

Archaeological Mapping Project

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ABSTRACT: In light of the earthquake in Christchurch, as well as the recent ones in Wellington, the need to know the location and types of archaeological sites/themes in Wellington is important. NZHPT, combined with the Wellington Archaeological Group, Wellington Tenth's Trust/Port Nicholson Block Settlement Trust, are working on a Wellington City archaeological mapping project that will have two purposes, the first being a tool that can be used in an emergency event to guide heritage experts, council, NZHPT and the equivalent of CERA, with a systematic and practical map showing the areas of high, medium, low or no archaeological risk. The second tool that will come out of this project is a mapping tool that can be used by consultants, Wellington City Council, tangata whenua, developers and other groups, on a daily basis to help identify the archaeological potential of an area in respect to proposed development or research.

The project will pull together local archaeological consultants' knowledge, tangata whenua knowledge, Wellington City Council and archival information as well as information on previous archaeological authorities and registrations held at NZHPT. We are seeking information and knowledge from people within the heritage community who can help in developing the project.

Introduction

A collaborative project is being undertaken by New Zealand Historic Places Trust (NZHPT), Wellington Archaeological Group (WAG) and Port Nicholson Block Settlement Trust, mapping the archaeological potential of the Wellington CBD. The Wellington City Archaeological Project aims to develop two distinct, yet related, products. The first product is a GIS database inventorying the built and sub-surface archaeological resources of Wellington City and the second product is a GIS layer that prioritises the archaeological resource of Wellington City for use in a disaster event. The work is being made possible due to the collaborative approach taken by the organisations involved and the fact many people are giving their time and

resources for free. The project arose from observations made on archaeological processes in Christchurch following their recent catastrophe events.

The NZHPT has taken a lead role in producing the GIS layer and collecting and collating the various pieces of information that will make up the project. This paper will look at the background to the project, the scope of the project, themes associated with the project, and finally, where we are at and where we are going.

Background

In order to move further on in this paper, it is important to note the reason why archaeology and creating a GIS database is important.

Under the Historic Places Act 1993 an archaeological site is defined as a place associated with pre-1900 human activity, where there may be evidence relating to the history of New Zealand, and any site that meets this definition is afforded automatic statutory protection under the Act. It is unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority ("consent") of the New Zealand Historic Places Trust. Archaeological sites provide the opportunity to learn about our history that cannot be gained from other resources. Once a site is gone it cannot be retrieved, and because of this documenting and recording the information prior to its destruction is very important.

The origin and development of this project essentially arose from post-earthquake processes and actions undertaken in Christchurch. In the wake of the Canterbury earthquakes, the Christchurch NZHPT office was required by CERA to urgently provide GIS layers identifying all standing pre-1900 buildings in the city, and to prioritise the archaeological resources into three categories, High Risk, Medium Risk, and Low Risk (see Figure 1). The term "risk" was chosen by CERA, and refers to the risk of significant archaeological remains being present. The conditions put into the emergency archaeological authorities (consents) issued in Christchurch are tied to these categories. Roughly speaking, authorities granted in the high-risk area require archaeological excavations, medium-risk authorities require monitoring, and low-risk authorities have minimal accidental discovery conditions. Three GIS layers were created for Christchurch, one of standing pre-1900 buildings, one of the colour-coded risk zones, and another of themes that were used to help create the prioritised maps, to ensure that all aspects of Christchurch's history were being captured by the archaeological investigations occurring in the high-risk area.

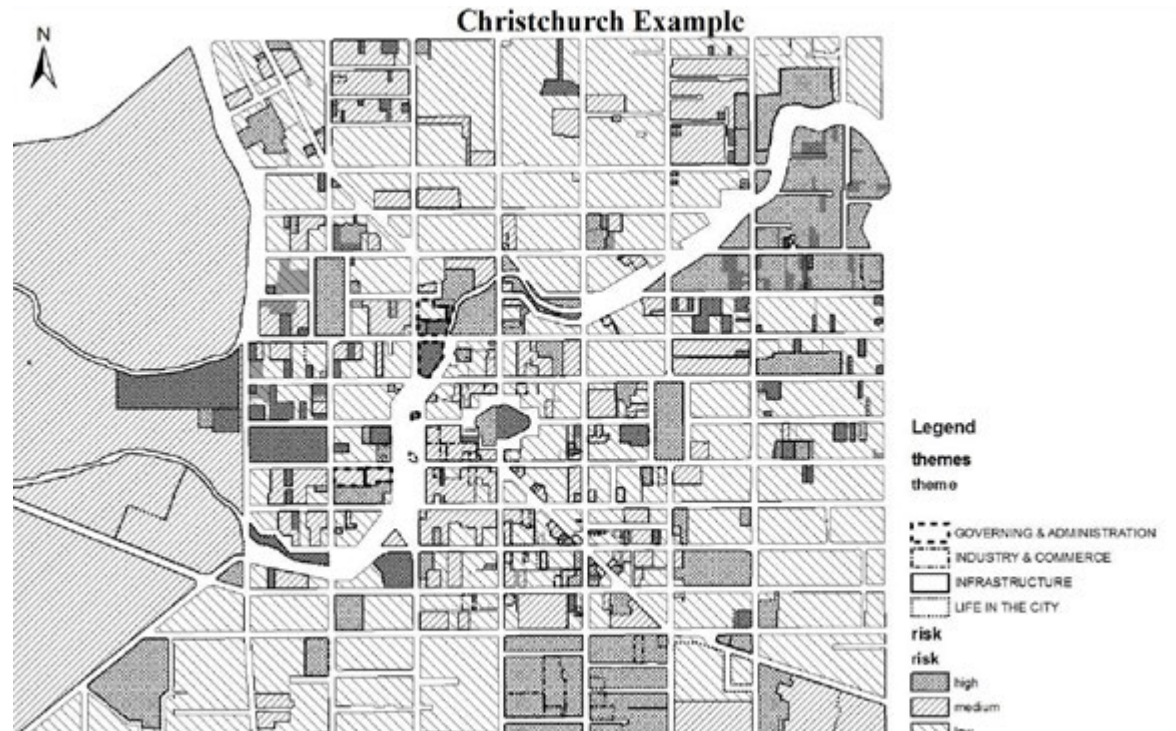


Figure 1. The Christchurch "Risk" GIS layers, pre-1900 buildings and themes. (Image from NZHPT GIS).

By undertaking the Wellington City Archaeological Project we want to pre-empt a similar situation in Wellington by being prepared with good information and context, and by developing a GIS layer that can be used in a disaster situation. In addition, there are issues of planners and developers not understanding the Historic Places Act and incorrectly identifying the need for NZHPT authorities or archaeological involvement in

projects. This has led to cases of site damage and stalled projects with the finger being pointed at Wellington City Council and the New Zealand Historic Places Trust. This project will aim to create a GIS layer and associated themes that can be used by council, developers, iwi and consultants to identify the archaeological context and implications of proposed works.

NZHPT has been looking at undertaking a project in Wellington for a number of years to aid Wellington City Council and the various consultancies with regards to archaeology and the NZHPT authority process. Previous ideas have included creation of a predictive model of Wellington, identification of areas of Wellington that have already been developed, analysis of Wellington in terms of past uses (ie gardening areas, reclamation etc). and utilising the data in the Thomas Ward Plans by attaching them to ArchSite.¹ The present project is a combination of these previous ideas integrating developments made by the Christchurch NZHPT office following the earthquakes there.

Who is involved?

This project is a collaborative project. People are giving their time and resources to develop it as it has been identified as being important. The organisations that have been approached are:

- (a) The Wellington Archaeological Group (WAG): This is a voluntary collaborative group of professional consultant

¹ *Archsite* is the New Zealand Archaeological Association's on-line database of recorded archaeological sites in New Zealand.

- archaeologists
- (b) Wellington City Council
- (c) Port Nicholson Block Settlement Trust
- (d) NZHPT Christchurch Office and Christchurch archaeologists.
- (e) Architects and historians
- (f) Wellington Historic Groups and Archives

WAG are providing archaeological data on known and potential sites, based on professional work undertaken,² WCC are providing historic information about Wellington, the Port Nicholson Block Settlement Trust are providing data on sites and places of significance to Māori,³ and NZHPT colleagues are providing guidance and advice based on their own experience.

Outputs

It is important to note that there are two project outputs. The first output is a GIS layer showing Wellington's archaeological assets and potential, based on themes, while the second output is a GIS layer that prioritises the archaeological resource of Wellington City for use in a disaster event. The project will

² Wellington Archaeology Group n.p.

³ Port Nicholson Block Settlement Trust n.p.

Theme	Subtheme
MĀORI	residential/settlement subsistence/gardening defence urupa
SOCIAL	entertainment religion sport clubs/organisations
URBAN PLANNING	reclamation cemeteries public gardens
INFRASTRUCTURE	maritime transport services tunnels drains
PUBLIC/SOCIAL ADMIN	health government justice/law & order education military
COMMERCE	retail professional/trade service accommodation/boarding houses
INDUSTRY	bricks/clay extraction quarrying mining/prospecting brewing/bottling manufacturing food processing
SUBSISTENCE	agriculture horticulture
RESIDENTIAL	high class middle class working class

identify gaps in Wellington's information and aid the heritage response in a serious event. The project has taken lessons from the Christchurch project and developed on these. Both of the GIS layers will add to the body of knowledge of archaeology in New Zealand as well as acting as a template for other cities and towns to follow.

The prioritising GIS layer will be used in a disaster event only, and thus will not be released for general public use ahead of a catastrophe. The people using this information will be decision makers such as the emergency response team, the Wellington equivalent of CERA, and NZHPT. This GIS layer will enable a swift response after a catastrophe event, by ensuring that there are no delays with providing archaeological information to the emergency response team and ensuring business continuity and recovery is not slowed down due to lack of information.

The target users of the GIS layer showing Wellington's archaeological assets and potential are wider than those of the disaster GIS layer. Target users for this output are consultant archaeologists, NZHPT, researchers, planners, developers, Iwi and

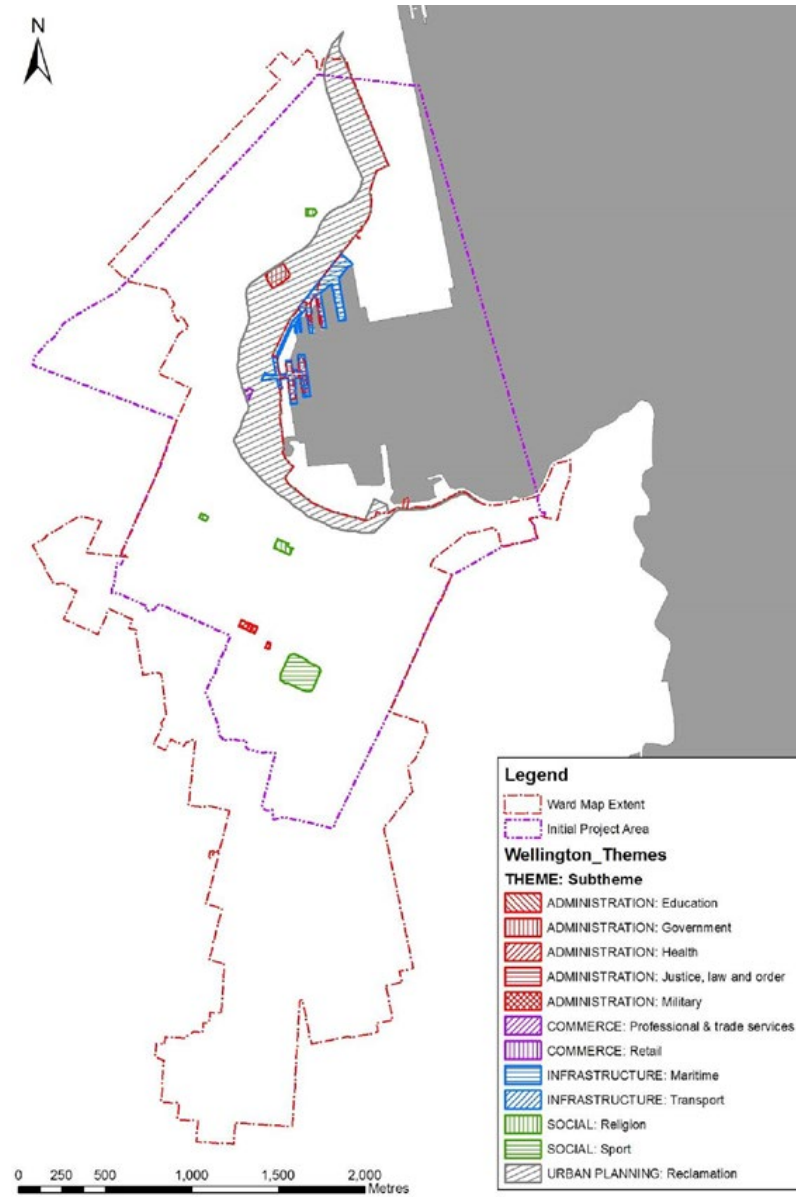


Figure 2. Map showing the Ward map extent, the initial project area and the test themes. (Image from NZHPT GIS).

Wellington City Council. The GIS layer will inform on archaeological potential within Wellington City, will act as an alert layer for the need of an archaeological authority and will increase efficiency for owners and developers planning projects.

The scope of the project

This project will only focus on physical tangible elements. Archaeology is the study of the people and their past through the remains of their material culture, so by definition archaeological sites and features are physical and tangible. The project will focus on pre-1900 standing structures and subsurface structures/archaeological remains. The project will start off by focusing on the Central Business District extent, will then extend to the scope of the Thomas Ward Plan, followed eventually by the Wellington suburbs. The information that will be utilised to develop the project will be collated from archaeological reports, the Thomas Ward Plan, archival material, Port Nicholson Settlement Block Trust information, archaeological consultants, historians, architects, and others. The inventory of standing pre-1900 buildings will be undertaken by using the Thomas Ward Plan, architectural knowledge, historical

knowledge, the NZHPT Register, and Wellington City Council listings.

When determining the subsurface potential information from archaeological reports and consultants, historic information and the Thomas Ward Plan will be collated to identify the presence or absence of archaeological potential. For example, a site that has a 1980s building with a car park below it will have no archaeological potential but a city block that has late 1800s or early 1900s buildings will have high archaeological potential. For areas that have uncertainties attached to them site visits will be undertaken.

The disaster-preparedness layers will be constructed in the same manner as the one developed for CERA, by identifying standing pre-1900 buildings, a theme layer, and a simple colour-coded "risk" layer. Unlike the Christchurch layer, the Wellington risk layer will include a fourth category, "No risk," for areas where for one reason or another, there is no chance of archaeological remains surviving on the said property, and thus an archaeological authority is not required. This data will be held in NZHPT offices, kept updated, and not released except in the case of a disaster. The inventory will be a large GIS

database, containing information related to each parcel, and references to seek more information. This data will be provided to outside sources to aid in planning consents.

Themes

In order to undertake the Christchurch projects a number of themes and subthemes were developed to aid the archaeological work. These themes consisted of Governing and Administration, Industry and Commerce, Infrastructure and Life in the City, each with their own subthemes. Based on the work undertaken in Christchurch we have built on and developed themes specific to Wellington.

Before listing the proposed Wellington Themes it is important to provide context around them in relation to this project. This project is around mapping for risk management purposes and as such research potential is a second-tier consideration. The project will facilitate research possibilities, but the primary objective of the project is not research *per se*, but is data identification and capture. In order to be useful to this project the themes must have a tangible element, in that there must be some physical aspect that can be identified and tagged on a map. Abstract themes can be used for further

research but not for the practical application of the project. For this project we want to have as few themes as possible to enable robust management and sorting of data to allow big picture patterns to emerge. However, there has to be a sufficient number of themes so that Wellington-based stories and issues can emerge. A document will accompany the finished product, which will set out the context and nature of the themes. Below is a list of the proposed themes for the Wellington project. We are seeking comments, discussions and opinions on these themes.

Two examples of standing 1880s buildings already entered into the GIS are St John's Church, and the Bank of New Zealand Building (No. 3), a house in Ngaio that has been archaeologically investigated illustrates how a residential property would fit into the project. Depending on the history and use of the site, one piece of land may have several different themes allocated to it.

The Bank of New Zealand Building (No. 3) was constructed in 1884 for the National Mutual Life Association and was designed by Thomas Turnbull in imposing classical design; it was purchased by the Bank of New Zealand in 1963. The building was constructed on one

of Wellington's earliest reclamations, which started in 1857, directed by CR Carter.⁴ Under the Wellington City Mapping Project it is recorded as a standing pre-1900 building, and is covered by the COMMERCE: Professional and Trade Services theme and the URBAN PLANNING: Reclamation theme.

St John's Church was constructed in 1885. The church was also designed by Thomas Turnbull in the gothic style. The church has a spire that is enhanced visually when the church is viewed from its elevated corner side. The interior has a large gallery with columns along both sides. An organ that has been placed behind the central pulpit is a focal point of the interior of the church⁵. St John's Church is visually related to other churches in Wellington such as St Peter's Church which was also designed by Thomas Turnbull in the gothic style although six years earlier⁶. Under the Wellington City Mapping Project the St John's Church is recorded as a standing pre-1900 building, and is covered by the SOCIAL:

⁴ New Zealand Historic Places Trust "Bank of New Zealand Building (No 3)" n.p.

⁵ New Zealand Historic Places Trust "St John's Church (Presbyterian)" n.p.

⁶ New Zealand Historic Places Trust "St Peter's Church (Anglican)" n.p.

Religion theme.

An additional example of how archaeology can contribute to our understanding of 1880s architecture is seen in a domestic house located in Ngaio. While outside the geographic scope of the project, the Radcliffe House demonstrates how archaeological techniques and investigations can add to the body of knowledge. The original simple one storied Georgian box cottage with a gable roof was added to over the years, with a two-storey addition forming a "T." Prior to the demolition of the house in late 2008, two archaeologists removed interior fabric. Much construction detail was revealed including original walls, doors and windows, and original alignment of internal stairs. Of particular note was the discovery of the original 1880s wallpaper beneath later plasterboard, and ceramic hearth tiles in a complementary lily pattern to the wallpaper motifs.⁷ As the building no longer stands, it would not be added to the pre-1900 standing buildings list. The site would be identified under RESIDENTIAL: Middle Class. In the risk layer it would appear as "no risk" as all the archaeological material has been removed

⁷ O'Keefe "Radcliffe House: 4 Chelmsford Rd, Ngaio."

due to previous development.

Conclusion

The Wellington City Archaeological Mapping Project intends to create GIS-based layer of Wellington's known and potential archaeology, both as a research tool but to aid heritage management and disaster recovery in the event of a catastrophe. This paper is a brief overview of a project that is underway but in its infancy. At this point in time we are making contact with people, developing themes and testing the GIS. Our next step is to start collecting and collating information/data from all the resources that we have identified prior to undertaking the on the ground work which will involve walking around Wellington and looking at places that have been identified as needing additional research.

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