Quarantine Stations at Torrens Island and Point Nepean: A Comparison Study

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Front cover illustration: Top photo- Torrens Island (National Archives, Adelaide).
Bottom photo- Point Nepean (photo: Charlie Brown).
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Introduction

Quarantine stations were structures designed to contain people with infectious diseases. Though stereotypically viewed as ominous places, these stations provided safety and shelter to those just off a rigorous voyage. Fears of smallpox and other diseases instilled paranoia in surrounding communities, and quarantine stations helped ease those anxieties by temporarily confining crew and passengers upon arrival to Australia. This incarceration was mandatory until medical professionals verified health conditions. The colonial governments were responsible for protecting their expanding colonies, and quarantine stations aided in this manner.

Figure 1: The Torrens Island station, Adelaide and Point Nepean station, Melbourne are circled in red (Cumpston, Robertson & Elkington 1919)

Ships were a catalyst in that they transported immigrants and diseases to new settlements. After a long journey at sea, the experiences of those placed in
quarantine were varied. Often the stations became an unlikely relief for immigrants. Comforts such as laundry and bathing facilities were usually accessible at quarantine stations, which were not always present aboard vessels. Those at the station generally felt anticipation for the future, and quarantine was a necessary, if unfavorable step in obtaining new citizenship. A quarantine station worked best as a self-contained unit independent from outside influence. Islands were a preferable location, in that they could successfully quarantine immigrants, without fear of outside contact.

Researching quarantine stations in Australia is significant because the structures are the product of the unique and vast voyage that immigrants faced. The archaeological remains of these stations can provide information regarding the lives of immigrants during the 1800s, illuminating the uses of medical practices implemented in treatment. Combining architectural plans, drawings, and photos with historical documents concerning the structures will offer insight into Australian immigration and maritime quarantine practices. Many in quarantine were anxious to flee, and the stations needed an architectural design to prevent this action. Quarantine stations were frequently understaffed, and immigrants often overpopulated employees. This created the necessity of maintaining control over the large numbers of immigrants, and the need for management housing to have an optimal vantage point over the station. The purpose of this study is to examine not only the archaeological structures of the stations themselves, but also the thinking of the society during that time. Behind these archaeological structures were the people who operated within them. Cultural beliefs dictated the construction of buildings,
and how the immigrants were segregated, which was usually in accordance with the 'class system'.

This research will inspect the reasons why people were initially in quarantine. An examination of what diseases were present aboard the vessels and at the stations will help uncover the uses of quarantine buildings. During the life of maritime quarantine stations, disinfecting cargo items and good hygiene practices were of particular importance. An earlier belief held was that houses or ships were in need of quarantine, not just the people and/or animals that actually carried the diseases (Bashford 2004). With the growth of medical science and technology, these perceptions changed and isolating the infected person became the focus.

Quarantine stations were not only vitally important for the safety of Australian colonists, but the structures also protected Indigenous inhabitants from contracting the diseases. They were fluid places that consistently adapted to meet the needs of immigrants and their accompanying illnesses. Studying this aspect of colonialism in Australia through a site analysis of the structures, will merit a greater understanding of the country’s history and past practices of disease control. This research aims to add to the knowledge regarding quarantine stations as anthropological and archaeological representations of a unique place in time.

This thesis will consist of comparison research. The Torrens Island quarantine station, South Australia will be compared and contrasted with the Point Nepean quarantine station, Victoria. An examination will focus on the similarities and differences between the two archaeological structures, and their current remains. This comparison between Torrens Island and Point Nepean will center on how many
quarantine structures there were and the materials employed in the construction. A discussion will focus on these two quarantine stations and maritime quarantine practices of the past. This thesis will also address the following question: How were the spatial arrangements of the quarantine structures designed to provide caretakers with optimal control over the immigrants?

Figure 2: Location of Torrens Island, off Port Adelaide, South Australia (Hartell & Richards 2001: 46)

Figure 3: Point Nepean Quarantine Station circled in red on the Mornington Peninsula, Victoria (Mornington Peninsula Surf School 2006)
Chapter One will focus on the literature and research which has been produced concerning Australian quarantine stations and specifically, Torrens Island and Point Nepean. Previous work regarding the spatial analysis of sites proposed by Mark Leone and Judy Birmingham will be discussed. Chapter Two will provide an overview of the history as it relates to both stations, additionally examining the voyage to Australia, the living conditions at sea, and diseases aboard which led to the necessity of quarantine. Chapter Three will present the theoretical models and methodology concerning the spatial analysis of both sites. The methods used in the Torrens Island fieldwork will additionally be summarized. Chapter Four will include a detailed analysis of both sites. Chapter Five will be an overview of the materials presented in this thesis. Included, will be a discussion of the archaeological potential of Torrens Island and Point Nepean and an overview of the similarities and differences between both of the stations. Chapter Six will conclude with further possible studies regarding both quarantine stations and their potential contribution to maritime archaeology in Australia.
Chapter One

Literature Review

Quarantine stations are a unique and unforeseen aspect of maritime archaeology. Though usually associated with shipwrecks and submerged cultural material, maritime archaeology can also encompass maritime activities associated with the land. One definition of the subject describes maritime archaeology as, “The material remains of man and his activities on the sea” (Muckelroy 1978: 3). This definition includes shore side facilities such as quarantine stations, which are a rather neglected aspect of this field. Though an abundance of literature regarding stations was lacking, there was still valuable information to be obtained from the documents that were available. Literature pertaining to this topic, and the outcomes of previous work, helped to form the theoretical perspective of this thesis. In this chapter, preceding work on quarantine stations will be discussed, followed by an examination of the literature pertaining to immigration and disease. Text regarding the sites at Torrens Island and Point Nepean will be outlined, followed by archaeological work concerning site analysis.

Previous Work Concerning Australian Quarantine Stations

The Maritime Quarantine Administration reviewed the way in which quarantine stations organizationally functioned. Vessel design/construction of immigrant ships were discussed, and revealed was an overview of quarantine laws and principles.
Included was an outline of the building uses for various Australian stations (Cumpston, Robertson & Elkington 1919).

Established in 1832, the North Head quarantine station located in Sydney, New South Wales is the most widely documented quarantine station in Australia (AHPI Record 2006: 1). This site is the largest, oldest, and most intact Australian quarantine station (SHNP North Head Quarantine Station 1998: 198). “As a part of the management and planning for North Head… a number of conservation, planning and management documents have been prepared for the Service” (SHNP North Head Quarantine Station 1998: 196). A conservation plan for North Head included heritage and environmental protection of the site, and an emphasized the importance of tourism. An interesting aspect of this plan was that it noted that the Torrens Island station did not contain the depth of evidence present at the Point Nepean and North Head stations (SHNP North Head Quarantine Station 1998: 210). The report recorded that there was an archaeological site survey of the North Head station in 1991. This survey was conducted because the precinct was considered a historic feature that contributed to the cultural significance of the Manly and Sydney Harbor area. The conservation report also investigated the physical manifestations of Aboriginal uses of the site, and encouraged further investigation into these remains. The plan also looked at the natural heritage of the site, and proposed a comprehensive analysis of the flora and fauna. The North Head station is well maintained, and due to its favorable location, receives numerous tourists annually. The site assessment also looked at ‘gaps’ in the knowledge of Australian quarantine stations. A brief description was made of other stations in Brisbane, New York,
Quebec, San Francisco, South Australia, Tasmania, Victoria, and Western Australia. Part of the theoretical perspective used in this thesis will stem from this North Head Conservation report, due to its comprehensive outlook at the multiple aspects of the station. This extensively researched site is a good model for other Australian quarantine stations, due to its status as a popular tourist attraction.

An additional overview of the North Head station was made in the book, *In Quarantine: A History of Sydney’s Quarantine Station 1828-1984*, that detailed the origins of maritime quarantine stations, (which was established in Venice, Italy in 1403). The work also described the sea voyages immigrants faced, and presumed that infectious diseases were due to unsanitary and overcrowded living conditions aboard a vessel (Foley 1995: 15). This added to the theoretical perspective behind this thesis as to why and how immigrants fell ill on voyages.

The Australian Heritage Places Inventory documented information regarding the stations at Torrens Island (identifier # 13931), Point Nepean (identifier # 105611), and North Head (identifier # 5045740). This inventory detailed the significance of these protected stations and compared their structural remains (*AHPI Record* 2006). In the research process, it was found that there was a lack of information on the subject of the Torrens Island quarantine station.

**Literature on Immigration and Disease**

When people immigrated to Australia, they were frequently of ‘struggling classes’ and often times were hardy workers, a quality always in demand for a colony (Golding 1973: 6). Positive feedback from those who immigrated to Australia
encouraged others to ensue. Immigrants needed to be people who were innovative, hard workers, and adventure seekers. During the voyage, discomfort and quarreling were inevitable due to the fusion of vastly different backgrounds, cultures, and religions (Shaw 1996: 146). The close quarters aboard a ship also added to this friction.

European immigration in the mid 19th century brought contagious diseases such as cholera, typhoid, whooping cough, smallpox, measles, and consumption, outbreaks that could decimate whole communities (Pearn & Carter 1995: 93). Station structures needed to reflect the medical needs of those in quarantine. “Public health turned on the problem of bodies in space, forcing questions of population, overcrowding, the condition and design of buildings into a medical domain. All this came to be articulated in a medical and social scientific language of urban and architectural pathology” (Campbell 2002: 45). This work outlined the theory that building structures stemmed from medical need, which could relate to quarantine stations.

Peel Island is located in Moreton Bay, east of Brisbane in Queensland, Australia. A quarantine station remains in the area, though the structural remains are ambiguous. Another station was established at Lytton, on the Brisbane River. The station construction was based on the quarantine architecture of the Sydney and Melbourne stations. Many of these buildings still survive today, and would make a valuable comparison study. Brisbane quarantine facilities were first established in 1850 at Dunwich on Stradbroke Island, Queensland, but the buildings were found to be more suitable as a Benevolent Asylum (SHNP Nth Head Quarantine Station
A point of note was that asylums and quarantine stations were similar enough to be used interchangeably, since asylums and quarantine stations were both structures employed to achieve control over populations. The Dunwich station buildings were unfortunately demolished. There were minor stations at Townsville, and Thursday Island, but comparative information has not been pursued. This validates the concept that little is known about some remaining Australian quarantine stations. Despite this, many quarantine buildings in Australia are still standing, which makes the archaeological potential of the stations significant.

**Torrens Island**

A previous maritime archaeological report near Torrens Island, *Garden Island: Ship’s Graveyard*, presented a detailed account of shipwrecks near the Torrens Island area (Hartell & Richards 2001). Some literature researched, discussed the methodology used in building construction for the Torrens Island station. The architect-in-chief, E.J. Woods aimed to make the inhabitants of the station too healthy to remain there by designing the buildings in order to provide immigrants with maximum medical care. Accounts of the Torrens Island quarantine construction process, revealed insight into the multiple factors considered.

McDougall and Vines Architectural and Heritage, developed a Conservation Analysis plan for Torrens Island and Australian Construction Services commissioned the report. The central point of the report was to establish the cultural significance of the site and to emphasize the importance of individual buildings and other elements within the station. The report analyzed the physical condition of the
buildings within the precinct and outlined the maintenance and conservation guidelines for the site (McDougall & Vines 1988: 1). The report also recorded potential archaeological locations around the station. The extant buildings reflected the physical process of disinfecting and quarantine of the early Commonwealth period of 1911-1921. This conservation report provided the most thorough document concerning the Torrens Island quarantine station. The work entitled Port Adelaide, Tales from a “Commodious Harbour”, created a detailed map of the layout of the quarantine structures that were drawn upon for the fieldwork component of this thesis (Couper-Smartt 2003). Also provided was a historical background pertaining to the Port Adelaide community.

**Point Nepean**

A series of essays written entitled, 150th Anniversary Quarantine Station Portsea, detailed the voyage of the *Ticonderoga*, an immigrant vessel that sailed to Point Nepean in 1852. This voyage will be further discussed in Chapter Two. An essay focused on the life of a particular immigrant family, and how their disastrous voyage, was overcome by their successful future Australia (Deerson et al. 2002: 16). This document helped define why quarantine was a necessary practice in Australia, and explained the realities behind immigrants’ lives. In *Hell to Health, the History of Quarantine at Port Phillip Heads 1852-1966*, numerous archival photographs of the station were included. The book began by discussing illnesses aboard immigrant vessels, focusing specifically on the *Ticonderoga*. The work also discussed the erection of the Point Nepean quarantine buildings and included a description of the
daily life at the station. The end of the book briefly discussed the military occupation of the area (after use of the site for quarantine purposes ceased). This perspective on the station yielded information regarding the construction of the buildings and their necessity during quarantine (Welch 1969). An additional document for Point Nepean was, *The Portsea Station...People and Plague*, an account of life of the quarantine station from 1852-1878 (McMeekin 2002). The voyages to Point Nepean and the construction of the station were discussed. The numerous vessels that carried immigrants to the station and the diseases that accompanied the passengers, were the central focuses of the work. The book also showed how the site was organized in order to achieve a goal of good health.

**Spatial Analysis**

An overview of the research previously conducted regarding spatial analysis of landscapes from other archaeological sites helped to form the theoretical perspective in approaching the sites at Torrens Island and Point Nepean stations. The spatial analysis of asylums, prisons, and quarantine stations all suggest the presence of a command structure. Judy Birmingham stated that historical archaeology could provide a wealth of information concerning the history of human occupation of Australia. Birmingham argued that, “Broken kitchen china, glass grog bottles, building debris, nails and plaster samples are sources of social and economic information rather than cultural and aesthetic values” (Birmingham & Murray 1979: 91). This statement is helpful for the Torrens Island and Point Nepean sites because artifacts remaining from quarantine show the materials that were economically
available. Birmingham argued that the potential for ceramic finds is considerable at Australian archaeological sites. Additionally, the importance of environmental impacts on the historical background of sites was stressed. “The physical nature of the environment is part of the historical enquiry, i.e. topography, soils, orientation, spacing” (Birmingham & Murray 1979: 32). Research on the environmental impact on the sites can also indicate how, “Themes suggested by the archaeological database would include the difficulties imposed by distance, climate, and terrain, difficulties of transport and communication” (Birmingham & Murray 1979: 33).

This work helped to achieve a general background concerning the structural component in this thesis research. “Preliminary background research into an archaeological site can conveniently be viewed in terms of three aspects: the land, the people connected with it, and the activities carried out on it” (Birmingham & Murray 1979: 39). Birmingham’s work emphasized the importance of observation, description, measurement, and recording the components of historical sites (Birmingham & Bairstow 1987). Birmingham’s research focused on the meaning of structures in society. Technological and engineering achievements regarding historic building structures reveals itself as unique fabricated rearrangements of naturally available resources. Structures have been executed to fulfill a task by ways not naturally existing (Birmingham & Murray 1979: 101). This connects to the construction of Torrens Island and Point Nepean, in that though the island and peninsula provided necessary isolation for quarantine, fencing and human surveillance needed to be implemented to maintain control over the detained populations.
Birmingham focused on the colonial site at Wybalenna, located on Flinders Island on the Bass Strait. This investigation took place between November 1969 and February 1971. The work incorporated associated historical documentary research and analysis of the excavated material. The major question asked was,

“In what ways the hunter-gatherer Tasmanians react to and interact with, their changing circumstances and increasing exposure to nineteenth century European colonization ideology and technology? The site has the potential to answer questions on how successfully the other residents of the Settlement interacted with their fellow men” (Birmingham 1992: 25).

The archaeological material uncovered contributed to the emic record and to the understanding of European colonization. The finds from the Wybalenna site were grouped into three main categories for the purpose of analysis. These were architectural matter, faunal remains, and cultural or domestic items (Birmingham 1992: 57). Surface remains discovered around the structures included animal bones, middens, door handles, bricks, glass windows, flooring, iron nails, iron spikes, ceramics, and bed sheets. A research question that Birmingham proposed was, “Could archaeological evidence reveal insights into one of the more disturbing incidents of Britain’s imperial past, and equally into an episode so meaningful for Tasmanian aboriginal history” (Birmingham 1992: 57)? This thesis also aims to study the archaeological remains of the structures and combine that information with documentary records to achieve the most diverse account of both sites.

Mark Leone discussed three approaches to archaeological data: symbolic, structural, and critical archaeology. “In a concrete historical sense in archaeology,
the last twenty years’ progress has revolved around the remarkably productive studies of the natural environment, domesticated plant and animal foods, and the tools, shelters, and techniques used to supply, support, reproduce, and control a population, society, and a whole culture” (Leone & Potter 1999: 417). This quote contributed to this thesis by highlighting multiple influences on the sites at Torrens Island and Point Nepean. Leone focused on how class affected sites. “Critical archaeology forcefully asserts with Marx that history is always produced in the service of class interest” (Leone & Potter 1999: 418).

Annapolis, Maryland was a site Leone investigated archaeologically. “Archaeological excavations conducted around the State House Circle in the winter of 1989-1990…uncovered intact deposits that dated to the 1720s. These deposits afforded Archaeology in Annapolis the opportunity to interpret changes in the historic district’s layout” (State Circle n.d. : 1). “Annapolis’ baroque town was originally created as an embodiment of political power attempting to naturalize the landscape’s appearance as though it is one with the power that it supported” (State Circle n.d. : 2). The work on this site drew a connection between the baroque town planning and the newly formed ideas of American nationalism during the Federalist period (1780-1820). An interesting aspect of the study was it emphasized the State Circle’s tiered windows, and how they provided a viewing platform for the cupola, (a rounded roof) to watch citizens of the community. “The idea of the panopticon (permitting viewing of all parts or elements), plays off Federal period ideas for citizens both to see and be seen. The cupola on the State House was designed after Jeremy Bentham’s idea for the building construction for a prison. The idea behind
the prison was for inmates to be constantly visible, that way the inmates would never be sure if they were being watched, and if there was no observer, the inmates were trained to watch themselves. Panoptic designs, and the social theory that underlay them, were commonly used throughout society, and can be seen in homes, hospitals, churches, insane asylums, and schools” (State Circle n.d. : 3). This theory could also be applied to quarantine stations. The State House cupola of Annapolis, Maryland, represented a notion for establishing social control over the community, similar to a superintendent’s quarters/administration block in quarantine. “The way in which critical theory can be applied to archaeology is illustrated by an analysis of data from a citywide project conducted in Annapolis, Maryland” (Leone, Potter & Shackel 1987: 283). Leone’s study aimed to explain the way a past is constructed and when using critical theory; social, economic, political, and psychological factors can be described (Leone, Potter & Shackel 1987: 284). Leone’s fusion of documentary sources (such as historic maps), with archaeological findings, showed how governments used structures to maintain control over the citizens.
Chapter Two

Historical Background

Australian quarantine stations offer a rich history. This chapter will outline the historical background of immigration as it relates to quarantine stations. It will then discuss the voyage to Australia, focusing on how overpopulation and poor hygiene practices led to the spread of disease. Additionally, records of diseases and documentation by medical professionals will contribute to this historical background. The Quarantine Act will briefly be summarized, and the section will conclude with a history of the stations at Torrens Island and Point Nepean.

Immigration and the Voyage

Immigrants who sailed to Australia were often motivated by the possibility of wealth and opportunity. The promise of a new life was an inspiring factor for making this move. In the British Isles, grinding poverty in the 19th century was the primary force which lead immigrants to leave family behind and face the rigorous voyage to Australia (McMeekin 2002: 6). Life aboard a ship during the crossing to Australia was difficult at best. Speedy passages at sea were first priority, because lengthy journeys would further weaken the sick and jeopardize the healthy. Vessel overcrowding became a problem especially when immigrant ships were fitted with an additional deck to accommodate more passengers. During warm seasons, many aboard would faint from heat exhaustion. There was a lack of facilities aboard, and
some endured disease as a result. Due to the close quarters aboard a vessel, cultures had to intermingle and occasionally would clash. If the captain and surgeon were caring, passenger moral would be far greater than that of the antithesis. Positive or negative experiences at sea would influence an immigrants’ stay at a quarantine station.

Figure 4: Quarantine station launch Cheopis alongside SV Oregon Pine quarantined for fumigation (National Archives, Adelaide)

An account from Mary Jane Crosse, aboard the Orient observed the division of class while immigrating to Australia in 1888. Crosse was a third class adult passenger who consumed preserved meat, potatoes, peas, and rice during the voyage, (recorded as unappealing at best). The ship was divided according to first, second, and third class. Third class passengers were expected to bring their own bedding and mess utensils. This experience was severely less elegant than that of the first and second class (Passenger Lists, Shipping Lists 2003).
Figure 5: Boarding launch for quarantine deck plan
(Cumpston, Robertson & Elkington 1919: 122)

An additional problem was the lack of personal hygiene aboard a vessel, which caused illness to increase. “The coldness and rough seas experienced seem to have had considerable influence in spreading disease, causing the emigrants to keep constantly huddled together in their berths which they could not be induced to keep clean” (Welch 1969: 18). Certain flags flown on a vessel would indicate the health status of the ship. “The Quarantine Act and Regulations prescribe that every vessel subject to quarantine shall fly certain signals before she comes within a league of any port” (Cumpston, Robertson & Elkington 1919: 56). These requirements were sometimes disregarded, especially at night when quarantine officers were less vigilant. It was difficult to target a fever in its early stages aboard a ship, and quarantine was a vital precaution. The protocol for disease control required the captain of a ship to provide a bill of health at the quarantine station. A clean bill of health meant the ship could proceed into the bay, and an unclean bill of health forced the ship and its passengers into quarantine (McGuinness 2005: 4). If a ship did not present this document, there was a substantial risk of contaminating a colony. Maritime regulations worked under the assumption that ports and vessels were
‘diagnosed’ as infected not just the people, animals, or insects (Bashford 2004). The public was urged to keep away from these ports, and large structural barriers were placed around the quarantine premises.

**Disease**

Smallpox was a disease, which formed most of the Quarantine Legislation (‘Torrens Island’ 1981: 4). In 1884, the disease became prevalent in areas such as South Australia, Victoria, and New South Wales (Cumpston, Robertson & Elkington 1919: 17). Yellow fever and cholera were not widespread in Australia, but smallpox was so common, it hindered traffic and commerce (Cumpston, Robertson & Elkington 1919: 18). It was difficult to target from where and from whom the disease came. There were merely assumptions by the victims that smallpox came from the north (Campbell 2002: 188). The proximity of Australian ports to countries where exotic diseases flourished necessitated extreme vigilance from the colonies.
Smallpox appeared in the late eighteenth century in South Australia (Campbell 2002: 9). A key in halting the spread of this illness was to quarantine even the seemingly healthy passengers since the disease may have been in an incubating stage (Cumpston, Robertson & Elkington 1919: 53). By 1892, there was a standard procedure for the vaccination of smallpox. After this date, vaccination was performed at infancy and again when the person reached 15 years of age (Observer 1892: 31c).
Locations of Quarantine Stations

There were 12 permanent quarantine stations which served 12,210 miles of Australian coast (Cumpston, Robertson & Elkington 1919: 107). “The largest stations are thus situated at Sydney and Melbourne, while somewhat smaller, but equally equipped stations were located at Fremantle, Adelaide, and Brisbane” (Cumpston, Robertson & Elkington 1919: 109). Many factors played into the decision regarding where to position a station. An isolated locale for quarantine agreed with the public’s reservations regarding a station residing close to their colony. After telegraph communication was developed, proficient contact could be made between remote island stations and the mainland (Register 1877: 5f). This made quarantine stations on islands that much more favorable. Trade routes, traffic conditions, safe anchorage, and access to timber for fuel were all aspects for consideration while choosing a location (Pearn & Carter 1995: 96). Advantageous environmental qualities were an important consideration. A consistent water supply was especially important for station disinfecting, bathing, and laundry facilities. “The suitability of the area for the buildings and their arrangement, involves numerous questions relating to grades and contours, nature of soil, depth of subsoil water from the surface, risks from floods or hurricanes” (Cumpston, Robertson & Elkington 1919: 113).

There was a standard procedure for maritime quarantine stations to follow when a vessel disembarked. Station employees would first segregate and treat the passengers suspected of infectious disease. Then there was an examination of all exposed persons, and the selection of immune passengers for surveillance. The
vessels and cargo were disinfected, and the rats and insects aboard were killed, (though rat termination was not always practiced in Australia). Later, the vessels were cleaned and fumigated (Cumpston, Robertson & Elkington 1919: 109). Often those employed at a quarantine station needed to multi-task, because the staff usually had several jobs, due to the small amount of employees. Generally, quarantine stations were active communities. Many immigrants were in better condition while in quarantine than they were at home, (though class segregation was still enforced). Those in quarantine were served food items such as dairy, meat, and vegetable products, a diet likely to be too expensive for most to afford in their homeland (McMeekin 2002: 15). Usually there was an opportunity for exercise and amusements for those detained. Many times, quarantined immigrants were assigned

Figure 7: Schematic for quarantine procedures
(Cumpston, Robertson & Elkington 1919: 116)
jobs during their stay at a station. This kept those in quarantine lively, and helped to rebuild their strength and general attitude.

**Quarantine Regulations**

There was expressed concern from South Australia regarding the lack of laws concerning quarantine. The only legislation was the Ordinance No. 8 of 1850, which was, “To provide for the prevention of the spread of epidemic and contagious disease on the arrival of merchant vessels” (*Register* 1877: 4b). In South Australia, the first Quarantine Act passed in 1850. The usual detention for those in quarantine lasted for 14 days (‘Torrens Island’ 1981: 5). Below is a brief summary of some quarantine regulations that affected quarantine stations in South Australia and Victoria.

**The Quarantine Act**

- In 1825, Britain passed the Quarantine Act to protect people against such diseases as cholera, yellow fever, plague, and smallpox (McMeekin 2002: 1). Control of the vessels under the Quarantine Act in Australia was similar to that of other countries.

**Health Act of 1873**

- This act allowed the Governor to have authority to meet any emergency that arose from any vessel that arrived to Australia with infectious diseases. Additionally, the Government would allow quarantined persons to be visited by friends and family, or private medical advisor (*Register* 1877: 4f).
**Public Health Act, Victoria 1890**

- This act gave power to the Government in Council (or two members of the Executive Council) to take any action they thought necessary in the presence of any emergency associated with quarantine (Cumpston, Robertson & Elkington 1919: 22).

**Commonwealth of Australia Quarantine Act 1908-1915**

- In this act, “quarantine has relation to measures for the inspection, exclusion, detention, observation, protection, segregation, isolation, regulation, and disinfection of vessels, persons, goods, and things, and having as their object the prevention of the introduction or spread of disease or pests affecting man” (Cumpston, Robertson & Elkington 1919: 23).

**Torrens Island Quarantine Station History**

Throughout 1850-1900, the Government of South Australia managed Torrens Island. As early as 1855, this island was used for the purpose of human quarantine (McDougal & Vines 1988: 1). Initially there were no proper quarantine structures, and accommodations for immigrants consisted of military style tents (Banks 1995). Before the construction of formal buildings for quarantine, there were temporary organizational structures for the immigrants. The Observer detailed early quarantine organization on Torrens Island. “The single females are at the eastern side, and near the doctor’s house, the married people are in the centre, and the single men are at the western end - an arrangement which has proved most conducive to the good order of the establishment” (Observer 1855: 4f). Though this provisional lodging suited its
purpose, there was need of a formal, permanent quarantine station in South Australia, and several locations were considered for this use: Torrens Island, Kangaroo Island, and Wauraltee Island (Register 1877: 6g). In 1856, an announcement made in the Register newspaper, stated that a proper quarantine station on Torrens Island was to be erected, and that this process was to take three months (Register 1856: 4c; Observer 1856: 2e). There was opposition from the public regarding this construction (Register 1877: 7c). The citizens of Port Adelaide held public meetings to protest against this production (Register 1877: 6f). The public’s hesitation stemmed from the fact that the station would be in close proximity to Port Adelaide. An additional fear was that a quarantine station would cause traffic along the Port River. In addition, many citizens believed that those in quarantine would attempt to escape the island at low tide. Others worried that the diseases would ‘float’ over to the Port Adelaide community from Torrens Island, and that strict isolation would not be enforced on the infected (Register 1877: 5b). Despite these fears, the Quarantine Commission and Medical Board uniformly decided that Torrens Island would make a suitable quarantine station (Observer 1879: 21e). The Register stated, “It is within easy reach, so that quarantined passengers can readily be conveyed there and additional medical or other assistance may be promptly obtained when required” (Register 1878: 4d). Another favorable quality was that a good supply of water could be imported to the island with little difficulty.

By August of 1873, none of these plans had commenced, and growing concern was expressed in the Register newspaper that a quarantine station was still
in need. “South Australia stood almost alone in her neglect of proper means for the protection of colonists against contagious diseases introduced from abroad, and for the accommodation and comfort of persons arriving in vessels known to have had disease on board” (Register 1873: 5b). Though construction was to take place in 1856, it took until 21 June 1878 for the Government of South Australia to begin construction (Register 1878: 4d). This delay may have been the result of public opposition to the quarantine station, and/or from financial constraints. Torrens Island officially became a quarantine station in 1879.

During the late 1800s, the superintendent at Torrens Island was William Lewis, who had been in charge of the station of the island since quarantine commenced (Register 1893: 6f). The immigrants quarantined at the station indicated they were pleased with the treatment they received from the superintendent during their stay. In letters written from 1878-1897, most expressed regret in saying goodbye to Lewis (Register 1886: 6e). These ‘thank you’ letters were written by
passengers from the following vessels: *Hankow, Sorata, Rome, Chimborazo, Himalaya*, and an unidentified ship (*Archival Collections Database* 2006). The superintendent succeeded at the daunting task of keeping those in quarantine satisfied while maintaining control over the station (*Letters and Testimonials to William Lewis* 1878-1879). Despite praise for Lewis’ management, some immigrants complained at some quarantine stations concerning management (*Observer* 1882: 27c). Among other responsibilities, Lewis examined, fumigated, and carefully monitored the immigrants’ luggage.

*Figure 9: The State Library Archives contain this handwritten letter of gratitude to the superintendent of the Torrens Island quarantine station, William Lewis (State Library of South Australia Archives)*
During quarantine, an immigrant stated that, “Torrens Island is a place for healing, rebuilding, and regaining health. It is the reward for labor in the past and a magnificent preparation for labor yet to come,” (Kalyptus 1901: 2). Many of the immigrants agreed that living on Torrens Island was superior to residing aboard a ship. Usually expecting the worst upon arrival at the station, most of those in quarantine were pleasantly surprised. The buildings were clean and well-ventilated (Observer 1882: 27c). Activities in which the immigrants participated included, shooting, tennis, cricket, cards, and social interaction (Register 1898: 5h). Another immigrant observed that Torrens Island was, “‘The Isle of Unrest’ to the isle of rest. The telephone is handy; we talk with our friends and order our tobacco. The post came in and brought letters. This is a charmed life” (Kalyptus 1901: 1). In the early 1900s, The Yellow Flag and Torrens Island Terror newspaper described the state of the structures,

“The building consists of three compartments, one of which is the size of the other two. It is square in shape, and the compartments are about ten feet high. The sides are pierced with enormous ventilators, four each in the two small compartments, and eight in the other. Once the walls were whitewashed; the whitewash now like the timbers is aged, and it falls in thin flakes upon everything within, making things a beastly state” (Kalyptus 1901: 3).

By 1909, the station covered 551 acres and accommodated 224 people (National Archives of Australia 2005). Between 1912 and 1920, the Commonwealth renovated the Torrens Island station, and improved the quarantine structures.
Point Nepean Quarantine Station History

In 1851, the discovery of gold in Victoria caused an influx of immigrants into the Melbourne area (Smith 2001: 320). This caused need for a quarantine station. The Melbourne quarantine station at Point Nepean was established in 1852, after the arrival of the ship, the *Ticonderoga*. This was the first vessel to disembark immigrants at Point Nepean. On 4 August 1852, the *Ticonderoga* sailed from Liverpool to Melbourne, and the majority of passengers aboard were of Scottish descent. To meet the demands of immigration, the *Ticonderoga* was fitted with double decks in order to accommodate 795 passengers. The ship was extremely overcrowded, unventilated, and filthy (Welch 1969: 30) leading to typhus and scarlatina outbreaks. Typhus, also called ‘ship fever’ came from the feces of body lice, which were scratched into the human system. Symptoms of the illness included pain, delirium, and fever. Typhus often led to insanity or death (McGuinness 2005: 10). When the ship arrived at Point Nepean, 100 had already perished during the voyage, and 300 were sick. The station did not have proper accommodations for the passengers, and many died at Point Nepean. After the *Ticonderoga* incident, the station improved immensely.

While in quarantine at Point Nepean, the concept of participating in the gold rush was too great a temptation for some, causing many to escape from the station. Due to this, police were summoned to watch over the immigrants to ensure they would not escape. In 1854, there was accommodation for 50 patients at the Point Nepean quarantine station hospital. Akin to Torrens Island, healthy immigrants were
required to work. This allowed those in quarantine to exercise and kept them occupied throughout the day (McMeekin 2002: 18). By 1858, the station expanded to house 500 people in five two story proper hospital blocks, and a jetty was constructed (McGuinness 2005: 11). A major problem which occurred at the station during the 1860s, was a lack of facilities for the immigrants. At this time, there were no lavatories, and only one bath (McMeekin 2002: 27). During the disinfection process, the clothes were boiled and it took days for the articles to dry. To address this problem, a drying house, new water tank, wells, lavatories, and baths were built.

The staff at the Point Nepean was historically small. Employees usually consisted of a surgeon, superintendent, storekeeper, nurse, and two laborers (McMeekin 2002: 20). James Walker was appointed the clerk of the station in 1854, and eventually attained the position of storekeeper-in-charge. Walker was responsible for all employment, catering, accommodation, and requisitioning arrangements. Dr. Reed was the resident medical officer, and made this statement in his Annual Report. “…Our accommodations on the Sanitary Station, either for the purposes of ablution or for treating disease, or for providing for healthy immigrants,
have been very meager...but we have succeeded in every instance in stopping and extinguishing the disease for which each vessel has been detained” (McMeekin 2002: 19). Dr. John Browning was appointed medical officer and station superintendent in 1885. After 1899, Dr. Astley Gresswell, a medical inspector of the Victorian Department of Public Health, introduced new protocols for quarantine. All goods and passengers were expected to undergo the process of disinfection. A disinfecting and bathing complex was built close to the jetty, making Point Nepean the leader of Australian quarantine design. Point Nepean is the second oldest intact quarantine station in Australia after the North Head station in Sydney, New South Wales. Four of the hospital buildings, which were established in 1858, pre-date the oldest intact structures at North Head by sixteen years (McGuinness 2005). The Point Nepean site is unique in that it provides, “Australia’s only relatively complete complex of quarantine buildings from the 1850-1870 period” (AHPI Record 2006: 1).
Point Nepean was a highly desirous quarantine location due to its isolation, rich soil, and fresh water. Additions to the station structures have constantly been made throughout the history of the site. Some structural features included a cattle quarantine station, slaughter yard, cemetery, leper station, and a bathing block. Point Nepean was unique in that those quarantined were not typically sick. Usually, they were put under temporary observation. Sketches below were made of, “Guests playing badminton, reading newspapers, watching ships pass, smoking, and communicating with friends at the Portsea Gate” (McGuinness 2005: 4).
In 1921, the Point Nepean quarantine station changed minutely with the introduction of migration via aviation. A military training camp and army cadet school was established at the quarantine station in 1952, and the military accommodations, which were constructed during that time, remain today. In April 1954, 113 army members onboard the *Strathaird*, were quarantined with smallpox at Point Nepean. This was one of the last uses of the site as a quarantine station (McGuinness 2005: 4). Due to vaccinations and advancements in medical practices, Torrens Island and Point Nepean quarantine stations were needed less throughout time. Greater attention to cleanliness and personal hygiene also reduced the need for such stations. By 1978, the Point Nepean station was officially closed, and in 1979,
the threat of epidemic diseases had been overcome and the South Australian station was closed.
Chapter Three

Methodology

This chapter will address the methods used for this study. Methodology addressing: site selection criteria, documentary sources and research, purpose and plan, field methods, archaeological potential, and site formation processes will be discussed in regards to the quarantine stations at Torrens Island and Point Nepean. The quarantine structures frequently changed throughout time. This change was often rooted in technological adaptations. Therefore, by examining the remaining cultural material of the structures, a greater knowledge of this subject will be attained.

Site Selection Criteria

Torrens Island and Point Nepean were strong candidates for a comparison study due to many reasons. A leading factor was the close proximity of the sites, and a number of similarities between the stations could be due to this fact. Established at similar periods, both stations were constructed using alike methodologies. The thinking behind the construction of the stations could have been to situate the buildings in order to give the staff maximum control over the immigrants. Architects needed to use the environmental and structural elements of the site to their advantage, and both stations possessed this quality. Though Torrens Island and Point Nepean stations have differing environments that shaped their structural components, both sites were used for the same purpose, and therefore will have comparable qualities. Another similarity between the stations is that both sites are being transferred to maritime
The Point Nepean Community Trust (McGuinness 2005) will convert Point Nepean into a marine educational school, while Torrens Island will be passed to the Port Adelaide Maritime Corporation effective around the summer of 2006.

**Documentary Sources and Research**

For Torrens Island, numerous documented accounts concerning the station are held at the National Archives, Adelaide. Archival photographs aided in understanding how the station was organized. These pictures were used to compare with the buildings currently standing. Another source used was “Torrens Island Quarantine Station Conservation Analysis” composed in 1988 by Australian Construction Services (McDougall & Vines 1988). This document included maps and primary plans of the station. The State Library of South Australia contains research materials discussing immigration, disease, and the Torrens Island quarantine station. This library also holds newspapers (obtained via microfilm) from the *Register* and the *Observer*, which recorded the experiences of those in quarantine, ongoing public debates about where to situate a station, and the construction process.

For Point Nepean, documentary sources were gathered from the quarantine station in Victoria. Other sources used were books, which recorded the history of the Point Nepean quarantine station. Like Torrens Island, archival photographs of Point Nepean helped to visually analyze the site. By traveling to both stations, a greater understanding of the similarities and differences between Point Nepean and Torrens Island was achieved. Since there is limited documentation regarding the
subject of Australian quarantine stations, the sampling strategy used was to examine all the records available within the area.

**Purpose and Plan**

Studying the spatial arrangements of both quarantine structures will show how the stations were designed to control the immigrants and discourage them from escaping quarantine. In comparing the archaeological remains at Torrens Island and Point Nepean, the evidence will show how well each station has been maintained, and the benefits of heritage protection (both stations are Heritage Listed). It was important that quarantine stations were protected to insure that they remain a part of Australia’s cultural heritage. The purpose in visiting both quarantine stations was to examine the structures remaining at the sites, and to assess their current physical condition.

The Torrens Island quarantine station is closed to the public, but True Energy, (a power station) currently uses the island. Therefore, permission from the Government of South Australia and True Energy had to be given in order to physically visit and inspect the site. Contact with John Strawbridge, from the Treasury and Finance Department was made to organize the fieldwork. This station is rather mysterious in that few reports have been made regarding the site, and few researchers have visited Torrens Island. There has been a lack of investigation regarding the site, which is why further study is beneficial.
Field Methods

The fieldwork conducted for this thesis will consist of a total station survey of the quarantine station structures of Torrens Island. This survey will add to the understanding of spatial arrangements. The aim of the survey was to see the spatial arrangements of the Administration Block in relation to the other structures of the site. Therefore, the total station was placed in front of the Administration Block, and points were taken of the surrounding buildings. This would bring insight as to where the Administration Block stood in relation to the other station structures, and perhaps see if the Administration Block had a vantage point over the station. The results of this survey will be discussed in Chapter Five. Figure 14 shows a chart of the total station plan for Torrens Island.

![Figure 14: Plan of the survey (created by: Linda Honey)](image)

Point Nepean differed from Torrens Island in regards to field methods. Visually inspecting this site gave a wealth of information that could not be achieved by research alone. One area of focus during the site visit was to inquire as to how the station adapted to meet differing needs over time. Since the public can access
Point Nepean, perhaps this station could be a model for Torrens Island to allow tourism and to gain public interest in the South Australian quarantine station. The author visited the Point Nepean quarantine station on 23 April 2006, and Jim Barras gave an extensive tour of the site, which revealed a large amount of information regarding the history of the structures. Accommodations at Point Nepean divided the immigrants according to class. The archaeological remains support this division, and showed that even the hospital buildings were divided according to class. At Point Nepean, first class accommodations were located next to the superintendent/administrator’s residence. This placement of the structures was interesting because these buildings were located on a hill, which gave administrators a clear view of the whole station. This could support the theory that superintendent and administrative buildings were located at a place where optimal viewing of the entire station could be achieved.

Site Formation Processes

Environmental issues have shaped and influenced both stations throughout time. At Point Nepean, a severe storm destroyed the jetty in 1970. Point Nepean was rather windy and cold during the winter due to its isolated location at the end of the Mornington Peninsula. Fortunately, the station has received little or no damage by vandalism, which could be due to the constant maintenance of the site. The environmental qualities of Torrens Island include saltwater creeks which run south of the station (Register 1878: 5c). The island was described as devoid of hills, valleys, mountains and rivers. The inhabitants of the quarantine station were
constantly ravaged by ‘clouds’ of mosquitoes (*Observer* 1882: 22b). Torrens Island consists of swampy, sandy, and flat land within 20ft of the (*Register* 1898: 5h) (*Register* 1878: 6b). Muddle Island was another name given by immigrants when referring to Torrens Island. A patient described the island as,

“about 6 miles long, three wide, sand swamps and saltbush, breeding of mosquitoes. Nothing to do and lots of time. The soil is very light; indeed for the most part it consists of low hillocks of sand, in some places so bare that the wind has excavated large holes, but much of it is covered with the well-known tussock rush, the presence of which indicates fresh water” (*Kalyptus* 1901: 2).

Non-environmental issues such as looting and human disturbance are factors that have influenced the Torrens Island station. Some of the tombstones from the cemetery have been vandalized, and are currently housed in the Linen Store to prevent further damage. In comparing environmental issues of the sites, the elevation of Torrens Island, three to four feet above the watermark, is characteristic of swampy, mosquito-infested areas. In comparison, the elevation of Point Nepean, replete with the fresh ocean breeze, suggest a far healthier climate for immigrants, certainly one with less effects of swampland and all that it may portend.
Chapter Four

Site Analysis

This chapter will examine the Torrens Island and Point Nepean sites. Both stations will be analyzed, and their spatial relations compared. Historical plans, building descriptions, photographs, and any adaptations to the sites will be discussed. It will be argued that the structural arrangements at both quarantine stations provided caretakers with optimal control over the immigrants. This chapter will show how the spatial arrangements of both stations suggest the presence of a structure of command. Stations, prisons, and asylums were similar in that they all needed to maintain constant supervision over those enclosed in the structure. This maintenance of control was reflected in the placement of the quarantine buildings, which today remain in the archaeological record. Though there were historical articles pertaining to how and when the structures were built, there was no documentation concerning the methodology behind the layouts. By examining the archaeological remains of the structures with documentary records, insight into the methodology behind the buildings will be provided.

Torrens Island: Buildings and Site Descriptions

The Torrens Island quarantine station is on the Record List of the National Trust. The structure considered most significant is the Timber Cottage, as it is the oldest remaining building. When the station was finally erected, it was very low to the
ground, (three to four feet above the high-water mark). Before the station was constructed, the Register detailed impending plans for the station.

“At one end, occupying two chains of the frontage, the single women’s quarters will be built, while the single men will have a similar space. The quarters for those married were going to be erected on the remaining five chains in the centre. The depth of the actual quarantine ground will be between seven and eight chains, but outside of this area there are some 40 acres available for the station, and which can be utilized as recreation-grounds.

The station was constructed so the site formed an oblong square. A large galvanized fence made of iron surround the station (Register 1879: 6c). Single people would be housed in large block buildings which could hold 60 people each. These buildings will consist of two long dorms with a large dining room, with kitchens on the eastern ends. This would be attached to the main buildings by covered way. On the east side of the three enclosures would be a yard containing three small hospitals. These hospitals would contain dispensaries, kitchens, storerooms for luggage, and rooms for fumigation. A landing house would be constructed with a guardhouse for protection. The buildings would be constructed of wood or galvanized iron whitened to neutralize the sun’s heat” (Register 1878: 6b).

Though changes and adaptations were made, these plans were generally achieved. The Observer newspaper also recorded details of the station after construction was completed.
“Between the wards there is a dining-room, 36 ft by 50 ft, opening into a verandah. All the buildings are of wood except the walls of kitchens, and a few other places where stone is required. They are built on jarrah piles, an Australian tree (*Eucalyptus marginata*), grown for its hard red-brown wood line the building with an inch of board outside and with a three-quarter inch matchboard in the interior. The walls were eight inches thick. Additional buildings were the dead-house (or morgue), the carpenter shop, and the disinfecting chamber. The total cost of construction was estimated to be 17,000-18,000 English pounds” (*Observer* 1879: 21e).

“On 17 May 1879, strong galvanized iron fences, 6 feet high, built so as to resist the force of the gales that occasionally arise, have been put up round the two hospitals…A carpenter’s shop, a disinfecting house of iron, bricks, slate, and concrete are being rapidly proceeded with; and a lookout, 25 feet high, of timber, stands in a position commanding the best view of the quarantine ground and its approaches” (McDougall & Vines 1988: 13).

“The building consists of three compartments, one of which is the size of the other two. It is square in shape, and the compartments are about ten feet high. The sides are pierced with enormous ventilators, four each in the two small compartments, and eight in the other. When the station was completed, the layout consisted of three parts. The Main Premises was where the healthy immigrants from the infected vessel stayed. The Observation Ward was where the suspected cases were removed and watched. The final part of the station consisted of the Hospital.
The right wing of the first section consists of a large corrugated iron building lined with pine, lofty and well-ventilated, in which are the dining room, dormitory, bathroom, and kitchen for the single men. A storeroom plentifully stocked with blankets and bed linen opens out from the dormitory, which was also a dining-room. The single women’s quarters, which forms to the left wing, is a counterpart to the men’s but it is hedged around with a strong galvanized iron fence. The central part of the main block of buildings consists of a little township of some 30 wooden cottages. Each cottage contained two to four rooms, which were made for married couples and their children.

Some were reserved for first class passengers and a common dining room was available for all. There was also a 50 ft watchtower built. An observation ward was located behind the main buildings. The hospital (which was carefully fenced in) was located behind the observation ward. A fumigating furnace was located to the left of the doctor’s quarters. Accommodation was made for 400-500 people for quarantine. By 1881, the quarantine station had been in this form for three years. The buildings were very clean, and in a great state” (Register 1881: 6e).

The Register and Observer newspapers left a body of research concerning the structures and the site. This recorded information is valuable because many of the structures have been razed, and these detailed accounts detailed how the station looked during the late 1800s.
Plans and Photographs of Torrens Island

The Commonwealth Precinct (1911-1921) is the group of buildings which represent the physical arrangement of the stages of quarantine developed under the Commonwealth Quarantine Service. They illustrate the stages of the ‘cleansing’ process for quarantine. The buildings which are still standing possess many of the original fittings.

Figure 15: Site map of Torrens Island quarantine station (McDougall & Vines 2005: 156)

Figure 16: Plans of the Torrens Island quarantine station in 1985 (Couper-Smartt 2003: 347)
Construction materials: Timber piles and decking.

Responsible Government Department: Commonwealth Department of Health.

The first jetty was constructed in 1879, was 266ft long. The right angled extension was added in 1891 (McDougall & Vines 1988: 42). This jetty was rebuilt in 1923, and was used to transfer passengers to the island. The Torrens Island jetty is still intact although the Fumigations Chamber at the end has been removed.
Luggage and Disinfecting Block (1913)

**Construction Materials:** Corrugated iron.

**Responsible Government Department:** Commonwealth Quarantine Service.
This structure was designed to house the infected materials from the vessel which were passed through the Disinfecting Block. Large sliding doors admit a tramway line which passes through from the end of the Disinfecting Block to the main station system. The store is fitted with racks built up in tiers (Cumpston, Robertson & Elkington 1919: 135). There was only one disinfecting autoclave, which was a departure from the standard two found in other Australian stations. In 1988, the tramway, Fumigation Chamber, and autoclave were still in existence (McDougall & Vines 1988: 51-52). Disinfection required the provision of steam machinery together with the appurtenant boilers, and skilled personnel to operate them. Disinfection needed to be completed rapidly and thoroughly (Cumpston, Robertson & Elkington 1919: 111). During the fieldwork in April 2006, there was no access into the building.

**Boiler House (1916)**

Construction Materials: Painted brick and brick chimney.

Responsible Government Department: Commonwealth Quarantine Service.

The purpose of the Boiler House was to provide the source of steam power for the station, specifically for laundry. In order to disinfect the immigrants’ clothing, the items were dipped in chloride of zinc (*Observer* 1855: 4f). Additions were made to
this building in 1926, and the coal fired boiler was converted to oil in 1967 (McDougall & Vines 1988: 66-67).

**Linen Store (1916)**

[Figure 26: Linen Store ca. 1988 (McDougall & Vines 1988: 73)]

[Figure 27: Front of the structure (photo: Linda Honey)]

[Figure 28: Plans (McDougall & Vines 1988: 21)]

Construction Materials: Brick.

Responsible Government Department: Commonwealth Quarantine Service.

The Linen Store was constructed to house textile fabrics such as blankets and towels. This building also represented the expansion of the station given the large amount of supplies the Linen Store needed to hold (McDougall & Vines 1988: 73). An interesting current use of this building, is that it houses tombs and crosses from the cemetery which have been vandalized.
Laundry

Figure 30: Laundry structure (McDougall & Vines 1988: 56)

Figure 31: Plans (McDougall & Vines 1988: 54)

Construction Materials: Profiled asbestos cement sheet wall and roof cladding.

Responsible Government Department: Commonwealth Quarantine Services.

The original cladding was of corrugated iron. The disinfecting and washing equipment is still in situ (McDougall & Vines 1988: 56-57).
Bulk Store (1923)

Construction Materials: Corrugated iron.

Responsible Government Department: Department of Health.

This structure symbolizes the development of the station, and the necessity for further storage space (McDougall & Vines 1988: 70).

Bathing Block
Figure 36: Bathing Block 2006 (photo: Linda Honey)

Figure 37: Baths for immigrants inside the Bathing Block (National Archives, Adelaide)

Figure 38: Plans (McDougall & Vines 1988:21)
Construction Materials: Timber framed with asbestos cement sheeting, horizontal weatherboard.

Responsible Government Department: Commonwealth Quarantine Service.

This building was used for the disinfection of individuals, and represented the standardization of quarantine procedures and design. The standard bathing block was 52ft long, and 39 ft wide. On one side there were ten first class plunge-bath units and on the other, entirely separated from first class, 13 shower bath units. Each bath unit consisted of three separate cubicles, one for undressing, a central one for the bath, and a third for dressing. An entrance verandah existed at one end, which was separate for each class (Cumpston, Robertson & Elkington 1919: 137, 139).
Waiting Room (1915)

Construction Materials: Corrugated galvanized iron lined with asbestos cement sheeting, timber windows and doors.

Responsible Government Department: Commonwealth Quarantine Service.

The Waiting Room was where the quarantine process began. This structure received, questioned, and distributed the crew and passengers in order to examine their health records (McDougall & Vines 1988: 49).
Timber Cottage (1879)

This building was used for accommodation during quarantine and contains a main room and a bedroom with two beds which are still made. The Cottage was going to be turned into a museum, but this never happened since the island is closed to the public. This structure is the oldest standing at the quarantine station.

*Figure 43: Timber Cottage in 2006 on the left  (photo: Linda Honey)*

*Figure 44: Side view of Cottage  (photo: Linda Honey)*

*Figure 45: Beds inside of Cottage  (photo: Linda Honey)*
Figure 46: Door handle of Cottage (photo: Linda Honey)  
Figure 47: Sink (photo: Linda Honey)  
Figure 48: Cottage plans (McDougall & Vines 1988: 99)

Construction Materials: Timber (Oregon).

Responsible Government Department: South Australian Department of Health through Public Buildings Department.

This Timber Cottage is extremely significant because it is the only remaining intact building from the 1879 quarantine station structure. There were 30 similar cottages which were either destroyed or removed. “The Government has purchased 30 American frame houses (imported cottages) of three and four rooms each…the rooms are 14ft x 12ft to 14ft x 16ft. These rooms could accommodate 250 people” (Register 1878: 6b).

“It is a rare example of a prefabricated timber cottage imported from America. It represents the necessity of establishing a substantial quarantine station as expeditiously as possible, and was originally one of 30 cottages of similar design used as accommodation for married couples and families in the 1879 quarantine station. These cottages were purchased by the South Australian Government in 1878” (McDougall & Vines 1988: 91).

This building was fully prefabricated, and was made of pre-shaped timber components which fit exactly together while it relied little on metal fastening
Prefabrication was advantageous in that it minimized on-site construction work.

“The panelized construction method developed by John Manning of London about 1830 appears to have been dominant among the prefabricated systems in use in the British Empire and North America in the mid-nineteenth century. The timbers used in this structure consisted of Oregon and Redwood, which suggest a West Coast origin. The importation of houses which were prefabricated in America and assembled in Australia was common in the 1800s” (McDougall & Vines 1988: 96-97).

The remaining Timber Cottage has two rooms. Over the years, the building has suffered from termite infestation. The other cottages were put up for sale, and those not purchased were dismantled and burned (McDougall & Vines 1988: 93).

**Attendant’s Cottage (1921)**

*(North)*

*Figure 49: North Attendant’s Cottage (McDougall & Vines 1988: 125)*
Construction Materials: Weatherboard.

Responsible Government Department: Department of Home Affairs.

The Attendant’s Cottages are significant in that they needed to accommodate the permanent staff at the station. The first Cottage was adjacent to the Boiler House, and could have been one of the original Cottages on the island prior to the construction of the quarantine station. The second Attendant’s Cottage was built along the seafront. The oldest cottage was demolished.
Change Room/Kitchen

Construction Materials: Asbestos cement sheeting, corrugated iron, timber frame.

Responsible Government Department: Department of Health.

The Change Room and Morgue were part of the Isolation Compound which was distanced from the main station. This Compound was used to isolate and care for patients with infectious diseases. The plans for the Isolation Hospital were the same as for Point Nepean (which was built between 1916-1920). Torrens Island seems to have predated this time. Demolition of almost all the buildings within the Isolation Compound has left only the Change Room/Kitchen, Morgue, and Incinerator (McDougall & Vines 1988: 107). The Change Room/Kitchen was used to disinfect
staff going in and for preparing food separately from the main station kitchen area (McDougall & Vines 1988: 4).

**Morgue (1912)**

Construction Materials: Asbestos cement sheeting, concrete floor.

Responsible Government Department: Commonwealth Quarantine Service.

The Morgue was constructed along with the Isolation Hospital. “The building represents one of the earliest uses of ‘fibro-cement’ sheeting in South Australia” (McDougall & Vines 1988: 112).
Refshauge House/Administrative Block (1916)

![Image of Refshauge House/Administrative Block]

*Figure 59: Exterior of the Administration Block ca. 1988 (McDougal & Vines 1988: 82)*

![Image of Immigrants outside the Administration Block]

*Figure 60: Immigrants outside the Administration Block (National Archives, Adelaide)*

![Image of Some other fireplaces like this have been looted and Administration Block, 2006]

*Figure 61: Some other fireplaces like this have been looted (photo: Linda Honey)*

*Figure 62: Administration Block, 2006 (photo: Linda Honey)*

Construction Materials: Brick, weatherboard/corrugated asbestos cement roof.

Responsible Government Department: Department of Home Affairs.

This structure is the strongest architectural element in the complex and is assumed to be the work of the architect, J. S. Murdoch. This building contained a dispensary and office. Originally the building was used as the Administration Building and the Superintendent’s Residence. The interior of the building has undergone changes
(McDougall & Vines 1988: 82-83). During fieldwork, the caretaker explained that this building was also used as the Doctor’s House while the left end of the structure was used for surgery.

Point Nepean: Buildings and Site Descriptions

Figure 63: Panorama with chimney in the background for fumigation ca. 1890 (Welch 1969: 48-49)

Figure 64: Point Nepean quarantine station (photo: Charlie Brown)
In September of 1853, material for wooden buildings arrived for construction use. Quarry lime was frequently used in building construction (Welch 1969: 45). By 1854, a Doctor’s Home, Hospital, Jetty, Sullivan’s Cottage, and Iron Cottages were in full use (McGuinness 2005: 1). This site has been fluid over the years, and many structures have been added to the station. Five stone, two story buildings were built in 1856; these were substantial and permanent structures which distinguished the station from the one story quarantine buildings found at Sydney, where the buildings consisted of simpler structures. These buildings at Point Nepean allowed the station to house 500 persons. In 1857, construction was complete on the double story stone buildings which would house the immigrants. A quarry was established for sandstone production, which was used in the construction of the station. Sandstone proved to be an unsuitable building material, due to the fact that it weathered
quickly. The Annual Station Report described the buildings at the quarantine station in 1875. Buildings One through Five were two stories, and used as hospitals or reception houses for immigrants and were constructed of sandstone and rough cast and slate roofs. Each of these buildings had four large wards, each 60ft long x 20ft wide x 14ft high. All had lower story lavatories, a verandah, and a balcony. Each ward and small room had a fireplace. Three of the buildings were fitted with a water pump for cooking and drinking. Building Six (which has now been demolished) and Building Seven, which stands behind Building Three, were cookhouses, detached, built of sandstone, rough caste, and roofed with slate. Each of the buildings had three rooms fitted with boilers, cupboards, and shelves. Behind Hospital Building Four was an additional cookhouse. On the western side of the jetty was a bath and a washhouse made of sandstone with a shingle roof.

<table>
<thead>
<tr>
<th>Building No.</th>
<th>Building Name</th>
<th>Materials Used</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>First Class Hospital/Reception House, two story</td>
<td>Sandstone, slated roof</td>
</tr>
<tr>
<td>2</td>
<td>Second Class Hospital/Reception House, two story</td>
<td>Sandstone, slated roof</td>
</tr>
<tr>
<td>3</td>
<td>Steerage Class Hospital/Reception House, two story</td>
<td>Sandstone, slated roof</td>
</tr>
<tr>
<td>4</td>
<td>Steerage Class Hospital/Reception House, two story</td>
<td>Sandstone, slated roof</td>
</tr>
<tr>
<td>5</td>
<td>Hospital/Reception House, two story</td>
<td>Sandstone, slated roof</td>
</tr>
<tr>
<td>6</td>
<td>Cookhouses</td>
<td>Sandstone, rough caste, and slated roof.</td>
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</table>

*Figure 67: Descriptions of the buildings in 1875  (chart by: Linda Honey, facts gathered from Welch 1969: 53)*

Building Three, were cookhouses, detached, built of sandstone, rough caste, and roofed with slate. Each of the buildings had three rooms fitted with boilers, cupboards, and shelves. Behind Hospital Building Four was an additional cookhouse. On the western side of the jetty was a bath and a washhouse made of sandstone with a shingle roof.
By 1860, the Melbourne station was the largest and best appointed quarantine ground in Australia. The quarantine station was upgraded at the turn of the century, with the construction of a large Disinfecting and Bathing Complex. This development was the model for other stations, and reflected the influence of the Chief Public Health Official in Victoria, Dr. Gresswell, who lobbied for a Federal system of quarantine. One story colonial structures made of timber or brick, was the standard for all the other Australian quarantine stations, but Point Nepean was innovative for its use of two story structures (SHNP Nth Head Quarantine Station 1998: 208). Point Nepean is a quarantine station with a ‘multi-layered’ history, which encompasses two hundred years of European settlement.

The quarantine station at Point Nepean is significant in that four of the five original 1857-1859 hospitals are the oldest standing quarantine structures in Australia (AHPI Record 2006: 3). The buildings at the station span over 100 years. The sandstone 1866 Bathing Complex with 12 bathing cubicles, is the oldest Australian quarantine bathing structure (AHPI Record 2006: 4).

The fifth building burned down, and was re-built in 1916-1919. This was the latest date of construction (excluding the 1960s military dorms). These limestone buildings are versions of the colonial barracks form. The station was believed to have been designed by Dr. Reed, Alfred Scurry, and with the Victorian Public Works Department (AHPI Record 2006: 3).
Jetty

Figure 68: Jetty at Point Nepean (Welch 1969: 48-49)

Figure 69: Point Nepean station ca. 1877 (State Library of Victoria)

Shepherd’s Hut

The limestone Shepherd’s Hut is the oldest structure remaining at the site. It represented the key settlement patterns of pre-1852 Point Nepean (AHPI Record 2006: 2). Beneath the hut was a cellar or underground dairy.

Figure 70: Shepherd’s Hut, 2006 (Photo: Linda Honey)
Hospitals
Hospitals Three and Four which were used by the third and steerage class passengers, while Hospital One was used by the first class passengers, while Hospital Two was used by the second class. Hospitals One and Two were distanced from the third class hospitals (*AHPI Record* 2006: 19).

**Kitchen**
The small, original slate roofed kitchen was made of sandstone walls, and flagstone floors.
Boiler House

Figure 80: View of the Luggage Store and Boiler House constructed in 1900 (photo: Charlie Brown)

Figure 81: Standard cubicle rooms of the passenger’s quarters, Point Nepean quarantine station (Cumpston, Robertson & Elkington 1919: 146)
Chapter Five

Discussion

This chapter will discuss the outcomes of the research on the quarantine stations. The discussion will begin by examining the results of the fieldwork at Torrens Island. Similarities and differences between the stations will follow. The chapter will conclude with a summary of the archaeological potential of both sites.

This study of quarantine stations located at Torrens Island and Point Nepean endeavored to present unique and important aspects of the lives of immigrants, from around 1850 to 1879. Among other topics presented in this thesis, the following were considered: the immigrants’ voyage, conditions onboard the vessels, infectious diseases, and arrival at the stations. Scrutiny resulted in either mere observation of illness, or confirmation of infectious disease. Other quarantine conditions for better or worse were examined. Additionally, the design of the stations, the spatial arrangements, and the standardized requirements of the quarantine buildings were discussed.

Environmental differences were considered especially concerning the effects of elevation or lack thereof. The environment had an impact upon the immigrants of Torrens Island and Point Nepean. The importance of the archaeological remains and what light they shed on the life in the quarantine station is an aid in understanding the history of that unique time. Generally, little investigative work on quarantine stations has been completed or even attempted. More research by the maritime
archaeological community would aid in the documentation of a very significant era in Australian history.

Fieldwork Results

What was discovered from the fieldwork on Torrens Island, (that took place on 5 May 2006), was verification that the Administration Block was located at a position where the superintendent and staff could view the activities of the immigrants. During the fieldwork, photographs were taken of the remaining structures, scattered artifacts were examined, and a total station survey was conducted. Through previous research, it was determined that there was one structure that dated to 1879, and the team to decipher the exact building and its location.

Figure 82: The total station is highlighted by the red box, and the white building on the left is the Administration Block (photo: Bill Welsh)
The focus of the survey was to determine how the other buildings were situated in relation to the Administration Block. Total station points of the surrounding building corners were taken to determine this relationship. The Administration Block was situated within close range to the main station structures. Most of the quarantine structures could be viewed from the Administration building. A large window faced west from this structure, which additionally allowed surveillance of the site. The Administration Block was positioned at the back of the station, where the other buildings could be observed by the quarantine staff. The ocean and the Administration Block formed two barriers in which control over the immigrants could be achieved. Proximity of the Administration Block to the
Bathing Block was an advantageous placement because the Bathing Block was a vital aspect of quarantine, and was necessary for all quarantined. Many immigrants were resistant to the numerous bathing and disinfection processes, which took place in the Bathing Block. This was why the close positioning of the Administration Block to the Bathing Block was important for quarantine staff to monitor that every immigrant bathed to help ensure that diseases were not passed on to others. Due to all these factors, the total station was located in front of the Administration Block because this building’s location was deemed most important. After the total station survey was completed, the results were recorded on a Microsoft Excel program. The data points from the survey appear in the Appendix section. The data was converted in order to produce a chart of the results. Though the vertical access varied little, the distance, and horizontal results provided a spatial analysis of quarantine structure placement.
Figure 84: Chart of the total station results, note that the Administration Block is highlighted by the rectangular boxes (by: Linda Honey)

This chart is the outcome of the Total Station survey and shows the location of the main buildings in relation to the Administration Block at the Torrens Island quarantine station. The number of building points surveyed depended on the building positions. Some buildings obstructed the view of others. The chart shows how the Administration Block was positioned in order to have full view of the surrounding buildings. Some constraints that were present during the total station survey were that the trees occasionally obstructed the view, and the total station
points could not be taken. An addition challenge was the limited time that the team had to conduct the fieldwork on Torrens Island. There was one day permitted by a Government Official in which to gather the information and rainstorms compromised the ability to conduct the survey and photograph the site. Despite these constraints, the fieldwork was completed.

After visiting the Point Nepean site on 23 April 2006, the author constructed a chart in order to gain perspective concerning how the Superintendent’s Accommodation was situated in relation to the quarantine station. Figure 85 shows that the Superintendent’s Accommodation was located next to the First Class Accommodation. Both structures were elevated on a hill, which gave optimal viewing of the whole station as well as the bay. The Port Phillip Bay view permitted the superintendent to watch for incoming vessels in need of quarantine.

![Figure 85: Layout of the Point Nepean quarantine station 2006, not to scale (by: Linda Honey)]
Similar to Torrens Island, the Superintendent’s Accommodation was situated to permit most of the station to be viewed at once. An additional comparison between the sites was that the Superintendent’s Accommodation was near the Bathing Block/or Cleansing Compound.

**Compare and Contrast of Sites**

A comparison between Torrens Island and Point Nepean was that fencing was prevalent in the historical accounts of both stations. Though the majority of historic fencing has now been removed, there is no doubt of its use during quarantine. Creating a physical barrier around quarantine stations was a common practice in Australia. This was partly to discourage unauthorized entrance into the station, and to help resist the gale force wind that would arise at some sites, but it also could be argued that the fencing was employed to discourage immigrants from fleeing their time in quarantine. Torrens Island and Point Nepean quarantine stations were also similar regarding how the stations originated. In the 1850s, both stations accommodated passengers in tents. This was difficult in that the passengers had just survived a rigorous journey at sea, only to camp in cold and windy conditions.

There became standardization as to how quarantine stations were run in Australia. An example of this could be the disinfecting chambers. Torrens Island made significant technological progress in 1887 when an innovative Fumigation Chamber was installed. The old Fumigation Chamber (which was heated by a furnace), used sulphur to disinfect clothing items. The new chamber could achieve a temperature of 220 degrees that could be easily maintained within one hour. This
was significant because 220 degrees would destroy any germs. This Chamber was
the first of its kind to be seen in the Australian colonies, and soon other stations
mirrored this innovative idea (Register 1887: 5b).

Figure 86: Disinfecting Bock Chamber, North Head quarantine station
(Cumpston, Robertson & Elkington 1919)

Figure 87: Disinfecting Chamber, Torrens Island quarantine station
(National Archives, Adelaide)

Figure 88 & 89: Disinfecting Chamber at Point Nepean (photos: Linda Honey)
Figures 86-89 show this standardization of quarantine organization. Evidence discussed earlier in this chapter also suggested that both stations were designed to allow the superintendent or administrator’s residence optimal viewing of both stations. Though most quarantine procedures were similar, both sites maintained individual qualities. A contrasting feature between the two sites is their current uses. Though True Energy currently uses Torrens Island to run a power station, the old quarantine station remains unused. Point Nepean is a tourist destination, and the structures are holding up well as a result, and have changed little throughout time. The impact of tourism will be discussed further in Chapter Six. Building materials were another contrasting feature between the stations. Some materials employed in the construction of Torrens Island included imported timber, weatherboard, asbestos cement sheeting, and corrugated iron cladding. Building materials at Point Nepean included limestone, and sandstone for construction. However, both stations did employ brick and wood in building construction.

Figure 90 & 91: A comparison of the building materials used at both stations. Left is a close up of the Torrens Island Timber Cottage and right are some sandstone and limestone building materials used for the construction of Point Nepean (photos: Linda Honey)

Another difference that exists between the stations is the presence of a jetty. The jetty at Torrens Island is still intact, while the jetty at Point Nepean is no longer
standing due to a severe storm. The sites differed concerning how they originated. As discussed earlier in this thesis, the Point Nepean station was a reaction to the vessel the *Ticonderoga*. After the ship and its passengers were quarantined, grand and sprawling structures were built to create a state of the art and innovative station. However, after the arrival of the *Ticonderoga* at Point Nepean, there was never another vessel with as many infected passengers at the station.

**Archaeological Potential**

These stations have high archaeological potential due to their extensive history as quarantine stations commencing in the 1850s. Though little archaeological consideration of this aspect of maritime archaeology can be found, both sites could yield a wealth of artifacts which would reveal Australian colonial quarantine practices. Artifacts to look for at both stations include medical tools, trash middens, bones, shoes, glasses, and ceramics. Ceramics in particular would be an excellent area of examination because they could provide information concerning the availability of earthenware and/or stoneware during the time of quarantine. As Leone stated, “The archaeological record for ceramics is one of the most complete and informative available to historical archaeologists. Ceramics are widely used, easily breakable, not recyclable, and do not decompose” (Leone 1999: 195).

Various areas of the Torrens Island quarantine station have some (though limited) archaeological potential according to the McDougall & Vines Conservation Analysis report. It could be argued however, that excavation could bring an abundance of information. Study of the artifacts from the Torrens Island quarantine
station, housed at the Alan Green Gallery would be advantageous. An area that may have the greatest excavation potential on Torrens Island station could be around the 1879 Timber Cottage, or “Working Men’s Dwellings”. The area around this building might have the greatest potential for excavation due to the structure’s long history.

Figure 92: This foundation was located around ten feet from the front of the 1879 Timber Cottage, Torrens Island. It can be postulated that this strip of stone belonged to another cottage structure that has now been demolished. (photo: Linda Honey)

Figure 93: Ceramic shards like this were frequently found consistently scattered around the site (photo: Linda Honey)

Figure 94: Pipe structures at Torrens Island (photo: Linda Honey)

Figure 95 & 96: Other ceramic shards around Torrens Island (photos: Linda Honey)
There are old ruins that were not accessible during the fieldwork at Torrens Island. This may be a place where archaeological investigation would be valuable, since these ruins may pre-date the quarantine station. An empty lot which separates the main strip of buildings from the Isolation Compound was scattered with ceramics while the fieldwork was conducted. Ceramic analysis of these scattered artifacts may be valuable indicators of when certain ceramics were used at the station. Additionally, the Cemetery and Well would be worth investigation and perhaps excavation due to their extensive history.
Figure 98: Areas circled in red for potential excavation sites on Torrens Island  
(McDougall, Vines 1988: 156)

At Point Nepean, the underground daily/cellar of the Shepherd’s Hut might be the best place to find archaeological materials. This structure is the oldest standing building of the site, and therefore may have a higher density of artifacts buried around this location. The building was said to have been constructed around 1842, (ten years before the station was built). Though many types of artifacts are likely to be found around the site, some suggestions of what to look for specifically,
may include medical supplies, foodstuffs, kettles, pails, axes, mops, blankets, cutlery, and cleaning equipment (McMeekin 2002: 18).

Figure 99: A possible site for excavation- the cellar of the Shepherd’s Hut (McGuiness 2005)

Figure 100: Ceramic artifacts housed at Point Nepean (photo: Linda Honey)

The conditions of the ceramics varied between the sites. While Torrens Island had numerous scattered ceramics around the site, Point Nepean housed intact ceramic artifacts in a structure near the Boiler House. Though artifact labels were absent next to some of these intact ceramic artifacts, they were clean, and sheltered from the outdoor elements. Other items that the structure housed was medical equipment used for the station, luggage items, and samples of sandstone, and limestone that helped to construct the station. Finding middens containing disposed
items from the time at which the stations were running, could be an extremely informative study regarding daily life on a quarantine stations.
Chapter Six

Conclusion

It seems that stations have been overlooked in favor of archaeological investigations of shipwrecks and submerged sites. Despite this, quarantine stations could archaeologically provide a wealth of information about maritime quarantine practices in Australia. Quarantine structures were quite standardized, and this has been reflected in the archaeological remains of both stations.

Allowing tourists to access the quarantine station at Torrens Island will not only broaden public knowledge concerning the station, but it will preserve the archaeological remains of the structures with funding from tourism. Despite the odd incident of vandalism, the Australian Government has succeeded in protecting the sites. Both stations should be surveyed and inspected frequently to ensure their maintenance, and good status. By allowing the public to visit quarantine stations, there is a greater understanding of the value and significance of the sites. Tours of these quarantine stations permit people to develop a strong understanding of this important historical resource. The historic site has tours of Annapolis, Maryland that intends to educate and challenge its visitors to create, interpret and present the past (Leone, Potter & Shackel 1987: 289). The tour discusses the archaeological team, sources of funding, and the anthropological content of the site. Applying this example to tours of Point Nepean and Torrens Island, would engage the public and encourage further interest.
**Plans for the Station**

The Point Nepean quarantine station is managed today by the Point Nepean Community Trust, which was established by the Australian Government. The Trust, in collaboration with the Mornington Peninsula Shire and Parks Victoria, has been drafting a management plan for the site. The quarantine station will become apart of the Point Nepean National Park. This management plan has been submitted for the State and Commonwealth Government approval (McGuinness 2005: 1). Three outcomes that the Australian Government desires for Point Nepean are:

- To include 294 hectares of Commonwealth land within a National Park for all time.
- Funding of $31 million for building refurbishment, ordinance clearance, and for education.
Future study

An investigation into the separation of class during quarantine and the archaeological remains that support this cultural practice would be of value. Analysis of the structural remains of the station which show evidence of a class system would make an interesting study. Another field of interest could be the food that immigrants consumed during quarantine. Excavation could be conducted at both stations to see what food remnants remain, and what that could indicate about the diet of the immigrants.

The value in examining the structures of the quarantine stations, it that they reflect the medical and social philosophies of the mid 1800s. The spatial arrangements indicate that both stations were arranged to allow superintendents optimal control over the immigrants in quarantine. The total station points of Torrens Island showed that the distances of the remaining buildings indicate that the historical documents were accurate in the description of the structures, but did not provide the reasons why the buildings were placed in that particular order. Quarantine stations in Australia have been locations of hope and promise to those who immigrated to the country. The Torrens Island and Point Nepean quarantine stations are nationally significant in terms of quarantine practices, and their role in
controlled immigration to Australia tell a distinct story which demonstrates the unique value of Australian quarantine station research.
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### Appendix

Total Station Data for Chart:

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**Total Station Performa:**
**Site:** Torrens Island Quarantine Station
**Name:** Linda Honey, Bill Welsh, Mark Opdyke
**Date:** 05/05/06

**GPS Points:**
- 54H0273253
- UTM 6148821
- Elevation: 7.8m, Accuracy: 8.4m

<table>
<thead>
<tr>
<th>Description</th>
<th>Prism Height</th>
<th>Total Station Height</th>
<th>Vertical Measurement</th>
<th>Horizontal Measurement</th>
<th>Sdist Measurement</th>
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<tbody>
<tr>
<td>0) Zero Point</td>
<td>1.81m</td>
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<td>179:46:18</td>
<td>201:01:59</td>
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<td>Irving street sign</td>
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<tr>
<td>1) W corner of Linen Store</td>
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<td>6) N corner of Timber Cottage</td>
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<td>7) N corner of Chalets (1960)</td>
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<td>8) S corner of Chalets (1960)</td>
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<td>9) E corner of Refshauge House</td>
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<td>293:43:17</td>
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<td>10) Front door of Refshauge House</td>
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<td>11) SE corner of Bathing Block</td>
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<td>12) NE corner</td>
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<td>46:18:03</td>
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of Bathing Block

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<td>14) SE corner of Fire House</td>
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