ON 2 3/4" HANG 2' 0" FLOOR, NEW 2X4 BRACKETS 1 EACH REAR.
   2. NEW 4x6 BEAM ON 3 3/4" HANG 2' 0" FLOOR, NEW 2X4 BRACKETS 1 EACH REAR.
   3. 2x2 1/2" x 1 3/4" STUD @ 16" O.C.
   4. 2x2 2" x 1 3/4" STUD @ 16" O.C. (TRIMMED JOISTS)
   5. 2x2 3/4" x 1 3/4" STUD @ 16" O.C. (TRIMMED JOISTS)
   6. 1x2 1/2" x 1 3/4" STUD @ 16" O.C. (TRIMMED JOISTS)
   7. OTHER JOISTS 2x6.

   ALL FRAMING SHOWN ON this SHEET IS EXISTING, "NEW" VIEW LEADERED ADDED IN 1952/54 OR 1958.

FOUNDATION & FLOOR FRAMING PLAN

PLAN NORTH

SCALE: 1/4" = 1'-0"

SCALE OF FEET

ST. PHILOMENA CATHOLIC CHURCH
FOUNDATION & FLOOR FRAMING PLAN
EXISTING CONDITIONS
HISTORIC STRUCTURE REPORT

ST. PHILOMENA CATHOLIC CHURCH
FOUNDATION & FLOOR FRAMING PLAN
EXISTING CONDITIONS
HISTORIC STRUCTURE REPORT

DRAWING NO. 451
25,000
PREP. SHEET 10
ST. PHILOMENA CATHOLIC CHURCH
FOUNDATION & FLOOR FRAMING PLAN
EXISTING CONDITIONS
HISTORIC STRUCTURE REPORT

DRAWING NO. 451
25,000
PREP. SHEET 10
ST. PHILOMENA CATHOLIC CHURCH
EAST ELEVATION
PROPOSED TREATMENTS
HISTORIC STRUCTURE REPORT

1. East elevation
2. Top of roof
3. Top of cornice
4. Top of copula
5. Top of nave
6. Top of flanking
7. Replace steeple roof
8. Clean and repaint bell tower
9. East wall as required
10. Replace roofing and flashing
11. Replace roofing and flashing
12. Reproduce all windows

SCALE: 1/4" = 1'-0"
LONGITUDINAL SECTION

SCALE 1/4" = 1'-0"

1. REPAIR WALL PLASTER
2. CLEAN AND REPAIR SOUTH EXTERIOR WALL AS REQUIRED
3. REPAIR SOUTH CORNICE AND REPLACE GALLEY
4. REPAIR AND TREAT ALL OTHER CORNICE IN PLACE
5. REPAIR COLUMN CAPITALS

ST. PHILOMENA CATHOLIC CHURCH
PROPOSED TREATMENTS
HISTORIC STRUCTURE REPORT

25,000

SCALE OF FEET

0 4 8 12

HIGH ENTRANCE CEILING
CEIL. FLR.
CELLAR FLR.
GENERAL SCOPE OF WORK

The Contractor's General Scope of Work is to repair and/or modify the high roof and vault framing portion of the structure as shown on the drawings. The Contractor's work shall be concentrated above the vault or flat ceiling and all necessary precautions shall be taken by the Contractor to protect the existing interior and exterior of the structure from any damage by construction activity during the construction period.

GENERAL NOTES

1. CONSTRUCTION NOTES:
   A. The Contractor shall follow standard procedures to protect the structure from damage by construction activity. No items or features of the structure damaged by the Contractor shall be restored to original condition to the satisfaction of the Contractor's Office at an additional cost to the Contractor.
   B. The Contractor shall verify all existing relocations and conditions and any necessary arrangements in writing to Contracting Officer before beginning work.

2. SHORING AND SCAFFOLDING:
   A. The Contractor shall provide shoring as required for the roof and ceiling framing to support construction live load and roof and ceiling dead load.
   B. Shoring shall be erected in such a manner as to impart no disturbing loads to the existing structure.
   C. Scaffolding shall be erected to prevent direct construction loads on the existing frame and flat ceiling. This work shall be reviewed by the Contracting Officer before beginning construction.

3. CONCRETE PLACING:
   A. Existing concrete slabs shall be replaced and shall be coordinated with the repair and/or modification of the high roof and vault framing to accommodate the work.

4. TIMBER AND FASTENERS:
   A. New timber shall be pressure treated with water borne preservatives in accordance with American Wood Preservers' Bureau (AWPB) or LP-1, and run-in to a minimum moisture content of 15 percent.
   B. Nails, screws, and anchors shall be in accordance with AWP and/or other standards.
   C. Other fasteners and anchors shall be of size and type as recommended by applicable standards. See specifications.

5. STEELWORK:
   A. All structural shapes shall conform to ASTM A572.
   B. Structural framing, steel, girts, and fasteners shall be consistently similar to the existing work.
   C. No welding will be permitted within the building.

6. DESIGN LOADS:
   A. Minimum roof live load 16 psf
   B. Flat ceiling live load 16 psf
   C. Induced design wind velocity 80 mph
   D. Seismic periods 0.38 sec
   E. Turbulent wind 40 mph

7. SCALE:
   SCALE: 1/4"=1'-0"
1. WALL STUDS MAY BE AT SOME LOCATIONS, VERIFY.
2. NEW STUD AT LINE 10 ON LEFT SIDE AND LINE 8 ON RIGHT SIDE.
   SHALL BE LOCATED SOUTH OF EXISTING WINDOW JAMBS.
3. NEW STUD AT LINE 9 ON LEFT SIDE SHALL BE LOCATED NORTH OF EXISTING WINDOW JAMBS.
4. INTERIOR WALL BOARDING EXISTS BETWEEN LINES 11-16 (CONTRACTOR SHALL ARRANGE WITH THE CONSTRUCTION OFFICER THE PROCEDURE FOR INSTALLING THE NEW STUD.)

DETAILS AND SECTIONS

SCALE: 1"=1'-0"

DETAILS AT SHEET A"
1. Prior to execution of repairs/modify areas for the roof and vault ceiling framing, the contractor shall repair those portions of the vault bearing plates and 2x6 nailed between for removal/modify. Repair shall be at same of area function. (See specifications.)

2. Procedures and extent of work injection shall be as recommended by the product manufacturer experienced in this type of work, in accordance with the specifications.

3. Replace old anchor bolts as necessary as noted in the schedule and as shown on the drawings. Existing conditionHEET work prior to damage identified. The contractor shall verify and adjust details shown. The contractor shall perform work required for design by the contractor officer shown all connection details that are applicable to the work.

4. Care shall be taken when installing bolts or nail connections for members in order to safely connect them without damaging existing members.

5. Power driven fasteners shall not be used without prior approval of the contracting officer.

6. Existing member joints shall be strengthened by means of epoxy injection in accordance with manufacturers' recommendations.

7. Replace tenned damaged portions.

8. Install new 2x6 stud bearing plates bearing plate on the work framed full section of the structure. Maintain the blocking at 48" o.c. between new and/or existing wall studs. Epoxy shall be injected to base plate for full length wall members.

9. New studs shall be added at each line of member except lines 5, 9, and 11. Where 2x6 occurs visit existing plan, no new 2x6 shall be added except where connection similar to details 5, 9, and 11 were applicable.

10. Add 2x6 diagonal for new members as shown on det. 2 to 10 patch existing.

11. When installing new steel pipe column, contractor shall remove portion of existing the interior wall spacing are changed to 24" and shall be re-established upon completion of work. Epoxy shall be used in order to prevent damage to existing interior wall finishes of church/whitewashed.

12. Add 2x6 diagonal for new members as shown on det. 2 to 10 patch existing.
Appendix C  A Bill Authorizing a Study of the Site of the Kalaupapa National Historical Park

from Congressional Record, December 16, 1975, E793

HON. PATSY T. MINK
OF HAWAII
IN THE HOUSE OF REPRESENTATIVES
Monday, December 15, 1975

Mrs. MINK. Mr. Speaker, I am introducing legislation today calling for an immediate study by the Secretary of Interior for a new national historic park at Kalaupapa on the island of Molokai, State of Hawaii. I authored H.R. 12012 in the 93d Congress and House Joint Resolution 220 in this Congress, establishing such a national park. I believe this new study bill will help further the enactment of the national park bill and is needed to provide this Congress and the people of America with information on the treasured and historic significance of this area.

Kalaupapa may already be known to the Members of this House through the long and dedicated service of a Belgian priest named Father Damien, who committed his life to the people of Kalaupapa settlement -- a colony which was established more than a century ago for the care and treatment of the victims of leprosy.

At its October meeting, the National Advisory Council of the National Park Service approved, endorsed and recommended to the Secretary of the Interior that Kalaupapa settlement be designated as a national historic landmark. This recommendation and endorsement followed a professional evaluation of the potential historical significance of the peninsula undertaken at my urging.

This new bill contains three key elements. First, it authorizes and directs the Secretary of Interior to conduct a study of Kalaupapa. The purpose of this study would be to formulate the basic design of this national park.

Second, it creates an advisory commission based in Hawaii to consult with the Secretary during the course of this study. This is to assure that local input is had during the early stages of planning.

Third, it provides that a proposed master plan for development of the park area be made part of the Secretary's report.

The cape on which the site is located is among the most remote locations in all Hawaii. It is the scene of heroic service by Father Damien and many others who came later. As you know, modern methods for treatment of leprosy have since been developed and so today the patient population has dwindled to less than 160 persons, most of whom currently live there by choice, and not by necessity. These persons adamantly refuse to leave their homes on Kalaupapa and do not wish to leave under any circumstances. Any study should allow these persons to remain for their lifetimes.

Within 50 years there will be no more patients at Kalaupapa. It is therefore imperative that this study be authorized now. Time is essence.

Kalaupapa is a national treasure whose historic significance is already noted by the selection of Father Damien as one of the two greatest personages from Hawaii whose statue is in Statuary Hall in the House of Representatives.

Mr. Speaker, I am pleased to report that this legislation calling for a study of Kalaupapa for national historic park purposes has the support of citizens groups in Hawaii and, most importantly, the concurrence of the resident and staff population of the settlement itself. Through the enactment of this study bill I believe these residents of Kalaupapa will have their best assurance of being allowed to remain there for the rest of their lives. The State of Hawaii has served notice to them that they may be evicted in 10 years, which they are strongly resisting. The State legislature on the other hand, has given numerous assurances to these residents that they could indeed remain.

The matter of establishing this historic peninsula as a park is not at issue in the legislature. I believe it has overwhelming support. The only issue is whether it should be a national park or a State park. Some of our county leaders and State legislators believe that the State should not give up any more of its lands to the Federal Government. There is rather widespread opinion that the State park could adequately preserve this area. To enable this matter to be satisfactorily answered, the study called for by my bill will delineate the magnitude of the undertaking, the cost for development and the funds needed for restoration and preservation of those sites already heavily in disrepair. My bill will also authorize the preparation of a master plan. This will supply all of us who seek to have this historic area with better than "ball park" figures of the full cost of this undertaking. My bill authorizes $150,000 for the preparation of this report.

In view of the historical significance of Kalaupapa, both at the State and national levels, I would urge the earliest possible consideration of this legislation.

Public Law 96-565  96th Congress

An Act

To establish the Kalaupapa National Historical Park in the State of Hawaii, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

Sec. 101. In order to provide for the preservation of the unique nationally and internationally significant cultural, historic, educational, and scenic resources of the Kalaupapa settlement on the island of Molokai in the State of Hawaii, there is hereby established the Kalaupapa National Historical Park (hereinafter referred to as the "park").

Sec. 102. The Congress declares the following to constitute the principal purposes of the park:

(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, cultural values, and natural features; and to provide for limited visitation by the general public; and
(3) to provide that the preservation and interpretation of the settlement be managed and performed by patients and Native Hawaiians to the extent practicable, and that training opportunities be provided such persons in management and interpretation of the settlement's cultural, historical, educational, and scenic resources.

Sec. 103. The boundaries of the park shall include the lands, waters, and interests therein within the area generally depicted on the map entitled "Boundary Map, Kalaupapa National Historical Park", numbered P67-80024, and dated May 1980, which shall be on file and available for public inspection in the local and Washington, District of Columbia offices of the National Park Service, Department of the Interior. The Secretary of the Interior (hereinafter referred to as the "Secretary") may make minor revisions in the boundary of the park by publication of a revised boundary map or other description to that effect in the Federal Register.

Sec. 104. (a) Within the boundary of the park, the Secretary is authorized to acquire those lands owned by the State of Hawaii or any political subdivision thereof only by donation or exchange, and only with the consent of the owner. Any such exchange shall be accomplished in accordance with the provisions of sections 5 (b) and (c) of the Act approved July 15, 1966 (62 Stat. 354). Any property conveyed to the State or a political subdivision thereof in exchange for property within the park which is held in trust for the benefit of Native
Hawaiians, as defined in the Hawaiian Homes Commission Act of 1920 shall, as a matter of Federal law, be held by the grantee subject to an equitable estate of the same class and degree as encumbers the property within the preserve; and "available lands" defined in section 203 of the Hawaiian Homes Commission Act may be exchanged in accordance with section 204 of said Act. The vesting of title in the United States to property within the park shall operate to extinguish any such equitable estate with respect to property acquired by exchange within the park.

(b) The Secretary is authorized to acquire privately-owned lands within the boundary of the park by donation, purchase with donated or appropriated funds, or exchange.

(c) The Secretary is authorized to acquire by any of the foregoing methods except condemnation, lands, waters, and interests therein outside the boundary of the park and outside the boundaries of any other unit of the National Park System but within the State of Hawaii, and to convey the same to the Department of Hawaiian Home Lands in exchange for lands, waters, and interests therein within the park owned by that Department. Any such exchange shall be accomplished in accordance with the provisions defined in subsection (a) of this section.

SEC. 105. (a) The Secretary shall administer the park in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 551), the Act of August 21, 1935 (49 Stat. 666), and the provisions of this Act.

(b)(1) With the approval of the owner thereof, the Secretary may undertake critical or emergency stabilization of utilities and historic structures, develop and occupy temporary office space, and conduct interim interpretive and visitor services on non-Federal property within the park.

(2) The Secretary shall seek and may enter into cooperative agreements with the owner or owners of property within the park pursuant to which the Secretary may preserve, protect, maintain, construct, reconstruct, develop, improve, and interpret sites, facilities, and resources of historic, natural, architectural, and cultural significance. Such agreements shall be of not less than twenty years duration, may be extended and amended by mutual agreement, and shall include, without limitation, provisions that the Secretary shall have the right of access at reasonable times to public portions of the property for interpretive and other purposes, and that no changes or alterations shall be made in the property except by mutual agreement. Each such agreement shall also provide that the owner shall be liable to the United States in an amount equal to the fair market value of any capital improvements made to or placed upon the property in the event the agreement is terminated prior to its natural expiration, or any extension thereof, by the owner, such value to be determined as of the date of such termination, or, at the election of the Secretary, that the Secretary be permitted to remove such capital improvements within a reasonable time of such expiration. Upon the expiration of such agreement, the improvements thereon shall become the property of the owner, unless the United States desires to remove such capital improvements and restore the property to its natural state within a reasonable time for such expiration.

(3) Except for emergency, temporary, and interim activities as authorized in paragraph (1) of this subsection, no funds appropriated pursuant to this Act shall be expended on non-Federal property unless such expenditure is pursuant to a cooperative agreement with the owner.
(4) The Secretary may stabilize and rehabilitate structures and other properties used for religious or sectarian purposes only if such properties constitute a substantial and integral part of the historical fabric of the Kalaupapa settlement, and only to the extent necessary and appropriate to interpret adequately the nationally significant historical features and events of the settlement for the benefit of the public.

Sec. 106. The following provisions are made with respect to the special needs of the leprosy patients residing in the Kalaupapa settlement—

(1) So long as the patients may direct, the Secretary shall not permit public visitation to the settlement in excess of one hundred persons in any one day.

(2) Health care for the patients shall continue to be provided by the State of Hawaii, with assistance from Federal programs other than those authorized herein.

(3) Notwithstanding any other provision of law, the Secretary shall provide patients a first right of refusal to provide revenue-producing visitor services, including such services as providing food, accommodations, transportation, tours, and guides.

(4) Patients shall continue to have the right to take and utilize fish and wildlife resources without regard to Federal fish and game laws and regulations.

(5) Patients shall continue to have the right to take and utilize plant and other natural resources for traditional purposes in accordance with applicable State and Federal laws.

Sec. 107. The following provisions are made with respect to additional needs of the leprosy patients and Native Hawaiians for employment and training. (The term "Native Hawaiian" as used in this title, means a descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to the year 1778.)—

(1) Notwithstanding any other provision of law, the Secretary shall give first preference to qualified patients and Native Hawaiians in making appointments to positions established for the administration of the park, and the appointment of patients and Native Hawaiians shall be without regard to any provision of the Federal civil service laws giving an employment preference to any other class of applicant and without regard to any numerical limitation on personnel otherwise applicable.

(2) The Secretary shall provide training opportunities for patients and Native Hawaiians to develop skills necessary to qualify for the provision of visitor services and for appointment to positions referred to in paragraph (1).

Sec. 108. (a) There is hereby established the Kalaupapa National Historical Park Advisory Commission (hereinafter referred to as the "Commission"), which shall consist of eleven members each appointed by the Secretary for a term of five years as follows:

(1) seven members who shall be present or former patients, elected by the patient community; and

(2) four members appointed from recommendations submitted by the Governor of Hawaii, at least one of whom shall be a Native Hawaiian.

(b) The Secretary shall designate one member to be Chairman. Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.

(c) A member of the Commission shall serve without compensation as such. The Secretary is authorized to pay the expenses reasonably.
(g) Each member of the Commission shall receive $100 for each day such member is engaged in performing the duties of the Commission, except that members of the Commission who are full-time officers or employees of the United States shall receive no additional pay on account of their service on the Commission other than official travel expenses.

(h) While away from their homes or regular places of business in the performance of services for the Commission, members of the Commission, including members who are fulltime officers or employees of the United States, shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5, United States Code.

(i) Subject to such rules and regulations as may be adopted by the Commission, the Chairman may—

(1) appoint and fix the compensation of an executive director, a general counsel, and such additional staff as he deems necessary, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, but at rates not in excess of the maximum rate of pay in effect from time to time for grade GS-15 of the General Schedule under section 5332 of such title; and

(2) procure temporary and intermittent services to the same extent as is authorized by section 3109 of title 5, United States Code, but at rates not to exceed $100 a day for individuals.

(j) Subject to section 552a of title 5, United States Code, the Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out this title. Upon request of the Chairman of the Commission, the head of such department or agency shall furnish such information to the Commission.

(k) The Commission may use the United States mails in the same manner and upon the same conditions as other departments and agencies of the United States.

DUTIES OF THE COMMISSION

Sec. 303. (a) The Commission shall conduct a study of the culture, needs and concerns of the Native Hawaiians.

(b) The Commission shall conduct such hearings as it considers appropriate and shall provide notice of such hearings to the public, including information concerning the date, location and topic of each hearing. The Commission shall take such other actions as it considers necessary to obtain full public participation in the study undertaken by the Commission.

(c) Within one year after the date of its first meeting, the Commission shall publish a draft report of the findings of the study and shall distribute copies of the draft report to appropriate Federal and State agencies, to Native Hawaiian organizations, and upon request, to members of the public. The Commission shall solicit written comments from the organizations and individuals to whom copies of the draft report are distributed.

(d) After taking into consideration any comments submitted to the Commission, the Commission shall issue a final report of the results of its study within nine months after the publication of its draft report. The Commission shall submit copies of the final report and

Pay.

Travel expenses.

Staff.

Draft report.

Comments.

Final report.

Submittal to President and congressional committees.
(g) Each member of the Commission shall receive $100 for each day such member is engaged in performing the duties of the Commission, except that members of the Commission who are fulltime officers or employees of the United States shall receive no additional pay on account of their service on the Commission other than official travel expenses.

(h) While away from their homes or regular places of business in the performance of services for the Commission, members of the Commission (including members who are fulltime officers or employees of the United States) shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 503 of title 5, United States Code.

(i) Subject to such rules and regulations as may be adopted by the Commission, the Chairman may—

(1) appoint and fix the compensation of an executive director, a general counsel, and such additional staff as he deems necessary, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to chapter 51 and subchapter III of chapter 53 of title 5 relating to classification and General Schedule pay rates, but at rates not in excess of the maximum rate of pay in effect from time to time for grade GS-15 of the General Schedule under section 5332 of such title; and

(2) procure temporary and intermittent services to the same extent as is authorized by section 3109 of title 5, United States Code, but at rates not to exceed $100 a day for individuals.

(j) Subject to section 552a of title 5, United States Code, the Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out this title. Upon request of the Chairman of the Commission, the head of such department or agency shall furnish such information to the Commission.

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Pay.

Travel expenses.

Staff.

5 USC 5101, note.

5 USC 552a

Temporary and intermittent services.

Study.

42 USC 2591a

note.

Hearings; public notice.

Draft report.

Comments.

Final report.

Submittal to President and congressional committees.
copies of all written comments on the draft submitted to the Commission under paragraph (c) to the President and to the Committee on Energy and Natural Resources of the Senate and the Committee on Interior and Insular Affairs of the House of Representatives.

(e) The Commission shall make recommendations to the Congress, based on its findings and conclusions under subsection (a) of this section.

TERMINATION OF THE COMMISSION

Sec. 304. Except as provided in subsection (b) of section 307, upon the expiration of the sixty-day period following the submission of the report required by section 303, the Commission shall cease to exist.

DEFINITIONS

Sec. 305. For the purposes of this title, the term "Native Hawaiian" means any individual whose ancestors were natives of the area which consisted of the Hawaiian Islands prior to 1778.

SAVINGS CLAUSES

Sec. 306. No provision of this title shall be construed as—

(1) constituting a jurisdictional act, conferring jurisdiction to sue, or granting implied consent to Native Hawaiians to sue the United States or any of its officers; or

(2) constituting a precedent for reopening, renegotiating, or legislating any past settlement involving land claims or other matters with any Native organization or any tribe, band, or identifiable group of American Indians.

AUTHORIZATION

Sec. 307. (a) There are hereby authorized to be appropriated for fiscal years 1982 and 1983 such sums as are necessary to carry out the provisions of this title. Until October 1, 1981, salaries and expenses of the Commission shall be paid from the contingent fund of the Senate upon vouchers approved by the Chairman. To the extent that any payments are made from the contingent fund of the Senate prior to the time appropriation is made, such payments shall be chargeable against the authorization provided herein.
(b) The Secretary of the Treasury shall reserve a reasonable portion of the funds appropriated pursuant to subsection (a) of this section for the purpose of providing payment for the transportation, subsistence, and reasonable expenses of the members of the Commission in testifying before the Congress with respect to their duties and activities while serving on the Commission or to such matters as may involve the findings of the study of the Commission after the expiration of the Commission pursuant to section 304.

Approved December 22, 1980.
As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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